



LISBON CONGRESS CENTRE



CRS 2026

ANNUAL MEETING & EXPOSITION

LISBON

— **PORTUGAL** —

MULTISECTOR INNOVATION
for ADVANCING DELIVERY SCIENCE

JULY 6–9, 2026



ABSTRACT GUIDE

#CRS2026



Controlled Release Systems, Core Excipients & Film Coatings

Simplify the development and manufacture of controlled release solid oral dosage forms.



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Welcome to CRS 2026

Annual Meeting & Exposition in Lisbon, Portugal!

On behalf of the Controlled Release Society (CRS) Annual Meeting Program Committee (AMPC) and the CRS Board of Directors, I am truly delighted to invite you to join us for the **CRS 2026 Annual Meeting & Exposition**, taking place at the **Lisbon Congress Centre** in the vibrant and historic city of **Lisbon, Portugal**, from **July 6–9, 2026**.

This year's theme, "**Multisector Innovation for Advancing Delivery Science**," reflects our commitment to fostering dynamic, cross-sector collaboration and driving innovation in controlled release and delivery technologies. We aim to build an inclusive and interactive scientific program that brings together voices from academia, industry, hospitals, regulatory bodies, and patient associations. We are eager to welcome professionals working in human and veterinary health, and to expand participation from those applying delivery science in diversified products such as food, nutraceuticals, and personal care.

CRS 2026 will be a space for active engagement, where attendees are not just listeners but contributors to shaping the future of our field. We are also exploring joint actions with other scientific societies, reinforcing our commitment to global health and inclusivity by engaging participants from all continents and encouraging multidisciplinary collaboration.

Lisbon offers the perfect setting for this exciting meeting. With its stunning coastline, rich cultural heritage, and warm hospitality, the city invites you to explore its historic neighborhoods, enjoy its world-class cuisine, and experience its innovative spirit. We are confident that Lisbon will inspire both scientific exchange and memorable experiences.

We look forward to welcoming you to Lisbon for a week of science, networking, and discovery. Let's shape the future of delivery together!

Warm regards,

On behalf of CRS 2026 Annual Meeting Program Committee,



Helena F. Florindo, Pharm.D., Ph.D.
iMed – Research Institute for Medicines

University of Lisbon

AMPC Chair

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CRS Headquarters Team is Ready to Serve You!

CRS headquarters team members value current members, future members, partners and programs & meetings attendees. Our goal is to consistently provide you with outstanding service, products, and programs. Use the following quick reference list to reach the appropriate persons in areas in which you may need assistance. Please call the general number for assistance Monday through Friday during the office hours of 08:30 AM - 4:30 PM Eastern Time (13:30 to 22:00 GMT/UTC). You can leave a voice mail or e-mail message at any time. We look forward to hearing from you!

GENERAL INFORMATION:

Phone: +1.856.380.6910 • Fax: +1.856.439.0525 • Email: info@controlledreleasesociety.org

Controlled Release Society

1120 Route 73, Suite 200 • Mount Laurel, NJ U.S.A. 08054

Gabrielle Copperwheat

Chief Executive Officer

gcopperwheat@controlledreleasesociety.org

Leah Carter

Assistant Executive Director

lcarter@controlledreleasesociety.org

Jessica Hayes, CMP

Meetings Manager

jhayes@controlledreleasesociety.org

Tara Locantore

Meetings Coordinator

tlocantore@controlledreleasesociety.org

Amanda Bray

Senior Manager of Industry Relations

abray@controlledreleasesociety.org

Leah Scott

Programs Coordinator

lscott@controlledreleasesociety.org

General Meeting Information

ALL EVENTS WILL TAKE PLACE AT THE LISBON CONGRESS CENTRE IN LISBON, PORTUGAL, JULY 6-9, 2026.

The main entrance to the Lisbon Congress Centre will be open daily at 7:00 am WEST

**All times listed in Western European Summer Time (WEST)*

REGISTRATION HOURS

Monday, July 6 | 7:30 am – 8:30 pm

Tuesday, July 7 | 7:30 am – 7:00 pm

Wednesday, July 8 | 7:30 am – 6:00 pm

Thursday, July 9 | 7:30 am – 2:00 pm

USE OF CRS SCIENTIFIC PROGRAM CONTENT

Information presented during the 2026 CRS Annual Meeting & Exposition is the property of CRS and the presenter. Information may not be recorded, photographed, copied, photocopied, transferred to electronic format, reproduced, or distributed without the written permission of CRS and the presenter. Any use of the program content, which includes, but is not limited to oral presentations, audiovisual materials used by speakers, and program handouts, without the written consent of CRS is prohibited.

SPEAKER READY ROOM HOURS:

Monday, July 6 | 7:30 am – 7:00 pm

Tuesday, July 7 | 7:30 am – 7:00 pm

Wednesday, July 8 | 7:30 am – 7:00 pm

Thursday, July 17 | 7:30 am – 5:00 pm

The Speaker Ready Room is located in **Room 104**. All speakers are requested to check in at least two (2) hours prior to their presentation (schedule permitting). Verification of proper performance in the Speakers' Ready Room is essential, particularly if video and animation is included in the presentation.

ACCESS THE ABSTRACTS

CRS annual meeting abstracts can easily be accessed on the CRS Website & Meeting Mobile App by registrants only. Within the app, click on the Posters icon to begin viewing poster abstracts. You can search by abstract category, presenter, & poster number. You can view podium abstracts directly from the full schedule by speaker, session track, time, and day.

ELECTRONIC DEVICES

As a courtesy to other meeting attendees, please turn off or silence all electronic devices during all workshops, sessions, and presentations.

PHOTOGRAPHY

Photography is not permitted in the session rooms, exhibit hall, or poster sessions.

PHOTO RELEASE

By virtue of your attendance, you agree to the Controlled Release Society's use of your likeness in promotional media.

CHILDREN AND THE CRS ANNUAL MEETING & EXPOSITION

The CRS Annual Meeting & Exposition is a professional, scientific meeting. CRS does not permit anyone under the age of 18 to attend the scientific sessions, poster sessions, exposition, and social events. For safety reasons, only registered exhibitors and poster presenters are permitted in the exposition/poster hall during set-up and take-down hours. Anyone 18+ must register and buy applicable individual tickets if not attending/registering as a student.

CRS ANTITRUST POLICY

It is the undeviating policy of the Controlled Release Society (CRS) to comply strictly with the letter and spirit of all U.S.A. federal laws, as well as state, and applicable international trade regulations and antitrust laws. Any activities of CRS or related actions of its staff, officers, trustees, or members that violate these laws and regulations are detrimental to the interests of CRS and are unequivocally contrary to CRS' policy. The implementation of the antitrust compliance policy of CRS shall include, but not be limited to the following:

- a. All the association activities or discussions shall be avoided that might be construed as tending to: (1) raise, lower, or stabilize prices; (2) allocate markets; (3) encourage boycotts, (4) foster unfair trade practices; or (5) in any way violate U.S.A. federal, state, or applicable international trade regulations and antitrust laws.
- b. No officer, director, or member of CRS shall make any representation in public or in private, orally or in writing, that states, or appears to state, an official policy or position of CRS without specific authorization to do so.
- c. CRS members, officers, or directors who participate in conduct that the Board of Directors, by a two-thirds majority vote, determine to be contrary to the CRS. Antitrust Policy shall be subject to disciplinary measures up to, and including, termination.



GENERAL INFORMATION (CONTINUED)

EXHIBITS

The exhibits are an integral part of the complete education experience and will feature the latest research products in the field of controlled release. The Exhibit Hall will be open daily, in **Pavillion 2**, at 9:00 AM and will close after the last event each day. The main times to expect activity in the Exhibit Hall are below. Please make time during the meeting to visit the exhibits during their open hours.

Exhibit Installation: **Sunday, July 5** | 8:00 am – 7:00 pm (custom booths only)
Monday, July 6 | 1:00 pm – 8:00 pm (all exhibitors)

Exhibit Hours **Tuesday, July 7** | 9:00 am – 8:30 pm
Morning Break | Exhibit Hall & Posters
10:00 am – 10:30 am (coffee/tea provided)

Lunch Break | Exhibit Hall & Posters
1:30 pm – 2:30 pm (boxed lunch provided)

Afternoon Break | Exhibit Hall & Posters
4:30 pm – 5:00 pm (coffee/tea provided)

Welcome Reception | Exhibit Hall & Posters
7:00 pm – 8:30 pm (appetizers & drinks provided)

Wednesday, July 8 | 9:00 am – 8:00 pm
Morning Break | Exhibit Hall & Posters
10:00 am – 10:30 am (coffee/tea provided)

Lunch Break | Exhibit Hall & Posters
1:30 pm – 2:30 pm (boxed lunch provided)

Afternoon Break | Exhibit Hall & Posters
4:30 pm – 5:00 pm (coffee/tea provided)

Exhibit Hall & Posters
6:00 pm – 8:00 pm (appetizers & drinks provided)

Thursday, July 9 | 9:00 am – 2:30 pm
Morning Break | Exhibit Hall & Posters
10:00 am – 10:30 am (coffee/tea provided)

Lunch Break | Exhibit Hall & Posters
1:30 pm – 2:30 pm (boxed lunch provided)

Exhibit Dismantle: **Thursday, July 9** | 2:30 pm – 8:00 pm

POSTER SESSIONS

Posters are located in the Exhibit Hall in **Pavillion 2**. All posters must be removed during Poster Breakdown or they will be discarded. The poster viewing area will be secured overnight. Photographing posters is not permitted.

The Posters Sessions are an important educational event of this meeting. We hope you support and attend these scientific presentations.

Poster Installation: **Monday, July 6** | 6:00 pm – 8:00 pm
(installation must be complete by 8:00 pm)

Tuesday, July 7

Morning Break | Exhibit Hall & Posters
10:00 am – 10:30 am (coffee/tea provided)

Lunch Break | Exhibit Hall & Posters
1:30 pm – 2:30 pm (boxed lunch provided)

Afternoon Break | Exhibit Hall & Posters
4:30 pm – 5:00 pm (coffee/tea provided)

Welcome Reception | Exhibit Hall & Posters
7:00 pm – 8:30 pm (appetizers & drinks provided)

Wednesday, July 8

Morning Break | Exhibit Hall & Posters
10:00 am – 10:30 am (coffee/tea provided)

Lunch Break | Exhibit Hall & Posters
1:30 pm – 2:30 pm (boxed lunch provided)

Afternoon Break | Exhibit Hall & Posters
4:30 pm – 5:00 pm (coffee/tea provided)

Exhibit Hall & Posters
6:00 pm – 8:00 pm (appetizers & drinks provided)

Thursday, July 9

Morning Break | Exhibit Hall & Posters
10:00 am – 10:30 am (coffee/tea provided)

Lunch Break | Exhibit Hall & Posters
1:30 pm – 2:30 pm (boxed lunch provided)

Poster Dismantle: **Thursday, July 9** | 6:00 pm – 8:00 pm
(if your poster is not collected by 8:00 pm on Thursday, July 9, it will be discarded)



2026 CRS Awards & Recognition

Congratulations to the 2026 Award Winners!

CRS proudly announces the recipients of Awards that honor those who have contributed to the CRS society and science. Awards will be presented during the CRS 2026 Annual Meeting.

COMMUNITY IMPACT AWARD



Ruth Schmid, PhD
SINTEF Industry, retired Vice President Marketing

DISTINGUISHED SERVICE AWARD



Twan Lammers, PhD
RWTH Aachen University

EXCEPTIONAL LEADERSHIP AWARD



Ana Melero, PhD
University of Valencia

FOUNDERS AWARD



Dan Peer, PhD
Tel Aviv University

RISING SAMYANG AWARD



Alexandros Marios Sofias, PhD
RWTH Aachen University Hospital

RISING WOMEN IN SCIENCE AWARD



Flavia Sousa, PhD
University of Groningen

PHD THESIS AWARD



Kelsey Swingle, PhD
Rice University

SAMYANG AWARD



Aliasger Salem, PhD
University of Iowa



Juliane Nguyen, PhD
UNC at Chapel Hill

TRANSDERMAL KYDONIEUS AWARD



Choon Fu Goh, PhD
Universiti Sains Malaysia

WOMEN IN SCIENCE AWARD



Kathryn Whitehead, PhD
Carnegie Mellon University

YOUNG INVESTIGATOR AWARD



Ana Beloqui, PhD
Universite Catholique de Louvain



Tushar Kumeria, PhD
University of New South Wales

JCR BEST PAPER AWARD



Wenguang Wang, PhD
China Pharmaceutical University

"In vivo FAP-CAR macrophages enhance chemotherapy and immunotherapy against pancreatic cancer by removing the fibrosis barrier"

DDTR BEST PAPER AWARD



Adi Idris, PhD
Queensland University of Technology

"Intranasal delivery of engineered anti-SARS-CoV-2 extracellular vesicles therapeutically represses lung infection and inflammation"



CRS Committee Meetings

(Dates & times subject to change)

MONDAY, JULY 6

	TIME	ROOM
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GMEC Committee Meeting	11:30 AM - 12:30 PM	Room 105
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WEDNESDAY, JULY 8

	TIME	ROOM
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ADDR Board Meeting	1:30 PM - 2:30 PM	Room 105
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C&DP Board Meeting	1:30 PM - 2:30 PM	Room 106
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DDTR Editorial Board Meeting	1:30 PM - 2:30 PM	Room 107
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FG Leadership Meeting	1:30 PM - 2:30 PM	Auditorium 2
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Industry Advisory Group Meeting	1:30 PM - 2:30 PM	Room 108
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International Chapters Meeting	1:30 PM - 2:30 PM	Auditorium 3/4
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THURSDAY, JULY 9

	TIME	ROOM
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JCR Editorial Meeting	11:30 AM - 1:30 PM	Room 105
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JCR Board Meeting	1:30 PM - 2:30 PM	Room 105
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CONNECT @ THE EXPO

EXPOSITION HALL | PAVILION 2

The CRS Exposition is the place to CONNECT and discover the latest delivery science and technology trends! Meet face-to-face with leading companies from around the world—learn about new products, discuss industry challenges, and build your network. 2026 Exhibitors as of (6/18/2026)

Detailed description of current Exhibitors and the schedule of Exposition hours can be found in the CRS AM&E Mobile App.

EXHIBIT HALL HOURS

Exhibit Installation: **Sunday, July 5 | 8:00 am – 7:00 pm (custom booths only)**

Monday, July 6 | 1:00 pm – 8:00 pm (all exhibitors)

Exhibit Hours

Tuesday, July 7 | 9:00 am – 8:30 pm

Morning Break | Exhibit Hall & Posters

10:00 am – 10:30 am (coffee/tea provided)

Lunch Break | Exhibit Hall & Posters

1:30 pm – 2:30 pm (boxed lunch provided)

Afternoon Break | Exhibit Hall & Posters

4:30 pm – 5:00 pm (coffee/tea provided)

Welcome Reception | Exhibit Hall & Posters

7:00 pm – 8:30 pm (appetizers & drinks provided)

Exhibit Hours

Wednesday, July 8 | 9:00 am – 8:00 pm

Morning Break | Exhibit Hall & Posters

10:00 am – 10:30 am (coffee/tea provided)

Lunch Break | Exhibit Hall & Posters

1:30 pm – 2:30 pm (boxed lunch provided)

Afternoon Break | Exhibit Hall & Posters

4:30 pm – 5:00 pm (coffee/tea provided)

Exhibit Hall & Posters

6:00 pm – 8:00 pm (appetizers & drinks provided)

Exhibit Hours

Thursday, July 9 | 9:00 am – 2:30 pm

Morning Break | Exhibit Hall & Posters

10:00 am – 10:30 am (coffee/tea provided)

Lunch Break | Exhibit Hall & Posters

1:30 pm – 2:30 pm (boxed lunch provided)

Exhibit Dismantle:

Thursday, July 9 | 2:30 pm – 8:00 pm

COMPANY NAME	BOOTH NUMBER
AGILENT	46
amofor GmbH	29
Ardena	9
Asahi Kasei Corporation	43
Ashland Inc.	42
Bionanopharma SL	14
BioNavis	32
BUCHI Labortechnik AG	52
Captisol, a Ligand Technology	62
Certest Biotec	36
CILYX	53
Coating Place	56
Colorcon	23
Corbion	30
Croda Pharma & Avanti Research	45
Crystal NAX Inc	59
Curapath	60
digIM Solution	18
Dionamix Scientific Inc.	44
Early Career Scientist Meet-up Station	12
Eastman	15
Elsevier	MTI
Evonik Operations GmbH.	22
FluidicLab	35
Frontiers in Drug Delivery	48
Helix Biotech	20
IamFluidics	13
Inside Therapeutics	37
Izon Science	8
Lonza Capsugel	26

COMPANY NAME	BOOTH NUMBER
Marama Labs	47
MDPI AG	21
MeltPrep	31
MyBiotech	61
NanoFCM	16
NanoFormiX	54
Nanoworx	2
Nisso Chemical Europe GmbH	19
NOF Corporation	4
Oakwood Labs	39
ONI	57
PharmaCircle	25
Pion, Inc.	34
Polypure AS	3
Precigenome LLC	24
RONDOL INDUSTRIE	55
Roquette	6
Sartorius	49
Schrödinger	38
Science Partner Journals	33
Shin-Etsu Chemical Company	5
SOTAX AG	27
Southwest Research Institute	17
Sparta Biodiscovery	63
Spectradyne	10
Stable Micro Systems	40
Teledyne LABS	41
Tosoh Bioscience GmbH	51
Unchained Labs Ltd	28

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OF THE 2026 CRS ANNUAL MEETING & EXPO

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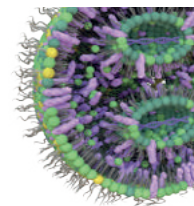
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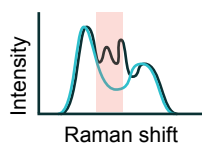
Single particle composition analysis

Measure the chemical composition of drugs, carriers and targeting moieties, **simultaneously** at **single particle resolution**.

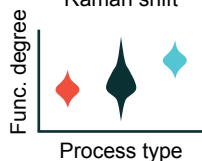
A unique benchtop analytical modality that enables effortless, **label-free** and in-solution measurements, uncovering new **critical quality attribute** insights in nanoparticle samples.



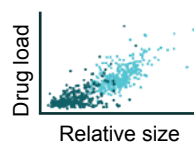
Accelerate LNP discovery to delivery from composition to cargo with chemical insights from individual particles.



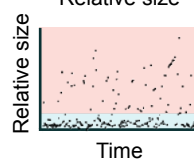
Single particle lipid composition



Functionalisation analysis



Multi-parameter assessment



Stability and aggregation monitoring



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Get in touch

www.spartabiodiscovery.com
info@spartabiodiscovery.com

ABSTRACTS

ORAL ABSTRACTS

This list includes all oral and poster abstract presentations accepted for the CRS 2026 Annual Meeting & Exposition. Oral abstracts are organized alphabetically- first by session category, then by title.. You can also browse the full list of presentations on the CRS mobile app.

Advanced Therapies

Engineering lipid self-assembling nanoparticles for Safe and Efficient CRISPR/CAS9-Based Editing

Alessia Angelillo, MPharm, Università degli Studi di Napoli, Federico II, Italy

Virginia Campani - Department of Life Health Sciences and Health Profession, Link Campus University, Rome (IT); Marianna Yanez Arteta - Advanced Drug Delivery, Pharmaceutical Sciences, BioPharmaceuticals R&D, AstraZeneca, Sweden; Giuseppe De Rosa - Department of Pharmacy, University of Naples Federico II, (IT); Kai Liu - Advanced Drug Delivery, Pharmaceutical Sciences, BioPharmaceuticals R&D, AstraZeneca, Sweden; Valeria Nele - Department of Pharmacy, University of Naples Federico II, (IT); Xiaoqin Wang - Advanced Drug Delivery, Pharmaceutical Sciences, BioPharmaceuticals R&D, AstraZeneca, Sweden

Lipid nanoparticles mediated CRISPR/Cas9 co-targeting for the treatment of Amyotrophic Lateral Sclerosis

Meiling Yu, University of Hong Kong, China (People's Republic)
Nadia Nadia Rouatbi - king's collage London; Jemeen Sreedharan - king's collage London; Khuloud Al-Jamal - University of Hong Kong

Noble linear mRNA structures for prolonged protein expression

Eunbin Kim, Ewha Womans University, Republic of Korea
Yuna Hwang - Ewha Womans University; Hyukjin Lee - Seoul National University

Optimizing liposomal doxorubicin efficacy: Pharmacological tumor priming to overcome delivery barriers

Leila Arabi, PhD, Mashhad University of Medical Sciences, Iran

Precision mRNA therapy for pre-eclampsia: a mechanism-driven approach for LNP delivery to the placenta

Kelsey Swingle, PhD, Rice University, United States
Co-Authors: All names listed

The Clearance of Human Cytomegalovirus Using CRISPR/Cas9 RNA Lipid Nanoparticles

Anson Lau, University of Toronto, Canada

Alternative Methods to Animal Testing

A Dynamic Subcutaneous Tissue-Mimetic Platform for In Vitro Testing of Drug Infusion Systems

Yishu Liu, University of Galway, Ireland
Ellen Conroy - Discipline of Anatomy, College of Medicine, Nursing and Health Sciences, University of Galway, Galway, Ireland; Bryan Boyle - Discipline of Anatomy, College of Medicine, Nursing and Health Sciences, University of Galway, Galway, Ireland; Robert Wylie - Discipline of Anatomy, College of Medicine, Nursing and Health Sciences, University of Galway, Galway, Ireland; Garry Duffy - Anatomy, College of Medicine Nursing and Health Sciences, University of Galway; SFI Advanced Materials and BioEngineering Research Centre (AMBER), Trinity College Dublin & University of Galway; CÚRAM, SFI Research Centre for Medical Devices, University of Galway & RCSI, Galway; Anatomy and Regenerative Medicine, RCSI University of Medicine and Health Sciences, Dublin; Joanne O'Dwyer - Pharmacy, College of Medicine Nursing and Health Sciences, University of Galway

A Pause or a Pivot: Decoding Early Chemoresistance in 3D Melanoma Spheroids

Alina Sesarman, Babes-Bolyai University of Cluj-Napoca, Romania
Giorgiana Negrea - Babes-Bolyai University of Cluj-Napoca; Ovidiu Pavel - Babes-Bolyai University of Cluj-Napoca; Bogdan Dume - Babes-Bolyai University of Cluj-Napoca; Stefan Dragan - Babes-Bolyai University of Cluj-Napoca; Loredana Balacescu - Institute of Oncology Prof. Dr. Ion Chiricuță; Szilvia Meszaros - Babes-Bolyai University of Cluj-Napoca; Emilia Licarete - Babes-Bolyai University of Cluj-Napoca; Valentin Rauca - Babes-Bolyai University of Cluj-Napoca; Laura Patras - Babes-Bolyai University of Cluj-Napoca; Vlad Toma - Babes-Bolyai University of Cluj-Napoca; Manuela Banciu - Babes-Bolyai University of Cluj-Napoca

Beyond Animal Models: Perfused Human Vasculature for Predictive Nanoparticle Delivery Testing

Laura Bracaglia, PhD, Villanova University, United States
Valerie Lallo - Villanova University; Jianlei Wu - Villanova University

Dynamic Human Gut-on-Chip Model Enhances Prediction of Intestinal Drug Permeability

Maurizio Aiello, React4life S.p.A., Italy
Elisabetta Palama - React4life S.p.A.; Silvia Scaglione - React4life S.p.A.

ABSTRACTS

ORAL ABSTRACTS

Nanostructured Lipid Carriers Co-Delivering Simvastatin and Adenosine for Chronic Wound Therapy in 3D Skin Models

Regina Dare, PhD, *University of São Paulo, Brazil*
Luigi Di Stolfo - *Adolphe Merkle Institute, University of Fribourg*;
Mauro Almeida - *Adolphe Merkle Institute, University of Fribourg*;
Alke Petri-Fink - *Adolphe Merkle Institute, University of Fribourg*;
Luciana Lopes - *Institute of Biomedical Sciences, University of São Paulo*; Barbara Rothen-Rutishauser - *Adolphe Merkle Institute, University of Fribourg*

Patient-derived apical-out 3D intestinal organoids as in vitro models for screening RNA-loaded nanoparticles

Dinh Son Vo, *Uppsala University, Sweden*
Alina Meyer - *Uppsala University*; Foteini Tzioufa - *Uppsala University*; Ana Lopes - *Uppsala University*; Miguel Ramôa - *University College Cork*; Jens Eriksson - *Uppsala University*;
Kajsa Björner - *Uppsala University Hospital*; Johan Vessby - *Uppsala University Hospital*; Mikael Sellin - *Uppsala University*;
Caitriona O'Driscoll - *University College Cork*; Piotr Kowalski - *University College Cork*; Per Artursson - *Uppsala University*;
Madlen Hubert - *Uppsala University*

Artificial Intelligence and Predictive Models

AI-Assisted Optimization of Liposomal Intracocular Voriconazole-Micafungin Delivery with Multilevel Evaluation

Meltem Ezgi Durgun, PhD, *Istanbul Health and Technology University, Turkey*
Mustafa Kara - *Trustlife*; Merve Bilgin - *Istanbul Health and Technology University*; Yıldız Özsoy - *Istanbul University*

Autonomous bone healing enabled by predictive digital twins and immune-instructive bioengineered scaffolds

Ashok Unni, BVSc & AH, MVSc, MBA, PhD, *Amrita Institute of Medical Sciences and Research Center, India*

In vitro + in silico: Predictive IVIVR modelling of subcutaneously injected biologics

Conor Gomes, PhD, *Pion Inc., United States*
Sam Lee - *Pion Inc.*; Imogen Anastasiou - *Pion Inc.*; Bálint Sinkó - *Pion Inc.*

Machine learning-guided selection of cell-penetrating peptides for enhanced endosomal escape in RNA delivery

Shakhawath Hossain, PhD, *Uppsala University, Sweden*
Xuanhao Zhu - *Lund University*

Multimodal framework for early developability assessment to accelerate protein/antibody development

Jiayin Deng, *University of Macau, Macau*
Defang Ouyang - *University of Macau*

Supramolecular Organization of π -Conjugated Macroinitiators for the Development of Functional Nanocarriers

Nerea Manzano, *Centro de Investigación Príncipe Felipe, Spain*
Alberto Fernández-Alarcón - *Instituto de Ciencia Molecular (ICMOL)*; Pau Armada - *Instituto de Ciencia Molecular (ICMOL)*;
Ana Armiñán - *Centro de Investigación Príncipe Felipe*; Joaquín Calbo - *Instituto de Ciencia Molecular (ICMOL)*; María Medel - *Centro de Investigación Príncipe Felipe*; María J. Vicent - *Centro de Investigación Príncipe Felipe*

Bioengineering (Focus Group – Bioengineering)

A Bioinstructive Injectable Hydrogel for Enhancing Intrinsic Regeneration through Cell Recruitment and Training

Yurim Kim, *Korea Institute of Science and Technology, Republic of Korea*
Young-Min Kim - *Korea Institute of Science and Technology*

An Exosome-based Approach to Assess Polymer Implant Acceptability

Randy Mrsny, PhD, *University of Bath, United Kingdom*
John Garner - *Akina Inc.*; Kate Heesom - *University of Bristol*;
Philip Lewis - *University of Bristol*; Kinam Park - *Purdue University*; Alistair Taverner - *University of Bath*; Helen Wallace - *University of Bath*; Aaron Walsh - *University of Bath*; Eva Webb - *University of Bath*; Kate Gridley - *University of Bath*

Architecting Bioinspired Antimicrobial Interfaces Using Quaternary Ammonium Organosilanes

Roberta Censi, *University of Camerino (IT), Italy*
Cristina Casadidio - *University of Camerino*;
Giacomo Di Giambattista - *University of Camerino*;
Martina Fronduti - *University of Camerino (IT)*;
Divishth Gupta - *University of Camerino*

Bio-Responsive DNA Nanostructure Conjugates for Neutrophil-Driven Targeted Therapy of Bone Diseases

Xinran Shen, *Sichuan University, China (People's Republic)*
Wenjuan Ma - *Sichuan University*; Yunfeng Lin - *Sichuan University*

Biodynamers as Dynamic Proteoids Control and Enhance Drug Efficacy

Sangeun Lee, *Saarland University, Germany*

Bioinspired Itaconate-Based Controlled Release Platform for Immunometabolic Tuning of Peri-implant Fibrosis

Zachary Froom, *Dalhousie University, Canada*
Kyle Mead - *Dalhousie University*; Lauren Fong-Hollohan - *Dalhousie University*; Christian Rempsee - *Dalhousie University*;
Kaitlyn Woodworth - *Dalhousie University*; Brenden Wheeler - *Dalhousie University*; Natasha Osborne - *Dalhousie University*;
Ibrahim Ahmed - *Dalhousie University*; Clare Moore - *National Research Council Canada*; Susanne Penny - *National Research Council Canada*; Devanand Pinto - *National Research*

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Council Canada; Neal Callaghan – Nova Scotia Health; Tobias Karakach – Dalhousie University; Locke Davenport Huyer – Dalhousie University

Biointeractive Gelatin Nanoparticles as a Nanoengineered Therapeutic Platform for Tissue Regeneration

Dream Kim, Chonnam National University, Republic of Korea
Woochan Kim – Chonnam National University; Harshita Sharma – Chonnam National University; Shinyull Lee – Chonnam National University; Chaeyeon Park – Chonnam National University; Sunho Park – Pusan National University; Seula Kim – Chonnam National University; Jangho Kim – Chonnam National University

Design of Self-Assembling Immune Cell Tumor Engagers (SITE) for Multiple Myeloma Therapy

Jindrich Kopecek, PhD, University of Utah, United States
Jiyuan Yang – University of Utah; Shannuo Li – University of Utah; Douglas Sborov – University of Utah

Development of single-injection and self-boosting HIV vaccines

Behnaz Eshaghi, PhD, MIT, United States
Jayeshbhai Chaudhari – Beth Israel Deaconess Medical Center – Harvard; Joseph Nkolola – Beth Israel Deaconess Medical Center – Harvard; Rishi Das – MIT; Stacey Qiaohui Lin – MIT; Aki Gurram – MIT; Dalia Cabrera – Beth Israel Deaconess Medical Center – Harvard; Robert Langer – MIT; Dan Barouch – BIDMC Harvard; Ana Jaklenec – MIT

Disease-severity-responsive nanoparticles enable precise RNA therapy for osteoarthritis

Mahima Dewani, PhD, Brigham and Women's Hospital, Harvard Medical School, United States
Raashi Nair – Brigham and Women's Hospital; Anjali Rajesh Mamidwar – Tufts University School of Medicine; Li Zeng – Tufts University School of Medicine; Nitin Joshi – Brigham and Women's Hospital, Harvard Medical School

Dual Crosslinked Self Healing Hydrogel with Hemostatic, Antibacterial and Photothermal Functions for Wound Repair

Samin Abbaszadeh, PhD, The University Medical Center Groningen, Netherlands
Saman Rezaie – Urmia University of Medical Sciences; Vahideh Nosrati – Guilan University of Medical Sciences; Mohammad-ali Shahbazi – The University Medical Center Groningen

Encapsulated Pro-Angiogenic Cell Factories for Long-Term Beta Cell Transplant Support

Alvaro Moreno Lozano, Rice University, United States
Bonu Vohidova – Rice University; Jacob Cabler – Rice University; Cassidy Hart – Rice University; Martha Fowler – SteerBio; Shalini Pandey – Rice University; Mor Sela Golan – Rice University; Chancellor Smith – Rice University; Elizabeth Kelley – Rice University; Omid Veisheh – Rice University

Engineering cytotoxic T cells for cancer immunotherapy

Ruoyu Cheng, University of Helsinki, Finland
Shiqi Wang – University of Helsinki

Exogenous Enzyme-Initiated Morphological Transition of Neuro-specific Hydrogels to Enable Precise Delivery

Zahra Eivazi Zadeh, PhD, the University of Melbourne, Australia
Colin J. Jackson – Research School of Chemistry and ARC Centre of Excellence in Synthetic Biology; Richard J. Williams – iMPACT; Clare Parish – The Florey Institute of Neuroscience and Mental Health; David R. Nisbet – Department of Biomedical Engineering and The Graeme Clark Institute

Functionalized miR-loaded lipid-nanocapsules for regeneration of intervertebral disc to treat low back pain

Hussein Genedy, PhD, RMeS lab INSERM UMR1229, university of Nantes, France
Bilel Laoulaou – RMeS lab INSERM UMR1229, university of Nantes.; Marion Fusellier – Department of Diagnostic Imaging, CRIP ONIRIS, College of Veterinary Medicine, Nantes F-44307, France; Catherine Le Visage – RMeS lab INSERM UMR1229, university of Nantes.; Jérôme Guicheux – RMeS lab INSERM UMR1229, university of Nantes.; Johann Clouet – RMeS lab INSERM UMR1229, university of Nantes.; Élise Lepeltier – Univ Angers, INSERM, CNRS, MINT, SFR ICAT, F-49000 Angers, France

Generating tumor-targeting mAbs with cancer sEVs for antibody-decorated CD8+ T-seV/PTX

Dongin (Donoven) Kim, PhD, University of Oklahoma Health Campus, College of Pharmacy, United States
Chang Kang – University of Oklahoma Health Campus, College of Pharmacy; Maryam Firouzi – University of Oklahoma Health Campus, College of Pharmacy

Harnessing siRNA delivery to the lungs through extracellular vesicles-coated biomimetic nanoparticles

Teresa Silvestri, University of Naples Federico II, Italy
Ersilia Villano – University of Naples Federico II; Susy Brusco – University of Naples Federico II; Erika Esposito – University of Naples Federico II; Chiara Indolfi – University of Naples Federico II; Melania Correale – University of Naples Federico II; Emma Mitidieri – University of Naples Federico II; Roberta d'Emmanuele di Villa Bianca – University of Naples Federico II; Raffaella Sorrentino – University of Naples Federico II; Gabriella Costabile – University of Naples Federico II; Francesca Ungaro – University of Naples Federico II

In Situ Immunomodulation of a 3D-Bioengineered Subcutaneous Microenvironment for Cell Transplantation

Alessandro Grattoni, PhD, Houston Methodist Hospital, United States
Jocelyn Nikita Campa Carranza – Houston Methodist Hospital

Local stromal targeting via thermosensitive hydrogel to enhance therapy for pancreatic ductal adenocarcinoma.

Remya Valoor, PhD, Radboud University Medical centre, Palau

Lymph node-inspired biomaterials for CAR T cell therapy

Hongjun Li, Zhejiang University, China (People's Republic)

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MMP13-responsive siRNA delivery system for self-regulated control of hypertrophy in MSC-based cartilage repair

Silouane Dupuy, IRMB - INSERM, France
Emmanuel Belamie - ICGM; Jade Berthelot - ICGM; Cécile Echalié - IBMM; Marie-noelle Labour - ICGM; Marie Morille - IRMB; Danièle Noel - IRMB; Baptiste Robin - ICGM; Gilles Subra - IBMM; Jules Simonin-Garcia - IBMM

MOMONA-seq: in vivo multi-omic single-cell LNP screen for mRNA vaccine and cancer immunotherapy discovery

Abishek Wadhwa, University of British Columbia, Vancouver, Canada

OS-on-Chip: Decoding Metastatic-Immune Crosstalk to Guide Pediatric Osteosarcoma Therapy

Catarina Pereira, i3S/University of Porto, Portugal
Carolina Vieira - i3S/University of Porto; Sofia Costa - i3S/University of Porto; Sofia Dias - i3S/University of Porto; Bruno Sarmento - i3S/University of Porto

Protein-Producing Lipid Particles Synthesize Exenatide Enhancing Insulin Secretion in Human Pancreatic Islets

Sónia Siquenique, i3S - Instituto de Investigação e Inovação em Saúde, Portugal
Nayere Taebnia - Karolinska Institutet, Stockholm, Sweden; Shanny Ackerman - Technion- Israel Institute of Technology, Haifa, Israel; Aikaterini Motso - Karolinska Institutet, Stockholm, Sweden; Shane Wright - Karolinska Institutet, Stockholm, Sweden; Volker Lauschke - Karolinska Institutet, Stockholm, Sweden; Avi Schroeder - Technion- Israel Institute of Technology; Bruno Sarmento - i3S - Instituto de Investigação e Inovação em Saúde

RBC-mimetic concave core-shell microparticles with PFC cores and elastomer shells were evaluated in vivo in mice

Taichi Ito, PhD, University of Tokyo, Japan
Xiao Da - University of Tokyo; Natsuko Inagaki - University of Tokyo

Spatially distinct bone marrow sites are asymmetrically impacted by inflammatory cardiovascular disease

Jeroen Deckers, Radboud University Medical Center, Netherlands
Yuri Van Elsas - Radboud UMC; Roy Van der Meel - Eindhoven University of Technology; Thijs Beldman - Radboud UMC; Willem Mulder - Radboud UMC

The development of a cell-based once-yearly monoclonal antibody therapeutic delivery platform

Anthony Davis, B.S. Biochemistry, Rice University, United States
Cody Fell - Rice University; Jon Debonis - Rice University; Zeshi Wang - Rice University; Shalini Pandey - Rice University; Tyler Guinn - Rice University; Nathan Brown - Rice University; Chancellor Smith - Rice University; Ravi Ghanta - Baylor College of Medicine; Oleg Igoshin - Rice University; Michael Diehl - Rice University; Omid Veisheh - Rice University

Theranostic targets in TNBC: extracellular vesicles involved in epithelial-to-mesenchymal transition

Oliwia Majchrzak, University of Geneva, Switzerland
Carolina Lopes Silva - University of Geneva; Yasmine Ben Abdallah - University of Geneva; Mounia Reda - University of Geneva; Muriel Urwyler - University of Geneva; Emmanuelle Sublet - University of Geneva; Nathalie Boulens - University of Geneva; Eloise Dupuychaffray - University of Bern; Serge Rudaz - University of Geneva; Isabel Meister - University of Geneva; Julien Boccard - University of Geneva; Carole Bourquin - University of Bern; Olivier Jordan - University of Geneva; Gerrit Borchard - University of Geneva

Wavelength-regulated cell-based biohybrid patch for temporal immunomodulation of the wound bed.

Elizabeth Kelley, Rice University, United States
Co-Authors: All names listed

Delivery Science Without Borders: Multisector Breakthroughs, Global Health, Equity & Special Populations

From Drug Delivery to Agriculture: Process and Formulation Design of Liposomal Nanocarriers

Alireza Mohammadzadeh, MSc, University of Pittsburgh, United States
Mia Van Heerden - University of Pittsburgh; Sai Thejaswini Pamuru - Duke University; Chendongyan Sun - University of Pittsburgh; Leanne Gilbertson - Duke University; Steven Little - University of Pittsburgh

Lignin-rich Nanoparticles from Agricultural Waste as Multifunctional UV-Protective Systems

Antonella Vitiello, University of Naples Federico II, Italy
Mariavittoria Verrillo - University of Naples Federico II; Teresa Silvestri - University of Naples Federico II; Vincenza Cozzolino - University of Naples Federico II; Riccardo Spaccini - University of Naples Federico II; Francesca Ungaro - University of Naples Federico II; Gabriella Costabile - University of Naples Federico II

Peptide-based nanocarriers boost lethal dsRNA oral delivery and shape microbiota in urban and crop pests

Adriana Avila Flores, PhD, Auburn University, United States
Erin McGraw - Auburn University

Sustainable encapsulation of lipophilic fragrances in sodium alginate microcapsules for cosmetic applications

Anna Tarrats-Duran, Institut Químic de Sarrià - Universitat Ramon Llull, Spain
Salvador Borrós - Institut Químic de Sarrià - Universitat Ramon Llull; José Rodrigo Magaña - Institut Químic de Sarrià - Universitat Ramon Llull; Cristina Fornaguera - Institut Químic de Sarrià - Universitat Ramon Llull

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Unlocking the multifunctional cosmetic potential of sustainable lupin by-product extracts

Aline Caramona, *Research Institute for Medicines (iMed.ULisboa) | University of Lisbon, Portugal*

Alexandre Paiva - LAQV-REQUIMTE, NOVA School of Science and Technology, Portugal; Lídia Gonçalves - Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, University of Lisbon, Portugal; João Seixas - Spartax Chemicals Lda, Portugal; Joana Marto - Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, University of Lisbon, Portugal

Delivery to the Nervous System

An Automated and Barcoded Platform for Scalable In Vivo Screening of Brain-Targeted Lipid Nanoparticles

Zhenpeng Qin, PhD, *University of Texas at Dallas, United States*; Karthik R Ramanathan - *University of Texas at Dallas*; Hassan Tajarenejad - *University of Texas at Dallas*; Alexandro DeAnda - *University of Texas at Dallas*; Taek Kang - *University of Texas at Dallas*; Scott Elmore - *University of Texas at Dallas*; Esther Alao - *UT Southwestern Medical Center*; Xiaoqian Ge - *University of Texas at Dallas*; Mayank Verma - *UT Southwestern Medical Center*; Berge Minassian - *UT Southwestern Medical Center*; Shuguang Wei - *UT Southwestern Medical Center*; Bruce Posner - *UT Southwestern Medical Center*; Jung-Mo Ahn - *University of Texas at Dallas*; Leonidas Bleris - *University of Texas at Dallas*

An in vitro platform to test therapeutic ultrasound in nerve injury

Sachin Thakur, PhD, *University of Auckland, New Zealand*; Ederlyn Perolina - *University of Auckland*; Brad Raos - *University of Auckland*; Darren Svirskis - *University of Auckland*

An in-body networking system for communication between wearable and implantable therapeutics

Ramy Ghanim, *Georgia Institute of Technology, United States*; Alex Abramson - *Georgia Institute of Technology*

Computational analysis of blood-brain barrier targets and trafficking toward the design of targeted therapeutics

Habib Baghirova, *Ábo Akademi University, Poland*

Enhanced Malignant Brain Tumor Targeting via Size-Tunable Polymeric Nanoruler

Yukine Ishibashi, *The University of Tokyo, Japan*; Mitsuru Naito - *Tokyo University of Science*; Kanjiro Miyata - *The University of Tokyo*

Focused Ultrasound Controlled Delivery of Fluorescent Ferumoxytol to Glioblastoma Mouse Model

Giovanni Marco Saladino, *Stanford University, United States*; Payton Martinez - *Stanford University*; Jie Wang - *Stanford University*; Raheleh Roudi - *Stanford University*; Raag Airan - *Stanford University*; Heike Daldrup-Link - *Stanford University*

Formulation of fluorinated polyester sonosensitive agents for ultrasound brain therapy and imaging

Nicolas Tsapis, *CNRS, France*

Influence of Lipid Nanoparticle Chemistry on Expression After Focused Ultrasound Delivery to Brain and Gliomas

Eden Gordon, BS, *University of Virginia, United States*; Anna Debski - *University of Virginia*; Alec Batts - *University of Virginia*; Matthew DeWitt - *University of Virginia*; Catherine Gorick - *University of Virginia*; Kay Russi - *University of Virginia*; Richard Price - *University of Virginia*

Machine-learning-guided and Ultrasound-responsive Nanotherapeutic Platform for Chronic Pain Management

Huiliang Wang, PhD, *University of Texas at Austin, United States*

Nanoparticle-mediated Nose-to-Brain RNA Therapy to alleviate neuroinflammation after traumatic brain injury

Jingjing Gao, *University of Massachusetts Amherst, United States*
Co-Authors: All names listed

Targeting glioblastoma via L-amino acid transporters: cross-model evaluation of amino acid-guided nanomedicines

Claudia Martins, PhD, *i3S - University of Porto, Portugal*

Temporal remodeling of the post-surgical tumor margins as a target for local glioblastoma therapy

Chiara Bastiancich, PhD, *Institute of Neurophysiopathology - INP, UMR7051, France*

Roberta Stacchini - *Institute of Neurophysiopathology - INP, UMR7051*; Aurélie Tchoghandjian - *Institute of Neurophysiopathology - INP, UMR7051*

Tri-Targeted Nanoparticles for Blood-Brain Barrier Crossing and T Cell-Mediated Immunotherapy in Glioblastoma

Elisa Mastrantuono, *Gulbenkian Institute for Molecular Medicine, Portugal*; Catarina da Oliveira - *Gulbenkian Institute for Molecular Medicine*; José Muñoz - *Institute for Bioengineering of Catalonia*; Claudia Faria - *Gulbenkian Institute for Molecular Medicine*; Teresa Pacheco - *Hospital Santa Maria*; Giuseppe Battaglia - *Institute for Bioengineering of Catalonia*; Luis Graca - *Gulbenkian Institute for Molecular Medicine*; Diana Matias - *Medicine ULisboa for Health, Clinical Research and Innovation*

Triple Cargo Strategy: VCAM-Targeted LNPs for Neurological Disorders

Oscar Marcos-Contreras, *Temple University, United States*; Soomin Jeong - *Temple University/University of Pennsylvania*; Lesley Chaboub - *University of Pennsylvania*; Jia Nong - *University of Pennsylvania*; Marco Zamora - *University of Pennsylvania*; Jillian Melamed - *University of Pennsylvania*; Sahily Reyes-Esteves - *University of Pennsylvania*; Vladimir Muzykantov - *University of Pennsylvania*; Jacob Brenner - *University of Pennsylvania*; Raghu Vemuganti - *University of Wisconsin*; Drew Weissman - *University of Pennsylvania*; Jacob Myerson - *University of Pennsylvania*

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Gene Delivery and Gene Editing (Focus Group – GDGE)

A dual-pKa ionizable lipid enables potent and tolerable lung-targeted mRNA delivery

Seong Gi Lim, MS, *The Catholic University of Korea, Republic of Korea*

Minju Lee – *Ajou University*; Yiming Wang – *University of Pennsylvania*; Eunjin Choi – *Southwest Research Institute*; Ji Sun Park – *The Catholic University of Korea*; Hayoung Jeon – *The Catholic University of Korea*; Donghyun Kim – *The Catholic University of Korea*; Donghyun Lee – *The Catholic University of Korea*; Yeeun Lee – *The Catholic University of Korea*; Kee-Pyo Kim – *The Catholic University of Korea*; Eunha Kim – *Ajou University*; Heebeom Koo – *The Catholic University of Korea*

A non-viral platform for cellular reprogramming of brain tissue

Anna Anjo, CNC, CIBB, *University of Coimbra, Portugal*
Anna Anjo – *CNC, CIBB, Universidade de Coimbra*; Joana Brito – *CNC, CIBB, University of Coimbra*; Francesca Tomatis – *CNC, CIBB, Universidade de Coimbra*; Vitor Francisco – *CNC, CIBB, Universidade de Coimbra*; Luis Estronca – *CNC, CIBB, Universidade de Coimbra*; Thi Tram Truong – *Helmholtz Munich*; Nishant Chintalagiri – *Helmholtz Munich*; Stefan Stricker – *Helmholtz Munich*; Filipe Rodrigues – *CNC, CIBB, Universidade de Coimbra*; Susana Simões – *CNC, CIBB, Universidade de Coimbra*; Lino Ferreira – *CNC, CIBB, Universidade de Coimbra*

Advanced Formulations Potentiate AAV Vectors for Cancer Gene Therapy

Xun Sun, *Sichuan University, China (People's Republic)*
Yongshun Zhang – *Sichuan university*; Fuhua Wu – *Sichuan university*

Bioreducible polymer nanoparticles enhance cancer radiotherapy via metabolic reprogramming

Christopher Grigsby, PhD, *Queen's University Belfast, United Kingdom*

Zelin Tan – *Queen's University Belfast*; Tongchuan Wang – *Queen's University Belfast*; Jonathan Coulter – *Queen's University Belfast*

Delivery of mRNA with non-immunogenic lipid nanoparticles

Niren Murthy, PhD, *University of California at Berkeley, United States*
Dengpan Liang – *University of California at Berkeley*; Hesong Han – *University of California at Berkeley*; Atip Lawanprasert – *University of California at Berkeley*

Development of a Lipid Nanoparticle-Based mRNA Vaccine Against Chikungunya Virus: Preclinical Evaluation

Flávia França, *Federal University of Minas Gerais, Brazil*
Gabriel da Silva – *Federal University of Minas Gerais*; Marco Tullio Alves – *Federal University of Minas Gerais*; Guilherme Costa – *Federal University of Minas Gerais*; Pedro Augusto Costa – *Federal University of Minas Gerais*; Vivian Costa – *Federal University of Minas Gerais*; Matheus Gonçalves

– *Federal University of Minas Gerais*; Amanda Gonzaga – *Federal University of Minas Gerais*; Lays Guimarães – *Federal University of Minas Gerais*; Pedro Guimarães – *Federal University of Minas Gerais*

Disulfide-Based LNPs With Enhanced Endosomal Escape Facilitates Improved HIV-1 DNA Elimination

Soumya Dey, *University of Nebraska Medical Center, United States*
Bharat Chaudhary – *University of Nebraska Medical Center*; Mohammad Uzair Ali – *University of Nebraska Medical Center*; Howard Gendelman – *University of Nebraska Medical Center*; Sudipta Panja – *University of Nebraska Medical Center*

Hybrid nanoassemblies combine active and endogenous targeting to enable siRNA delivery for lung cancer treatment

Philipp Lapuhs, *University of Santiago de Compostela, Spain*
Lucía Sanjurjo – *Health Research Institute of Santiago de Compostela (IDIS), Santiago de Compostela, Spain*; Ana María Torres – *Experimental Biomedicine Centre (CEBEGA), University of Santiago de Compostela, Santiago de Compostela, Spain*; Carmen Carneiro – *Center for Research in Molecular Medicine and Chronic Diseases (CiMUS), Health Research Institute of Santiago de Compostela (IDIS), University of Santiago de Compostela, Santiago de Compostela, Spain*; Bruno Silva – *Swiss Federal Laboratories for Materials Science and Technology, Switzerland*; Anxo Vidal – *Center for Research in Molecular Medicine and Chronic Diseases (CiMUS), Health Research Institute of Santiago de Compostela (IDIS), University of Santiago de Compostela, Santiago de Compostela, Spain*; María José Alonso – *Department of Pharmacology, Pharmacy, and Pharmaceutical Technology, School of Pharmacy/Center for Research in Molecular Medicine and Chronic Diseases (CiMUS), University of Santiago de Compostela (USC), Santiago de Compostela, Spain, Madrid Institute for Advanced Studies in Nanoscience, IMDEA Nanoscience, Madrid, Spain*

Hydrophobic Tuning of Lipo-Xenopeptides Modulated Endosomal Escape and Enhanced mRNA Transfection Efficiency

Sophie Thalmayr, *Ludwig-Maximilians-University Munich, Germany*
Tobias Burghardt – *Ludwig-Maximilians-University Munich*; Joschka Mueller – *Ludwig-Maximilians-University Munich*; Jana Poehmerer – *Ludwig-Maximilians-University Munich*; Mina Yazdi – *Ludwig-Maximilians-University Munich*; Miriam Hoehn – *Ludwig-Maximilians-University Munich*; Olivia Merkel – *Ludwig-Maximilians-University Munich*; Ernst Wagner – *Ludwig-Maximilians-University Munich*

Immunogenic silica nanoparticles and silicified cells for ovarian cancer

Achraf Noureddine, *University of New Mexico, United States*
Lien Tang – *University of New Mexico*; Ben Marwedel – *UT Austin*; Caleb Dang – *Rice University*; Marian Olewine – *UCLA*; Prashant Dogra – *University of Southern California*; Rita Serda – *University of New Mexico Health Sciences Center*

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Investigating type of ionizable lipids in mRNA lipid nanoparticle vaccines to induce respiratory mucosal immunity

Dhruv Patel, MSc, *Vaccines and Infectious Disease Organization (VIDO), Canada*

Naga Suresh Kola - *Vaccines and Infectious Disease Organization (VIDO)*; Tasson Rodrigues - *Vaccines and Infectious Disease Organization (VIDO)*; Kaushal Baid - *Vaccines and Infectious Disease Organization (VIDO)*; Arianna Hurtado-Monzón - *Vaccines and Infectious Disease Organization (VIDO)*; Arinjay Banerjee - *Vaccines and Infectious Disease Organization (VIDO)*; Aneesh Thakur - *Vaccines and Infectious Disease Organization (VIDO)*

Mechanistic Insights into Helper Lipid-Dependent Trafficking and Functional Response to mRNA Lipid Nanoparticles

Shraddha Sharma, PhD, *Sanofi, United States*

Mihaela Babiceanu - *Sanofi*; Sudha Chivukula - *Sanofi*; Ryan Clinton - *Sanofi*; Hillary Danz - *Sanofi*; Frank DeRosa - *Sanofi*; Fengmei Hua - *Sanofi*; Shrirang Karve - *Sanofi*; Catherine Khoo - *Sanofi*; Ana Kume - *Sanofi*; Zon Weng Lai - *Sanofi*; Xiaoyan Ni - *Sanofi*; Robert Ontiveros - *Sanofi*; Christian Ortiz - *Sanofi*; Vladimir Perkov - *Sanofi*; Kristen Randall - *Sanofi*; Eric Reyes - *Sanofi*; Alisa Zhilin Roth - *Sanofi*; Anushka Saxena - *Yoh, A Day & Zimmermann Company*; Jackie Tang - *Sanofi*; Wei Zong - *Sanofi*

Membrane-Coated Oral Nucleic Acid Delivery with Mitochondria-Targeted Antioxidants for Intestinal Fibrosis

Qiuyue Liu, *Sichuan University, China (People's Republic)*
Yuan Huang - *Key Laboratory of Drug-Targeting and Drug Delivery System of the Education Ministry and Sichuan Province; Sichuan Engineering Laboratory for Plant-Sourced Drug; West China School of Pharmacy, Sichuan University*

Modified Lipid Nanoparticles Showed Lymph Node Tropism

Muhammad Muzamil Khan, PhD, *University of British Columbia, Canada*

Cedric Brimacombe - *Polymorphic bio*; Ehsan Dezfouli - *University of British Columbia*; Kevin Fox - *University of British Columbia*; Taehun Kim - *University of British Columbia*; Olga Santamaria - *University of British Columbia*; Anthony Wong - *University of British Columbia*

Multiplexed lipid nanoparticle barcoding reveals tissue-dynamic kinetic insights and hepatic zone enrichment

Daniel Siegwart, PhD, *University of Texas Southwestern Medical Center, United States*

Poly (lactic-co-glycolic acid) Nanoparticles for IL-12 Self-Amplifying RNA Delivery in Glioblastoma Models

Fatima Hameedat, *Groningen Research Institute of Pharmacy, Netherlands*

Flávia Sousa - *University of Groningen*

Post-Endosomal Release, Not Escape, Limits Functional mRNA Delivery from Lipid Nanoparticles

Fanfei Meng, PhD, *University of Houston, United States*

Stabilizing mRNA-lipid nanoparticles with carbohydrate excipients for pulmonary delivery

Naga Suresh Kola, *University of Saskatchewan, Canada*

Aneesh Thakur - *Vaccine and Infectious Disease Organization (VIDO)*

Systemic Heart-Selective Lipid Nanoparticles for High-Efficiency In Vivo Delivery and Cardiomyocyte Gene Editing

Andong Liu, PhD, *METIS TechBio, China (People's Republic)*

Shaoli Liu - *METIS TechBio*; Ruilu Feng - *METIS TechBio*; Xiaopeng Song - *METIS TechBio*; Zimo Liu - *METIS TechBio*; Lin Zhang - *METIS TechBio*; Yu Lu - *METIS TechBio*; Rui Mao - *METIS TechBio*; Jiani Lei - *METIS TechBio*; Hongming Chen - *METIS Therapeutics*

The performance of LNPs in Low-Density Lipoprotein Receptor (LDLR) deficient mouse models

Thomas Bobak, MSc, *Novo Nordisk A/S, Denmark*

Thomas Dagø - *Novo Nordisk A/S*; Gael Clergeaud Veiga - *Novo Nordisk A/S*; Sanne Brandt Nielsen - *Novo Nordisk A/S*; Henning Hvid - *Novo Nordisk A/S*; Helene Kildegaard - *Novo Nordisk A/S*; Diego Iglesias Gato - *Novo Nordisk A/S*; Louise Voetmann - *Novo Nordisk A/S*; Erik Oude Blenke - *Novo Nordisk A/S*

Triazine lipids as a platform for mRNA delivery

Vincent Venditto, PhD, *University of Kentucky, United States*

Global Health, Special Populations, Women's Health, & Sex-Specific Therapeutic Approaches

A Multi-Organ-on-a-Chip Platform to Model Pregnancy-Associated Breast Cancer and Test Targeted Interventions

Yasmin Abdedlkader, *University of Toronto, Canada*

Mahmoud Abdelkarim - *University of Toronto*; Hagar Labouta - *Li ka Shing institute*

Alginate cryogel for real-time gastric pH monitoring

Simon Matoori, PhD, *Université de Montréal, Canada*

Katia Cherifi - *Université de Montréal*; Gang Zheng - *University of Toronto*

Biodegradable Reservoir Implants Delivering Bictegravir/ Emtricitabine and Islatravir in Nonhuman Primates

Daniela Cruz, PhD, *RTI International, United States*

Kalie Beckers - *Tulane National Biomedical Primate Center*; Mackenzie Cottrell - *UNC*; Leah Johnson - *RTI International*; Pafio Johnson - *RTI International*; Leanna Levin - *RTI International*; Chastiy Norton - *RTI International*; Ronald Veazey - *Tulane National Biomedical Primate Center*; Xiaolei Wang - *Tulane University School of Medicine*; Meagan Watkins - *Tulane National Biomedical Research Center*; Linying Li - *Johnson & Johnson*

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EGFR-Targeted Nanocarriers Demonstrate Hormone-Responsive Uptake in an Endometrial Spheroid Model

Audrey McCarthy, BA, *Brown University, United States*
Akram Abbasi - *Brown University*; Juan Gnecco - *Tufts University*; Tejal Desai - *Brown University*

Localized Non-Hormonal Treatment of Endometriosis with a Dual-Acting Drug Delivery System

Neslihan Salar, *University of Bern, Switzerland*
Lilian Escher - *University of Bern*; Anna Tomasone - *University of Bern*; Simone Aleandri - *University of Bern*; Paola Luciani - *University of Bern*

Microneedle Patch Delivery of an Adjuvant-Free Malaria Vaccine Enhances Immunity and Protective Efficacy

Gulcin Arslan Azizoglu, PhD, *Georgia Institute of Technology, United States*
Edwin Cardenas - *Artificial Cell Technologies*; Jennifer Daniels - *Artificial Cell Technologies*; Andrea Jacobs - *Artificial Cell Technologies*; Jie Tang - *Artificial Cell Technologies*; Yewel Flores-Garcia - *Johns Hopkins Bloomberg School of Public Health*; Nicholas Kelhofer - *Georgia Institute of Technology*; Fidel Zavala - *Johns Hopkins Bloomberg School of Public Health*; Thomas Powell - *Artificial Cell Technologies*; Mark Prausnitz - *Georgia Institute of Technology*

Nanofiber Encapsulation Modulates Adhesion and Early Biofilm Formation of Vaginal Lactobacilli

Špela Zupančič, *University of Ljubljana, Faculty of Pharmacy*

Pre-clinical Screening of Prenatal Nanomedicines

Hagar Labouta, PhD, *University of Toronto, Canada*

Imaging in Drug Delivery

High-Resolution 3D Imaging and Release Prediction for the Rapid Assessment of Hormonal Intrauterine Systems

Melissa Rooney, PhD, *DigiM Solution LLC, United States*
Melissa Rooney - *DigiM Solution LLC*; Ashwin Abhang - *UConn School of Pharmacy*; Diane Burgess - *UConn School of Pharmacy*; Andrew Clark - *DigiM Solution LLC*; Phil Yawman - *DigiM Solution LLC*

Imaging Intratumoral Distribution as Driver of Nanotaxane Treatment Efficacy

Quim Peña, PhD, *RWTH Aachen University Hospital, Germany*
Lieby Zborovsky - *TUM School of Natural Sciences, Technical University of Munich (TUM), Garching, Germany*; Alec Wang - *RWTH Aachen University Hospital, Institute for Experimental Molecular Imaging, Forckenbeckstraße 55, 52074 Aachen, Germany*; Rahaf Mihyar - *RWTH Aachen University Hospital, Institute for Experimental Molecular Imaging, Forckenbeckstraße 55, 52074 Aachen, Germany*; Armin Shalmani - *RWTH Aachen University Hospital, Institute for Experimental Molecular Imaging, Forckenbeckstraße 55, 52074 Aachen, Germany*; Jan Niklas May - *RWTH Aachen University Hospital, Institute for Experimental*

Molecular Imaging, Forckenbeckstraße 55, 52074 Aachen, Germany; Eva Buhl - *Electron Microscopy Facility, Institute of Pathology, RWTH Aachen University Hospital, 52074 Aachen, Germany*; Diana Daberkow - *Experimental Pharmacology and Oncology GmbH, Berlin, Germany*; Wolfgang Walther - *Experimental Pharmacology and Oncology GmbH, Berlin, Germany*; Fabian Kiessling - *RWTH Aachen University Hospital, Institute for Experimental Molecular Imaging, Forckenbeckstraße 55, 52074 Aachen, Germany*; Yang Shi - *RWTH Aachen University Hospital, Institute for Experimental Molecular Imaging, Forckenbeckstraße 55, 52074 Aachen, Germany*; Josbert Metselaar - *RWTH Aachen University Hospital, Institute for Experimental Molecular Imaging, Forckenbeckstraße 55, 52074 Aachen, Germany*; Nicole Strittmatter - *TUM School of Natural Sciences, Technical University of Munich (TUM), Garching, Germany*; Twan Lammers - *RWTH Aachen University Hospital, Institute for Experimental Molecular Imaging, Forckenbeckstraße 55, 52074 Aachen, Germany*

Influence of Molecular Charge on Intrathecal Drug Distribution

Martta Peltoniemi, MSc, *University of Helsinki, Finland*
Sonja Jalonen - *University of Helsinki*; Susanne Wiedmer - *University of Helsinki*; Terhi Lohela - *Helsinki University Hospital and University of Helsinki*; Mirka Sarparanta - *University of Helsinki*; Tuomas Lilius - *Helsinki University Hospital and University of Helsinki*

Investigating the Influence of Polymer Structures on the Accelerated Blood Clearance of Liposomes using PET Imaging

Alessia Centanni, *University of Helsinki, Finland*
Florian Ziegler - *University of Helsinki*; Surachet Imlimthan - *University of Helsinki*; Julian Schmidt - *Johannes Gutenberg University Mainz*; Linnea Flytström - *University of Helsinki*; Holger Frey - *Johannes Gutenberg University Mainz*; Robert Luxenhofer - *University of Helsinki*; Mirka Sarparanta - *University of Helsinki*

PET-CT and PET-MRI Evaluation of Anti-PSMA [89Zr-DFO]5D3 Antibody Theranostic Conjugates

Sudath Hapuarachchige, PhD, *The Johns Hopkins School of Medicine, United States*
Zora Nováková - *Institute of Biotechnology of the Czech Academy of Sciences*; Cyril Bařinka - *Institute of Biotechnology of the Czech Academy of Sciences*; Dmitri Artemov - *The Johns Hopkins University School of Medicine*

Radiopaque Hydrogel-in-Liposome Nanoplatfom for Tumor Theranostics via μ CT Imaging and Chemotherapy

Sang Min Lee, MSc, *Seoul National University, Republic of Korea*
So-Yeol Yoo - *Seoul National University*; Jae-Young Lee - *Seoul National University*

Super-Resolution Microscopy Reveals mRNA Fate and Endosomal Escape at Single-Particle level

Klarinda Zwaan, MSc, *Eindhoven Technical University, Netherlands*
Lorenzo Albertazzi - *Eindhoven University of Technology*; Roland Brock - *Radboud University Medical Center*; Ward Jacobs - *Radboud University Medical Center*

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Immuno Delivery (Focus Group – ID)

Bispecific DC-CD4 Nanovesicles Enable Efficient Lymph Node Programming of Antigen Specific Immune Tolerance

Lei Zhao, *Soochow University, China (People's Republic)*
Yiran Zheng – *Soochow University*; Ze Yuan – *Jiangnan University*; Xinyun Zhang – *The Second Affiliated Hospital of Soochow University*

Deep learning-assisted development of anti-CD25 nanobodies for T cell-directed nanomedicine

Senna Roelofs, MSc, *Eindhoven University of Technology, Netherlands*
Ayla Hokke – *Eindhoven University of Technology*; Koen de Bruin – *Eindhoven University of Technology*; Derek van Tilborg – *Eindhoven University of Technology*

Drug-Integrated Amphiphilic Nano-Assemblies (DIANAs) for localized immunotherapies at the transplantation site

Diana Velluto, *University of Miami, United States*
Giulio Palummieri – *University of Miami*; Sung-Ting Chuang – *University of Miami*; Peter Buchwald – *University of Miami*; Estefania Quesada-Masachs – *University of Miami*

Efficacy of allergen-loaded nanoparticles for allergen specific immunotherapy

Ana Pérez Moreno, *IBIMA Plataforma BIONAND, Spain*
María del Carmen Martín-Astorga – *IBIMA Plataforma BIONAND*; José A. Céspedes – *IBIMA Plataforma BIONAND*; Paula Cuevas-Delgado – *IBIMA Plataforma BIONAND*; Irene García-Esteban – *IBIMA Plataforma BIONAND*; Pablo Torres – *IBIMA Plataforma BIONAND*; Paul Palmquist-Gomes – *IBIMA Plataforma BIONAND*; Carlos J. Aranda – *IBIMA Plataforma BIONAND*; María José Torres – *IBIMA Plataforma BIONAND*; Cristobalina Mayorga – *IBIMA Plataforma BIONAND*; Juan L. Paris – *IBIMA Plataforma BIONAND*

Engineered *Saccharomyces boulardii* for Local Immunotherapy Delivery Ameliorates Colitis

Alita Miller, *University of North Carolina at Chapel Hill, United States*
Anthony Hazelton – *University of North Carolina at Chapel Hill*; Juliane Nguyen – *University of North Carolina at Chapel Hill*

Engineering DNA-Scaffolded polymeric Particles for Enhanced NK Cell Antitumor Activity

Marwa Sallam, PhD, *Brown University, United States*
Jingge Chen – *Brown university*; Deblin Jana – *Brown university*; Tejal Desai – *Brown university*

Erythrocyte Patch for Enhanced B Cell Depletion Therapy

Fengju Wang, *SiChuan University, China (People's Republic)*

Jiaqi Liu – *SiChuan University*

In vivo cytokine cancer therapy using mRNA-loaded apolipoprotein nanoparticles

Merel Hendriks, MSc, *Eindhoven University of Technology // Biotrip, Netherlands*
Tom Anbergen – *Radboud University Medical Center*; Jeroen

Deckers – *Radboud University Medical Center*; Stijn Hofstraat – *Eindhoven University of Technology*; Yuri van Elsas – *Radboud University Medical Center*; Willem Mulder – *Radboud University Medical Center*; Roy van der Meel – *Eindhoven University of Technology*

In vivo Degradable Nanocarriers for Immunodrug Delivery and Gene Interference

Lutz Nuhn, PhD, *Center of Polymers for Life, Julius-Maximilians-Universität Würzburg, Germany*
Adrian Hauck – *Center of Polymers for Life, Julius-Maximilians-Universität Würzburg*; Alexander Fuchs – *Center of Polymers for Life, Julius-Maximilians-Universität Würzburg*

Intradermal delivery of liposomal personalized neoepitope vaccines induces high T cell responses and tumor control

Koen Van der Maaden, PhD, MSc, BSc, *Leiden University Medical Center, Netherlands*

Ionizable LNP for anti-glioblastoma mRNA CAR T cell in vivo engineering

Dzhangar Dzhumashev, *University of Geneva, Switzerland*
Darel Martinez Bedoya – *University of Geneva*; Ali Ghasemi – *University of Geneva*; Suzel Davanture – *University of Geneva*; Luis Castillo – *University of Geneva*; Noëlia Maldonado-Perez – *University of Geneva*; Gaspard Pardon – *EPFL*; Valérie Dutoit – *University of Geneva*; Denis Migliorini – *University of Geneva, University Hospital of Geneva*

Lipid Nanocarriers with spleen tropism for mRNA-mediated T Cell Engineering

Elisa Battistini, *University of Santiago de Compostela, Spain*
Naiara Doldán – *University of Santiago de Compostela*; Alberto Jiménez Lomo – *University of Santiago de Compostela*; Philipp Lapuhs – *University of Santiago de Compostela*; Ivana Zagorac – *Spanish National Cancer Research Centre (CNIO)*; Luis Álvarez-Vallina – *Spanish National Cancer Research Centre (CNIO)*; Lucía Sanjurjo – *Health Research Institute of Santiago de Compostela (IDIS)*; María José Alonso – *University of Santiago de Compostela*

Lymphatic Remodeling Enhances Dendritic Cell-Targeted Nanovaccine Efficacy for Breast Cancer Brain Metastases

Carolina Macela, *Research Institute for Medicines (iMed. ULisboa), Portugal*
Rita Acúrcio – *Research Institute for Medicines (iMed.ULisboa)*; Helena Florindo – *Research Institute for Medicines (iMed. ULisboa)*

Macrophage-targeted nanotherapy enables immune reprogramming in inflammatory bowel disease

Chia-Yueh Hsiung, MSc, *National Tsing Hua University/ Academia Sinica, Taiwan (Republic of China)*
Yuncheng Chen – *Institute of Biological Chemistry, Academia Sinica, Taipei 115, Taiwan*; Tsung-Yin Lee – *Institute of Bioengineering, National Tsing Hua University, Hsinchu 30013, Taiwan*

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Macrophage-Targeting Peptide-Driven Intratumoral Penetration of STING Nanotherapy in PDAC

Hsin-Mei Lee, *National Tsing Hua University / Academia Sinica, Taiwan (Republic of China)*
Yunching Chen - *Academia Sinica*; Sheng-Liang Cheng - *Academia Sinica*; Chung-Pin Li - *Taipei Veterans General Hospital*

Multivalent Ligand Armed NK Cells for Immunological Synapse Stabilizing

Lian Li, *SiChuan University, China (People's Republic)*

Nanomedicine for immunoregulation in sepsis

Elias Fattal, *University Paris-Saclay, France*
Younes Louaguenouni - *Université Paris Saclay*; Qinglin Wang - *Université Paris Saclay*; Catherine Cailleau - *Université Paris-Saclay*; Juliette Vergnaud - *Université Paris-Saclay.fr*; François Fay - *Université Paris-Saclay*

Nanomedicine Reprogramming of Cancer-Associated Fibroblasts Enhances Chemo-Immunotherapy in Pancreatic Cancer

Ahmed Gamal Hemdan Ahmed, *Radboud University Medical Center - Radboud University- Nijmegen, Netherlands*
Ahmed Mostafa Ramadan - *Twente University*; Franck Assyag - *Twente University*; Jai Prakash - *Radboud UMC*

Senescence-Engineered Hybrid Nanovesicle aAPCs for Spleen-Targeted Cancer Immunotherapy

Wei Tang, *National University of Singapore, Singapore*

Sensitized mast cells for targeted drug delivery and augmented cancer immunotherapy

Jicheng Yu, PhD, *Zhejiang University, China (People's Republic)*

Synergistic Tumor Microenvironment Modulation Enhances Nano-Immunotherapy and Chemotherapy Across Solid Tumors

Constantina Neophytou, PhD, *The Cyprus Institute of Neurology and Genetics, Cyprus*
Stella Angeli - *The Cyprus Institute of Neurology and Genetics*; Antonia Charalambous - *University of Cyprus*; Fotios Mpekris - *The Cyprus Institute of Neurology and Genetics*; Myrofora Panagi - *University of Cyprus*; Triantafyllos Stylianopoulos - *University of Cyprus*; Chrysovalantis Voutouri - *University of Cyprus*

Systemically inducing trained immunity overcomes solid tumors' immunosuppressive microenvironment

Bram Priem, MD, *Trained Therapeutix Discovery, Netherlands*
Tom Anbergen - *RadboudUMC*; Yuri van Elsas - *RadboudUMC*; Jeroen Deckers - *RadboudUMC*; Thijs Beldman - *TTxD*; Joost Kreijtz - *TTxD*; Arjan Griffioen - *Amsterdam UMC*; Willem Mulder - *RadboudUMC*

Manufacturing and Process Scale-Up

Automated compositional screening of nanoparticles containing mycobacterial components for immunostimulation

Anna-Maria Makri-Pistikou, *Nanoworx B.V., Netherlands*
Milou Meulendijks - *Eindhoven University of Technology*; Anastasis Savellos - *Nanoworx B.V.*; Chiara Tramontano - *Eindhoven University of Technology*; Ayla Hokke - *Eindhoven University of Technology*; Ewelina Kluza - *Eindhoven University of Technology*; Roy van der Meel - *Eindhoven University of Technology*; Stijn Hofstraat - *Nanoworx B.V.*; Anne de Dreu - *Nanoworx B.V.*; Peter Hendriks - *Nanoworx B.V.*; Willem Mulder - *Eindhoven University of Technology*

Enhancing mRNA-LNP Functionality Through Optimal Organic Solvent Selection: Advantages of Pyridine

Koki Ogawa, PhD, *Nagoya-city University, Japan*
Satoshi Miyake - *Nagoya-city university*; Tetsuya Ozeki - *Nagoya-city university*

High-Throughput Aerofoiled-Based Microfluidics for Screening and AI-Driven Optimization of Lipid Nanoparticles

Nan Zhang, *University College Dublin, Ireland*
Allen Mathew - *University College Dublin*; Luhan Wang - *University College Dublin*; Mingzhi YU - *University College Dublin*

Impact of Particle Agglomeration & Depot Microstructure on In Vivo Performance of Long Acting Injectable Suspension

Saurabh Bhorkade, *Credentials, University of Connecticut, United States*
Diane Burgess - *University of Connecticut*; Daniela Amaral Silva - *Simulations Plus, Inc.*; Viera Lukacova - *Simulations Plus, Inc.*; Alam Khondoker - *U.S. Food and Drug Administration*; Yan Wang - *U.S. Food and Drug Administration*

It's Not Me, It's You: Mapping Process Drivers of Reproducibility in PLGA Nanoparticle Production

Alvja Mali, *Wageningen University and Research, Netherlands*
Mangala Srinivas - *Wageningen University & Research*; Raphael Marques Marcilli - *Wageningen University & Research*

Lipid nanoparticle production method affects lipid composition, nanoparticle attributes, and bio-interactions

Thomas Moore, PhD, *University of Naples Federico II, Italy*
Simone Misto - *University of Naples Federico II*; Teresa Ferrillo - *University of Naples Federico II*; Michele Guida - *University of Naples Federico II*; Andrea Di Fonzo - *Italian Institute of Technology*; Andrea Armirotti - *Italian Institute of Technology*; Fabiana Quaglia - *University of Naples Federico II*

Modular Continuous Reactor Platform for Scalable Manufacturing of Taste-Masked Clarithromycin Nanoparticles

Shorooq Abukhamees, *The Hashemite University | Faculty of Pharmaceutical sciences, Jordan*
Maximilian Besenhard - *UCL*; Hend Abdelhakim - *UCL*; Georgios Gkogkos - *UCL*

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Pharmacokinetic clinical trial of 3D-printed pimobendan tablets in Beagle dogs

Ruy Beck, *Federal University of Rio Grande do Sul, Brazil*
Julia Leao - *Federal University of Rio Grande do Sul (UFRGS), Brazil*;
Valeria Winck - *Federal University of Rio Grande do Sul (UFRGS), Brazil*;
Lucas Barnet - *Laboratório Federal de Defesa Agropecuária (LFDA/RS), Brazil*;
Fabiano Barreto - *Laboratório Federal de Defesa Agropecuária (LFDA/RS), Brazil*;
Fabio Scott - *Federal Rural University of Rio de Janeiro (UFRRJ), Brazil*;
Yara Cid - *Federal Rural University of Rio de Janeiro (UFRRJ), Brazil*;
Diego de Andrade - *Federal University of Rio Grande do Sul (UFRGS), Brazil*

Print, disperse, deliver: personalized water-soluble 3D-printed medicines for oral drug delivery

Nadine Funk, *Universidade Federal do Rio Grande do Sul, Brazil*
Valéria Winck - *Universidade Federal do Rio Grande do Sul*;
Júlia Leão - *Universidade Federal do Rio Grande do Sul*;
Douglas De Matos - *Hospital de Clínicas de Porto Alegre*;
Silvia Almeida - *Hospital de Clínicas de Porto Alegre*;
Marcio Ayres - *Hospital de Clínicas de Porto Alegre*;
Thalita Jacoby - *Hospital de Clínicas de Porto Alegre*;
Ruy Beck - *Universidade Federal do Rio Grande do Sul*

Programming Shape and Therapy: 4D- Scaffolds for Minimally Invasive Drug Delivery

Silvia Pisani, *University of Pavia, Italy*
Aleksandra Evangelista - *University of Pavia*;
Luigi Ruccolo - *IRCCS Policlinico San Matteo*;
Marco Benazzo - *University of Pavia*;
Rossella Dorati - *University of Pavia*;
Ida Genta - *University of Pavia*;
Bice Conti - *University of Pavia*

Scalable LNP Manufacturing: TFR-Independent Quality, Mixer Effects and Process Intensification

Janani Thangapandian, *leon-nanodrugs GmbH, Germany*

Thiol-ene polymer platform enabling injectable macrogels and nanogels for stimuli-responsive dual drug delivery

Cristina Casadidio, *University of Camerino, United States*
Lakshmi Sathi Devi - *University of Camerino*;
Roberta Censi - *University of Camerino*

UltraPlex: Ultrasonic solvent-free, sterile-compatible manufacturing of mRNA liposomes

Sanjeev Ranjan, PhD, *Aalto University, Finland*
Nele Vangiel - *Aalto University, Finland*;
Yohann Lebourlout - *Aalto University, Finland*;
Heikki Nieminen - *Aalto University, Finland*

Nanomedicine and Nanoscale Delivery (Focus Group – NND)

A bioorthogonal luminescent approach for intracellular delivery quantitative analysis

Shiqi Wang, *University of Helsinki, Finland*
Jonas Burmester - *University of Helsinki*;
Mingze Yang - *University of Helsinki*;
Saadia Chowdhury - *University of Helsinki*;
Mariia Shcherbii - *University of Helsinki*

A Modular HDL-Inspired Hydrogel Platform for Local, Controlled Drug Delivery

Matt Timmers, PhD, *Eindhoven University of Technology, Netherlands*
Fenna Craenmehr - *Eindhoven University of Technology*;
Yuri van Elsas - *RadboudUMC*;
Tom Anbergen - *RadboudUMC*;
Roy van der Meel - *Eindhoven University of Technology*;
Patricia Dankers - *Eindhoven University of Technology*;
Willem Mulder - *Eindhoven University of Technology*

A Next-Generation Modular Ionizable Lipid Nanoparticle Platform for Gene and Cell Therapy Applications

Alexandre Lopez, PhD, *Certest Biotec S.L., Spain*
Javier Gimenez-Warren - *Certest Pharma*;
Juan Enrique Martinez Olivan - *Certest Biotec SL*;
Diego De Miguel - *Certest Biotec SL*;
Elena Mata - *Certest Biotec S.L.*;
Esther Broset - *Certest Biotec S.L.*;
Diego Casabona Agudo - *Certest Biotec S.L.*;
Laura de Miguel Acha - *Certest Pharma*;
Esther Perez-Herran - *Certest Biotec S.L.*;
Andrei Mihai Stoian - *Certest Pharma*

A pH-Sensitive Chemotherapy Nanococktail with CD47-Silencing Nanoparticles for Enhanced Breast Cancer Therapy

Kamel Ahmed, *Auckland University, New Zealand*
Emma Nolan - *University of Auckland*;
Jingjing Wang - *University of Auckland*;
Patrick Pan - *University of Auckland*;
Andrew Andrew - *University of Auckland*;
Zimei Wu - *University of Auckland*

A Pharmacokinetic Paradox: Blood Cell Interactions Mask Divergent Nanocarrier Mechanisms

Julian Knoll, *KU Leuven, Germany*
Julia Malinovskaya - *D. Mendeleev University of Chemical Technology of Russia*;
Tatyana Kovshova - *D. Mendeleev University of Chemical Technology of Russia*;
Svetlana Gelperina - *D. Mendeleev University of Chemical Technology of Russia*;
Matthias Wacker - *KU Leuven*

Advancing Biotherapeutic Delivery in Ulcerative Colitis using Lipid Mesophases

Rafaela Gazzi, PhD, *University of Bern, Switzerland*
Tiziana Cremona - *University of Bern*;
Reto Czekalla - *University of Bern*;
Emily Capbell - *University of Bern*;
Marlene Schwarzfischer - *University Hospital Zurich*;
Gerhard Rogler - *University Hospital Zurich*;
Michael Scharl - *University Hospital Zurich*;
Alessandra Bergadano - *University of Bern*;
Raffaele Mezzenga - *ETH Zurich*;
Martin Kuentz - *University of Applied Sciences and Arts Northwestern Switzerland*;
Paola Luciani - *University of Bern*;
Simone Aleandri - *University of Bern*

Albumin-based smart nanocargo for synchronous drug co-delivery to Kupffer cells and hepatic stellate cells in MASH

Kengo Yasuda, PhD, *Kobe Gakuin University, Japan*
Hitoshi Maeda - *Kyoto Pharmaceutical University*;
Hiroshi Watanabe - *Kumamoto University*;
Shuichi Kishimoto - *Kobe Gakuin University*;
Toru Maruyama - *Kumamoto University*

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APC-Targeted Nanovaccine Enhances Immunity and Boosts Efficacy of Standard and KRAS-Targeted Therapies in PDAC

Daniella Vaskovich-Koubi, MD, PhD, *Tel-Aviv university, Israel*
Ron Kleiner - *Tel-Aviv university*; Yair Roth - *Tel-Aviv university*; Adan Miari - *Tel-Aviv university*; Helena F. Florindo - *Universidade de Lisbon*; Ronit Satchi-Fainaro - *Tel-Aviv university*

Biomimetic Nanomotors with pH-Responsive Propulsion to Deliver a Dual Combination Treatment for Osteosarcoma

Sofia Costa, i3s - *Institute of Investigation and Innovation in Health, University of Porto, Portugal*
Bruno Sarmiento - *i3S - Instituto de Investigação e Inovação em Saúde da Universidade do Porto*; Ruibing Wang - *ICMS, Univeristy of Macau*; Catarina Leite Pereira - *i3S - Instituto de Investigação e Inovação em Saúde da Universidade do Porto*

Biomimetic Nanoparticles Co-delivering Gemcitabine and IKK β Inhibitor Reverse PDAC Stemness

Junyi Lin, *University of Nebraska Medical Center, United States*
Aboushanab Alaa - *University of Nebraska Medical Center*; HassankhaniRad Ashkan - *University of Nebraska Medical Center*; Wei Li - *University of Nebraska Medical Center*; Ying Li - *University of Nebraska Medical Center*

Breaking the Neural Mitochondria-Neutrophil Loop with a Targeted Drug Delivery Platform for Spinal Cord Injury

Jinxia Kong, PhD, *Sichuan University, China (People's Republic)*
yuan huang - *Sichuan University*

Calcium phosphate nanoparticles enable efficient delivery of therapeutic siRNA for cardiac gene silencing

Camilla Fusacchia, *ISSMC-CNR and University of Parma, Italy, Italy*
Lorenzo Degli Esposti - *University of Genova, Italy*; Daniele Catalucci - *Humanitas Clinical and Research Center and Institute of Genetics and Biomedical Research-CNR, Italy*; Teresa Maria Formica - *Molecular Cardiology-IRCCS Istituti Clinici Scientifici Maugeri and Department of Pharmacy, University of Naples Federico II, Italy*; Luca Grisorio - *Molecular Cardiology-IRCCS Istituti Clinici Scientifici Maugeri and Department of Internal Medicine, University of Pavia, Italy*; Rossana Bongianino - *Molecular Cardiology-IRCCS Istituti Clinici Scientifici Maugeri, Italy*; Silvia Giuliana Priori, *Molecular Cardiology-IRCCS Istituti Clinici Scientifici Maugeri and Department of Internal Medicine, University of Pavia, Italy*; Gaetano Cannavale - *Department of Pathophysiology and Transplantation, University of Milan, Italy*; Cristina Martelli - *Department of Pathophysiology and Transplantation, University of Milan, Italy*; Luisa Ottobrini - *Department of Pathophysiology and Transplantation, University of Milan and Institute of Bioimaging and Biological Complex Systems (IBSBC), National Research Council -(CNR), Italy*; Alessio Adamiano - *Institute of Nanostructured Materials (ISMN), National Research Council -(CNR), Italy*; Michele Iafisco - *Institute of Nanostructured Materials (ISMN), National Research Council -(CNR), Italy*

Cardiomyocyte-targeted inhibition of ceramide production salvages damaged heart

Jiong-Wei Wang, PhD, *National University of Singapore, Singapore*
Chenyuan Huang - *National University of Singapore*; Rawan Shenhani - *National University of Singapore*; Suet Yen Chong - *National University of Singapore*; Giorgia Pastorin - *National University of Singapore*; Gert Storm - *Utrecht University*; Federico Torta - *DukeNUS Medical School*

Controlled Nanoparticle Localization in Tumor Spheroids for Effective Photothermal Therapy

Sandra Krzyzowska, MSc, *KU Leuven, Belgium*
Beatrice Fortuni - *KU Leuven*; Susana Rocha - *KU Leuven*; Hiroshi Uji-i - *Hokkaido University*

DAR governs subcutaneous ADC pharmacokinetics via a simplified hydrogel depot

Alexandre Detappe, PhD, *Institut de Cancérologie Strasbourg Europe, France*
Guillaume Jacquot - *Institut Strauss*; Olivier Tillement - *UCBL*

Delivery of CAR T cells in a magnesium-functionated hydrogel for peritoneal cancer therapy

Junlin Li, *Zhejiang University, China (People's Republic)*
Zhen Gu - *Zhejiang University*; Hongjun Li - *Zhejiang University*

Design of Magnetically Actuated Biodegradable Fibre-based Scaffolds for Remote Modulation of Drug Release

Mihaela Rusu, *Helmut Schmidt University, Germany*
Benedict Bauer - *ITA-RWTH*; Lennart Göpfert - *Helmut-Schmidt University*; Thomas Gries - *ITA*; Ioana Slabu - *Helmut-Schmidt University*

Developing a universal therapeutic mRNA vaccine for the treatment of advanced melanoma

Pau Castells, *Institut Químic de Sarrià, Spain*
Silvia López-Borrego - *Centro Nacional de Biotecnología (CNB-CSIC)*; Mar Valés-Gómez - *Centro Nacional de Biotecnología (CNB-CSIC)*; Cristina Fornaguera - *Institut Químic de Sarrià (IQS)*

Discovery of a new polymorph of TBAJ tartrate induced by wet milling as a long-acting injectable formulation

Ben Boyd, PhD, *Monash University, United States*
Jamie Lam - *Monash University*; Malinda Salim - *Monash University*; Bryce Barber - *Monash University*; Livia Salvati Manni - *Monash University*; Nadina Zulbeari - *University of Southern Denmark*; Rene Holm - *University of Southern Denmark*

Dual-Drug Nanoparticle Therapy for Primary Tumors and Brain Metastases in BRCA1-Deficient Cancers

Giuseppe Longobardi, PhD, *Tel Aviv University, Israel*
Rami Khoury - *Tel Aviv University*; Tania T. Barnatan - *Tel Aviv University*; Dana Venkert - *Tel Aviv University*; América Garcia Alverado - *Tel Aviv University*; Adi Yona - *Tel Aviv University*; Marina Green Buzhor - *Tel Aviv University*; Rita C. Acúrcio - *University of Lisbon*; Qiwei Wang - *Harvard Medical School*; Jean J. Zhao - *Dana-Farber Cancer Institute*; Helena F. Florindo - *University of Lisbon*; Ronit Satchi-Fainaro - *Tel Aviv University*

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Durable in vivo expression of DNA-encoded biologics via SubQ delivery of polymer nanoparticles (PNPs)

Thomas Neenan, PhD, Nanite Inc., United States
Peter Dykeman-Birmingham - Nanite Inc.; John Fisher - Nanite Inc.; Rakshitha Miskin - Nanite Inc.; Suteja Patil - Nanite Inc.; Nathaniel Snell - Nanite Inc.; Teresa Tamayo - Nanite Inc.; Jeffrey Ting - Nanite Inc.; Jared Van Reet - Nanite Inc.; Sean Kevlahan - Nanite Inc.

Effective LNP-based delivery of therapeutic mRNA under the harsh environment of degenerated intervertebral disc

Daniele Corraini, Utrecht University, Netherlands
Aida Moreira - Utrecht University; Chantal Voskamp - Utrecht University; Marianna Tryfonidou - Utrecht University; Raymond Schiffelers - UMC Utrecht

Efficient Nanoneedle transfection requires Caveolar Endocytosis

Ciro Chiappini, PhD, King's College London, United Kingdom
Giovanna Lombardi - King's College London; Ningjia Sun - King's College London

Engineered LNPs for Active Targeting of Circulating Tumor Cells

Stefano Salmaso, PhD, University of Padova, United States
Lara Marcenta - University of Padova; Andrea Barisan - University of Padova; Elena Scoccia - Dep Pharmaceutical and Pharmacological Sciences; Antonella Teramo - University of Padova; Stefania Bortoluzzi - University of Padova; Paolo Caliceti - University of Padova; Renato Zambello - University of Padova

Engineering Polymeric Nanocarriers for Targeted Drug Delivery in Chronic Kidney Disease

Vedangi Kulkarni, Institute for Experimental Molecular Imaging, Germany
Margarita Iljin - Crown Bioscience, Leiden, The Netherlands; Nicolas Olalde-Hightower - Leiden University Medical Center, Leiden, The Netherlands; Tim Caspers - RWTH Aachen University Hospital, Aachen, Germany; Elena Rama - RWTH Aachen University Hospital, Aachen, Germany; Hester Bange - Crown Bioscience, Leiden, The Netherlands; Leo Price - Crown Bioscience, Leiden, The Netherlands; Yvonne H.W. Derks - Radboud University Medical Center, Nijmegen, The Netherlands; Barbara M. Klinkhammer - RWTH Aachen University Hospital, Aachen, Germany; Peter Boor - RWTH Aachen University Hospital, Aachen, Germany; Dorien J.M. Peters - Leiden University Medical Center, Leiden, The Netherlands; Twan Lammers - RWTH Aachen University Hospital, Aachen, Germany

Enhancing KRAS mRNA-LNP Vaccine Efficacy through Tumor Microenvironment Normalization in Desmoplastic Tumors

Antonia Charalambous, BSc, MSc, PhD, University of Cyprus, Cyprus
Fotios Mpekris - The Cyprus Institute of Neurology & Genetics; Chrysovalantis Voutouri - AnaBios-Data Ltd; Myrofora Panagi - University of Cyprus; Tereza Andreou - University of Cyprus; Constantina Neophytou - The Cyprus Institute of Neurology & Genetics; Stella Angeli - The Cyprus Institute of Neurology & Genetics; Christina Michael - University of Cyprus; Triantafyllos Stylianopoulos - University of Cyprus

Enzyme-activatable doxorubicin-prodrug micelles promote complete response to immune checkpoint therapy in TNBC

Alexandra Valeske, RWTH Aachen University, Germany
Bi Wang - Institute for Experimental Molecular Imaging ExMI, RWTH Aachen University; Marie Pinvidic - Institute for Experimental Molecular Imaging ExMI, RWTH Aachen University; Karolin Roemhild - Institute for Experimental Molecular Imaging ExMI, RWTH Aachen University; Susanne Koletnik - Institute for Experimental Molecular Imaging ExMI, RWTH Aachen University; Lea Imschweiler - Institute for Experimental Molecular Imaging ExMI, RWTH Aachen University; Vedangi Kulkarni - Institute for Experimental Molecular Imaging ExMI, RWTH Aachen University; Qingxue Sun - Institute for Experimental Molecular Imaging ExMI, RWTH Aachen University; Hans Scheeren - Institute for Experimental Molecular Imaging ExMI, RWTH Aachen University; Yang Shi - Institute for Experimental Molecular Imaging ExMI, RWTH Aachen University; Josbert Metselaar - Institute for Experimental Molecular Imaging ExMI, RWTH Aachen University; Twan Lammers - Institute for Experimental Molecular Imaging ExMI, RWTH Aachen University; Quim Peña - Institute for Experimental Molecular Imaging ExMI, RWTH Aachen University

Extracellular vesicle mimetics for the targeted treatment of metastatic brain cancer

Sjoerd Idzerda, University of Groningen, Netherlands
Sara Busatto - University of Groningen

Flame Synthesis of Fractal-Like Nanoaggregates for Deep-Tissue Bioimaging

Olof Eskilson, PhD, Science for Life Laboratory, Stockholm University, Sweden
Padyrk Merkl - ETH Zürich; Elina Bletska - Karolinska Institutet; Anshika Maheshwari - Karolinska Institutet; Abhilash Kulkarni - Royal Institute of Technology - KTH; Uliana Kostiv - Royal Institute of Technology - KTH; Anandi Narayana Moorthy - Karolinska Institutet; Haichun Liu - Royal Institute of Technology - KTH; Jerker Widengren - Royal Institute of Technology - KTH; Birgitta Henriques-Normark - Karolinska Institutet; Georgios Sotiriou - Science for Life Laboratory, Stockholms Universitet

Flame Synthesis of Fractal-Like Nanoaggregates for Deep-Tissue Bioimaging

Presenter Name, Credentials, Affiliation, Country
Co-Authors: All names listed

Flame-made nanocarriers of antimicrobial biomolecules against antibiotic resistant bacteria in skin wounds

Niki Karouta, Stockholm University, Sweden
Matilde Ruas - Karolinska Institute; Anshika Maheshwari - Karolinska Institute; Georgios A. Sotiriou - Stockholm University

Flame-Made Nanoparticles for Next-Generation Drug Delivery and Theranostics

Georgios Sotiriou, SciLifeLab, Stockholm University, Sweden

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Formulation Strategies for Pulmonary Delivery of GMP-Bacteriophages

Hadrien Mallet, Edouard Herriot Hospital, France
Hadrien Mallet - Laboratory of Tissue Biology and Therapeutic Engineering (LBTI), CNRS UMR 5305, 69007, Lyon, France;
Benjamine Lapras - , Pharmacy Department, Hospices Civils de Lyon, Edouard Herriot Hospital, FRIPHARM Platform, 69437, Lyon, France; Valentin Lequeux - Laboratory of Tissue Biology and Therapeutic Engineering (LBTI), CNRS UMR 5305, 69007, Lyon, France; Alexia Von Kanel - Pharmacy Department, Hospices Civils de Lyon, Edouard Herriot Hospital, FRIPHARM Platform, 69437, Lyon; Chloe Marchand - Pharmacy Department, Hospices Civils de Lyon, Edouard Herriot Hospital, FRIPHARM Platform, 69437, Lyon, France; Camille Merienne - Pharmacy Department, Hospices Civils de Lyon, Edouard Herriot Hospital, FRIPHARM Platform, 69437, Lyon, France; Floriane Laumay - Bacteriology Department, Institute of Infectious Agents, Hospices Civils de Lyon, Croix Rousse Hospital, 69317, Lyon, France.; Mathieu Medina - Bacteriology Department, Institute of Infectious Agents, Hospices Civils de Lyon, Croix Rousse Hospital, 69317, Lyon, France.; Frederic Laurent - Bacteriology Department, Institute of Infectious Agents, Hospices Civils de Lyon, Croix Rousse Hospital, 69317, Lyon, France.; Fabrice Piro - Pharmacy Department, Hospices Civils de Lyon, Edouard Herriot Hospital, FRIPHARM Platform, 69437, Lyon, France

GD2Fab-directed Ionizable Lipid Nanoparticles for Precision siRNA Therapy in Neuroblastoma

Zhongkun Zhang, Southeast University, China (People's Republic)
Yufei Wang - Southeast University; Siyu Yao - Southeast University

GSH-Scavenging Lipid-Hybrid Nanoplatform for Dual-Light-Primed Cascade Photodynamic Cancer Therapy

So-Yeol Yoo, PhD, Seoul National University, Republic of Korea
Sang Min Lee - Seoul National University; Jeeyeon Lee - Seoul National University; Jae-Young Lee - Seoul National University

High Drug-to-Antibody Ratio Antibody-Polymer Conjugates as a Platform for Hybrid Anti-Cancer Nanomedicine

Tomáš Etrych, Institute of Macromolecular Chemistry, CAS, Czech Republic
Pavel Klener - First medical faculty, Charles University, Prague;
Marek Kovář - Institute of Microbiology, CAS, Prague, Czechia;
Lucia Kučerová - Biomedical Research Center SAS, Slovakia;
Ondřej Lidický - Institute of Macromolecular Chemistry, CAS;
Robert Pola - Institute of Macromolecular Chemistry, CAS

Hyaluronidase Enabled Subcutaneous Delivery of mRNA Lipid Nanoparticles

Chris Wahl, MD, MBA, Halozyme Therapeutics, United States
Ryan Nolan - Halozyme Therapeutics; Marie Printz - Halozyme Therapeutics; David Kang - Halozyme Therapeutics; Robert Connor - Halozyme Therapeutics; Yan Wang - Halozyme Therapeutics; Limin Liu - Halozyme Therapeutics

Immunoglobulin M as a Tumor Targeting Tissue Biomarker for Cancer Nanomedicine Accumulation and Extravasation

Rahaf Mihyar, RWTH Aachen University Hospital, Germany
Jan-Niklas May - Uniklinik RWTH Aachen; Julia Blöck - Uniklinik RWTH Aachen; Tarun Ojha - Uniklinik RWTH Aachen; Roman Barmin - Uniklinik RWTH Aachen; Anne Rix - Uniklinik RWTH Aachen; Fabian Kießling - Uniklinik RWTH Aachen; Saskia von Stillfried - Uniklinik RWTH Aachen; Twan Lammers - Uniklinik RWTH Aachen

Improved In Vivo Tomographic Imaging for LNP-mediated mRNA delivery using red-shifted Fluc alternatives

Lukas Finger, RWTH Aachen University, Germany
Jeffrey Momoh - RWTH Aachen University; Fabian Kießling - RWTH Aachen University; Twan Lammers - RWTH Aachen University

Infection-triggered nisin release from multi-responsive nanogels for efficient bovine mastitis therapy

Maria Soledad Orellano, Polymat, Spain
Maria Florencia De Lillo - IMITAB; Huiyi Wang - Shanghai University; Agustin Picco - INIFTA; Cristian Huck - ALBA; Gabriel Longo - INIFTA; Paula Isaac - IMITAB; Carina Porporatto - IMITAB; Marcelo Calderón - POLYMAT

Injectable hydrogel scaffold for localized delivery of tumoricidal induced neural stem cells in glioblastoma

Kayla Maue, UNC Chapel Hill, United States
N. Caroline Dau - UNC Chapel Hill; Morrent Thang - UNC Chapel Hill; Shawn Hingtgen - UNC Chapel Hill; S. Rahima Benhabbour - UNC Chapel Hill

Innovative phage therapy for chronic osteomyelitis: controlled intrabone release of GMP therapeutic phages

Valentin Lequeux, Hospices Civils de Lyon, France
Benjamine Lapras - Hospices Civils de Lyon, Edouard Herriot Hospital, FRIPHARM Platform, 69437, Lyon, France; Hadrien Mallet - Hospices Civils de Lyon, Edouard Herriot Hospital, FRIPHARM Platform, 69437, Lyon, France; Alexia Von-Kanel - Hospices Civils de Lyon, Edouard Herriot Hospital, FRIPHARM Platform, 69437, Lyon, France; Chloé Marchand - Hospices Civils de Lyon, Edouard Herriot Hospital, FRIPHARM Platform, 69437, Lyon, France; Camille Merienne - Hospices Civils de Lyon, Edouard Herriot Hospital, FRIPHARM Platform, 69437, Lyon, France.; Camille Kolenda - Institute of Infectious Agents, Hospices Civils de Lyon, Croix Rousse Hospital, 69317, Lyon, France.; Mathieu Medina - Institute of Infectious Agents, Hospices Civils de Lyon, Croix Rousse Hospital, 69317, Lyon, France.; Frédéric Laurent - Institute of Infectious Agents, Hospices Civils de Lyon, Croix Rousse Hospital, 69317, Lyon, France.; Fabrice Piro - Hospices Civils de Lyon, Edouard Herriot Hospital, FRIPHARM Platform, 69437, Lyon, France.

Integrating CD44v6-targeted nanodelivery with immune checkpoint blockade for colorectal cancer

Ana Baião, i3S - University of Porto, Portugal
Flávia Castro - i3S - Universidade do Porto; Carla Oliveira - i3S - Universidade do Porto; Bruno Sarmiento - i3S - Universidade do Porto; IUCS-CESPU

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Lipid Nanoparticle-Mediated Spatiotemporal Modulation of NF- κ B Activation to Treat Atherosclerosis

Brian Xi, *University of Chicago, United States*
Siyang Wang - *University of Chicago*; Jiayu Zhu - *University of Chicago*; Shentu Tzu-pin - *University of Chicago*; Gabriel Mercado Vasquez - *University of Chicago*; Ru-Ting Huang - *University of Chicago*; Zhengjie Zhou - *Temple University*; Katiannah Moise - *University of Chicago*; Savas Tay - *University of Chicago*; Yun Fang - *University of Chicago*; Matthew Tirrell - *University of Chicago*

Lipid Structural Dynamics Modulate Dexamethasone Encapsulation and Release in Lipid Nanoparticles

Jader Pires, *Credentials, Universidade Federal de Goiás, Brazil*
Lucas de Souza - *Federal University of Goiás*; Bianca Fontanezi - *Federal University of Goiás*; Alexandre Barros - *Federal University of Goiás*; Sebastião Mendanha - *Federal University of Goiás*; Eliana Lima - *Federal University of Goiás*

Lipoprotein hitchhiking peptide amphiphiles for improved delivery of topoisomerase-I inhibitors

Adem Yildirim, PhD, *Oregon Health and Science University, United States*
Kailin Mooney - *OHSU - Oregon Health & Science University*; Morgan Stewart - *OHSU - Oregon Health & Science University*; Li Xiang - *OHSU - Oregon Health & Science University*

Local vs. systemic tropism of lipid nanoparticles (LNPs) via intramuscular and intradermal injections

Quang Minh Dang, *University of Pennsylvania, United States*
Jacob Brenner - *University of Pennsylvania*; Leo Wang - *University of Pennsylvania*

Mechanistic Insights into Ultrasound-Sensitive Liposomes for Rational Control of Triggered Drug Release

Alina Rwei, *TU Delft, Netherlands*
Tiago Costa - *TU Delft*; Ignasi Simon - *TU Delft*

Microbubble Shell Engineering Enhances Ultrasound-Mediated Drug Delivery

Roman Barmin, *RWTH Aachen University Hospital, Germany*
Laura Charlton - *The University of Edinburgh*; Vasileios Koutsos - *The University of Edinburgh*; Fabio Domenici - *University of Rome "Tor Vergata"*; Gaio Paradossi - *University of Rome "Tor Vergata"*; Thomas Lisson - *Ruhr University Bochum*; Georg Schmitz - *Ruhr University Bochum*; MirJavad Moosaviifar - *RWTH Aachen University Hospital*; Julia Blöck - *RWTH Aachen University Hospital*; Jasmin Baier - *RWTH Aachen University Hospital*; Susanne Koletnik - *RWTH Aachen University Hospital*; Anne Rix - *RWTH Aachen University Hospital*; Fabian Kiessling - *RWTH Aachen University Hospital*; Twan Lammers - *RWTH Aachen University Hospital*; Roger M. Pallares - *RWTH Aachen University Hospital*

Modular PLGA nanoparticles for activatable and targeted tumour imaging by 19F MRI

Mangala Srinivas, *Wageningen University and Research, Netherlands*
Alvja Mali - *Wageningen university and research*

Modular prodrug design through axial ligand tailoring enhances platinum drug delivery to tumors

Marie Pinvidic, *RWTH Aachen, Germany*
Alexandra Valeske - *Institute for Experimental Molecular Imaging, Uniklinik RWTH Aachen University, Forckenbeckstraße 55, Aachen, Germany*; Sven Thoröe-Boveleth - *Institute for Occupational, Social and Environmental Medicine, Uniklinik RWTH Aachen University, Pauwelsstraße 30, Aachen, Germany*; Dmytro Kobzev - *Institute for Experimental Molecular Imaging, Uniklinik RWTH Aachen University, Forckenbeckstraße 55, Aachen, Germany*; Alec Wang - *Institute for Experimental Molecular Imaging, Uniklinik RWTH Aachen University, Forckenbeckstraße 55, Aachen, Germany*; Jeffrey Momoh - *Institute for Experimental Molecular Imaging, Uniklinik RWTH Aachen University, Forckenbeckstraße 55, Aachen, Germany*; Rachel Baillif - *Institute for Experimental Molecular Imaging, Uniklinik RWTH Aachen University, Forckenbeckstraße 55, Aachen, Germany*; Rasika Daware - *Institute for Experimental Molecular Imaging, Uniklinik RWTH Aachen University, Forckenbeckstraße 55, Aachen, Germany*; Vedangi Kulkarni - *Institute for Experimental Molecular Imaging, Uniklinik RWTH Aachen University, Forckenbeckstraße 55, Aachen, Germany*; Yang Shi - *Institute for Experimental Molecular Imaging, Uniklinik RWTH Aachen University, Forckenbeckstraße 55, Aachen, Germany*; Hans W. Scheeren - *Institute for Experimental Molecular Imaging, Uniklinik RWTH Aachen University, Forckenbeckstraße 55, Aachen, Germany*; Sonja Herres-Pawlis - *Institute of Inorganic Chemistry, RWTH Aachen University, Landoltweg 1a, Aachen, Germany*; Josbert M. Metselaar - *Institute for Experimental Molecular Imaging, Uniklinik RWTH Aachen University, Forckenbeckstraße 55, Aachen, Germany*; Twan Lammers - *Institute for Experimental Molecular Imaging, Uniklinik RWTH Aachen University, Forckenbeckstraße 55, Aachen, Germany*; Quim Peña - *Institute for Experimental Molecular Imaging, Uniklinik RWTH Aachen University, Forckenbeckstraße 55, Aachen, Germany*

Mucoadhesive thiolated nanostructured lipid carriers for enhanced oral delivery of poorly soluble drugs

Pedro Fonte, *Centre for Marine Sciences (CCMAR); University of Algarve, Portugal*
Paola Pirela - *iBB, Department of Bioengineering, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal*; Beatriz Ruivinho - *CCMAR/CIMAR, Universidade do Algarve, Faro, Portugal*; Filipa Ramos - *CCMAR/CIMAR, Universidade do Algarve, Faro, Portugal*; Mariana Atalaia - *CCMAR/CIMAR, Universidade do Algarve, Faro, Portugal*; Sofia Duarte - *iBB, Department of Bioengineering, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal*; Samia Kausar - *College of Pharmacy, University of Sargodha, Punjab, Pakistan*; Ahmed Hashmi - *School of Pharmacy, Monash University Malaysia, Selangor, Malaysia*; Farwa Zahra - *Doctor's Institute of Health Sciences, Sargodha, Pakistan*; Alia Erum - *College of Pharmacy, University of Sargodha, Punjab, Pakistan*; Shumaila Arshad - *ILM College of Pharmaceutical Sciences & Sargodha College of Medical Sciences, Sargodha, Pakistan*; Ume Tulain - *College of Pharmacy, University of Sargodha, Punjab, Pakistan*; Mulazim Asim - *College of Pharmacy, University of Sargodha, Punjab, Pakistan*

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Multidrug-loaded thermoresponsive hydrogel for post-surgical glioblastoma treatment

Paulo Faria, *i3S/ICBAS, University of Porto, Portugal*
Catarina Pacheco - *i3S - Instituto de Investigação e Inovação em Saúde da Universidade do Porto, Portugal*; Cláudia Martins - *i3S - Instituto de Investigação e Inovação em Saúde da Universidade do Porto, Portugal*; Rui Simões - *i3S - Instituto de Investigação e Inovação em Saúde da Universidade do Porto, Portugal*; Mansoor Amiji - *Northeastern University, Boston, Massachusetts, USA*; Hélder Santos - *University Medical Center Groningen, University of Groningen, Groningen, The Netherlands*; Bruno Sarmiento - *i3S - Instituto de Investigação e Inovação em Saúde da Universidade do Porto, Portugal*

Nano-Cell Vesicle Technology Systems (nCVTs) as a Versatile Biohybrid Platform for Cancer Drug Delivery

Yi Hsuan Ou, *MIT, Singapore*
Giorgia Pastorin - *National University of Singapore*

Nanoencapsulated circadian clock-resynchronizing molecule for improved efficacy in Alzheimer's disease

Marion Le Meur, *IMDEA Nanoscience, Spain*
Ela Radošević - *University of Bologna*; Rita Grimalt Mirada - *Institute for Bioengineering of Catalonia*; Andrés Crespo - *Institute for Bioengineering of Catalonia*; Sujei Palma-Florez - *Institute for Bioengineering of Catalonia*; Anna Lagunas - *Institute for Bioengineering of Catalonia, ISCIII*; Maria Laura Bolognesi - *University of Bologna*; Mònica Mir - *Institute for Bioengineering of Catalonia, ISCIII, University of Barcelona*; Paolo Blasi - *University of Bologna*; Sridhar Vasudevan - *University of Oxford, Circadian Therapeutics*; Valle Palomo - *IMDEA Nanoscience, ISCIII, CNB-CSIC, IdiPAZ*

Nanoporous intratumoral seed for sustained 5-drug immunotherapy delivery eradicates cancer without toxicity

Corrine Ying Xuan Chua, PhD, *Houston Methodist Research Institute, United States*
Jingyi Wang - *Houston Methodist Research Institute*; Francesco Manfredi - *Houston Methodist Research Institute*; Casey Lewis - *Houston Methodist Research Institute*; Alessandro Grattoni - *Houston Methodist Research Institute*

Nanotherapeutics in motion: engineering collective nanomotors to overcome biological barriers

Samuel Sánchez, *Institute of Bioengineering of Catalonia, Spain*

Natural Cellulose-Chitosan Hydrogel for Sustained Local Docetaxel Delivery in Cancer Therapy

Diana Rafael, *Credentials, Vall D' Hebron Research Institute, Spain*
Magalí Sureda - *VHIR*; Giacomoluciano Vitelli - *VHIR*; Julia German-Cortés - *VHIR*; Sergio José Pereson - *University of Rome*; Guillermo Goode-Romero - *Universidad Nacional Autónoma de México*; Narine Fischer-Albiol - *VHIR*; Vincenzo Montanarella - *VHIR*; Zamira Vanessa Diaz-Riascos - *VHIR*; Roser Ferrer Costa - *VHIR*; Simo schwartz - *VHIR*; Esteban Durán-Lara - *Universidad de Talca*; Joana Marto - *iMed.ULisboa*; Rodrigo Aguayo-Ortiz - *Universidad Nacional Autónoma de México*; Fernanda Andrade - *Universitat de Barcelona*

Optimization of Lipid Nanoparticles for Prolonged Vitreal Residence and Retinal Distribution

Arto Merivaara, PhD, *University of Eastern Finland, United States*
Natalia Zashikhina - *University of Eastern Finland*; Jooseppi Puranen - *University of Eastern Finland*; Elisa Toropainen - *University of Eastern Finland*; Eetu Valkama - *University of Eastern Finland*; Ida Kolehmainen - *University of Eastern Finland*; Erika Pennanen - *University of Eastern Finland*; Lea Pirskanen - *University of Eastern Finland*; Mika Reinisalo - *University of Eastern Finland*; Tatu Lajunen - *University of Eastern Finland*; Kati-Sisko Vellonen - *University of Eastern Finland*; Tetsuya Terasaki - *University of Eastern Finland*; Arto Urtili - *University of Eastern Finland*

Optimizing Localized Platinum Therapy with DACHPT Nanoparticles Delivered via PIPAC in Peritoneal Carcinomatosis

Giovanna Lollo, PhD, *University of Lyon 1, United States*
Giuseppina Catania - *University of Lyon 1*; Imane Boudrioua - *University of Lyon 1*; Sherine Montillet - *SATT Ouest*; Naoual Bakrin - *Hospices Civils de Lyon*; Théodore Tillement - *University of Lyon 1*; Olivier Tillement - *University of Lyon 1*; David Kryza - *Centre Leon Berard*; Sylvain Goutelle - *University of Lyon 1*

Outsmart Breast Cancer Brain Metastases with Nano-Immunotherapy to Empower Brain Immunity

Ana Matos, *Credentials, Research Institute for Medicines (iMed.ULisboa) | University of Lisbon, Portugal*
Rita C. Acúrcio - *University of Lisbon / Research Institute for Medicines (iMed.ULisboa), Lisboa, Portugal*; Bárbara Carreira - *University of Lisbon / Research Institute for Medicines (iMed.ULisboa), Lisboa, Portugal*; Margarida Ferreira - *University of Lisbon / Research Institute for Medicines (iMed.ULisboa), Lisboa, Portugal*; Luís Graça - *University of Lisbon / Gulbenkian Institute of Molecular Medicine (GIMM)*; Ronit Satchi-Fainaro - *Tel Aviv University / Department of Physiology and Pharmacology, Sackler Faculty of Medicine, Tel Aviv, Israel*; Helena F. Florindo - *University of Lisbon / Research Institute for Medicines (iMed.ULisboa), Lisboa, Portugal*

Oxygen-Boosting Catalytic Nanoparticles for Enhanced Colorectal Cancer Therapy

Kiyan Musaie, *Credentials, University Medical Center Groningen, University of Groningen, Netherlands*
Jermay Molhuijsen - *UMCG, University of Groningen*; Kik Marais - *UMCG, University of Groningen*; Hélder Santos - *UMCG, University of Groningen*; Mohammad Shahbazi - *UMCG, University of Groningen*

Peptide-conjugated nanoemulsions for treatment of pneumonia using antimicrobial photodynamic therapy

Angela Liang, *University of Toronto, Canada*
Giulia Kassab - *University Health Network*; Juan Chen - *University Health Network*; Charles Lochenie - *University of Edinburgh*; Caitlyn Lee - *McMaster University*; Hanyi Weng - *University of Toronto*; Marc Vendrell - *University of Edinburgh*; Gang Zheng - *University of Toronto*

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Photothermal electrospun nanofibers for safe and effective delivery of macromolecules in pluripotent stem cells

Amin Ahmad, Ghent University, Belgium

Chloë De Clercq – Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium; Manon Minsart – Polymer Chemistry and Biomaterial Group, Ghent University, Ghent, Belgium; Jeffrey Aalders – Department of Diagnostic Sciences, Ghent University, Ghent, Belgium; Kai Ling Liang – Department of Diagnostic Sciences, Ghent University, Ghent, Belgium; Stefaan De Smedt – Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium; Peter Dubruel – Polymer Chemistry and Biomaterial Group, Ghent University, Ghent, Belgium; Tom Taghon – Department of Diagnostic Sciences, Ghent University, Ghent, Belgium; Koen Raemdonck – Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium; Kevin Braeckmans – Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium

Poly(Acrylamido) lipids replace PEG to enhance mRNA-LNP efficacy in immune cells and evade anti-PEG antibodies

Benjamin Fiedler, PhD, UCL (University College London), United Kingdom

Charlotte Galley – UCL; Margarita Strimaite – UCL; Jenny Lam – UCL; Chris Morris – UCL; Gareth Williams – UCL; Daniel Stuckey – UCL; Clare Bennett – UCL; Pratik Gurnani – UCL

Porphyrin-containing Polyglutamic Acid Nanocarriers for Photodynamic Therapy in Metastatic Prostate Cancer

Carla Ortuño-Moya, Príncipe Felipe Research Center (CIPF), Spain
Ana Armiñán de Benito – CIPF; María Medel – CIPF; María Jesús Vicent – CIPF

Production of small nanocrystals with radiosensitising drugs for long-acting localised treatment of glioblastoma

Adriparna Paul, Queen's University of Belfast, United Kingdom
Marta Garcia Fuster – Queen's University of Belfast; Lucia Lopez-Vidal – Queen's University of Belfast; Jonathan Coulter – Queen's University of Belfast; Alejandro Paredes – Queen's University of Belfast

Rational Design of Breast Cancer-Selective Lipid Nanoparticles via Multi-Objective Bayesian Optimization

Yuichirou Shirakata, Toshiba Corporation, Japan
Shu Okumura – Toshiba Corporation; Daiki Kiribuchi – Toshiba Corporation; Masaaki Takada – Toshiba Corporation; Mitsuko Sugano – Toshiba Corporation

Reinventing Cancer Chemo-Immunotherapy with HPMA-based Polymer-Drug Conjugates

Jiyuan Yang, PhD, University of Utah, United States
Jindrich Kopeček – University of Utah; Lian Li – University of Utah; Matthew Peterson – University of Utah

Remodeling the Pancreatic Tumor Microenvironment with Antihistamines to Improve Nanomedicine Efficacy

Fotios Mpekris, PhD, The Cyprus Institute of Neurology and Genetics, Cyprus

Antonia Charalambous – University of Cyprus; Chrysovalantis Voutouri – University of Cyprus; Constantina Neophytou – The Cyprus Institute of Neurology and Genetics; José Djamas – The Helmsley Cancer Center, Shaare Zedek Medical Center; Ajay Gupta – The Helmsley Cancer Center, Shaare Zedek Medical Center; Alberto Gabizon – The Hebrew University of Jerusalem; Triantafyllos Stylianopoulos – University of Cyprus

Reprogramming Immunodeficiency in Lung Metastases via PD-L1 siRNA Delivery Using a Catalytic Nanosponge

Shang-Hsiu Hu, Credentials, National Tsing Hua University, Taiwan (Republic of China)

Shape engineering of exosomes for endoplasmic reticulum-targeted delivery and amplified anticancer efficacy

Li Liang, Shanghai Institute of Materia Medica, China (People's Republic)

Yong Gan – Shanghai Institute of Materia Medica, Chinese Academy of Sciences; Miaorong Yu – Shanghai Institute of Materia Medica, Chinese Academy of Sciences; Shiyao Guo – Shanghai Institute of Materia Medica, Chinese Academy of Sciences; Chunliu Zhu – Shanghai Institute of Materia Medica, Chinese Academy of Sciences; Di Nie – Shanghai Institute of Materia Medica, Chinese Academy of Sciences

Solvothermal Fabrication of Rose Bengal-Terbium theranostic particles for X-ray Photodynamic Therapy

Bunty Sharma, PhD, Queens University Belfast UK, United Kingdom

Anjali Pandya – Queens University Belfast UK; Niall Byrne – Queens University Belfast UK; Jonathan Coulter – Queens University Belfast UK; Lalitkumar Vora – Queens University Belfast UK; Ryan Donnelly – Queens University Belfast UK

Spacetime Controlled Oral Insulin Nano Targeting Hepatorenal Glucose for Diabetes and Diabetic Nephropathy

Peizhou Hou, Shanghai Institute of Materia Medica, Chinese Academy of Sciences, China (People's Republic)

Miaorong Yu – Shanghai Institute of Materia Medica, Chinese Academy of Sciences, China; Di Nie – Shanghai Institute of Materia Medica, Chinese Academy of Sciences, China; Shiyao Guo – Shanghai Institute of Materia Medica, Chinese Academy of Sciences, China; Chunliu Zhu – Shanghai Institute of Materia Medica, Chinese Academy of Sciences, China; Yong Gan – Shanghai Institute of Materia Medica, Chinese Academy of Sciences, China

Spatial Distribution of Long-Acting Injectables for Echinococcosis: Analysed by Secondary Ion Mass Spectrometry

Sham Nawshirawan, University of Nottingham, United Kingdom
James Butler – GlaxoSmithKline, Ware UK; Himanshu Bhattacharjee – GlaxoSmithKline, Upper Providence USA; Anna Kotowska – University of Nottingham; Pavel Gershkovich – University of Nottingham; Maria Marlow – University of Nottingham

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Surface-Imposed Symmetry and Structural Footprints of Lipid Nanoparticles at Interfaces

Calum Drummond, PhD, DSc, BScEd, BScHons, *RMIT University, Australia*

Brendan Dyett - *RMIT University*; Haitao Yu - *RMIT University*; Biserka Lacic - *RMIT University*; Natinael Koyra - *RMIT University*; Shveta Pandiancherri - *RMIT University*; Pablo Mota-Santiago - *Australian Synchrotron, ANSTO*; Nigel Kirby - *Australian Synchrotron, ANSTO*; Nhiem Tran - *RMIT University*; Charlotte Conn - *RMIT University*; Jiali (Maggie) Zhai - *RMIT University*

Sustained subcutaneous delivery of Prime-LS via starPEG-heparin hydrogels for chronic colitis

Maria Rossello, *University of the Basque Country (UPV/EHU), Spain*

Camino Garcia-Blasco - *University of the Basque Country (UPV/EHU)*; Jose Javier Aguirre - *Bioaraba Health Research Institute*; Lucas Schirmer - *Leibniz Institute of Polymer Research Dresden (IPF)*; Carsten Werner - *Leibniz Institute of Polymer Research Dresden (IPF)*; Edorta Santos-Vizcaino - *University of the Basque Country (UPV/EHU)*; Rosa Maria Hernandez - *University of the Basque Country (UPV/EHU)*

Targeted Mitochondria Sequestration and Degradation via Modular Nanoassemblies Mimicking p62 Aggregates

Yunting Zhang, *Sichuan University, China (People's Republic)*
Yao Fu - *Sichuan University*; Yuai Li - *Sichuan University*

Targeted-FAK Inhibition via Nanoconjugate Enhances Nanovaccine-Induced Effector T Cell Infiltration in PDAC

Rita Acurcio, PhD, *iMed.Ulisboa, Faculty of Pharmacy, University of Lisbon, Portugal*

Maria Medel - *Prince Felipe Research Center (CIPF)*; María I. Vives - *Prince Felipe Research Center (CIPF)*, Valencia;; Inmaculada Conejos-Sanchez - *Prince Felipe Research Center (CIPF)*, Valencia; Ronit Satchi-Fainaro - *Sackler Faculty of Medicine, Tel Aviv University*; María J. Vicent - *Prince Felipe Research Center (CIPF)*, Valencia; Helena F. Florindo - *iMed. ULisboa, Faculty of Pharmacy, University of Lisbon*

Tissue Specific Biomolecular Corona Increased Transfection Efficiency Of LNPs in Primary Dog Disc Cells

Aida Moreira, *Utrecht University, Netherlands*

Willemijn van der Heijden - *Utrecht University*; Anouk Eversdijk - *Utrecht University*; Cornelis Seinen - *University Medical Center Utrecht*; Daniele Corraini - *Utrecht University*; Chantal Voskamp - *Utrecht University*; Pieter Vader - *University Medical Center Utrecht*; Keita Ito - *Eindhoven University of Technology*; Raymond Schiffelers - *University Medical Center Utrecht*; Marianna Tryfonidou - *Utrecht University*

Transfecting T cells in vivo requires both robust targeting and compositional optimization

Ayla Hokke, MSc, *Eindhoven University of Technology, Netherlands*

Tuning PEG Chain Length to Modulate LNP Characteristics, Performance, and PEG Immunogenicity upon Repeated Dosing

Nadine Saber, *UMC Utrecht, Netherlands*

Mariona Estapé Senti - *UMC Utrecht*; Marcel Fens - *Utrecht University*; Matteo Soncin - *UMC Utrecht*; Raymond Schiffelers - *UMC Utrecht*

Ultra-Long-Acting Injectable Doravirine In-situ Forming Implant for HIV Treatment

S. Rahima Benhabbour, PhD, *University of North Carolina at Chapel Hill, United States*

Nanditha Chundayil Kalathil - *University of North Carolina at Chapel Hill*; Mackenzie Cottrell - *University of North Carolina at Chapel Hill*; Gabriela De la Cruz - *University of North Carolina at Chapel Hill*; Cassandra Gilbert - *University of North Carolina at Chapel Hill*; Angela Kashuba - *University of North Carolina at Chapel Hill*; Rani Sellers - *University of North Carolina at Chapel Hill*; Craig Sykes - *University of North Carolina at Chapel Hill*

Unlocking the potential of co-delivery of cannabidiol and paclitaxel in lipid nanocapsules against glioma

Juan Aparicio-Blanco, PhD, *Complutense University of Madrid, United States*

Laura Gómez-Lázaro - *Complutense University of Madrid*; Lucía Sánchez-Prieto - *Complutense University of Madrid*; Cristina Martín-Sabroso - *Complutense University of Madrid*; Ana Torres-Suárez - *Complutense University of Madrid*

Unlocking Therapeutic Potential of Repurposed Ribavirin for Lung Cancer

John Disouza, *Bombay Institute of Pharmacy & Research, Dombivli (East), India*

Kamal Dua - *NICM Health Research Institute, Western Sydney University, Australia*; Vikas Kamble - *ICT, Mumbai, India*; Kaustubh Kolekar - *Lovely Professional University, Phagwara, India*; Popat Kumbhar - *Tatyasaheb Kore College of Pharmacy, Warananagar, India*; Vandana Patravale - *ICT, Mumbai, India*

Unraveling the untapped potential of injectable liposomal depots: a journey from in silico to in vivo

Paola Luciani, *University of Bern, Switzerland*

Zipper Depot Improves Cardiac Recovery After Myocardial Infarction in Small and Large Animal Models

Juliane Nguyen, PhD, *UNC at Chapel Hill, United States*

Ocular Delivery (Focus Group – Ocd)

Innovative Contact Lenses for Controlled Drug and Heat Release in Ocular Disease Management

Carmen Alvarez-Lorenzo, PhD, *Universidade de Santiago de Compostela, Spain*

Ines Garcia-del-Valle - *Universidade de Santiago de Compostela*; María Vivero-Lopez - *Universidade de Santiago de Compostela*; Angel Concheiro - *Universidade de Santiago de Compostela*

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Nanoparticle Heme–Albumin Delivery Reduces Oxidative Stress and Inflammation in Retinal Degeneration Model

Katelyn Swindle-Reilly, PhD, *The Ohio State University, United States*

Amna Abdalbaqi – *The Ohio State University*; Tyler Heisler-Taylor – *The Ohio State University*; Nagaraj Kerur – *The Ohio State University*; Thomas Mendel – *The Ohio State University*; Matthew Ohr – *The Ohio State University*; Andre Palmer – *The Ohio State University*

Novel approach to study macromolecular diffusivity in intact vitreous by time-gated Raman spectroscopy

Shirin Tavakoli, Pharm.D, PhD, *University of Helsinki; University of Eastern Finland, Finland*

Jacopo Zini – *Drug Research Program, Division of Pharmaceutical Biosciences, Faculty of Pharmacy, University of Helsinki, Helsinki, Finland*; Judith Mittag – *Pharmaceutical Sciences, Roche Innovation Center Munich, Roche Pharma Research and Early Development, 82377 Penzberg, Germany*; Sina Bahrpeyma – *School of Pharmacy, Faculty of Health Sciences, University of Eastern Finland, Kuopio, Finland*; Natalia Zashikhina – *School of Pharmacy, Faculty of Health Sciences, University of Eastern Finland, Kuopio, Finland*; Iulia Pilipenko – *School of Pharmacy, Faculty of Health Sciences, University of Eastern Finland, Kuopio, Finland*; Timo Laaksonen – *Drug Research Program, Division of Pharmaceutical Biosciences, Faculty of Pharmacy, University of Helsinki, Helsinki, Finland*; Michael Gertz – *Pharmaceutical Sciences, Roche Innovation Center Basel, Roche Pharma Research and Early Development, Basel, Switzerland*; Antonello Caruso – *Pharmaceutical Sciences, Roche Innovation Center Basel, Roche Pharma Research and Early Development, Basel, Switzerland*; Arto Urtti – *School of Pharmacy, Faculty of Health Sciences, University of Eastern Finland, Kuopio, Finland*

Overcoming Biological Barriers: Single-atom Nanorobots for Ocular Diseases

Xiaohui Ju, *Mendel University in Brno, Czech Republic*
Eliška Javorková – *Institute of Experimental Medicine of the Czech Academy of Sciences*; Jan Michalicka – *Brno University of Technology*; Kateřina Palacká – *Institute of Experimental Medicine of the Czech Academy of Sciences*; Martin Pumera – *Brno University of Technology*; Roshan Velluvakandy – *Brno University of Technology*

Photothermal transport for guiding nanoparticles through the vitreous humor

Léa Guerassimoff, *Ghent University, Belgium*
Yera Ussembayev – *Ghent University*; Louise De Clerck – *Ghent University*; Deep Punj – *Ghent University*; Martijn Van den Broek – *Ghent University*; Filip Beunis – *Ghent University*; Katrien Remaut – *Ghent University*; Kevin Braeckmans – *Ghent University*; Stefaan De Smedt – *Ghent University*; Félix Sauvage – *Ghent University*

Precision-Engineered OcuMem Platform Enables Sustained Local Delivery of Nintedanib to Suppress Corneal Scarring

Ghanashyam Acharya, *Baylor College of Medicine, United States*

Shu Tang – *Baylor College of Medicine*; Nitisha Mehrotra – *Baylor College of Medicine*; Crystal Shin – *Baylor College of Medicine*; Nitesh Katta – *Baylor College of Medicine*; Thomas Milner – *Baylor College of Medicine*

Targeting oxidative stress in the retina through siRNA-loaded lipid nanoparticles

Silvia Fialho, PhD, *Ezequiel Dias Foundation, Brazil*
Deivisson Fagundes – *Ezequiel Dias Foundation*; Marco Alves – *Federal University of Minas Gerais*; Pedro Guimarães – *Federal University of Minas Gerais*; Marina Dias – *Ezequiel Dias Foundation*

Using choroidal explants to assess the anti-neovascularisation efficacy of retinal extracellular vesicles

Ilva Rupenthal, *The University of Auckland, New Zealand*
Henry Louie – *The University of Auckland*; Odunayo Mugisho – *The University of Auckland*; Charisse Kuo – *The University of Auckland*; Lawrence Chamley – *The University of Auckland*

Oral Delivery (Focus Group – OrD)

Additive Manufacturing of Ternary Lipid Matrices via FDM: The Role of Release Enhancers

Carolina Alva, *Research Center Pharmaceutical Engineering, Austria*

Josip Matić – *Research Center Pharmaceutical Engineering GmbH*; Fabian Specht – *Coperion GmbH*; Sebastian Reyer – *IOI Oleo GmbH*; Tanja Freichel – *IOI Oleo GmbH*; Susanna Abrahmsén-Alami – *AstraZeneca*; Jonathan Booth – *AstraZeneca*; Spoerk Martin – *Research Center Pharmaceutical Engineering GmbH*; Sharareh Salar-Bezhadi – *Research Center Pharmaceutical Engineering GmbH*

An oral nanoparticle-embedding hydrogel for targeted cGAS-STING inhibition in inflammatory bowel disease

Léo Guilbaud, MSc, *UCLouvain, Belgium*
Ana Beloqui – *UCLouvain*; Alessio Malfanti – *Università degli Studi di Padova*

Breast Milk Biomimetic Nano Particles as a Versatile, Non-Invasive, Oral Drug Delivery Tool

Assaf Zinger, PhD, *Technion- Israel Institute of Technology, Israel*

Cell tickling: Topography-based stimulation for permeation enhancement in the intestinal epithelium

Marta Rubio-Huertas, *Technical University of Denmark, Denmark*
Viktoria Sifaka – *Technical University of Denmark*; Khorshid Kamguyan – *Technical University of Denmark*; Lasse Thamdrup – *Technical University of Denmark*; Zhongyang Zhang – *Technical University of Denmark*; Nikolaj Gadegaard – *University of Glasgow*; Anja Boisen – *Technical University of Denmark*

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Circadian Rhythm–Matched Programmable Oral Tablets via 3D-Printed Photocrosslinkable Polyamides

Kibret Mequanint, *Western University, Canada*
armin geralli – *Western University*; kibret mequanint – *Western University*

Engineering oral drug delivery by 3D printing: nanocrystals versus solid dispersions

Lucia Lopez Vidal, *National University of Cordoba, Argentina*
Mariano Tinti – *Catholic University of Cordoba, Argentina*; Maria Melian – *Universidad de la República (Udelar), Uruguay*; Lucila Canton – *Centro de Investigacion Veterinaria Tandil (CIVETAN), Argentina*; Maria Formica – *National University of Cordoba, Argentina*; Sergio Sanchez Bruni – *Centro de Investigacion Veterinaria Tandil (CIVETAN), Argentina*; Nicolas Litterio – *Catholic University of Cordoba, Argentina*; Ricardo Faccio – *Universidad de la República (Udelar), Uruguay*; Juan Real – *National University of Cordoba, Argentina*; Santiago Palma – *National University of Cordoba, Argentina*

Feasibility of ultrasound cavitation agent mediated gastrointestinal drug delivery

Colm O'Reilly, *DPhil graduand, MSc, MPharm, BSc, MPSI, University of Oxford, United Kingdom*
Abdul Basit – *UCL School of Pharmacy*; Mine Orlu – *UCL School of Pharmacy*; Eleanor Stride – *University of Oxford*; Gareth LuTheryn – *University of Oxford*; Michael Gray – *University of Oxford*; Dario Carugo – *University of Oxford*

Hitchhiking on Chylomicrons: The Role of Oleic Acid on Lymphatic Absorption of bRo5 Drugs

Dong Ye, PhD, *AbbVie, Germany*

IntesTiny™: Nanoparticle Dynamics in Healthy and Diseased Gastrointestinal Tract via Microfluidics

Alexandra Teleki, *Uppsala University, Sweden*
Yael del Carmen Suárez López – *Uppsala University*

Mechanically engineered bioactive nanoparticles for oral delivery of cancer vaccine

Hao Song, PhD, *The University of Queensland, Australia*

Metal-organic framework for oral antibody delivery for colorectal cancer treatment

Cheng Chen, *Université catholique de Louvain, Belgium*
Leo Guilbaud – *Université catholique de Louvain*; Giulia Rodella – *Université catholique de Louvain*; Yining Xu – *Sichuan University*; Ana Beloqui – *Université catholique de Louvain*

Orally targeting IgA/pIgR axis to amplify the efficient regulation of intestinal homeostasis for the IBD treatment

Yining Xu, *Sichuan University, China (People's Republic)*
Xiang You – *Sichuan University*; Jingjing Ma – *Sichuan University*; Ling Zou – *Sichuan University*; Yutong Shu – *Sichuan University*; Zhilong Jia – *Sichuan University*; Yajin Kang – *West China Hospital*; Yu Wang – *West China Hospital*; Xin Xiao – *Sichuan University*; Ziting Ma – *Sichuan University*; Jinhan He – *Sichuan University*

Peptide and permeation enhancer interactions and their impact on intestinal permeability

Melitini Koutsoviti, *Novo Nordisk A/S, Denmark*
Andrew James Benie – *Novo Nordisk A/S*; Alina Kulakova Almind – *Novo Nordisk A/S*; Philip Jonas Sassene – *Novo Nordisk A/S*; Zhigao Niu – *Novo Nordisk A/S*; Anette Müllertz – *Bioneer A/S, University of Copenhagen*; Ben Boyd – *Monash University*

Spatial integration of antimicrobial peptides controls release and activity in oral delivery systems

Cesar Augusto Roque Borda, *Sao Paulo State University, Brazil*
Eduardo Festozo Vicente – *São Paulo State University (UNESP)*; Beatriz G. de la Torre – *University of Kwazulu-Natal*; Fernando Albericio – *University of Bacerlona*; Andreia Meneguim – *São Paulo State University (UNESP)*; Fernando Rogério Pavan – *São Paulo State University (UNESP)*

Surface Hydrophobicity and Rigidity Determines Protein Corona on Orally Delivered Nanoparticles Treating Colitis

Mingjie Ni, *Sichuan University, China (People's Republic)*
Jiawei Wu – *Sichuan University*; Yuan Huang – *Sichuan University*

Surface PEGylation density optimization enhances oral delivery of T7-functionalized liposomes

Yuan Huang, PhD, *West China School of Pharmacy, Sichuan University, United States*
Lie Zhang – *Sichuan University, P.R.China*

Skin and Mucosal Delivery (Focus Group – SMD)

Achieving oromucosal absorption of a GLP-1 peptide analogue: proof of principle for sub-lingual films in pigs

Sandeep Karki, *BPharm, MPharm, University College Dublin, Ireland*
Alessio Alogna – *Charite – Universitätsmedizin Berlin, Germany*; Jens Ötvös – *4Charite – Universitätsmedizin Berlin, Germany*; Floriane Bahuan – *Technical University of Denmark*; Ragna Berthelsen – *Novo Nordisk, Måløv 2760, Denmark*; David Brayden – *University College Dublin*; Stephen Buckley – *Novo Nordisk, Måløv 2760, Denmark*; Muhammad Ijaz – *University College Dublin*; Ruba Ismail – *Labtec GmbH / Adhex Pharma, Raiffeisenstraße 4, 40764 Langenfeld (Rheinland), Germany*; Sahil Malhotra – *University College Dublin*; João Mano – *University of Aveiro*; Line Hagner Nielsen – *Technical University of Denmark*; Eoin O'Ceirbhail – *University College Dublin*; Eleftheria Pantazoglou – *Technical University of Denmark*; João Rodrigues – *University of Aveiro*; Nicolas Rollet – *AdhexPharma, 42-44 Rue de Longvic, 21300 Chenôve, France*; Margarida Sacramento – *University of Aveiro*

Adjuvanted hybrid nanoparticles for intestinal mRNA delivery

Laurie Dechamboux, *LBTI, France*
Evelyne Colomb – *LBTI*; Cynthia Garapon – *LBTI*; Sophie Richard – *LBTI*; Claire Monge – *LBTI*; Danielle Campiol Arruda – *LBTI*

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Advanced selenium nanocarriers for siRNA delivery in BRAF-mutated melanoma

Luigia Serpico, PhD, University Medical Center Groningen, Netherlands

Luigia Serpico - University Medical Center Groningen; Maria Camilla Ciardulli - University Medical Center Groningen; Jiachen Li - University Medical Center Groningen; Maria Carmona Lobita - University Medical Center Groningen; Hélder Almeida Santos - University Medical Center Groningen

Alginate Lyase-functionalized PLGA nanoparticles against *P. aeruginosa* biofilm in chronic lung infections

Ivana d'Angelo, DiSTABif, University of Campania "Luigi Vanvitelli", Italy

Pouria Savadi - University of Campania "Luigi Vanvitelli"; Vincenzo Vendemia - University of Campania "Luigi Vanvitelli"; Andrea Casale - University of Campania "Luigi Vanvitelli"; Gabriella Costabile - University of Naples Federico II; Valeria Cafaro - University of Naples Federico II; Francesca Ungaro - University of Naples Federico II; Eugenio Notomista - University of Naples Federico II

Antibacterial inhalable chitosan nanoparticles for resistant lung infections: Impact of structural organization

Andrea Casale, MSc, University of Campania "Luigi Vanvitelli", Italy

Vincenzo Vendemia - University of Campania "Luigi Vanvitelli"; Camilla Passi - Saarland University; Chathuri Sodimanager - Saarland University; Marc Schneider - Saarland University; Ivana d'Angelo - University of Campania "Luigi Vanvitelli"

Biodegradable Antiretroviral Implant: 93-Week Preclinical Study for Safety, PK, and Polymer Properties

Leah Johnson, PhD, RTI International, United States

Daniela Cruz - RTI International; Greg Gatto - RTI International; Archana Krovi - RTI International; Ellen Luecke - RTI; Chasity Norton - RTI International; Mackenzie Cottrell - University of North Carolina; Rhonda Brand - University of Pittsburgh

Biorhythm-mimicking growth hormone patch

Yuqi Zhang, Zhejiang University, China (People's Republic)

Clinical trial of marking dogs and cats with microneedle patch tattoos to indicate sterilization status

Erkan Azizoglu, PhD, Georgia Tech, United States

Kathryn Amstutz - Georgia Institute of Technology; Adelia Hwang - Alliance for Contraception in Cats & Dogs (ACC&D); Mark Prausnitz - Georgia Institute of Technology

Co-delivery of Tobramycin and DNase I via inhalable carriers for improved treatment of *P. aeruginosa* biofilms

Max G. Koumou-Okandze, Saarland University / HIPS, Germany, Germany

Jesús E. Campos Pacheco - Malmö University / Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Helmholtz Center for Infection Research (HZI); Annette Boese - Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Helmholtz Centre for Infection Research (HZI); Lauryna

Startaite - Malmö University; Pascal Paul - Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Helmholtz Centre for Infection Research (HZI); Brigitta Loretz - Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Helmholtz Centre for Infection Research (HZI); Anna Millqvist-Fureby - RISE Research Institutes of Sweden, Stockholm / Lund University, Division of Food and Pharma, Lund, Sweden; Nicole Schneider-Daum - Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Helmholtz Centre for Infection Research (HZI); Sabrina Valetti - Malmö University; Claus-Michael Lehr - Saarland University / Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Helmholtz Center for Infection Research (HZI) Germany

Dissolving Epinephrine Microneedles for Transdermal Treatment of Anaphylaxis

Joseph Correa, University of Iowa College of Pharmacy, United States

Nicole Brogden - University of Iowa College of Pharmacy

Electrically Controlled Local Drug Delivery Beyond Size and Charge Limitations of Iontronic Transport

Sebastian Hecko, PhD, TU Wien, Austria

Marle Vleugels - Linköping University; Christian Bayer - Medical University of Graz; Donghak Byun - Linköping University; Moa Hörberg - Linköping University; Nikolaus Poremba - TU Wien; Rassen Boukree - Linköping University; Patrick Keppel - TU Wien; Andreas Löffler - TU Wien; Walter Kuba - TU Wien; Helena Saarela Unemo - Linköping University; Iwona Bernacka Wojcik - Linköping University; Theresia Arbring Sjöström - Linköping University; Magnus Berggren - Linköping University; Daniel Simon - Linköping University; Rainer Schindl - Medical University of Graz; Linda Waldherr - Medical University of Graz; Hannes Mikula - TU Wien; Johannes Bintlinger - TU Wien

Electrospun Nanofibrous Transmucosal Patch Enabling Needle-Free Immunization with an Influenza Antigen

Jose Lagaron, CSIC and Bionanopharma, Spain

Antonio Gomez - Bionanopharma; Jorge Teno - Bionanopharma; zoran Evtoski - CSIC; Cristina Prieto - CSIC

Engineered hybrid nanoparticles efficiently overcome mucus and aerosol barriers for respiratory mRNA delivery

Hiba Hassoun, CNRS LBTI, France

Camille Pascarel - INRAE; Alexandra Erny - INRAE; Elise Giang - LBTI CNRS; Cynthia Garapon - LBTI CNRS; Celine Coiffier - LBTI CNRS; Laetitia Gerossier - LBTI CNRS; Claire Monge - LBTI CNRS; Nicolas Aznar - LBTI CNRS; Fabienne Archer - INRAE; Bernard Verrier - LBTI CNRS

Engineering urease-powered polymeric nanomotors to overcome gastrointestinal mucosal barriers

Helena Almeida, i3S - Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Portugal

Cecília Cristelo - i3S - Instituto de Investigação e Inovação em Saúde, Universidade do Porto; Juliana Viegas - i3S - Instituto de Investigação e Inovação em Saúde, Universidade do Porto; Giovanni Traverso - Division of Gastroenterology, Brigham and Women's Hospital, Harvard Medical School; Department of

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Mechanical Engineering, Massachusetts Institute of Technology; Broad Institute of MIT and Harvard; Bruno Sarmento – i3S – Instituto de Investigação e Inovação em Saúde, Universidade do Porto; José das Neves – i3S – Instituto de Investigação e Inovação em Saúde, Universidade do Porto

Fabrication, characterization and evaluation of gatifloxacin and prednisolone loaded annular microneedle patch

Sharayu Naik, *BITS-Pilani Hyderabad campus, India*
Venkata Vamsi Krishna Venuganti – *BITS Pilani Hyderabad Campus; Arawindh R – BITS Pilani Hyderabad Campus; Shivani Thatavarti Bharatam – BITS Pilani Hyderabad Campus; Shreya Bhala – BITS Pilani Hyderabad Campus*

From Biological Cues to Therapeutic Action: Protein-Driven Autonomous Delivery Systems

Luai Khoury, *Technion – Israel Institute of Technology, Israel*

In Situ-Forming Alginate/Hyaluronic Acid Hydrogels for Antimicrobial Wound phototherapy

Ovidio Catanzano, PhD, *National Research Council of Italy (CNR), Italy*

Clara Gamba – *Institute for Polymers, Composites and Biomaterials (IPCB-CNR); Virgilio Piccolo – University of Napoli Federico II; Cinzia Reverberi – University of Parma; Maria Cristina Ossiprandi – University of Parma; Lisa Elviri – University of Parma; Claudia Conte – University of Napoli Federico II*

Intranasal Nanovaccine Reprograms Brain Immunity and Synergizes with PD-L1 Blockade in Melanoma Metastasis

Bárbara Carreira, *iMed.Ulisboa – University of Lisbon, Portugal*
Rita C. Acúrcio – *iMed.Ulisboa – University of Lisbon, Lisbon, Portugal; Sabina Pozzi – Sackler Faculty of Medicine, Tel Aviv, Israel; Ana I. Matos – iMed.Ulisboa – University of Lisbon, Lisbon, Portugal; Ron Kleiner – Sackler Faculty of Medicine, Tel Aviv, Israel; Daniella Koubi-Vascovich – Sackler Faculty of Medicine, Tel Aviv, Israel; Adelaide Fernandes – iMed.Ulisboa – University of Lisbon, Lisbon, Portugal; Sara Xapelli – GIMM, University of Lisbon, Lisbon, Portugal; Ronit Satchi-Fainaro – Sackler Faculty of Medicine, Tel Aviv, Israel; Helena F. Florindo – iMed.Ulisboa – University of Lisbon, Lisbon, Portugal*

Ionic Liquid Based Depots for Long-Acting Subcutaneous Delivery of Biologics

Anujan Ramesh, *University of the Pacific, United States*
Samir Mitragotri – *Harvard University*

Machine learning-driven predictions for microneedle mechanical performance

Choon Fu Goh, PhD, *Universiti Sains Malaysia, Malaysia*
Xue Yao Liew – *Universiti Sains Malaysia; Jing Yi Lee – Universiti Sains Malaysia; Jia Yee Ong – Universiti Sains Malaysia; Ying Ying Tham – Universiti Sains Malaysia; Eik Den Yeoh – Universiti Malaya; Mohd Azam Osman – Universiti Sains Malaysia*

Mechanistic Insights into Plant Extracellular Vesicle Skin Penetration and Barrier Crosstalk

Abraham M. Abraham, PhD, *Queen's University Belfast, United Kingdom*

Qonita Kurnia Anjani – *Queen's University Belfast; Darrin McKenzie – Queen's University Belfast; Miao Zhang – Queen's University Belfast; Huanhuan Li – Queen's University Belfast; Wafa T. Al-Jamal – Queen's University Belfast; Yu-Hsin Chang – National Research Council of Italy; Gabriella Pocsfalvi – National Research Council of Italy; Robert Graham – Queen's University Belfast; Ryan F. Donnelly – Queen's University Belfast*

Modelling of Hollow Microneedle Insertion-Induced Tissue Strain and Its Impact on Transdermal Drug Delivery

Prateek Ranjan Yadav, PhD, *University College Dublin, Ireland*
Aisling Ni Annaidh – *University College Dublin; Eoin D. O'Ceirbhail – University College Dublin; Wenting Shu – ETH Zurich*

Next Generation Intranasal Testosterone Delivery via Supercritical CO₂ Loaded 3D Printed Controlled Release Patch

Siva Satyanarayana Kolipaka, *University of Greenwich, United Kingdom*
Asma Buanz – *University of Greenwich; Vivek Trivedi – University of Kent*

Next-Generation Microneedles with Novel Visual Indicators for Precision Peptide Delivery

Huanhuan Li, *Queen's University Belfast, United Kingdom*
Ryan Donnelly – *Queen's University Belfast*

Next-generation nasal vaccines: engineering mRNA-nanoemulsions for in vivo mucosal delivery

Julia Baena, *CiMUS – University of Santiago de Compostela, Spain*
Daniela Ricci – *Istituto Superiore di Sanità; Guy Barbin – Epithelix; Laura Matarazzo – University of Lille, CNRS, Inserm, CHU Lille, Institut Pasteur de Lille; Saeedeh Khazaei – University of Santiago de Compostela; Monica Fabiani – Istituto Superiore di Sanità; Martina Severa – Istituto Superiore di Sanità; Lisa Morichon – Epithelix; Anne Rogel – University of Lille, CNRS, Inserm, CHU Lille, Institut Pasteur de Lille; Lisa Sachet – Institut Pasteur de Lille / Inserm; Bernadett Boda – Epithelix; Samuel Constant – Epithelix; Eliana M. Coccia – Istituto Superiore di Sanità; Jean-Claude Sirard – Institut Pasteur de Lille / Inserm; María José Alonso Fernández – University of Santiago de Compostela; Noemi Stefania Cs – University of Santiago de Compostela*

Novel approach to peptide delivery to the skin

Christian Wells, *Croda, United States*
Assma Aïssaoui – *Croda; Mami Anim-Addo – Croda; Marie Berthy – Croda; Alba Cico – Croda; Emmuel Doridot – Croda; Melina Duval – Croda; Marie Letourneau – Croda; Leticia Marques – Croda; Caroline Ringenbach – Croda; Renata Raffin – Croda*

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Novel peptide-functionalized lipid nanoparticles for mucus-penetrating, targeted delivery to airway epithelia

Debadityuti Ghosh, PhD, *The University of Texas at Austin, United States*

Melissa Soto - *The University of Texas at Austin*; Arian Veyssi - *The University of Texas at Austin*; Mae Lewis - *The University of Texas at Austin*; Jasmim Leal - *The University of Texas at Austin*; Yuting Pan - *The University of Texas at Austin*; Rashmi Mohanty - *The University of Texas at Austin*; Esther Maier - *The University of Texas at Austin*; Brittany Heiser - *The University of Texas at Austin*

Overcoming Resistance in Local Refractory Melanoma via Dual-Targeted Lipid Nanoparticles

Juliana Viegas, *Institute for Research and Innovation in Health (I3S), University of Porto, Portugal*

Ana Margarida Carvalho - *Institute for Research and Innovation in Health (I3S), University of Porto*; Bernardo Fernandes - *Institute for Research and Innovation in Health (I3S), University of Porto*; Soraia Pinto - *Institute for Research and Innovation in Health (I3S), University of Porto*; Bruno Sarmiento - *Institute for Research and Innovation in Health (I3S), University of Porto*

Spray-delivered gellan-chitosan hydrogels enabling dual nanotherapeutic delivery for infected and damaged skin

Piera Di Martino, PhD, *University G. d'Annunzio of Chieti e Pescara, Italy*

Mara Di Giulio - *University "G. d'Annunzio" of Chieti and Pescara*; Silvia Di Lodovico - *University "G. d'Annunzio" of Chieti and Pescara*; Dritan Hasa - *University of Trieste*; Valentina Spampinato - *University of Catania*; Maria Rosa Gigliobianco - *University "G. d'Annunzio" of Chieti and Pescara*; Joice Maria Joseph - *University "G. d'Annunzio" of Chieti and Pescara*; Kunle Okaiyeto - *University "G. d'Annunzio" of Chieti and Pescara*; Susi Zara - *University "G. d'Annunzio" of Chieti and Pescara*

Surface-engineered Muco-penetrating Nanocrystals for Nose-to-Brain Therapy in Cerebral Malaria

Alejandro Paredes, PhD, *Queen's University Belfast, United Kingdom*

Marta Fuster - *Queen's University Belfast*; Yushi Tao - *Queen's University Belfast*; Sergio Saldaña - *POLYMAT*; Matias Picchio - *POLYMAT*; Aline Miranda - *Fiocruz*; Diogo Moreira - *Fiocruz*; Marcelo Calderon - *POLYMAT*

Systemic Nasal Absorption of Supersaturating Amorphous Solid Dispersions for Rapid Drug Onset

Patricia Henriques, PhD, *Hovione, Portugal*

Slavomira Doktorovova - *Hovione*; Ana Fortuna - *University of Coimbra*; Dina Morais - *Hovione*

Temporal Progression of Inflammation and Healing in Porcine Tissue after Injection of Long-Acting Formulations

Marcus Deloney, PhD, *Gilead Sciences, United States*

Bhanu Singh - *Gilead Sciences*; Tracy Lagunero - *Gilead Sciences*; Ricardo Ramirez - *Gilead Sciences*; Kai-Hui Sun - *Gilead Sciences*; Zach Rabow - *Gilead Sciences*; Monica Swinney - *Gilead Sciences*; Raju Subramanian - *Gilead Sciences*; Joanna Koziara - *Gilead Sciences*; Tyler Novak - *Gilead Sciences*

The mucin corona alters nanoparticle transport in the female reproductive tract

Hannah Zierden, PhD, *University of Maryland, United States*

Rajan Jayasankar - *University of Maryland*; Darb Steinman - *University of Maryland*; Alyssa Petersen - *University of Maryland*

Tunable extracellular matrix hydrogels containing Helminth egg antigen for accelerated diabetic wound healing

Rebecca Byler, PhD, MPH, *Yale University, United States*

Themis Kyriakides - *Yale University*

Unravelling the Impact of Nanoparticle Surface Features on Microfold Cell Interactions

Zengke Chen, BSc (Hons), *Monash Institute of Pharmaceutical Science, Australia*

Yuxue Cao - *Monash Institute of Pharmaceutical Science*; Natalie Trevaskis - *Monash Institute of Pharmaceutical Science, Baker Heart and Diabetes Institute*; Jie Tang - *Monash Institute of Pharmaceutical Science*

Young Scientist Committee (YSC) Workshop

An injectable pro-angiogenic peptide delivery formulation for treating peripheral arterial disease

Isaac Thevathasan, *Queen's University, Canada*

Yuan Pang - *Queen's University*; Brian Amsden - *Queen's University*

An optimized lipid nanoparticle for targeted nucleic acid delivery and reprogram of macrophages in glioblastoma

Qingyang Lyu, *The University of Hong Kong, Hong Kong*

Khuloud Al-Jamal - *The University of Hong Kong*; Alexandra Paul - *The University of Hong Kong*; Calvin Chun Long Cheung - *The university of Hong Kong*

Colon-Specific Delivery of EGCG via pH-Responsive Chitosan Microparticles for Ulcerative Colitis Therapy

Jongjun Park, MS, *Sungkyunkwan University, Republic of Korea*

Prabhat Shrestha - *Sungkyunkwan University*; Simmyung Yook - *Sungkyunkwan University*

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Curcumin-loaded liposomes inhibit cigarette smoke induced senescence in human bronchial epithelial cells

Sofia Kokkinis, University of Technology Sydney, Australia
Jon Adams - UTS; Kamal Dua - UTS; Brian Oliver - UTS; Gabriele De Rubis - UTS; Tammam El Sherkawi - UTS; Keshav Raj Paudel - UTS; Stewart Yeung - UTS

Impact of PDMS Curing Chemistry on Physicochemical, Mechanical, and Drug Release Performance of LNG-IUSs

Ashwin Abhang, University of Connecticut, United States
Yuan Zou - U.S. Food and Drug Administration; Yan Wang - U.S. Food and Drug Administration; Diane Burgess - University of Connecticut

Lipid nanoparticles with allergen-encoding mRNA for allergen specific immunotherapy

Juan Paris, PhD, IBIMA Plataforma BIONAND, United States
Cinzia Guzzi - IBIMA Plataforma BIONAND; Cristobalina Mayorga - IBIMA Plataforma BIONAND; María José Torres - Hospital Regional Universitario de Málaga /IBIMA Plataforma BIONAND/ Universidad de Málaga

Oligoarginine Peptides Enable Intranasal Delivery of Trametinib for CNS Targeting

Stefana Duca, University of Nottingham, United Kingdom
Felicity de Cogan - University of Nottingham; Weng Chan - University of Nottingham; Andrew Lewis - Quotient Sciences

Poly-L-Glutamate-Based Nanocarriers Supporting Multimodal Treatment in Glioblastoma Multiforme

Amina Benaicha Fernández, MSc, Centro de Investigación Príncipe Felipe-CIPF, Spain
Teodora Randelović - Institute for Health Research Aragón (IIS Aragón), Aragón Institute of Engineering Research (I3A), University of Zaragoza, Zaragoza, Spain; Ana Armiñán - Centro De Investigación Príncipe Felipe - CIPF; Víctor Sebastián - Universidad de Zaragoza; Manuel Fuentes - University of Salamanca; Cristián Huck-Iriart - ALBA synchrotron light source; Esther Masià - Centro De Investigación Príncipe Felipe - CIPF; Paula Carrascosa-Marco - Centro de Investigación Príncipe Felipe-CIPF; Pablo Juanes-Velasco - University of Salamanca; Snežana Đorđević - Tosoh Bioscience GmbH; Clara Bayona - Universidad de Zaragoza; Ignacio Ochoa - University of Zaragoza; Maria Medel - Centro De Investigación Príncipe Felipe - CIPF; Inmaculada Conejos-Sánchez - Curapath; Maria J. Vicent - Centro De Investigación Príncipe Felipe - CIPF

The in vivo effects of permeation enhancers on the epithelial transport and bioavailability of the PROTAC ARV-471

Janis Niessen, Uppsala University, Sweden
Thomas Borchardt - AbbVie Inc; David Dahlgren - Uppsala University; Mikael Hedeland - Uppsala Universitet; Anura Indulkar - Merck; Mirko Koziolk - AbbVie Deutschland GmbH & Co. KG; Hans Lennernäs - Uppsala Universitet; Benjamin Ortiz Cardona - AbbVie Inc

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Magdy Abdelquader, PhD, Queen's University Belfast
Shu Li - School of Pharmacy, Queen's University Belfast; Gavin Andrews - School of Pharmacy, Queen's University Belfast; David Jones - School of Pharmacy, Queen's University Belfast

101: A QbD-Driven Approach for 3D Bioprinted Skin Performance

Marta Agostinho Cordeiro, Faculty of Pharmacy, University of Coimbra, Portugal
João José Sousa - UC NEXT Unipessoal Limitada; Faculty of Pharmacy, University of Coimbra; Margarida Miranda - Egas Moniz Center for Interdisciplinary Research; Coimbra Chemistry Centre, Institute of Molecular Sciences; Carla Vitorino - Faculty of Pharmacy, University of Coimbra; Coimbra Chemistry Centre, Institute of Molecular Sciences

102: Design and evaluation of 3D-Printed PCL-hydroxyapatite scaffolds for in-vitro bone modelling

Sara Alshaikh, University College Cork (UCC), Ireland
Erin Crowley - University College Cork; Cormac Gahan - University College Cork; Katie B. Ryan - University College Cork

103: De-Risking Preclinical LAI Formulations Through In Vitro Formulation Screening

Imogen Anastasiou, Pion Inc., United States
Karl Box - Pion Inc.; Conor Gomes - Pion Inc.; Bálint Sinkó - Pion Inc.

104: Peptide Amphiphile-Based 3D Breast Cancer Models Recapitulate the ECM for Nanomedicine Evaluation

Ana Armiñán, PhD, CIPF/CIBERONC, Spain
Paz Boix-Montesinos - CIPF; Magda Martinez - 2School of Pharmacy, Department of Chemical and Environmental Engineering, and Biodiscovery Institute, University of Nottingham, Nottingham, United Kingdom; Alvaro Mata - 2School of Pharmacy, Department of Chemical and Environmental Engineering, and Biodiscovery Institute, University of Nottingham, Nottingham, United Kingdom; Leire Miguéla-Maroto - CIPF; Maria J Vicent - CIPF/CIBERONC

105: Mechanically Tunable Tyramine-Modified Silk Hydrogels for In Vitro Modeling of Lung Fibrosis

Mariah Arral, PhD, Tufts University, United States
Adam Mullis - Tufts University; Maria Savvidou - Tufts University; Aria Yang - Tufts University; Thomas Falcucci - Tufts University; Julie Leonard-Duke - Columbia University; Sabrina Madiedo-Podvrsan - Tufts University; Jing-Jie Huang - Tufts University; Gordana Vunjak-Novakovic - Columbia University; David Kaplan - Tufts University

106: Establishing a robust ex vivo porcine intestinal platform for predictive permeation studies

Jacqueline Berger, Goethe University Frankfurt, Germany
Fouzia Machrouhi-Porcher - Merck KGaA; Sarah Vogel-Kindgen - Goethe University Frankfurt; Maike Windbergs - Goethe University Frankfurt

107: From multi-omics discovery to nanoparticle co-encapsulation: targeting glioma stem cell vulnerabilities

Francisco Branco, Faculty of Pharmacy, University of Coimbra, Portugal
Maria Mendes - 1Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal 2Coimbra Chemistry Centre, Institute of Molecular Sciences - IMS, Department of Chemistry, University of Coimbra, Coimbra, Portugal; Oriana Barros - 3iBIMED-Department of Medical Sciences, University of Aveiro, Aveiro, Portugal. 4UNIC, Department of Surgery and Physiology, Faculty of Medicine, University of Porto, Porto, Portugal 5QOPNA & LAQV-REQUIMTE, Chemistry Department, University of Aveiro, Aveiro, Portugal; Bárbara Marques - 1Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal 2Coimbra Chemistry Centre, Institute of Molecular Sciences - IMS, Department of Chemistry, University of Coimbra, Coimbra, Portugal; Joana Cunha - 1Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal; Alberto Canelas Pais - 2Coimbra Chemistry Centre, Institute of Molecular Sciences - IMS, Department of Chemistry, University of Coimbra, Coimbra, Portugal; João José Sousa - 1Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal 2Coimbra Chemistry Centre, Institute of Molecular Sciences - IMS, Department of Chemistry, University of Coimbra, Coimbra, Portugal; Rui Vitorino - 3iBIMED-Department of Medical Sciences, University of Aveiro, Aveiro, Portugal. 4UNIC, Department of Surgery and Physiology, Faculty of Medicine, University of Porto, Porto, Portugal 5QOPNA & LAQV-REQUIMTE, Chemistry Department, University of Aveiro, Aveiro, Portugal; Carla Vitorino - 1Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal 2Coimbra Chemistry Centre, Institute of Molecular Sciences - IMS, Department of Chemistry, University of Coimbra, Coimbra, Portugal

108: TIM-Cell: The most physiological intestinal permeability model

Tânia Martins Garcia, PhD, InnoGI technology, Netherlands
Tania Garcia - InnoGI technology; Lars Lars Verdurmen - InnoGI technology

109: Patient-derived explants to study immune-tumor interactions and nanoparticle immunomodulation

Catarina de Oliveira, Faculdade de Medicina, Universidade de Lisboa, Lisbon, Portugal
Catarina de Oliveira - Gulbenkian Institute for Molecular Medicine (GIMM); Elisa Mastrantuono - Gulbenkian Institute for Molecular Medicine (GIMM); Carolina Santos - Gulbenkian Institute for Molecular Medicine (GIMM); Ernesto Relova-Hernandez - Center of Molecular Immunology, Cuba; Rui

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110: Development of a Novel Hybrid 3D Intestinal–Colorectal Cancer Model for Preclinical Drug Screening

Sofia Dias, i3S – Institute for Research and Innovation in Health, University of Porto, Portugal

Ana Baião – i3S – Institute for Research and Innovation in Health, Portugal; Juliana Viegas – i3S – Institute for Research and Innovation in Health, Portugal; Ana Margarida Carvalho – University of Porto, Portugal; Soraia Pinto – i3S – Institute for Research and Innovation in Health, Portugal; Paulo Faria – University of Porto, Portugal; Catarina Leite Pereira – i3S – Institute for Research and Innovation in Health, Portugal; Bruno Sarmento – i3S – Institute for Research and Innovation in Health, Portugal

111: Use of brain organoids for the evaluation of nanotherapeutics targeting the central nervous system

Beatriz Fernández-Muñoz, PhD, Universidad de Sevilla, Spain
Ana García-Delgado – Universidad de Sevilla; Lucía Medialdea – Universidad de Sevilla; Noelia Durán-Soto – Universidad de Sevilla; Matilde Durán-Lobato – Universidad de Sevilla; Josefa Álvarez-Fuentes – Universidad de Sevilla; Mazen El-Hammadi – Universidad de Sevilla; Lucía Martín-Navarro – University of Seville; Rafael Campos-Cuerva – Red Andaluza de Diseño y Traslación de Terapias Avanzadas; Lucía Martín-Banderas – Universidad de Sevilla

112: Development of a decellularized ECM-based 3D model of intestinal fibrosis for antifibrotic drug screening

Bárbara Ferreira, MSc, Institute for Research and Innovation in Health, Portugal

Ana Beloqui – Université Catholique de Louvain; Bruno Sarmento – i3S

113: Looking Beyond Aerodynamics: Evaluation of Fluticasone Furoate via Dissolution and Permeation using Lung ALIs

Beatriz Gamelas, Hovione, Portugal

Beatriz Ferreira – Hovione; Mykaella Mestre – Hovione; Cláudia Costa – Hovione; Daniel Pereira – Hovione; Ricardo Ribeiro – Hovione; Alexandre Ribeiro – Hovione; Tiago Fernandes – IST

114: Repurposing of Quetiapine Fumarate for Breast Cancer Therapy: In-Silico Network Analysis and In-Vitro Validation

Gandhali Ghaisas, SVKM's NMIMS Shobhaben Pratapbhai Patel School of Pharmacy and Technology Management, India
Vaishali Londhe – SVKM's NMIMS Shobhaben Pratapbhai Patel School of Pharmacy and Technology Management

115: Reversible tissue encapsulation in polymer hydrogels supports scalable in vitro animal-free assays

Xinyuan Jia, University College London, United Kingdom

Michael Cook – University College London; David Shorthouse – University College London

116: In vitro dry eye disease modeling: selection of inflammatory stimuli and cytokine readouts

Josip Ljubica, PhD, University of Zagreb Faculty of Pharmacy and Biochemistry, Croatia

Jasmina Lovrić – University of Zagreb Faculty of Pharmacy and Biochemistry; Darija Stupin Polančec – University of Zagreb Faculty of Pharmacy and Biochemistry

117: Bioprinted Tumouroids as Precision Testbeds for Targeted Nanoparticle Delivery

Amy Logan, PhD, Children's Cancer Institute, Australia

Joanna Skhinas – Children's Cancer Institute; Ernesto Moles – Children's Cancer Institute and University of New South Wales; Christopher Howard – University of Queensland; Kristofer Thurecht – University of Queensland; Maria Kavallaris – Children's Cancer Institute and University of New South Wales

118: A Quantitative Human Immortalized BBB Organoid Platform for Screening Brain-Targeted Nanoparticles

Alexis Minchaca Acosta, PhD, Children's Cancer Institute, Australia

Estrella Gonzales-Aloy – Children's Cancer Institute; Aria Ahmed-Cox – Children's Cancer Institute; Nyoman Kurniawan – The University of Queensland; Amal Sivaram – The University of Queensland; Maria Tsoli – Children's Cancer Institute; Taskeen Janjua – The University of Queensland; Ganesh Kokil – University of New South Wales; David Ziegler – Children's Cancer Institute; Joshua McCarroll – Children's Cancer Institute; Kristofer Thurecht – The University of Queensland; Amiral Popat – The University of Queensland; Tushar Kumeria – University of New South Wales; Maria Kavallaris – Children's Cancer Institute; University of New South Wales

119: From Images to Amounts: A Simple Ex Vivo Skin Model for Concentration-Dependent Curcumin Dermal Penetration

Daniela Müller, PhD, Philipps Universität Marburg, Germany

Tien Trung Do – Philipps University Marburg; Anam Khan – Philipps University Marburg; Erik Saleski – Philipps University Marburg; Lennart Westermann – Philipps University Marburg; Ilva Rupenthal – University of Auckland; Cornelia Keck – Philipps University Marburg

120: Advanced Dual-Culture Non-Muscle Invasive Bladder Cancer Platform for Drug Screening

Soraia Pinto, PhD, Institute for Research and Innovation in Health (i3S), University of Porto, Portugal

Daniel Carvalho – Institute for Research and Innovation in Health (i3S), University of Porto; Instituto de Ciências Biomédicas Abel Salazar (ICBAS), University of Porto, Portugal; Ana Regina Sampaio – Institute for Research and Innovation in Health (i3S), University of Porto; Instituto de Ciências Biomédicas Abel Salazar (ICBAS), University of Porto,

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Porto, Portugal; João Almeida - Institute for Research and Innovation in Health (i3S), University of Porto; Alistair Ross - Ferring Pharmaceuticals, Glasgow, United Kingdom; Simon Read - Ferring Pharmaceuticals, Copenhagen, Denmark; Eskil Johnsson - Ferring Pharmaceuticals, Copenhagen, Denmark; Bruno Sarmiento - Institute for Research and Innovation in Health (i3S), University of Porto; Instituto Universitário de Ciências da Saúde (IUCS-CESPU), Gandra, Portugal

121: Mimicking the intestinal host-pathogen interface to assess anti-infective drug permeation across E. coli biofilms

Marie-Christine Rau, MSc, Goethe University Frankfurt, Germany
Johannes Most - Goethe University Frankfurt; Jonas Brill - Goethe University Frankfurt; Stefanie Gier - Goethe University Frankfurt; Viktoria Planz - Goethe University Frankfurt; Maïke Windbergs - Goethe University Frankfurt

122: Real-time label-free platforms for in vitro characterization of nanoparticle-based drug delivery formulations

Elena Scurti, University of Helsinki, Finland
Tapani Viitala - University of Helsinki

123: Effect of Varying Exposure Conditions on In Vitro Biocompatibility in a 3D Corneal Epithelial Model

Jelena Štimac, mag. pharm., University of Zagreb Faculty of Pharmacy and Biochemistry, Croatia
Maša Safundžić Kučuk - JGL d.d.; Andela Nosić - University of Zagreb Faculty of Pharmacy and Biochemistry; Željko Agić - JGL d.d.; Nensi Tomas - University of Zagreb Faculty of Pharmacy and Biochemistry; Josip Ljubica - University of Zagreb Faculty of Pharmacy and Biochemistry; Jasmina Lovrić - University of Zagreb Faculty of Pharmacy and Biochemistry

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Lisa Volpatti, PhD, Northwestern University, United States
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Hend Abdelhakim, PhD, University College London, United Kingdom

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Daniel Abramov, Pennsylvania State University - Berks, United States
Ioannis Androulakis - Rutgers University

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Andreas Bramboeck, MeltPrep, Austria
Julia Nikolaus - MeltPrep; Karl Wagner - University of Bonn

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Giorgio Buttitta, PhD, Sapienza University of Rome, United States

129: Where Empirical Non Linear IVIVR/C Works and Where It Breaks for Long Acting Injectables

Jake Dickinson, BSc, Seda Pharmaceutical Development Services, United Kingdom
Claire Patterson - Seda Pharmaceutical Development Services

130: Molecular Dynamics Simulation of Artificial Liposomes for Carprofen Encapsulation in Veterinary Medicine

Elisa Daniela Espinosa Bravo, Universidad de Guadalajara, Mexico
Teresa Romero Gutiérrez - Universidad de Guadalajara; Ernesto Borrayo - Universidad de Guadalajara; Yajaira Zepeda García - Universidad de Guadalajara

131: Automated Screening and External Foundation Model Transfer for Local Lipid Nanoparticle Discovery

Ewan Fawcett, MSc, University College London, United Kingdom
Michael Cook - University College London; Jenny Lam - University College London; David Shorthouse - University College London

132: Why Model Structure Matters: Translatability Across Inhalation PBPK Frameworks

Filipa Ferreira, Hovione, Portugal
Rúben Chaves - Hovione; Cláudia Viegas - Hovione; Alexandre Ribeiro - Hovione; Tiago Fernandes - Instituto Superior Técnico - Universidade de Lisboa; Filipa Ferreira - Hovione

133: Bayesian optimisation guided High-throughput screening platform for lipid nanoparticle formulation screening.

Gedion Girmahun, University College London, United Kingdom
Christian Wells - Croda; James Humphrey - Croda; Andrew Lewis - Quotient Sciences; Asma Patel - Quotient Sciences; Roberta Azzarelli - University College London; David Shorthouse - University College London; Pratik Gurnani - University College London

134: A semi-automated drug solubility method for accelerated prediction of micellar nanoassemblies

Antonia Gucic, UCL School of Pharmacy, United Kingdom
David Shorthouse - UCL School of Pharmacy; Christopher Waudby - UCL School of Pharmacy; Michael Cook - UCL School of Pharmacy

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Dimitri Leontiev, University College London (UCL), United Kingdom

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Giuseppe Licari, PhD, Merck KGaA, Switzerland

137: AI-driven rational design of lipid-polymer hybrid nanoparticles using a model hydrophobic drug.

Arturo Lorenzo, University of Santiago de Compostela, Spain
Mariana Perez - Universidade de Santiago de Compostela;
Patricia Rodriguez - Universidade de Santiago de Compostela

138: Machine Learning-Enabled Prediction of Microneedle Insertion Performance

Ruslan Mohamed, MSc, University of Nottingham, United Kingdom
Pratik Gurnani - University College London; Giuseppe Mantovani - University of Nottingham; Maria Marlow - University of Nottingham; Jamie Twycross - University of Nottingham; Mischa Zelzer - University of Nottingham

139: Combatting tuberculosis with Computationally Peptides Encapsulated in Tuftsin-Functionalized Nanoparticles

Fernando Pavan, Universidade Estadual Paulista - UNESP, Brazil
Christian Carnero Canales - São Paulo State University; Cesar Roque-Borda - São Paulo State University; Rafael Sabio - São Paulo State University

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Claire Riordan, BE, ME, PhD, University of Galway, Ireland
Ellen Conroy - University of Galway; James Curneen - University of Galway; Garry Duffy - RCSI University of Medicine and Health Sciences; Joanne O'Dwyer - University of Galway

141: A data-driven robotic workflow for autonomous formulation of antibody therapeutics

Helena Ros, University College London, United Kingdom
Christian Wells - Croda, UK; Geoff Platt - Croda, UK; Paul Dalby - UCL; David Shorthouse - UCL School of Pharmacy; Michael Cook - UCL School of Pharmacy

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Young Hun Song, Keimyung University, Republic of Korea
Du Hyeong Hwang - Keimyung University, Daegu, Republic of Korea

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Charles Vesey, MS, RPh, Colorcon, United States
Jason Hansell - Colorcon

144: Predicting negative food effect induced by adsorption to food on oral absorption of small- and middle-molecule drugs

Ayahisa Watanabe, PhD, Shionogi & Co., Ltd, Japan
Chitaka Namba - Shionogi & Co., Ltd; Shingo Sakamoto - Shionogi & Co., Ltd

145: Computational Design of Liposome-Based Nanoreactor through Molecular Dynamics Simulations

Yajaira Zepeda García, Universidad de Guadalajara, Mexico
Nicté Selene Fajardo - Universidad de Guadalajara; Alejandro Morales Valencia - Universidad de Guadalajara; Maria Teresa Romero Gutiérrez - Universidad de Guadalajara

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Hans Zhang, UCL School of Pharmacy, United Kingdom
Haoran Yue - UCL School of Pharmacy; Abdul Basit - UCL School of Pharmacy; Simon Gaisford - UCL School of Pharmacy

147: Integrating AI and PBPK to Predict In Vitro/In Vivo Fate of Self-Emulsifying Drug Delivery Systems

Jinying Zhu, University of Macau, Macau
Ping Xiong - University of Macau; Xurui Yang - University of Macau; Wei Wang - University of Macau; Defang Ouyang - University of Macau

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Chengcheng Zhang, Åbo Akademi University, Finland
Hongbo Zhang - Åbo Akademi University

Bioengineering (Focus Group – Bioengineering)

149: Biomimetic Protein-Based Nanocarriers Loaded with Lithium-6-Doped Carbon for Glioblastoma Theragnostic

Duarte Almeida, UMCG, Netherlands
Gil Gonçalves - University of Aveiro; Maria Lobita - UMCG; Irina Marin - UMCG; Mariana Salomão - UMCG; Hélder Santos - UMCG

150: Microfluidic engineered cancer cell membrane hybrid liposomes for breast cancer targeting

Mariana Arraes Salomão, Universidade Federal de Goiás, Brazil
Renata Maia - University Medical Center Groningen (UMCG), University of Groningen, Groningen, The Netherlands; Duarte Almeida - University Medical Center Groningen (UMCG), University of Groningen, Groningen, The Netherlands; Maria Lobita - University Medical Center Groningen (UMCG), University of Groningen, Groningen, The Netherlands; Graziela Scheuer Gomes - University Medical Center Groningen (UMCG), University of Groningen, Groningen, The Netherlands; Hélder Almeida Santos - University Medical Center Groningen (UMCG), University of Groningen, Groningen, The Netherlands; Eliana Martins Lima - School of Pharmacy, Federal University of Goiás, Goiânia, Brazil

151: Spatially Engineered Hybrid Scaffolds: How Component Organization Drives Osteogenic Microenvironment

Giulia Auriemma, University of Salerno, Italy
Angiola Guidone - university of Salerno; Pierpaolo Coppola - University of Salerno; Maria Grazia Raucci - Institute of

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Polymers, Composites and Biomaterials- National Research of Council (IPCB-CNR); Alessandra Soriente - Institute of Polymers, Composites and Biomaterials- National Research of Council (IPCB-CNR); Carla Sardo - University of Salerno; Rita P. Aquino - University of Salerno

152: Effects of peptide additives in lipid nanoparticles with low ionizable lipids content for siRNA delivery

*Yeonho Bae, BS, Konkuk University, Republic of Korea
Junhyuk Lee - Konkuk University; Hyejung Mok - Konkuk University*

153: Engineering extracellular vesicles to enhance wound healing

*Marta Barão, University of Coimbra, Center for Neuroscience and Cell Biology, Portugal
Carlos Jesus - University of Coimbra; Ning Landen - Karolinska Institutet (KI); Hugo Fernandes - Multidisciplinary Institute of Ageing (University Coimbra); Lino Ferreira - University of Coimbra*

154: Myxobacterial OMVs released from ADA-GEL Hydrogels: potentials in topical antibacterial treatment

*Ilaria Bettin, PhD, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
Lorenzo Sana - Friedrich-Alexander-Universität Erlangen-Nürnberg; Lisa Schöbel - Friedrich-Alexander-Universität Erlangen-Nürnberg; Rainer Detsch - Friedrich-Alexander-Universität Erlangen-Nürnberg; Aldo Boccaccini - Friedrich-Alexander-Universität Erlangen-Nürnberg; Gregor Fuhrmann - Friedrich-Alexander-Universität Erlangen-Nürnberg*

155: Bioinspired TIMP-1 Nanoparticles Mimic Extracellular Vesicle Anti-angiogenic Activity in Ewing Sarcoma

*Martina Boaron, University of Padua, Italy
Cristina Liboni - Université de Strasbourg; Diana Corallo - Pediatric Research Institute Città della Speranza Foundation; Sanja Aveic - Pediatric Research Institute Città della Speranza Foundation; Marco Ballestri - Institute for Organic Synthesis and Photoreactivity; Ricardo Sanchez-Rodriguez - Università degli Studi di Padova; Alessandra Maria Testa - Università degli Studi di Padova; Claudia Ferroni - Institute for Organic Synthesis and Photoreactivity; Greta Varchi - Institute for Organic Synthesis and Photoreactivity; Antonella Viola - Università degli Studi di Padova; Roberta Angioni - Università degli Studi di Padova*

156: Rational selection of mucinases for pulmonary mucus modulation

*Marilena Bohley Steiger, PhD, ETH Zurich, Switzerland
Sally Liu - ETH Zurich; Chantal Balmer - ETH Zurich; Padryk Merkl - ETH Zurich; Jean-Christophe Leroux - ETH Zurich*

157: Local Synthetic HDL Injection Attenuates Ligature-Induced Periodontal Bone Loss in Rats

*Marco Bottino, DDS, MSc, PhD, University of Michigan/School of Dentistry, United States
Renan Dal-Fabbro - University of Michigan School of Dentistry; Pedro Chaves de Oliveira - University of Michigan School of Dentistry; Alexandre dos Reis-Prado - University of Michigan School of Dentistry; Wanderson dos Santos - University of*

Michigan School of Dentistry; Mariana Justo - University of Michigan School of Dentistry; Arpita Roy - University of Michigan College of Pharmacy; Anna Schwendeman - University of Michigan College of Pharmacy

158: Comprehensive Evaluation of Hybrid Extracellular Vesicles as a Multifunctional Delivery Platform

*Yu Cai, Erasmus Medical Center, Netherlands
Mohamadreza Amin - Erasmus Medical Center; Guido Jenster - Erasmus Medical Center; Timo ten Hagena - Erasmus Medical Center*

159: Engineering lipid nano-carriers for modelling stromal cell - tumour crosstalk in the bone marrow niche

*Massimo Cau, PhD, University of Oxford, United Kingdom
Patrick Peschke - University of Oxford; Matthew Walker - University of Glasgow; Savvas Ioannou - University of Glasgow; Xavier Davis - University of Oxford; Monica Tsimbouri - University of Glasgow; Matthew Dalby - University of Glasgow; Catherine Berry - University of Glasgow; Molly Stevens - University of Oxford*

160: Dapagliflozin-loaded nanoerythrocytes as a biomimetic strategy to target cardiac fibrosis

*Maria Camilla Ciardulli, PhD, University Medical Center Groningen (UMCG), Netherlands
Luigia Serpico - The University Medical Center Groningen; Yu He - The University Medical Center Groningen; Idaira Pacheco-Fernández - Universidad de La Laguna; Ana Hortelão - The University Medical Center Groningen; Hélder Santos - The University Medical Center Groningen*

161: Elaboration and characterization of biomimetic lipid nanoparticles for biomedical applications

*Anna Derradj, Université Claude Bernard Lyon 1, France
Sandrine Bourgeois - Université Claude Bernard Lyon 1; Catherine Ladavière - CNRS*

162: Extracellular Vesicle-mediated Erythropoietin delivery mitigates inflammation-induced anemia in vivo

*Zuriñe Erana-Perez, NanoBioCel Group, Laboratory of Pharmaceutics, School of Pharmacy (UPV/EHU), Bioaraba, NanoBioCel Research Group, Vitoria-Gasteiz, Spain
Alicia Rodríguez-Gascón, PharmaNanoGene Group, Laboratory of Pharmaceutics, School of Pharmacy (UPV/EHU), Bioaraba, Microbiology, Infectious Disease, Antimicrobial Agents, and Gene Therapy Group; Edorta Santos-Vizcaino - Assistant Professor, NanoBioCel Group, Laboratory of Pharmaceutics, School of Pharmacy (UPV/EHU), Bioaraba, NanoBioCel Research Group, Vitoria-Gasteiz, Spain, Biomedical Research Networking Centre in Bioengineering, Biomaterials and Nanomedicine (CIBER-BBN); Rosa Maria Hernandez - Professor, NanoBioCel Group, Laboratory of Pharmaceutics, School of Pharmacy (UPV/EHU), Bioaraba, NanoBioCel Research Group, Vitoria-Gasteiz, Spain, Biomedical Research Networking Centre in Bioengineering, Biomaterials and Nanomedicine (CIBER-BBN)*

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163: Cytosolic Delivery of the Full Length 317 kDa Neurofibromin Protein

Cherry Gupta, PhD, *Battelle Memorial Institute, United States*
Dean Constantine – *Battelle Memorial Institute*; Ashlee Colbert – *Battelle Memorial Institute*; Molly Kaufman – *Battelle Memorial Institute*

164: A versatile and simple dual-network imine hydrogel delivery system for fine-tuning of release kinetics

Daniel Hachim, PhD, *Pontificia Universidad Católica de Chile, Chile*
Cristobal Ramirez – *Pontificia Universidad Católica de Chile*

165: Biofunctional Scaffolds Integrating Extracellular Vesicles and IM Cells for Accelerated Kidney Regeneration

Dong Keun HAN, PhD, *ORANDBIO Co. Ltd., Republic of Korea*
Seung-Woon Baek – *ORANDBIO Co., Ltd.*; Min Park Jeong – *CHA University*; Jun Yong Kim – *CHA University*; Dong Ryul Lee – *CHA University*

166: Biomimetic liposomes with antifibrotic properties for the treatment of idiopathic pulmonary fibrosis

Tacio Hayasaki, *Federal University of Goiás, Brazil*
Nathalia Oliveira – *UFG*; Anny Silva – *UFG*; Julia oliveira – *UFG*;
Lucas Sousa – *UFG*; Eliana Lima – *UFG*

167: Cross-kingdom extracellular vesicles for specific tissue targeting and gene delivery

Mei He, PhD, *University of Florida, United States*

168: Genetic Engineering of Extracellular Vesicles (EVs) for Targeted Drug Delivery Applications

Jonas Hemmingsen, *Aarhus University, Denmark*
Bradley Whitehead – *Department of Clinical Medicine, Aarhus University, Department of Infectious Diseases, Aarhus University Hospital*; Mads Zippor – *Department of Clinical Medicine, Aarhus University*; Anders Boysen – *Department of Clinical Medicine, Aarhus University*; Peter Nejsum – *Department of Clinical Medicine, Aarhus University, Department of Infectious Diseases, Aarhus University Hospital*; Kenneth Howard – *Interdisciplinary Nanoscience Center (iNANO) and Molecular Biology and Genetics, Aarhus University, DK-8000 Aarhus C, Denmark*

169: Engineering Colon Carcinoma Cell Lysate Lipid Nanovesicles for Therapeutic Cancer Vaccination

Noelia Hernandez-Lobato, PhD, *Catalan Institute of Nanoscience and Nanotechnology, Spain*
Mang Xu – *University of Manchester*; Hanan Abumanhal-Masarweh – *University of Manchester*; Marilena Hadjidemetriou – *University of Manchester*; Neus Lozano – *Catalan Institute of Nanoscience and Nanotechnology*; Thomas Kisby – *University of Manchester*; Kostas Kostarelos – *Catalan Institute of Nanoscience and Nanotechnology*

170: Collagenase-powered nanomotors for cardiac reprogramming of the fibrotic heart tissue

Ana Hortelão, PhD, *UMCG, Netherlands*
Maria Camilla Ciardulli – *UMCG*; Hélder Santos – *UMCG*

171: Human Protein-based Nanoparticles for RNA Self-packaging, Delivery into Stem Cells and Tissue Regeneration

Yu-Chen Hu, PhD, *National Tsing Hua University, Taiwan (Republic of China)*

172: Engineering targeted HDL-like nanoplatfom for therapy and monitoring of atherosclerosis

Aliaksei Ihnatsyeu-Kachan, PhD, *Sorbonne University, France*
Kim Benéteau – *University of Bordeaux*; Mathilde Ragues – *University of Bordeaux*; Marie-Josée Jacobin-Valat – *University of Bordeaux*; Florence Ottones – *University of Bordeaux*; Sophie Galier – *Sorbonne University*; Philippe Lesnik – *Sorbonne University*; Wilfried Le Goff – *Sorbonne University*; Anatol Kontush – *Sorbonne University*; Abdelmajid Noubhani – *University of Bordeaux*; Gilles Joucla – *University of Bordeaux*; Stéphane Mornet – *University of Bordeaux*; Gisèle Clofent-Sanchez – *University of Bordeaux*; Isabelle Guillas – *Sorbonne University*

173: Development of a novel semaglutide-loaded dry powder inhaler

Byeongnam Im, PhD, *Hanmi Pharm. Co., Ltd., Republic of Korea*

174: Ambient-Light Activatable Luminescent Patch for Photochemical Tissue Bonding and Phototherapy

Kyungjoo Jo, BS, *POSTECH, Republic of Korea*
Sei Kwang Hahn – *POSTECH*

175: Metabolically Glycoengineered Extracellular Vesicles for Targeted Renal Regeneration in Acute Kidney Injury

So Hee Kim, *Sungkyunkwan University, Republic of Korea*
Chan Ho Kim – *Sungkyunkwan University*; Jae Hyung Park – *Sungkyunkwan University*

176: Mechanobiologically Engineered EV-Mimetic Nanocarriers for Enhanced Systemic Anti-Inflammatory Therapy in RA

Dahwun Kim, MSc, *Sungkyunkwan University, Republic of Korea*
Su Yeon Lim – *Sungkyunkwan University*; Byung Deok Kim – *Sungkyunkwan University*; Ji Hoon Jeong – *Sungkyunkwan University*

177: Rejuvenating Effects of CD146+ TMSC-Derived Nanovesicles through Modulation of the p53 Pathway

Dohyun Kim, *Yonsei University, College of medicine, Republic of Korea*
Kyu-Sik Shim – *PLCOskin Co., Ltd*; Jeong Su Park – *PLCOskin Co., Ltd*; Han-saem Jo – *PLCOskin Co., Ltd*; Nayeon Koo – *PLCOskin Co., Ltd*; Jeongwoo Park – *PLCOskin Co., Ltd*; Tai Suk Roh – *Yonsei University, College of Medicine*; Wooyeol Baek – *Yonsei University, College of Medicine*

178: 3D-Bioprinted Patches for Controlled Delivery of a Hypoximimetic Compound to Enhance Diabetic Wound Repair.

Isabel Lastres Cubillo, *University of Córdoba/IMIBIC, Spain*
Isabel Lastres Cubillo – *University of Córdoba*; Esther Rincón – *BioPrEn Group (RNM940), Chemical Engineering Department, Instituto Químico para Energía y el Medioambiente (IQUEMA),*

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Faculty of Science, University of Córdoba, 14014, Córdoba, Spain.; Eduardo Espinosa - BioPrEn Group (RNM940), Chemical Engineering Department, Instituto Químico para Energía y el Medioambiente (IQUEMA), Faculty of Science, University of Córdoba, 14014, Córdoba, Spain.; Juan Domínguez-Robles - Department of Pharmacy and Pharmaceutical Technology, Faculty of Pharmacy, Universidad de Sevilla, Spain.; María Eugenia Prados - Maimonides Biomedical Research Institute of Cordoba, Spain.; Eduardo Muñoz - University of Cordoba; Adela García-Martín - University of Cordoba

179: Self-Immolative Polymeric Prodrug for Enhanced Cancer Therapy via Redox Balance Disruption

Chaeyoung Lee, Sungkyunkwan University, Republic of Korea
Anup Dey - Stony Brook University; Jueun Jeon - Harvard Medical School; Jae Hyung Park - Sungkyunkwan University

180: Photothermal Organelles Enables Nanoparticle-Free Tumor Ablation via Intracellular Vapor Bubbles

Tao Lu, Ghent University, Belgium
Cristina Muntean - Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium.; Félix Sauvage - Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium.; Deep Punj - Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium.; Herlinde De Keersmaecker - Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium.; Femke Baeke - VIB BiImaging Core, VIB-UGent Center for Inflammation Research, Ghent, Belgium. And Department of Biomedical Molecular Biology, Ghent University, Ghent, Belgium.; Riet De Rycke - VIB BiImaging Core, VIB-UGent Center for Inflammation Research, Ghent, Belgium. And Department of Biomedical Molecular Biology, Ghent University, Ghent, Belgium.; Kelly Lemeire - HistoCore, VIB Center for Inflammation Research, Ghent, Belgium and Department of Biomedical Molecular Biology, Ghent University, Ghent, Belgium.; Philippe Tummers - Department of Gynaecology, Ghent University Hospital, Ghent, Belgium; Weiran Li - Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium.; Chloé De Clercq - Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium.; Bernd Vanmeerhaeghe - Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium.; Kaat Durinck - Pediatric Precision Oncology Lab, Department of Biomolecular Medicine, Ghent University, Ghent, Belgium.; Olivier De Wever - Laboratory of Experimental Cancer Research, Department of Human Structure and Repair, Ghent University, Ghent, Belgium.; Katrien Remaut - Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium.; Kevin Braeckmans - Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent

University, Ghent, Belgium.; Stefaan De Smedt - Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium.; Koen Raemdonck - Laboratory of General Biochemistry and Physical Pharmacy, Faculty of Pharmaceutical Sciences, Ghent University, Ghent, Belgium.

181: Protein incorporation into suture threads for wound healing promotion in medico-surgical procedures.

Hector Magana, Autonomous University of Baja California, Mexico
Anabel Sanchez-Martinez - Autonomous University of Baja California; Cítlaly Bucio-Arzate - Autonomous University of Baja California; Teresa Rodriguez-Tellez - Autonomous University of Baja California; Kenia Palomino-Vizcaino - Autonomous University of Baja California; Giovanni Palomino-Vizcaino - Autonomous University of Baja California

182: Engineering Proteoliposomes by Microfluidics for Efficient Membrane Protein Incorporation

Renata0 Maia, University Medical Center Groningen, Netherlands
Joop De Vries - University Medical Center Groningen.; Diego Aguilar Rodriguez - University Medical Center Utrecht; Pieter Vader - University Medical Center Utrecht; Mohammad-Ali Shahbazi - University Medical Center Groningen.; Hélder Santos - University Medical Center Groningen.

183: Surface-erodible amino acid phosphoramidate for 3D printing of biodegradable drug delivery systems

Mahsa Mostofizadeh, PhD, Johannes Kepler University Linz, Austria
Ian Teasdale - Johannes Kepler University Linz

184: Engineering protein-polymer hybrid multilayer microreactors as antioxidant and anti-inflammatory therapeutics

Maria Motta, PhD, POLYMAT, Applied Chemistry Department, Faculty of Chemistry, University of the Basque Country UPV/EHU, 20018 Donostia-San Sebastián, Spain
Sergio Martin-Saldaña - POLYMAT, Applied Chemistry Department, Faculty of Chemistry, University of the Basque Country UPV/EHU, 20018 Donostia-San Sebastián, Spain; Ana Beloqui - POLYMAT, Applied Chemistry Department, Faculty of Chemistry, University of the Basque Country UPV/EHU, 20018 Donostia-San Sebastián, Spain; Marcelo Calderón - POLYMAT, Applied Chemistry Department, Faculty of Chemistry, University of the Basque Country UPV/EHU, 20018 Donostia-San Sebastián, Spain; Aitor Larrañaga - POLYMAT, Bilbao School of Engineering, University of the Basque Country UPV/EHU, 48013 Bilbao, Spain

185: Engineering TGFβ2 microparticles for tissue engineered vascular grafts and assessment of remodeling in vitro

Tracey Moyston, University of Pittsburgh, United States
David Maestas - University of Pittsburgh; Sang-Ho Ye - University of Pittsburgh; William Wagner - University of Pittsburgh; Jonathan Vande Geest - University of Pittsburgh; Steven Little - University of Pittsburgh

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186: Exploring nonliving cell-inspired bio-reservoir for regenerative medicine

Nhu-Nam Nguyen, Sungkyunkwan university, Republic of Korea
Tiep Nguyen – Sungkyunkwan University; Jee-Heon Jeong – Sungkyunkwan University

187: Optimization and characterization of adipose tissue biomimetic nanocarriers for oral delivery purposes

Cristina Pangua Irigaray, PhD, University catholique of Louvain, Belgium
Hafsa Yagoubi – University Catholic of Louvain; Ana Beloqui – University Catholic of Louvain

188: Bioengineered Nanoparticles to exploit Cholesterol Uptake in Helicobacter pylori

Ana Sofia Pinho, ICBAS/i3S, Portugal
Anette Müllertz – Department of Pharmacy, University of Copenhagen, Copenhagen, Denmark; Bioneer A/S, Kogle Allé 2, Hørsholm 2970, Denmark; Cristina Martins – i3S – Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Portugal; INEB – Instituto de Engenharia Biomédica, Universidade do Porto, Porto, Portugal; ICBAS – Instituto de Ciências Biomédicas Abel Salazar, Universidade do Porto, Porto, Portugal; Paula Parreira – i3S – Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Portugal

189: Polysaccharide membranes as controlled delivery platforms for açai seed extract-loaded microspheres

Caroline Santinon, PhD, State University of Campinas (UNICAMP), Brazil
Priscila Mazzola – State University of Campinas

190: Biopolymer Charge Shapes Context-Dependent Human Macrophage Cytokine Responses to In Vitro

Crystal Shin, PhD, Baylor College of Medicine, United States
Morgan Owens – Baylor College of Medicine; Ghanashyam Acharya – Baylor College of Medicine; Andrea McAlester – Baylor College of Medicine

191: Regulating the lifecycle of cell membrane-engineered nanocarriers to boost drug delivery to endoplasmic reticulum

Jing Tao, PhD, Key Laboratory of Drug-Targeting and Drug Delivery System of the Education Ministry and Sichuan Province, West China School of Pharmacy, Sichuan University, China
Yuan Huang – West China School of Pharmacy, Sichuan University

192: Bio-inspired peptide-like hydrogels as long-acting injectable drug delivery platforms

Garry Laverty, PhD, Queen's University Belfast, Ireland
Co-Authors: All names listed

192A: Sustainable Biomanufacturing of recombinant sfGFP: A cost-effective platform for producing reporters

Elaine Cabral-Albuquerque, Universidade Federal da Bahia, Brazil
Milena TRINDADE – universidade Federal da Bahia; Luis Gustavo Pacheco – Univerisidade Federal da Bahia; Cesar Aguirre – Universidade Federal da Bahia

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193: Development of two types of lipid nanoparticles containing naringenin for topical application

André RTS Araujo, Polytechnic University of Guarda, Portugal
Daniela Pedro – Polytechnic University of Guarda; Breno Oliveira – Polytechnic University of Guarda; Monica Argenziano – Department of Drug Science and Technology, University of Turin; Roberta Cavalli – Department of Drug Science and Technology, University of Turin; Carlos Fernandes – MedInUP, Faculty of Medicine, University of Porto; Karolline Krambeck – Polytechnic Institute of Guarda

194: Development and evaluation of Pentadesma butyracea gum as drug release modifier in diclofenac sodium matrix tablets

Mary-Ann Archer, B. Pharm, MPhil Pharm, FPCPharm, University of Cape Coast, Ghana
Prince Acquah Jnr – Kwame Nkrumah University of Science and Technology; Isaac Attah – University of Cape Coast; Raphael Johnson – Kwame Nkrumah University of Science and Technology; Samuel Kipo – Kwame Nkrumah University of Science and Technology; Kwabena Ofori-Kwakye – Kwame Nkrumah University of Science and Technology; Frederick William Owusu – Kwame Nkrumah University of Science and Technology

195: Long-Lasting Fragrance on the Skin Through Microencapsulation Technology

Sergio Gallucci, Vollmens Fragrances, Brazil
Natália Baptista – Vollmens Fragrances; Caroline Belmonte – Vollmens Fragrances; Leonardo Müller – Vollmens Fragrances; Isabella Resende – Vollmens Fragrances; Estela Silva – Vollmens Fragrances

196: Green Cosmetics: Spirulina Microparticle-Loaded Silk Protein Hydrogel for Enhanced Occlusion

Meliha Güneş, PhD, Ege University, Turkey
Sinem Karavana – Ege University; Meltem Yeşilkavak – Ege University

197: 30Kc19α: A Versatile Cell-Penetrating and Stabilizing Protein Platform for Targeted Intracellular Delivery

Nathaniel Hwang, Seoul National University, Republic of Korea
Jiyeon Hong – Seoul National University

198: Effects of Internal Flow Design on Aerosolization and Drug Dispersion in DPI Devices Using PIV and Raman Imaging

Woong-Young Jung, Chungbuk National University, Republic of Korea
Ji-Seung Kim – College of pharmacy, Chungbuk National University; Sang Min Cho – Korea United Pharm. INC.; Ji-Hoon Choi – Korea United Pharm. INC.; Dong-Won Oh – Korea United Pharm. INC.; Chun-Woong Park – College of pharmacy, Chungbuk National University

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199: Mechanistic Analysis of Sustained API Release from Cholesterol Substituted Hyaluronic Acid (CHHA) Nanogels

Toru Katsumata, PhD, *Asahi Kasei Corporation, Japan*
Shogo Aso – *Asahi Kasei Corporation*; Tsuyoshi Shimoboji – *Asahi Kasei Corporation*; Kohei Yabuuchi – *Asahi Kasei Corporation*

200: Development of Zein-Based Composite Nanoparticles for Enhanced Skin Delivery and Stability of Resveratrol

HyunKyung Kim, *Kolmar Korea, Republic of Korea*
HyungJin Bae – *Kolmar Korea*; JinMo Kim – *Kolmar Korea*;
SangWoo Kim – *Kolmar Korea*; JungEun Lee – *Kolmar Korea*

201: Development of 3D-Printable Hydrogels Leveraging Vanillin-Assisted and AI-Driven Tunable Processes

Chi Lee, MS, *University of Missouri-Kansas City, United States*
Yugyung Lee – *University of Missouri-Kansas City*; Chi Lee – *University of Missouri-Kansas City*

202: Rutin and Luteolin-loaded Nanostructured Lipid Carriers: Co-Encapsulation, Stability, and In Vitro Evaluation

Catarina Macedo, *Faculty of Pharmacy, University of Porto, Portugal*
Paulo Costa – *MedTech-Laboratory of Pharmaceutical Technology, Department of Drug Sciences, Faculty of Pharmacy, University of Porto, Rua de Jorge Viterbo Ferreira n.º. 228, 4050-313 Porto, Portugal*; Associate Laboratory i4HB – *Institute for Health and Bioeconomy, Faculty of Pharmacy, University of Porto, 4050-313 Porto, Portugal*; Francisca Rodrigues – *REQUIMTE/LAQV, ISEP, Polytechnic of Porto, Rua Dr. António Bernardino de Almeida, 4249-015 Porto, Portugal*

203: Polyorthoesters, a compelling platform for long-acting delivery of modern therapeutics

Cory Mahnen, *Ashland Specialty Ingredients, United States*
Fengyuan Yang – *Ashland Specialty Ingredients*; Niloofar Heshmati – *Ashland Specialty Ingredients*; Kathryn Messina – *Ashland Specialty Ingredients*; Ki-Young Yoon – *Ashland*; Keith Chenault – *Ashland*

204: Use of pseudoboehmite for obtaining glucose from starch.

Antonio Munhoz, PhD, *Mackenzie Presbyterian University, Brazil*
Pedro Araújo de Souza Coelho – *UPM*; Roberto Rodrigues Ribeiro – *UPM*; Bruno Sarmento – *Institute for Research and Innovation in Health (i3S), University of Porto, Portugal*

205: Dual-Phase Self-Locking Microarray Patches for Targeted Antibacterial and Anti-Inflammatory Delivery in Acne

Jisook Park, MS, *Cursus Bio Co., Ltd., Republic of Korea*
Gwooon Woo – *Cursus Bio Inc.*; Shayan Fakhraei Lahiji – *Cursus Bio Inc.*; Yong-Hee KIM – *Cursus Bio Inc.*

206: Exploring Encapsulated Polyphenol Performance in 3D Skin Models and Ex Vivo Studies for Cosmetic Use

Francisca Rodrigues, *Faculty of Pharmacy, University of Porto, Portugal*
Mariana Marques – *Applied Molecular Biosciences Unit (UCIBIO), MedTech-Laboratory of Pharmaceutical Technology*

and Institute for Health and Bioeconomy (i4HB), Faculty of Pharmacy, University of Porto; Filipa Teixeira – *REQUIMTE/LAQV, ISEP, Polytechnic of Porto, Rua Dr. António Bernardino de Almeida, 4249-015 Porto, Portugal* and ICBAS, University of Porto, Rua de Jorge de Viterbo Ferreira 228, 4050-313 Porto; Berta Nogueira Estevinho – *Laboratory for Process Engineering, Environment, Biotechnology and Energy (LEPABE) and Associate Laboratory in Chemical Engineering (ALICE), Faculty of Engineering, University of Porto*; Stefano Dall'Aquila – *Department of Pharmaceutical and Pharmacological Sciences, University of Padova, Via Marzolo 5, 35121 Padova, Italy*

207: Rational Design of Soursop Nanoemulsion via Factorial Design and Capillary Electrophoresis Assessment

Maurília Souza, *Federal University of Espírito Santo, Brazil*
Patrícia Geraldo – *Federal University of Juiz de Fora*; Marcone Oliveira – *Federal University of Juiz de Fora*; Paula Chellini – *Federal University of Juiz de Fora*; Rayanne Pereira – *Federal University of Western Pará*; Janaina Villanova – *Federal University of Espírito Santo*; Cristiane Giuberti – *Federal University of Espírito Santo*

208: NovoArc – Unprecedented lipids for drug delivery

Tanja Krainz, *NovoArc GmbH, Austria*

209: Engineering phospholipid-based microbubbles in a foam-driven drug delivery system for IBD treatment

William Van den Bossche, *UCLouvain, Belgium*
Ana Beloqui – *UCLouvain*; Greet Kerckhofs – *UCLouvain*

210: Proprietary non-PEG stabilizer lipids for nucleic acid lipid nanoparticles

Hossein Yazdani Ahmadabadi, PhD, *Cytiva, Canada*
Karolin Paulson – *Cytiva*; Helena Son – *Cytiva*; Leanna Yee – *Cytiva*; Anitha Thomas – *Cytiva*

211: Utilizing Azadirachta indica Phytoconstituents for Dermatological Innovation: Antioxidant & Molecular Insights

Mohsin Kazi, PhD, *King Saud University, Saudi Arabia*
Aousaf Ahmad – *Quaid-e-Azam College of Pharmacy*; Shakeel Ijaz – *Quaid-e-Azam College of Pharmacy*; Nosheen Kanwal – *Bahauddin Zakariya University Faculty of Pharmacy*; Syed Nisar Hussain Shah – *Bahauddin Zakariya University Faculty of Pharmacy*; Saif Ullah – *pak-aust*

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212: Self-Assembling Nanoparticles Enhance Brain Delivery and Anti-Amyloid Activity of NUSc1

Mariane Carraro, *University of Sao Paulo, Brazil*
Jonathas Santos – *School of Pharmaceuticals Sciences of Ribeirao Preto, University of Sao Paulo*; Luciane Alberici – *School of Pharmaceuticals Sciences of Ribeirao Preto, University of Sao Paulo*; Adriano Sebollela – *Ribeirao Preto Medical School, University of Sao Paulo*; Hélder Santos – *University Medical Center Groningen (UMCG), University of Groningen*; Renata Lopez – *School of Pharmaceuticals Sciences of Ribeirao Preto, University of Sao Paulo*

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213: Improving the brain delivery of chemotherapy for metastatic triple negative breast cancer

Marco Cavaco, Gulbenkian institute for Molecular Medicine, Portugal

Rafaela Silva - Faculdade de Medicina da Universidade de Lisboa; Thomas Brunner - University of Regensburg; Claudia Espósito - CIC biomaGUNE; Maria Gómez - CIC biomaGUNE; Max Keller - University of Regensburg; Pierre Koch - University of Regensburg; Jordi Llop - CIC biomaGUNE; Vera Neves - Gulbenkian institute for Molecular Medicine; Miguel Castanho - Gulbenkian institute for Molecular Medicine

214: JAM-1 nanobody induces barrier weakening and enhances drug permeability in a blood-brain barrier-like cell model

Liyu Chen, PhD, Queensland Brain Institute, Faculty of Health, Medicine and Behavioural Sciences, University of Queensland, Australia

Michael Healy - Institute for Molecular Bioscience, The University of Queensland, Australia; Haoyue Xi - Clem Jones Centre for Ageing Dementia Research, Queensland Brain Institute, The University of Queensland, Australia; Esteban Cruz - Clem Jones Centre for Ageing Dementia Research, Queensland Brain Institute, The University of Queensland, Australia; Mingze Xu - Institute for Molecular Bioscience, The University of Queensland, Australia; Rainbow Chan - The Walter and Eliza Hall Institute of Medical Research, Australia; Tishila Pilyaguru - Clem Jones Centre for Ageing Dementia Research, Queensland Brain Institute, The University of Queensland, Australia; Jonathan Lee - Clem Jones Centre for Ageing Dementia Research, Queensland Brain Institute, The University of Queensland, Australia; Wai-Hong Tham - The Walter and Eliza Hall Institute of Medical Research, Australia; Brett Collins - Institute for Molecular Bioscience, The University of Queensland, Australia; Jürgen Götz - Clem Jones Centre for Ageing Dementia Research, Queensland Brain Institute, The University of Queensland, Australia

215: CHITOSAN-OLIGOSACCHARIDE SOLID LIPID NANOPARTICLES FOR ASTROCYTE-TARGETED DELIVERY OF DEXAMETHASONE

Yahya Choonara, PhD, University of the Witwatersrand, South Africa

216: Smart Nanocarriers for Effective Drug Transport Across the Blood Brain Barrier

Riccardo D'Elia, DSTL, United Kingdom
Craig Roberts - University of Strathclyde

217: Harnessing Meningeal Lymphatic Vessels for Synergistic Amyloid- β Clearance in Alzheimer's Disease Therapy

Yufan Du, Sichuan University, China (People's Republic)
Huile Gao - Sichuan University

218: Targeting VEGFR3 to Halt Melanoma Brain Metastasis: From Inhibition to Targeted Nanodelivery

Margarida Ferreira-Silva, Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, University of Lisbon, Portugal
Rita Acúrcio - Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, University of Lisbon, Portugal; Bárbara

Carreira - Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, University of Lisbon, Portugal; Helena Florindo - Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, University of Lisbon, Portugal

219: Comparison of the blood-brain barrier transport efficiency of RVG- and G23-functionalized extracellular vesicles

Jie Gao, The university of Groningen, Netherlands
Laís Ribovski - The university of Groningen; Inge Zuhorn - The university of Groningen

220: Development of targeted polypeptide-based delivery systems for targeted spinal cord therapy

Margarita Gubina, CIPF, Spain
Ana Armiñán - CIPF; Ana Isabel Fraga Sánchez - CIPF; Loris Mannino - CIPF; Victoria Moreno Manzano - CIPF; María J. Vicent - CIPF

221: Consistent and Sustained Dual Drug Delivery for Synergistic Local Glioblastoma Therapy using Emulsion Nanofibers

Daewoo Han, PhD, University of Cincinnati, United States
Andrew Steckl - University of Cincinnati

222: Functionalized targeted pBAE nanoparticles as drug delivery systems for brain diseases

Elena Haro, MSc, Institut Químic de Sarrià (IQS, URL), Spain
Elena Muscolino - IQS, URL; Morten Nielsen - Aarhus University; Jordi Duran - IQS, URL; Cristina Fornaguera - IQS, URL

223: Hippocampal neuron-targeted delivery of protein drugs based on their insulin fusion

Noriyasu Kamei, Kobe Gakuin University, Japan
Kento Ikeda - Kobe Gakuin University; Yuka Ohmoto - Kobe Gakuin University; Seita Fujisaki - Kobe Gakuin University; Maya Maki - Kobe Gakuin University; Mika Miyata - Kobe Gakuin University; Mana Yamada - Kobe Gakuin University; Mariko Takeda-Morishita - Kobe Gakuin University

224: PEG polymer and functional peptide co-assembled nanoparticles enable efficient nose-to-brain delivery of mRNA

Takanori Kanazawa, PhD, Tokushima University, Japan
Taiki Yamaguchi - Tokushima University; Taku Ikeguchi - Tokushima University; mayu Takuma - Tokushima University

225: Mucosomes: Novel Mucin-based Nanocarriers for Nose-to-Brain Applications

Effrosyni Kosti, MPharm, University of Innsbruck, Austria
David Gintsburg - University of Innsbruck; Anna Seybold - University of Innsbruck; Gergely Kali - University of Innsbruck

226: Single-IgG Nanogels: A Nanoscale Platform for Efficient Blood-Brain Barrier Transport

Krishan Kumar, PhD, POLYMAT-UPV/EHU, Spain
Dhiraj Mishra - UPV/EHU; Upashi Goswami - POLYMAT; Elena Ben - Karolinska Institutet; Marcelo Calderon - POLYMAT; Alejandro Sosnik - Technion-Israel Institute of Technology; Ana Beloqui - POLYMAT

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227: Multiple Controlled Release of Particles Embedded in Injectable Hydrogel for Glioblastoma Intraoperative Therapy

Johan Lopez Parra, *UMCG, Netherlands*

Thanh Nguyen – *InnoCore*; Rob Steendam – *InnoCore Pharmaceuticals*; Annemiek Walenkamp-Hageman – *UMCG*; Gosia Wlodarczyk-Biegun – *RUG*; Hélder Santos – *UMCG*

228: Microfluidic formulations of Non-Ionic Surfactant Vesicles

Logan Mackie, PhD, *University of Strathclyde, United Kingdom*
Kerrie Hargrave – *University of Strathclyde*; Jane Preston-Kennedy – *King's College London*; Riccardo D'Elia – *University of Strathclyde*; Craig Roberts – *University of Strathclyde*

229: Bioinspired Lipid Nanoparticles for Enhanced Brain-Targeted Gene Therapies via Intrathecal Administration

Catalina Montoya Carvajal, *Carnegie Mellon University, United States*
Saigopalakrishna Yerneni – *Mayo Clinic*; Kathryn A. Whitehead – *Carnegie Mellon University*

230: Mannose-functionalized chitosan nanoparticles for improved nose-to-brain delivery of ketamine

Gessynger Morais-Silva, *State University of Maringá, Brazil*
Larissa Spósito – *Sao Paulo State University (UNESP), School of Pharmaceutical Sciences*; Fernando Rogério Pavan – *Sao Paulo State University (UNESP), School of Pharmaceutical Sciences*

231: Next-Generation RNA Nanocarriers to Overcome Glioblastoma Challenges

Ana Moreira, *University of Santiago de Compostela, Spain*
Alexandra Lobyntseva – *University of Santiago de Compostela*; Philipp Lapuhs – *University of Santiago de Compostela*; Alberto Martín – *Instituto Madrileño de Estudios Avanzados en Nanociencia*; Isabel Rodríguez – *Instituto Madrileño de Estudios Avanzados en Nanociencia*; María José Alonso – *University of Santiago de Compostela/ Instituto Madrileño de Estudios Avanzados en Nanociencia*

232: Patent: Compositions for in situ implant formation

Deepa Nakmode, *Adelaide University, Australia*
Sanjay Garg – *Adelaide University*; May Song – *Adelaide University*

233: Brain-Penetrating Magnetic Nanoparticles for Central Nervous System Neuroimaging

Vera Neves, *GIMM – Gulbenkian Institute of Molecular Medicine, Portugal*
Patrícia Fraga – *Gulbenkian Institute for Molecular Medicine, Av. Prof. Egas Moniz, Portugal*; Catarina Chaparro – *i3N/CENIMAT, Department of Materials Science, NOVA School of Science and Technology, NOVA University Lisbon, Campus de Caparica, Portugal*; Marco Cavaco – *Gulbenkian Institute for Molecular Medicine, Av. Prof. Egas Moniz, Portugal*; Paula Soares – *i3N/CENIMAT, Department of Materials Science, NOVA School of Science and Technology, NOVA University Lisbon, Campus de Caparica, Portugal*; Miguel Castanho – *Gulbenkian Institute for Molecular Medicine, Av. Prof. Egas Moniz, Portugal*; Pedro Ramos-Cabrer – *CIC biomaGUNE. Paseo Miramon 194. Donostia. Spain.*

234: Image-Guided Microneedle Delivery of NK Cells for Enhancing Post-Resection Glioblastoma Immunotherapy

Chelwin Oliveros, *National Cheng Kung University, Taiwan (Republic of China)*
Hung-Wei Yang – *National Cheng Kung University*

236: Formulations for convection-enhanced delivery of therapeutics in diffuse midline glioma

Sara Parvar, *UCL, United Kingdom*
Karolina Dziemidowicz – *UCL*; Christopher Morris – *UCL*; Andrew Lewis – *Quotient Sciences*; David Shorthouse – *UCL*

237: Transferrin-functionalized nanoparticles for targeted temozolomide delivery in Glioblastoma

Geanne Paula, *São Paulo State University, Brazil*
Suzana Carvalho – *São Paulo State University (UNESP)*; Marcela Luiz – *São Paulo State University (UNESP)*; Felipe Cardoso – *São Paulo State University (UNESP)*; Amanda Baviera – *São Paulo State University (UNESP)*; Marlus Chorilli – *São Paulo State University (UNESP)*

238: DEVELOPMENT OF DRY POWDER PLATFORM FOR NOSE-TO-BRAIN DELIVERY OF PREDNISOLONE

Mirna Perkušić, PhD, *University of Zagreb Faculty of Pharmacy and Biochemistry, Croatia*
Franka Vidić – *University of Zagreb Faculty of Pharmacy and Biochemistry*; Laura Vuić – *University of Zagreb Faculty of Pharmacy and Biochemistry*; Laura Nižić Nodilo – *University of Zagreb Faculty of Pharmacy and Biochemistry*; Daniela Amidžić Klarić – *University of Zagreb Faculty of Pharmacy and Biochemistry*; Sabino Sepčić – *Jadran-galenski laboratorij d.d.*; Maša Safunžić Kučuk – *Jadran-galenski laboratorij d.d.*; Anita Hafner – *University of Zagreb Faculty of Pharmacy and Biochemistry*

239: EVs containing urokinase-type plasminogen activator increase blood brain barrier permeability

Yuri Persidsky, MD, PhD, *Temple University School of Medicine, United States*
Naveen Mekala – *Temple University School of Medicine*

240: Formulation and Evaluation of Dual-Drug Intranasal Suspension in Murine Model of CNS Demyelination

Aditi Pradhan, MPharm, *Birla Institute of Technology & Science, Pilani-Hyderabad Campus, India*
Sonam Dolma – *Birla Institute of Technology & Science, Pilani-Hyderabad*; Abhijeet Joshi – *Birla Institute of Technology & Science, Pilani-Hyderabad*; Yuvraj Singh – *CSIR-Central Drug Research Institute, Lucknow*

241: Mucoadhesive Chitosan-HPMC Buccal Films for Bee Venom Delivery: A Potential Alzheimer's Therapy

Amira Saad – *Mahmoud, Faculty of Pharmacy, AASTMT, Alexandria, Egypt*
Sarah Amer – *Faculty of Pharmacy, Alexandria University, Alexandria, Egypt*

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Samuele Sanniti, *University of Trento, Italy*
Alessandro Quattrone - *University of Trento*

243: AI/ML-Derived Peptide-based (MSP-epitope) Patient Centric Prodrug for Progressive Multiple Sclerosis Treatment

Anand Paul Sekar, PhD, *Jenetech Informatics LLC, United States*
Anand Sekar - *Jenetech Informatics LLC*; Michael Sekar - *Jenetech Informatics LLC*

244: Development of lipid nanoparticle loaded with siRNA targeting neogenin for the treatment of multiple sclerosis

Kosuke Shimizu, *Hamamatsu University School of Medicine, Japan*

245: Brain-targeted nanoparticles for co-delivery of dopaminergic precursor and ROS-scavenger in PD

Devika Unnithan, M.Pharm, *Jamia Hamdard (Deemed to be University), School of Pharmaceutical Education and Research (SPER), New Delhi, India*
Javed Ali - *School of Pharmaceutical Education and Research, Jamia Hamdard, New Delhi, India*

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Carla Vitorino, *Faculty of Pharmacy, University of Coimbra, Portugal*

247: Targeted protein nano-degrader for Alzheimer's disease therapy

Xiaorong Wang, MS, *Sichuan University, China (People's Republic)*
Huile Gao - *Sichuan University*

248: Intranasal self-assembled nanodrug for the treatment of Alzheimer's disease

Wenqin Yang, MSc, *Sichuan University, China (People's Republic)*
Huile Gao - *Sichuan University*

249: Targeted Autophagy-Lysosome-Mediated Degradation of Amyloid- β for Alzheimer's Disease Therapy

Zixiao Yang, BS, *Sichuan University, China (People's Republic)*
Huile Gao - *Sichuan University*

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250: p53 restoration via LNPs improves pancreatic cancer outcomes via combined tumour inhibition and stroma modulation

Wafa Al-Jamal, *Queen's University Belfast, United Kingdom*
Raghed Qadadeh - *Queen's University Belfast*

251: Evaluation of a Novel Ionizable Lipid for mRNA Lipid Nanoparticle Delivery in Pancreatic Cancer

Noor Al-Rawi, BSc, MSc, *Queen's University Belfast, United Kingdom*
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252: RNA post hoc loading into empty lipid nanoparticles occurs on millisecond timescales during turbulent mixing

Anas Aljabbari, PhD, *Purdue University, Denmark*
Arezoo Ardekani - *Purdue University*; Mojhdeh Baghbanbashi - *Purdue University*; Andres Barrio-Zhang - *Purdue University*; Titania Bethiana - *Purdue University*; Marxa Figueiredo - *Purdue University*; Gabriel Harris - *Purdue University*; Harsa Mitra - *Purdue University*; David Perez Herrera - *Purdue University*; Kurt Ristroph - *Purdue University*; Brian Wilson - *Purdue University*; Xiaobing Zuo - *Advanced Photon Source*; Heather Binion - *Purdue University*; Sophia Dasaro - *Purdue University*

253: Characterization of curcumin-loaded nanocapsules as a new oral gene therapy vehicle for inflammatory bowel disease

Enrique Amoedo Alonso, *University of Santiago de Compostela, Spain*
Lorena Valverde-Fraga - *University of Santiago de Compostela*; Noemi Csaba - *University of Santiago de Compostela*

254: Next-Generation mRNA Vaccines: Combination of adjuvant with LNP for Optimized Immune Response

Carla ATALLAH, *Sanofi, France*
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255: A Microfluidics and QbD-Driven Platform for Scalable RNA-Lipid Nanoparticles

Francisca Bastos, *Bluepharma, Portugal*
Carolina Henriques - *Bluepharma - Indústria Farmacêutica S.A., Portugal*; Faculty of Pharmacy, *University of Coimbra, Portugal*; António Nunes - *Bluepharma - Indústria Farmacêutica S.A., Portugal*; Sérgio Simões - *Bluepharma - Indústria Farmacêutica S.A., Portugal*

256: DELIVERY-seq: a high-throughput barcoded sequencing platform to characterize lipid nanoparticle delivery

Margaux Bauwens, *Ghent University, Belgium*
Aaron Verplancke - *Ghent University*; Koen Deserranno - *Ghent University*; Ine Lentacker - *Ghent University*; Filip Van Nieuwerburgh - *Ghent University*

257: Development of multifunctional PepFect14 analogs for enhanced mRNA delivery in vitro and vivo

Obedoulaye Boukary, MSc, *University of Tartu, Estonia*
Tõnis Lehto - *University of Tartu*; Anneli Lorents - *University of Tartu*; Helena Sork - *University of Tartu*; Mattias Hällbrink - *University of Tartu*; Taavi Lehto - *University of Tartu*

258: Biomimetic polymeric nanocarriers for advanced gene delivery

Sara Busto-Boado, *Center for Research in Molecular Medicine and Chronic Diseases, Spain*
Raquel Martinez-Campelo - *Center for Research in Molecular Medicine and Chronic Diseases*; Nicolo Della-Bona - *Center for Research in Molecular Medicine and Chronic Diseases*; Helena Asensio-Bande - *University of Santiago de Compostela*; Marcos Garcia-Fuentes - *Center for Research in Molecular Medicine and Chronic Diseases*

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259: Lipid nanoparticle-mediated pulmonary gene editing of KRAS G12S in a lung cancer model

Simone Carneiro, PhD, *Ludwig-Maximilians-Universität München, Germany*

Moritz Marschhofer - *Ludwig-Maximilians-Universität München*; Siyu Chen - *Ludwig-Maximilians-Universität München*; Otto Berninghausen - *Ludwig-Maximilians-Universität München*; Bastian Popper - *Ludwig-Maximilians-Universität München*; Ana Maria Torres - *University of Santiago de Compostela*; Anxo Vidal - *University of Santiago de Compostela*; Olivia Merkel - *Ludwig-Maximilians-Universität München*

260: Thermostable Vaccines: the great challenge in the development of mRNA nanocarriers

Gisela Carreño, *Pontificia Universidad Católica de Chile, Chile*; José González - *Pontificia Universidad Católica de Chile*; Marcelo López - *Pontificia Universidad Católica de Chile*

261: Spermine-based poly(β -amino ester) Formulations for efficient Messenger RNA and Plasmid DNA delivery

Henrique Carvalho, MSc, *Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, Universidade de Lisboa, Av. Professor Gama Pinto 1649-003 Lisboa, Portugal*; Min Jiang - *Ludwig-Maximilians-Universität München, Department of Pharmacy, Butenandtstraße 5, 81377 Munich, Germany*; Felix Sieber-Schäfer - *Ludwig-Maximilians-Universität München, Department of Pharmacy, Butenandtstraße 5, 81377 Munich, Germany*; Rita Acúrcio - *Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, Universidade de Lisboa, Av. Professor Gama Pinto 1649-003 Lisboa, Portugal*; Rui Castro - *Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, Universidade de Lisboa, Av. Professor Gama Pinto 1649-003 Lisboa, Portugal*; João Gonçalves - *Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, Universidade de Lisboa, Av. Professor Gama Pinto 1649-003 Lisboa, Portugal*; Olivia Merkel - *Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, Universidade de Lisboa, Av. Professor Gama Pinto 1649-003 Lisboa, Portugal*; Helena Florindo - *Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, Universidade de Lisboa, Av. Professor Gama Pinto 1649-003 Lisboa, Portugal*

262: Modular supramolecular polycations enable efficient delivery of diverse RNA therapeutics

Robert Cavanagh, PhD, *University of Nottingham, United Kingdom*

263: Lipid Nanoparticle-mediated mRNA delivery as a platform for gene therapy in CoPAN

Chiara Cavestro, MD, *IRCCS Istituto Neurologico Carlo Besta Milano / Politecnico di Milano, Italy*; Francesca Baldelli Bombelli - *Politecnico di Milano*; Floriana Cascone - *Fondazione IRCCS Istituto Neurologico Carlo Besta*; Ivano Di Meo - *Fondazione IRCCS Istituto Neurologico Carlo Besta*; Pierangelo Metrangolo - *Politecnico di Milano*; Valeria Tiranti - *Fondazione IRCCS Istituto Neurologico Carlo Besta*

264: Liposomal lipid nanoparticles can deliver small interfering RNA to extrahepatic tissues

Karen Chan, PhD, *University of British Columbia, Canada*; Genc Basha - *University of British Columbia*; Zhen Jin - *University of British Columbia*; Lennart Bohrmann - *University Hospital of Basel*; Fiona Wong - *University of British Columbia*; Dominik Witzigmann - *NanoVation Therapeutics Inc.*; Ly Vu - *University of British Columbia*; Pieter Cullis - *University of British Columbia*

265: Antibody-Modularized Poly(β -amino ester) for the Co-delivery of mRNA and siRNA in Precision Cancer Gene Therapy

Tzu-Yu Chen, *National Cheng Kung University, Taiwan (Republic of China)*; Hung-Wei Yang - *National Cheng Kung University*

266: Cold Atmospheric Plasma-Responsive Nanoplatforms for Tissue Microenvironment Remodeling

Jaehyun Choi, *Sookmyung Women's University, Republic of Korea*

267: A worm-like nucleic acid nanostructure for gene delivery and endosomal escape via CIC3 ion exchanger

Chung Hang Jonathan Choi, PhD, *The Chinese University of Hong Kong, Hong Kong*; Yu Xiao - *The Chinese University of Hong Kong*

268: Mannose Targeting and Hydrophobic Tuning of Polycationic Vectors for Efficient Immunostimulatory CpG Delivery

Anna Cielo, *University of Padua, Italy*; Daniele Asnicar - *University of Padua*; Alberta Ferrarini - *University of Padua*; Giuseppe Mantovani - *University of Nottingham, School of Pharmacy*; Lara Marcenta - *University of Padua*; Francesca Mastrotto - *University of Padua*; Marco Zanon - *University of Padua*

269: siRNA loaded pH-responsive Lipid@PLGA nanoparticles to modulate TGF- β Signaling in Idiopathic Pulmonary Fibrosis

Gabriella Costabile, PhD, *University of Naples "Federico II", Italy*; Miriana d'Alessandro - *Department of life science, health and healthcare professions, LINK Campus University*; Susy Brusco - *Department of Pharmacy, University of Napoli Federico II, Napoli, Italy*; Ersilia Villano - *Department of Pharmacy, University of Napoli Federico II, Napoli, Italy*; Erika Esposito - *Department of Pharmacy, University of Napoli Federico II, Napoli, Italy*; Emma Mitidieri - *Department of Pharmacy, University of Napoli Federico II, Napoli, Italy*; Chiara Indolfi - *Department of Pharmacy, University of Naples "Federico II"*; Raffaella Sorrentino - *Department of Pharmacy, University of Napoli Federico II, Napoli, Italy*; Elena Bargagli - *Department of Medical Sciences, Surgery and Neurosciences, Respiratory Diseases and Transplant Unit, 3Siena University, Siena Italy*; Roberta d'Emmanuele di Villa Bianca - *Department of Pharmacy, University of Napoli Federico II, Napoli, Italy*; Gabriella Costabile - *Department of Pharmacy, University of Napoli Federico II, Napoli, Italy*; Francesca Ungaro - *Department of Pharmacy, University of Napoli Federico II, Napoli, Italy*

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Carmine D'Amico, Aalto University, Finland
Sharon Saarinen – Aalto University; Miska Mykkänen – Aalto University; Mauri Kostiaainen – Aalto University

271: Inverted Hexagonal Liquid Crystalline Nanoparticle enable efficient mRNA delivery and tumor immunity

Bryan Debiasi, PharmD, School of Pharmaceutical Sciences of Ribeirão Preto of University of São Paulo – FCFRP/USP, Brazil
Gabriel Henrique Silva – Federal University of Minas Gerais; Flávia Franca – Federal University of Minas Gerais; Pedro Leonidas Filho – University of Liverpool; Márcia Carvalho Fantini – University of São Paulo; Pedro Pires Guimarães – Federal University of Minas Gerais; Maria Vitória Lopes Bentley – School of Pharmaceutical Sciences of Ribeirão Preto of University of São Paulo

272: Polyphosphazene-based nanocomplexes for mRNA delivery in glioblastoma combined with radiotherapy

Nicolò Della-Bona, Center for Research in Molecular Medicine and Chronic Disease (CiMUS), University of Santiago de Compostela, Spain
Sara Gutierrez-Gutierrez – Center for Research in Molecular Medicine and Chronic Disease (CiMUS), University of Santiago de Compostela, Spain; Loris Roncali – Center for Research in Molecular Medicine and Chronic Disease (CiMUS), University of Santiago de Compostela, Spain; Diana Marcela Hernandez-Palomino – Veneto Institute of Oncology (IOV-IRCCS), University of Padova, Italy; Noemi Csaba – Center for Research in Molecular Medicine and Chronic Disease (CiMUS), University of Santiago de Compostela, Spain; Ilaria Marigo – Veneto Institute of Oncology (IOV-IRCCS), University of Padova, Italy; Yolanda Prezado-Alonso – Center for Research in Molecular Medicine and Chronic Disease (CiMUS), University of Santiago de Compostela, Spain; Marcos Garcia-Fuentes – Center for Research in Molecular Medicine and Chronic Disease (CiMUS), University of Santiago de Compostela, Spain

273: Optimizing Oligocationic Polymer Architecture for efficient RNA Delivery using Isothermal Titration Calorimetry

Gianluca Donò, Università degli Studi di Padova, Italy
Paolo Caliceti – Università degli Studi di Padova; Lisa Casagrande – Università degli Studi di Padova; Mariangela Garofalo – Università degli Studi di Padova; Alessio Malfanti – Università degli Studi di Padova; Cristiano Pesce – Università degli Studi di Padova; Stefano Salmaso – Università degli Studi di Padova; Joachim Emeka Arikibe – Università degli Studi di Padova

274: NoCTURNA: Nanotechnology for the Encapsulation of mRNA in Tuberculosis Vaccines

Mónica Escobar, MS, DIVERSA Technologies SL, Spain
María de la Fuente – DIVERSA Technologies SL; Sara Vicente – DIVERSA Technologies SL; Paulo J. G. Bettencourt – Universidade Católica Portuguesa, Faculty of Medicine, Center for Interdisciplinary Research in Health; Laura Matarazzo – Universidade Católica Portuguesa, Faculty of Medicine, Center for Interdisciplinary Research in Health; Lara Diego – Nano-Oncology and Translational Therapeutics Group,

Health Research Institute of Santiago de Compostela (IDIS), SERGAS; María Cascallar – Nano-Oncology and Translational Therapeutics Group, Health Research Institute of Santiago de Compostela (IDIS), SERGAS; Jenifer García – Nano-Oncology and Translational Therapeutics Group, Health Research Institute of Santiago de Compostela (IDIS), SERGAS

275: Design of Long-Acting Formulations for Controlled Release of Antisense Oligonucleotides

Lisa Falke, University Bonn, Germany
Katharina Dauer – University Bonn; Stefania Beretta – DZNE; Tobias Böckers – DZNE; Karl Wagner – University Bonn

276: Organotypic spinal cord model as nanoformulation screening platform in the context of spinal cord injury

Paulo Félix, University of Coimbra, Portugal
Laura Sofia Carvalho – CiBB – Centre for Innovative Biomedicine and Biotechnology, University of Coimbra; Susana Simões – CiBB – Centre for Innovative Biomedicine and Biotechnology, University of Coimbra; Lino Ferreira – CiBB – Centre for Innovative Biomedicine and Biotechnology, University of Coimbra

277: Advancing the Design Logic of mRNA Nanomedicines

Owen Fenton, PhD, University of North Carolina at Chapel Hill, United States

278: High-throughput formulation screening to identify functional LNPs for mRNA delivery to human primary lung cells

Teresa Ferrillo, University of Napoli Federico II, Italy
Millie Tyler – AstraZeneca, Cambridge, UK; Morag Rose Hunter – AstraZeneca, Cambridge, UK; Ceri Wiggins – AstraZeneca, Cambridge, UK; Davide Gianni – AstraZeneca, Cambridge, UK; Mariarosa Mazza – AstraZeneca, Cambridge, UK; Thomas Lee Moore – University of Napoli Federico II; Fabiana Quaglia – University of Napoli Federico II

279: Microfluidic tuning of lipid nanoparticle size for efficient prime editor delivery in solid tissue

Kyra Fortuin, UMC Utrecht, Netherlands
Jose Castro Alpizar – UMC Utrecht; Hoang Nguyen – UMC Utrecht; Sawsan Shehata – UMC Utrecht; Ravian van Ineveld – Princess Máxima Center; Sander Kooijmans – UMC Utrecht; Sabine Fuchs – UMC Utrecht/Wilhelmina Children's Hospital

280: Expanding the Lipid Toolkit Towards Targeted Delivery of LNP-RNA Therapeutics

Kevin Fox, UBC – Cullis & Ross Labs, Canada
Suiyang Liao – UBC – Cullis Lab

281: LIPID NANOPARTICLE: MANUFACTURING PROCESS REPRODUCIBILITY AND COMPOSITION-STRUCTURE-ACTIVITY RELATIONSHIPS

Silvia Franzè, University of Milan, Italy
Tommaso Tedeschini – Istituto Italiano di Tecnologia; Anna Maria Mazzetta – University of Padova; Marta Madeo – University of Milan; Stefania Sganga – Istituto Italiano di Tecnologia; Roberto Marotta – Istituto Italiano di Tecnologia;

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Umberto Musazzi - University of Milan; Paola Minghetti - University of Milan; Francesco Cilurzo - University of Milan; Paolo Caliceti - University of Padova; Elena Del Favero - University of Milan; Nicola Tirelli - Istituto Italiano di Tecnologia

282: NOF's Proprietary Ionizable Lipids for Gene Delivery and Low-inflammatory mRNA Vaccine

Masateru Furuta, NOF CORPORATION, Japan

283: Leveraging immunomodulatory lipids to enhance mRNA delivery and functionality in human T cells

Sergio Garrido Areal, University of Santiago de Compostela, Spain

Lucía Sanjurjo - Health Research Institute of Santiago de Compostela (IDIS), Santiago de Compostela, Spain; Álvaro Somoza - IMDEA Nanociencia, Madrid, Spain; María José Alonso - University of Santiago de Compostela, Santiago de Compostela, Spain

284: Polymer-based nanocarrier for Nrf2 siRNA therapy in chemoresistant triple-negative breast cancer

Bayan Ghanem, University of Nottingham, United Kingdom
Nurcan Gumus - Izmir Bakircay University, Izmir, Turkey; Ghayda AlDabet - University of Petra Pharmaceutical Center (UPPC), Amman, Jordan; Keith Spriggs - University of Nottingham, Nottingham, UK; David Heery - University of Nottingham, Nottingham, UK; Nidal Qinna - University of Petra, Amman, Jordan; Cameron Alexander - University of Nottingham, Nottingham, UK

285: Advancing on lipid-based systems delivery for plasmid DNA

Antonella Grigoletto, University of Padova, Italy
Giuseppe Angelini - Institute of Functional Genomics, Montpellier; Benedetta Campara - University of Padova; Giorgia Careccia - University of Milan; Elena De Nigris - University of Padova; Graziella Messina - University of Milan; Gianfranco Pasut - University of Padova

286: Uncovering design principles for targeted lipid nanoparticles via high-throughput profiling

Elena Grobecker, AstraZeneca, United States
Marianne Ashford - AstraZeneca; Kai Liu - AstraZeneca

287: Structural and compositional effects of PEG-lipids on pDNA and mRNA lipid nanoparticles performance

Pedro Guimaraes, Universidade Federal de Minas Gerais, Brazil
Marco Túllio Alves - Federal University of Minas Gerais; Gabriel Azevedo - Federal University of Minas Gerais; Gabriel Henrique da Silva - Federal University of Minas Gerais; Pedro Henrique Prazeres - Federal University of Minas Gerais; Letícia Helena Fujii - Federal University of Minas Gerais

288: Functionalized Liposomes for Delivering Nucleic Acid Mimics into Foodborne Bacteria

Nuno Guimarães, FEUP - Faculty of Engineering of University of Porto, Portugal

João Santos - LEPABE - Laboratory for Process Engineering, Environment, Biotechnology and Energy, Faculty of Engineering, University of Porto; ALiCE - Laboratório Associado em Engenharia Química, Faculty of Engineering, University of Porto; Joana Loureiro - LEPABE - Laboratory for Process Engineering, Environment, Biotechnology and Energy, Faculty of Engineering, University of Porto; ALiCE - Laboratório Associado em Engenharia Química, Faculty of Engineering, University of Porto; Department of Mechanical Engineering, Faculty of Engineering, University of Porto; Maria Pereira - LEPABE - Laboratory for Process Engineering, Environment, Biotechnology and Energy, Faculty of Engineering, University of Porto; ALiCE - Laboratório Associado em Engenharia Química, Faculty of Engineering, University of Porto; Eva Pinho - Innovayt Portugal, Lda; Rita Santos - LEPABE - Laboratory for Process Engineering, Environment, Biotechnology and Energy, Faculty of Engineering, University of Porto; ALiCE - Laboratório Associado em Engenharia Química, Faculty of Engineering, University of Porto; Nuno Azevedo - LEPABE - Laboratory for Process Engineering, Environment, Biotechnology and Energy, Faculty of Engineering, University of Porto; ALiCE - Laboratório Associado em Engenharia Química, Faculty of Engineering, University of Porto

289: Buffing up mRNA-LNPs: The pivotal role of formulation buffers in mRNA-LNP potency and stability

Gavin Han, National University of Singapore, Singapore
Matthias Wacker - Katholieke Universiteit Leuven; Sundar Authimoolam - Roquette Asia Pacific Pte Ltd; Wei Wu - National University of Singapore; Tao Peng - Roquette Asia Pacific Pte Ltd

290: Towards Nose-to-Brain Delivery of siRNA Lipoplexes: Formulation and Permeation

Bjarne Hasenberg, Kiel University, Germany
Ronak Ansari pour - Novartis Pharmaceuticals Corporation; Barbara Podobnik - Novartis farmacevtska proizvodnja d.o.o.; Lipa Shah - Novartis Pharmaceuticals; Hicham Majd - Novartis Pharma AG; Richard Pavkov - Novartis Pharmaceuticals Corporation; Karoline Bechtold-Peters - Novartis Pharma AG; Regina Scherließ - Kiel University

291: Formulation Optimization of siRNA-PLGA Hybrid Micelles Focusing on Endosomal Escape

Mai Hazekawa, Fukuoka University, Japan
Daisuke Watase - Fukuoka University; Ayano Yamada - Fukuoka University; Mitsuhsa Koga - Fukuoka University

292: Apolipoprotein Nanoparticles deliver splice-switching antisense oligonucleotides to immune cells

Daniek Hoorn, MSc, University of Technology Eindhoven, Netherlands
Mirre M Trines - University of Technology Eindhoven; Willem J M Mulder - Radboud UMC; Roy van der Meel - University of Technology Eindhoven

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Aidan Izuagbe, PhD, *Julius-Maximilians-Universität Würzburg, Germany*
Lutz Nuhn - *Julius-Maximilians-Universität Würzburg*

294: The role of glycocalyx-protein corona interactions in the cellular uptake of mRNA nanocarriers

Ward Jacobs, *Radboudumc, Netherlands*
Klarinda de Zwaan - *TU Eindhoven*; Luco Rutten - *Radboudumc*;
Ben Joosten - *Radboudumc*; Rona Rovers - *Radboudumc*;
Thierry van Wessel - *Radboudumc*; Thomas Boltje - *Radboud university*; Laia Querol Cano - *Radboudumc*; Christian Büll - *Radboud University*; Nico Sommerdijk - *Radboudumc*; Lorenzo Albertazzi - *TU Eindhoven*; Roland Brock - *Radboudumc*

295: Dual-functional inhalable lipid nanoparticles for pulmonary mRNA delivery in idiopathic pulmonary fibrosis

Jin-Hyuk Jeong, *Chungbuk National University, Republic of Korea*
Ji-Hyun Kang - *Jeonbuk National University*; Dong-Wook Kim - *Wonkwang University*; Han-UI Kim - *Chungbuk National University*; Chun-Woong Park - *Chungbuk National University*

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Alberto Jimenez, *Cimus USC, Spain*
Maria Jose Alonso - *USC, IMDEA, IDIS*; Elisa Battistini - *CIMUS*;
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297: Tuning lipid nanoparticle surface hydrophobicity to enable tissue-selective mRNA expression

Kevon Jolly, BS, *University of Florida, United States*

298: Targeted delivery of oligonucleotides by Calcium-Phosphate (CaP) nanoparticle-based delivery systems

David Juriga, PhD, *Scilifelab/Stockholm University, Sweden*
Vendela Damberg - *Scilifelab/Stockholm University*; Niki Karouta - *Scilifelab/Stockholm University*; Sara Mangsbo - *Uppsala University*; Georgios Sotiriou - *Scilifelab/Stockholm University*

299: Lymph Node targeted Lipid Nanoparticles for mRNA-based Vaccine Delivery

Muhammad Muzamil Khan, PhD, *University of British Columbia, Canada*
cedric Brimacombe - *Polymorphic bio*; Pieter Cullis - *University of British Columbia*; Ehsan Dezfouli - *University of British Columbia*; Taehun Kim - *University of British Columbia*; James Russell - *University of British Columbia*; Olga santamaria - *University of British Columbia*; Anthony Wong - *University of British Columbia*

300: Stress-resilient mRNA delivery: Lipopolyplexes improve stability and transfection

Vesa Kopliku, MSc, *Helmholtz Institute for Pharmaceutical Research Saarland, Germany*
Achim Biesel - *Helmholtz Institute for Pharmaceutical Research Saarland*; Aljoscha Gabelmann - *Helmholtz Institute for*

Pharmaceutical Research Saarland; Marcus Koch - *INM-Leibniz-Institute for New Materials, Campus D2.2, 66123 Saarbrücken, Germany*; Brigitta Loretz - *Helmholtz Institute for Pharmaceutical Research Saarland*; Claus-Michael Lehr - *Helmholtz Institute for Pharmaceutical Research Saarland*

301: Targeted delivery of mRNA/LNP to tumors and immune cells

Dae-Hyuk Kweon, *Sungkyunkwan University, Republic of Korea*

302: T Cell Modification with Ribonucleoprotein Containing Lipid Nanoparticles

Raul Leandro, *Ghent University, Belgium*
Kiyam Musae - *UMCG*; Hélder Santos - *UMCG*; Edwin Bremer - *UMCG*; André Skirtach - *Ghent University*

303: Enhancing Nuclear Transport of ASO and Its Therapeutic Efficacy in SMA and AD Treatment

Dahye Lee, *Seoul National University, Republic of Korea*
Hyukjin Lee - *Seoul National University*

304: Rapidly Excretable Antioxidant Ionizable Lipids for Safe and Efficient mRNA Delivery

Yeji Lee, *Seoul National University, Republic of Korea*
Hyukjin Lee - *Seoul National University*

305: Engineering Lipid Nanoparticles with Cellular or Extracellular Vesicle Membrane Protein for mRNA Delivery

Gaspard Lefebvre, *UMC Utrecht, Netherlands*
Diego Rodríguez - *University Utrecht*; Qianbing Yang - *UMC Utrecht*; Arjan Barendrecht - *UMC Utrecht*; Cornelis Seinen - *UMC Utrecht*; Raymond Schiffelers - *UMC Utrecht*; Pieter Vader - *UMC Utrecht*

306: PEGylated lipid optimization for mRNA-LNP delivery

Lingyun Liu, PhD, *Sanofi, United States*
Jae-Heon Kim - *Sanofi*; Mengwei Sun - *Sanofi*; Zhongyu Li - *Sanofi*; Jackie Tang - *Sanofi*; Trent Northen - *Sanofi*; Shirrang Karve - *Sanofi*; Frank DeRosa - *Sanofi*

307: Co-Delivery of PLPP3 mRNA and Autotaxin siRNA to Lung Fibroblasts for Idiopathic Pulmonary Fibrosis

Jason Lo, *University of Chicago, United States*
Bohao Chen - *University of Chicago*; Ru-Ting Huang - *University of Chicago*; Zhengjie Zhou - *University of Chicago*; Yun Fang - *University of Chicago*; Matthew Tirrell - *University of Chicago*

308: INCANTA: Innovating Cancer Treatment with Nanoimmunotherapeutics

Alice López López, MS, *DIVERSA Technologies SL, Spain*
María de la Fuente - *DIVERSA Technologies SL, Spain*; Nano-Oncology and Translational Therapeutics Group, Health Research Institute of Santiago de Compostela (IDIS), SERGAS, Santiago de Compostela, Spain; Sara Vicente - *DIVERSA Technologies SL, Spain*; Laura Cañada - *DIVERSA Technologies SL, Spain*; Mónica Escobar - *DIVERSA Technologies SL, Spain*; Patricia Álvarez - *DIVERSA Technologies SL, Spain*; Taina Laura

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– DIVERSA Technologies SL, Spain; María Cascallar – Nano-Oncology and Translational Therapeutics Group, Health Research Institute of Santiago de Compostela (IDIS), SERGAS, Santiago de Compostela, Spain; Jenifer García – Nano-Oncology and Translational Therapeutics Group, Health Research Institute of Santiago de Compostela (IDIS), SERGAS, Santiago de Compostela, Spain; Lara Diego – Nano-Oncology and Translational Therapeutics Group, Health Research Institute of Santiago de Compostela (IDIS), SERGAS, Santiago de Compostela, Spain; Pedro Berraondo – CIMA Universidad de Navarra; Nuria Ardaiz – CIMA Universidad de Navarra

309: Encoding Hydrophilicity–Hydrophobicity in Sequence-Defined Poly(β -amino ester)s for Gene Delivery

Rong Ma, ShanghaiTech University, China (People's Republic)
Bo Qiao – ShanghaiTech University; Daocheng Sun – ShanghaiTech University

310: NeuroCHAT: a peptide platform for cell-selective delivery of nucleic acids in glioblastoma

Emma McErlean, Queen's University Belfast, United Kingdom
Vicky Kett – Queen's University Belfast; Ciaran McGranaghan – Queen's University Belfast

311: Overcoming Poor Efficacy of mRNA Therapies Delivered to Solid Tumours

Oliver Meeds, BSc, MRes, University of Nottingham, United Kingdom
Snow Stolnik – University of Nottingham

312: Influence of TFF membrane composition and pH adjustment on the physicochemical properties of lipid nanoparticles

Shunsuke Morioka, MS, Astellas Pharma Inc., Japan
Naoki Takahashi – Astellas Pharma Inc.; Hiroko Yamamoto – Astellas Pharma Inc.

313 Stabilized Ionizable Polymeric Micelles Targeting Transferrin Receptor 1 for Systemic mRNA Delivery to the Brain

Jumpei Norimatsu, PhD, Institute of Science Tokyo, Japan
Hayato Mizuno – Institute of Science Tokyo; Yuki Mochida – Institute of Science Tokyo; Shigeto Fukushima – Innovation Center of NanoMedicine; Satoshi Uchida – Institute of Science Tokyo; Horacio Cabral – The University of Tokyo; Yasutaka Anraku – Institute of Science Toyko

314: Development of miRNA–Lipid nanoparticle for topical treatment of cervical intraepithelial neoplasia

Tarun Ojha, Nanomedicine Innovation Center Erasmus, Erasmus Medical Center, Netherlands
Seth Fobian – Amsterdam UMC; Arnold Koekman – Utrecht Medical Center; José Neves – University of Porto; Renske Steenbergen – Amsterdam Medical Center; Bruno Sarmento – University of Porto; Raymond Schiffelers – Utrecht Medical Center; Johannes Buyel – BOKU University; Timo ten Hagen – Erasmus MC; Mohamadreza Amin – Erasmus MC

315: Facilitating Nuclear Barrier Crossing and Immune Evasion of AAV Using Polymeric Micelles for Enhanced Gene Therapy

Yangsen Ou, Credentials, West China School of Pharmacy, Sichuan University, China (People's Republic)
Xun Sun – West China School of Pharmacy, Sichuan University

316: Selective mRNA Delivery to Antigen–Presenting Cells Using Functionalized Lipid Nanoparticles

João Panão-Costa, PhD, CNC–UC – Center for Neuroscience and Cell Biology, Center for Innovative Biomedicine and Biotechnology (CiBB), University of Coimbra, Coimbra, Portugal
Hugo Lopes-Cardoso – University of Coimbra; Patrícia V. Mendonça – Centre for Mechanical Engineering, University of Coimbra; João Soares-Gonçalves – University of Coimbra; Anastasiya Voronovska – University of Coimbra; Filipe Duarte-Azevedo – University of Coimbra; Maria Vieira-da-Silva – University of Coimbra; Ana Carvalho-Nunes – University of Coimbra; Joana S. Ferreira – Centre for Mechanical Engineering, University of Coimbra; João P. Vareda – Centre for Mechanical Engineering, University of Coimbra; Ana C. Fonseca – Centre for Mechanical Engineering, University of Coimbra; Ana Batista – University of Coimbra; Ana T. Amaral – University of Coimbra; João Panão-Costa – University of Coimbra; João Nuno Moreira – University of Coimbra

317: Nanostructured RNA Layering on Lipid Nanocarriers for Enhanced RNA Delivery

Kyung Hoon Park, Yonsei University, Republic of Korea
Minyoung Yi – Yonsei University; Young Hoon Roh – Yonsei University

318: Layer-by-layer Modified Lipid Nanoparticles for the Generation of CAR–Macrophages

Victor Passos Gibson, University of Montreal, Canada
Houda Tahiri – CHU Sainte-Justine; Xavier Banquy – University of Montreal; Pierre Hardy – CHU Sainte-Justine

319: Intranasal delivery of modified mRNA for pulmonary immunomodulation

Asha Patel, MPharm PhD, Imperial College London, United Kingdom

320: Multifactorial Strategies to Improve mRNA–LNP Vaccines Thermostability

Manon Ripoll, PhD, mRNA Center of Excellence, Sanofi, France
Ripoll Manon – mRNA Center of Excellence, Sanofi; Fethi Bensaïd – mRNA Center of Excellence, Sanofi; Sumit Luthra – mRNA Center of Excellence, Sanofi

321: Development, formulation and mechanistic evaluation of triGalNAc–LNPs for pDNA delivery to hepatocytes

Perrine Robin, EPFL, Switzerland
Alireza Kavand – EPFL; Pauline Skigin – EPFL; Ümit Kuzucu – Universität Basel; Jörg Huwyler – Universität Basel; Sandrine Gerber-Lemaire – EPFL

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322: Albumin Nanoparticle-Based Oligonucleotide Delivery System for lncRNA Modulation in Uveal Melanoma

Ammara Safdar, *IMDEA Nanociencia, Spain*
Mario Martinez - *Imdea Nanociencia*; Alvaro Somoza - *Imdea Nanociencia*

323: Targeted CRISPR/Cas9 Delivery Using Aptamer-Modified Lipid Nanoparticles for Gene Editing in Lung Cancer

Rajkumar Samanta, *Agharkar Research Institute, India*
Virendra Gajbhiye - *Agharkar Research Institute*

324: Green-Synthesized MnO₂@Inulin Nanoparticles for Layer-by-Layer siRNA Delivery and MRI-Guided Theranostics

Carla Sardo, *University of Salerno, Italy*
Gaia Scoppetta - *University of Salerno*; Pasquale Del Gaudio - *University of Salerno*; Nicola Funicello - *University of Salerno*; Vincenzo Vestuto - *University of Salerno*; Giulia Auriemma - *University of Salerno*; Rita Aquino - *University of Salerno*

325: Transcriptomic Profiling of Drug-Resistant Non-Small Cell Lung Cancer for Pathway Directed siRNA Liposome Therapy

Andrew Shen, *MSc Pharmaceuticals, Rutgers University, United States*
Simav Gildiz - *Rutgers University*; David Lee - *Hackensack Hospital*; Tamara Minko - *Rutgers University*; Alden Ordaniel - *Rutgers University*

326: Engineering Polymeric Nanocarrier for miRNA Delivery: Formulation Development, In-Vitro and In-Vivo Evaluation

Pratik Shinde, *MPharm, PhD Scholar, Birla Institute of Technology and Science (BITS) Pilani, India*
Deepak Chitkara - *BITS-Pilani, Pilani campus, Rajasthan*;
Anupama Mittal - *NIPER Mohali*

327: Gene editing aged cells with non-viral CRISPR/Cas9-based nanoformulation

Susana Simões, *University of Coimbra, Portugal*
Angela Barrera - *University of Coimbra*; Lino Ferreira - *University of Coimbra*; Rui Nobre - *University of Coimbra*; Patricia Pitrez - *University of Coimbra*; Simão Santos - *University of Coimbra*;
Francesca Tomatis - *University of Coimbra*

328: Ionizable Drug and siRNA Co-formulation Aided by Quantitative Structure-Property Relationship Analysis

Kai Slaughter, *PhD, University of Copenhagen, Denmark*
Mickael Dang - *Massachusetts Institute of Technology*; Eric Donders - *BlueRock Therapeutics*; Austin Cheng - *University of Toronto*; Gary Tom - *Intrepid Labs*; Xiang Olivia Li - *University of Toronto*; Sangwoo Han - *University of Toronto*; Eric Chiu - *University of Toronto*; Olivia Roland - *Queen's University*; Alán Aspuru-Guzik - *University of Toronto*; Molly Shoichet - *University of Toronto*

329: Gene Delivery in a Spin: High-Throughput pDNA-LNPs by Dual-Centrifuge Assembly

Mai Soliman, *University of Helsinki, Finland*
Timo Laksonen - *University of Helsinki*; Shiqi Wang - *University of Helsinki*

330: Dual pH/temperature-responsive polymeric nanoparticles for metotrexate and anti-VEGF siRNA delivery

Luis Sotelo-Marmolejo, *Autonomous University of Baja California, Mexico*
Kathleen Montoya-Villegas - *UABC*; Aracely Serrano-Medina - *UABC*; José Cornejo-Bravo - *UABC*; Bertha Landeros-Sánchez - *UABC*

331: Precise Poly(β -Amino Ester)s with Non-linear Topologies for Gene Delivery

Daocheng Sun, *BS, ShanghaiTech University, China (People's Republic)*
Bo Qiao - *ShanghaiTech University*; Rong Ma - *ShanghaiTech University*

332: Liposomal hydroxychloroquine: Enhancing endosomal escape and extrahepatic delivery of mRNA-LNPs

XuXin Sun, *UBC/BC Cancer Research Institute, Canada*
Marcel Bally - *BC Cancer Research Institute*; Anna Blakney - *School of Biomedical Engineering UBC*; Irafasha Casmil - *School of Biomedical Engineering UBC*; Nasim Sarrami - *BC Cancer Research Institute*; Maryam Sharifiaghdam - *BC Cancer Research Institute*; Yuqi Wang - *BC Cancer Research Institute*; Sijie Zhang - *BC Cancer Research Institute*

333: Palmitoylation Confers Albumin Binding to Gapmer Antisense Oligonucleotides by Flow-Induced Dispersion Analysis

Muhammad Tahir, *Interdisciplinary Nanoscience Center (iNANO) Aarhus University Denmark*
Stefan Vogel - *Nucleic Acid Center, Department of Physics, Chemistry and Pharmacy, University of Southern Denmark, 5000, Odense, Denmark*; Kenneth Howard - *The Interdisciplinary Nanoscience Center (iNANO), Department of Molecular Biology and Genetics, Aarhus University, 8000 Aarhus C, Denmark*

334: Evaluation of Intradermal Injection as an Effective Delivery Route for mRNA-LNP Vaccines

Ryo Tanaka, *MSc, Terumo Corporation, Japan*
Saho Morita - *Terumo Corporation*; Ryo Tanaka - *Terumo Corporation*; Masaki Hiramitsu - *Terumo Corporation*; Sakiko Shimizu - *Terumo Corporation*; Naoko Tanaka - *Terumo Corporation*; Masaki Fukuda - *Terumo Corporation*

335: Dendrimers Improve Apolipoprotein Nanoparticle mRNA Delivery To Immune Cells

Mirre Trines, *Eindhoven University of Technology, Netherlands*
Stijn Hofstraat - *Eindhoven University of Technology*; Daniek Hoorn - *Eindhoven University of Technology*; Roy van der Meel - *Eindhoven University of Technology*

336: An Innovative Cationic Lipid Library for Efficient and Tunable mRNA-LNPs

Pauline Urquia, *PhD, Sartorius Polyplus, France*
Thibaut Ben Chimol - *Sartorius Polyplus*; Margaux Briand - *Sartorius Polyplus*; Patrick Erbacher - *Sartorius Polyplus*; Marine Fenat - *Sartorius Polyplus*; Claire Gueguen - *Sartorius Polyplus*; Cassandra Renaud - *Sartorius Polyplus*; Quentin Huault - *Sartorius*

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337: Cheminformatics guided design of drug-like ionizable lipids for enhanced RNA delivery

naga venkata Amandeep varigonda, *University College Cork, Ireland*

Brendan Griffin - *University College Cork*; Piotr Kowalski - *University College Cork*; Jack Murray - *University College Cork*

338: Delivery-Seq: single-cell mRNA delivery and degradation profiling using barcoded mRNA sequencing

Aaron Verplancke, *Ghent University, Belgium*

Sarah Goddaer - *Ghent University*; Koen Deserranno - *Ghent University*; Elise Callens - *Ghent University*; Margaux Bauwens - *Ghent University*; Dieter Deforce - *Ghent University*; Stefaan De Smedt - *Ghent University*; Kevin Braeckmans - *Ghent University*; Ine Lentacker - *Ghent University*; Jo Vandesompele - *Ghent University*; Katrien Remaut - *Ghent University*; Filip Van Nieuwerburgh - *Ghent University*

339: Investigation of apparent pKa and Endosome escape of Lipid nanoparticles

Mengjie Wang, *University of Helsinki, Finland*

Melissa Hendrén - *University of Helsinki*; Zhuoyuan Lin - *Tsinghua University*; Jonas Burmester - *University of Helsinki*; Mai Soliman - *University of Helsinki*; Shiqi Wang - *University of Helsinki*

340: Photoporation-Enhanced Drug Loading and Genetic Engineering of Mesenchymal Stromal Cells

Wenjia Xie, *Ghent University, Belgium*

Jana Roman - *Ghent University*; Didier Sertheyn - *University of Liège*; Stefaan de Smedt - *Ghent University*; Karen Peynshaert - *Ghent University*; Kevin Braeckmans - *Ghent University*

341: Uniform Nanobubbles Fabricated by Microfluidics and Lyophilization for Ultrasound-Mediated Gene Delivery

Taiki Yamaguchi, *Tokushima University, Japan*

Yoko Endo-Takahashi - *Tokyo University of Pharmacy and Life Sciences*; Masatoshi Kawaguchi - *Tokyo University of Pharmacy and Life Sciences*; Yuta Takeuchi - *Tokushima University*; Takanori Kanazawa - *Tokushima University*; Yoichi Negishi - *Tokyo University of Pharmacy and Life Sciences*

342: Engineered bio-inspired nanocarriers for enhanced mRNA delivery and reduced reactogenicity

Yi Yang, *The University of Queensland, Australia*

Joy Wolfram - *The University of Queensland*

343: Optimisation of process and formulation parameters for freeze-drying of mRNA-LNPs and saRNA-LNPs.

Shilpkala Gade, *Medicines and Healthcare Regulatory Agency, United Kingdom*

Ryan Adibagus - *Imperial College London*; Kiran Malik - *MHRA*; Paul Matejtschuk - *De Montford University, UK*; Robin Shattock - *Imperial College London*; Christopher van der Walle - *MHRA*

Global Health, Special Population, and Women's Health

344: Multilayer Silver-Thiol-Hydrogel Coating for Endotracheal Tubes to Prevent Ventilator-Associated Pneumonia

Rania Ayasreh, *Queen's University Belfast (qub), United Kingdom*

Ahmad Rabi - *Jerash university*; Colin McCoy - *Queen's University Belfast (qub)*; Matthew Wylie - *Queen's University Belfast*

345: Evaluation of Liposomes and Niosomes as Nanocarriers for Olaparib and ATRA delivery in Ovarian Cancer Models

Eleonora D'Intino, *Sapienza, University of Rome, Italy*

Maria Valeria Giuli - *Sapienza University of Rome, Laboratory affiliated to Istituto Pasteur Italia-Fondazione Cenci Bolognetti, Latina, Italy*; Saula Checquolo - *Sapienza University of Rome*; Suzanne Fauchier - *École normale supérieure*; Caterina Ricci - *University of Milan*; Luca Buccini - *Sapienza University of Rome*; Maria Gioia Fabiano - *Sapienza University of Rome*; Francesca Romana Stacchini - *Sapienza University of Rome*; Elvira Martino - *Sapienza University of Rome*; Maria Carafa - *Sapienza University of Rome*; Carole Aimé - *École normale supérieure*; Carlotta Marianecchi - *Sapienza University of Rome*

346: Adaptive design of biodegradable targeted miRNA-loaded polymeric nanoparticles for therapy in endometrial cancer

Cristina Fornaguera, *Institut Químic de Sarrià (IQS), Universitat Ramon Llull (URL), Spain*

Jennifer Fernández Alarcón - *IQS Ramon Llull*; Clara Codina Bacardí - *IQS-Blanquerna Ramon Llull*; Marta Hernández - *Blanquerna-Ramon Llull*

347: Modulating placental drug transfer: meta-analysis of the impact of nanosystems' PEGylation, size & surface charge

Maria Gil-Vives, MSc, *Institut Químic de Sarrià (IQS) / Ramon Llull University (URL), Spain*

Marta Hernández - *Blanquerna*; Álvaro Hernández - *Blanquerna*; Salvador Borros - *IQS*; Cristina Fornaguera - *IQS*

348: Colloidal drug products and issues with bioequivalence of generic copies

Yuen Yi Lam, *Monash University, Australia*

Ellie Ponsonby-Thomas - *Monash University*; Kellen Maurus - *Monash University*; Malinda Salim - *Monash University*; Benjamin Boyd - *Monash University*

349: An injectable soft implant for long-term contraception

Luca Panariello, *Karolinska Institutet, Sweden*

Anna Constantinou - *University of Oxford*; Ceren Kütahya - *University of Oxford*; Adrian Najer - *Imperial College London*; David Peeler - *Imperial College London*; Patrick Peschke - *University of Oxford*; André Shamsabadi - *University of Oxford*; Molly Stevens - *Karolinska Institutet*

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350: Design of experiment of carvedilol-loaded nanostructured lipid carriers for myocardial infarction application

Mayara Roncaglia dos Santos, *University of Porto, Portugal*
Carlos Correia - *University of Campinas*; Carlos Pereira - *Chemistry Research Centre (CIQUP) and Institute of Molecular Sciences (IMS)*; Hélder Santos - *University Medical Center Groningen*; Thacilla Menezes - *Institute for Nanostructures, Nanomodelling and Nanofabrication (i3N) and Chemistry Research Centre (CIQUP) and Institute of Molecular Sciences (IMS)*; Luigia Serpico - *University Medical Center Groningen*

351: Large-Scale Plasma Drug Quantification in 10,000 Patients to Identify Women-Specific Differences in Drug Exposure

Isabelle St-Jean, MSc, *Université de Montréal, Canada*
Simon de Denus - *Université de Montréal, Montreal Heart Institute, Université de Montréal Beaulieu-Saucier Pharmacogenomics Centre*; Marie-Pierre Dubé - *Université de Montréal, Montreal Heart Institute, Université de Montréal Beaulieu-Saucier Pharmacogenomics Centre*; Martin Jutras - *Plateforme de Biopharmacie*; Grégoire Leclair - *Université de Montréal*; Jean-Claude Tardif - *Université de Montréal, Montreal Heart Institute, Université de Montréal Beaulieu-Saucier Pharmacogenomics Centre*

352: Virus-mimicking particles elicit robust and broad immune response against SARS-CoV-2 with sex-bias ACE2 activity

Pei Zhang, *Finncure Oy/University of Helsinki, Finland*
Erik Niemelä - *Finncure Oy*; Panagiotis Filis - *Charles River Laboratories, Elphinstone Research Centre*; Pasi Sorvisto - *Finncure Oy*; Jani Virtanen - *Finncure Oy*; Hélder Santos - *Department of Biomaterials and Biomedical Technology, The Personalized Medicine Research Institute (PRECISION), University Medical Center Groningen, University of Groningen*

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353: Advancing Tumor Imaging: Optimization of PASylated Ferritin Nanocages for Fluorescence-Guided Surgery

Valeria Giacobbo, *University of Milan, Italy*
Marta Sevieri - *University of Milan*; Francesca Gorgoglione - *University of Milan*; Ilaria Tagliolini - *University of Milan*; Beatrice Bignami - *University of Milan*; Arianna Bonizzi - *ICS Maugeri*; Fabio Ruggero Maria Corsi - *ICS Maugeri*; Serena Mazzucchelli - *University of Milan*

354: Hydrophilic brush length- and hydrophobic chain-dependent biodistribution of statistical copolymers

Yuki Hiruta, PhD, *Keio University, Japan*
Mayu Masuda - *Keio University*; Kohei Sano - *Kobe Pharmaceutical University*; Mai Hayakawa - *Keio University*; Noa Kamatani - *Kobe Pharmaceutical University*; Mizuho Yamasaki - *Kobe Pharmaceutical University*; Akihiro Sakama - *Keio University*; Toshihide Yamasaki - *Kobe Pharmaceutical University*; Daniel Citterio - *Keio University*; Takahiro Mukai - *Kobe Pharmaceutical University*

355: Polymer-Based Fluorescent Nanoprobes with Active and Passive Targeting for Guided Surgery of HNSCC

Pavol Karabínoš, MD, *Institute of Macromolecular Chemistry, Czech Academy of Sciences (IMC), Czech Republic*
Tomáš Etrych - *Institute of Macromolecular Chemistry, Czech Academy of Sciences (IMC)*; Robert Pola - *Institute of Macromolecular Chemistry, Czech Academy of Sciences (IMC)*

356: From Imaging to Therapy: Utilizing flexTORCH to Engineer Next-Generation ADCs for Treatment of HER2+ Cancers

Anne Krinsky, *Tel Aviv University, Israel*
Tania Barnatan - *Tel Aviv University*; Yulia Liubomirski - *Tel Aviv University*; Marina Green Buzhor - *Tel Aviv University*; Eilam Yeini - *Tel Aviv University*; Galia Tiram - *Tel Aviv University*; Jean Wakim - *The Healthcare Business of Merck KGaA*; Min Shan - *The Healthcare Business of Merck KGaA*; Stanley Sweeney-Lasch - *The Healthcare Business of Merck KGaA*; Mira Toister-Achituv - *Inter-Lab, a subsidiary of Merck KGaA*; Doron Kalimi - *Inter-Lab, a subsidiary of Merck KGaA*; Arie Zauberman - *Inter-Lab, a subsidiary of Merck KGaA*; Doron Shabat - *Tel Aviv University*; Ronit Satchi-Fainaro - *Tel Aviv University*

357: Multiplexed Raman Imaging to Study Tumour Cell-LNP Interactions and Microenvironment

João Nuno Moreira, PhD, *CNC-UC - Center for Neuroscience and Cell Biology, Center for Innovative Biomedicine and Biotechnology (CIBB), University of Coimbra, Coimbra, Portugal*
Maria Vieira-da-Silva - *CNC-UC - Center for Neuroscience and Cell Biology, Center for Innovative Biomedicine and Biotechnology (CIBB), University of Coimbra, Coimbra, Portugal*; Timur Nikitin - *Coimbra Chemistry Center, Department of Chemistry, Faculty of Sciences and Technology, University of Coimbra, Coimbra, Portugal*; António Marques - *CNC-UC - Center for Neuroscience and Cell Biology, Center for Innovative Biomedicine and Biotechnology (CIBB), University of Coimbra, Coimbra, Portugal*; Department of Informatics Engineering, *University de Coimbra, Coimbra, Portugal*; Hugo Lopes-Cardoso - *CNC-UC - Center for Neuroscience and Cell Biology, Center for Innovative Biomedicine and Biotechnology (CIBB), University of Coimbra, Coimbra, Portugal*; Univ Coimbra - *University of Coimbra, CIBB, Faculty of Pharmacy, Coimbra, Portugal*; João Soares-Gonçalves - *CNC-UC - Center for Neuroscience and Cell Biology, Center for Innovative Biomedicine and Biotechnology (CIBB), University of Coimbra, Coimbra, Portugal*; Anastasiya Voronovska - *CNC-UC - Center for Neuroscience and Cell Biology, Center for Innovative Biomedicine and Biotechnology (CIBB), University of Coimbra, Coimbra, Portugal*; IIIUC - *Institute for Interdisciplinary Research, University of Coimbra, Coimbra, Portugal*; Filipe Duarte-Azevedo - *CNC-UC - Center for Neuroscience and Cell Biology, Center for Innovative Biomedicine and Biotechnology (CIBB), University of Coimbra, Coimbra, Portugal*; Telma Costa - *Coimbra Chemistry Center, Department of Chemistry, Faculty of Sciences and Technology, University of Coimbra, Coimbra, Portugal*; Pedro Guimarães - *Faculty of Medicine, University of Coimbra, Coimbra, Portugal*; Coimbra Institute for Biomedical Imaging and Translational Research (CIBIT), *Institute for Nuclear Sciences Applied to Health (ICNAS), University de Coimbra, Coimbra, Portugal*; João Panão-Costa - *CNC-UC - Center for Neuroscience and Cell*

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Biology, Center for Innovative Biomedicine and Biotechnology (CIBB), University of Coimbra, Coimbra, Portugal; Ana Teresa Amaral – CNC-UC – Center for Neuroscience and Cell Biology, Center for Innovative Biomedicine and Biotechnology (CIBB), University of Coimbra, Coimbra, Portugal; João Nuno Moreira – CNC-UC – Center for Neuroscience and Cell Biology, Center for Innovative Biomedicine and Biotechnology (CIBB), University of Coimbra, Coimbra, Portugal; Univ Coimbra – University of Coimbra, CIBB, Faculty of Pharmacy, Coimbra, Portugal; Ana Batista – CNC-UC – Center for Neuroscience and Cell Biology, Center for Innovative Biomedicine and Biotechnology (CIBB), University of Coimbra, Coimbra, Portugal

358: Impact of Antibody Conjugation and Linker Structure on pH-Responsive Fluorescent Probe–Antibody Conjugates

Ryohei Otsuka, BS, Keio University, Japan
Tomohiro Fuji – Ajinomoto Co, Inc.; Lovisa Svanholm – Keio Univ.; Daniel Citterio – Keio Univ.; Yuki Hiruta – Keio Univ.

359: Development of Intrinsically Fluorescent Polymeric Micelles to Study Hepatic Clearance in Drug Delivery

Fateme Rezagholizade, PhD, Queen's University, Canada
Alice Stapleton – Queen's University; Brian Amsden – Queen's University

360: Imaging-based quantification of endosomal escape to study its role in mRNA-induced immune activation

Sophie Roesger, RPh, Goethe University Frankfurt, Germany
Stefanie Gier – Goethe University Frankfurt; Maike Windbergs – Goethe University Frankfurt

361: MP-SPR Enables Quantitative Characterization of Nano-Bio Interfaces in Drug Delivery Systems

Annika Järvinen, BioNavis, Finland
Elena Scurti – BioNavis; Annika Järvinen – BioNavis

362: Development and in vitro evaluation of theranostic liposomes for osteomyelitis

Mine Silindir Günay, PhD, Hacettepe University, Turkey
Asuman Taş – Hacettepe University Faculty of Pharmacy; Semih Çalamak – Lokman Hekim University Faculty of Pharmacy; Şeyma Nigiz – Hacettepe University Faculty of Pharmacy; Ahmet Çağkan İnkaya – Hacettepe University Faculty of Pharmacy

363: Spatiotemporal Image-Guided mRNA Delivery via Acoustically Activated Perfluorocarbon Nanodroplets

Mark Louis Vidallon, Baker Heart and Diabetes Institute, Australia
Haikun Liu – The University of Melbourne; Yuyang Song – The University of Melbourne; Aidan Walsh – Baker Heart and Diabetes Institute; Henry Gordon – The University of Melbourne; Shulei Ren – The University of Melbourne; Pengkai Shi – The University of Melbourne; Bangyan Xu – Baker Heart and Diabetes Institute; Mitchell Moon – Baker Heart and Diabetes Institute; Sylvain Trepout – Monash University; Rico Tabor – Monash University; Alexis Bishop – Monash University; Ulrich Flogel – Heinrich-Heine University Düsseldorf; Karlheinz Peter – Baker Heart and Diabetes Institute; Xiaowei Wang – Baker Heart and Diabetes Institute

364: Renal clearable nanocarrier for imaging and drug delivery

Yongfeng Zhao, Jackson State University, United States

Immuno Delivery (Focus Group – ID)

365: In vivo Engineering of Small Intestine Trafficked Regulatory T Cells in Celiac Disease

Brittney Allyn, PhD, University of Pennsylvania, United States
Erin Maule – University of Pennsylvania; Nile Bayard – University of Pennsylvania; Michael Betts – University of Pennsylvania; Jilian Melamed – University of Pennsylvania

366: Decoding Immune–Matrix Crosstalk Identifies Actionable Targets in Desmoplastic Small Round Cell Tumor

Ana Teresa Amaral, Universidade de Coimbra, Portugal
Anastasiya Voronovska – CNC-Universidade de coimbra; IIIUC – Institute for Interdisciplinary Research, University of Coimbra, Coimbra, Portugal; Carmen Salguero-Aranda – Molecular Pathology of Sarcomas and Other Tumors, Institute of Biomedicine of Seville-Hospital Universitario de Sevilla, Sevilla, Spain; Hugo Lopes-Cardoso – CNC-Universidade de coimbra, Univ Coimbra – University of Coimbra, CIBB, Faculty of Pharmacy, Coimbra, Portugal; João Gama – Instituto Português de Oncologia do Porto Francisco Gentil, EPE, Porto, Portugal; João Panão-Costa – CNC-Universidade de coimbra; João Soares-Gonçalves – CNC-Universidade de coimbra; Laura Lobo-Selma – Molecular Pathology of Sarcomas and Other Tumors, Institute of Biomedicine of Seville-Hospital Universitario de Sevilla, Sevilla, Spain; Teresa Abreu – CNC-Universidade de coimbra, Research Institute for Medicines (iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa, Building Carlos da Silveira (CPM), Avenida Professor Gama Pinto, 1649-003, Lisbon, Portugal; Filipe Duarte-Azevedo – CNC-Universidade de coimbra; Maria Vieira-da-Silva – CNC-Universidade de coimbra; Paulo Rodrigues-Santos – Institute of Immunology, Faculty of Medicine (FMUC), University of Coimbra, Portugal; M Ladanyi – Department of Pathology, & Human Oncology and Pathogenesis Program, Memorial Sloan Kettering Cancer Center, New York, NY, USA; Enrique de Álava – Molecular Pathology of Sarcomas and Other Tumors, Institute of Biomedicine of Seville-Hospital Universitario de Sevilla, Sevilla, Spain; Ana Batista – CNC-Universidade de coimbra; João Nuno Moreira – CNC-Universidade de coimbra, Univ Coimbra – University of Coimbra, CIBB, Faculty of Pharmacy, Coimbra, Portugal

367: Liposomal-based nanoarchitectures for guided cell-based immunotherapy in neuroblastoma

Alejandro Baeza, Universidad Politécnica de Madrid, Spain
Jorge Parra-Nieto – Universidad Politécnica de Madrid; Alicia Arroyo-Nogales – Universidad Politécnica de Madrid; Sandra Jimenez-Falcao – Universidad Politécnica de Madrid; Africa Gonzalez-Murillo – Hospital Infantil Universitario Niño Jesus; Manuel Ramirez – Hospital Infantil Universitario Niño Jesus

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368: Up-concentration of Monoclonal Antibodies Obtained from Electronebulized Powders for High-Strength Injections

Ozan Basar, CSIC and Bionanopharma, Spain
Virna MARTIN-GIMENEZ – Bionanopharma; Ozan Basar – Bionanopharma; Emma Talon – Bionanopharma; Zoran Evtoski – CSIC; Jose Lagaron – CSIC and Bionanopharma

369: One-step preparation and functionalization of LNPs for extrahepatic RNA delivery

Arnaud Beduneau, Université Marie et Louis Pasteur, France
Jérôme Chatelain – Université Marie et Louis Pasteur; Thomas Stalder – University Hospital of Besançon; Claire Chrétien – Université Marie et Louis Pasteur; Raphael Cornu – EFS BFC; Brice Moulari – Université Marie et Louis Pasteur

370: CD5-Targeted Lipid Nanoparticles for In Vitro Generation and Functional Assessment of Transient αCD123 CAR T Cells

Ela Cetin, MSc, Fraunhofer IZI, Germany
Tyler Ellis Papp – University of Pennsylvania; Hamideh Parhiz – University of Pennsylvania; Sandy Tretbar – Fraunhofer IZI

371: mRNA lipid nanoparticles alter myeloid cell dynamics in the 4T1 tumor microenvironment.

Margo De Velder, Ghent University – Ghent research Group on Nanomedicines, Belgium
Ilke Aernout – Ghent University – Ghent research Group on Nanomedicines; Thomas Ehouarne – Ghent University – Ghent research Group on Nanomedicines; Janne Swinnen – Ghent research Group on Nanomedicines (UGent); Kevin Mwangi – Ghent research Group on Nanomedicines (UGent); Daan Schollaert – Ghent research Group on Nanomedicines (UGent); Aaron Verplanck – Laboratory of Pharmaceutical Biotechnology (UGent); Stefaan De Smedt – Ghent research Group on Nanomedicines (UGent); Jo Vanginderachter – Myeloid Cell Immunology Lab (VIB) – Laboratory of Cellular and Molecular Immunology (VUB); Rein Verbeke – Ghent research Group on Nanomedicines (UGent); Karine Breckpot – Translational Oncology Research Center – Molecular and Cellular Therapy Research Group (VUB); Ine Lentacker – Ghent research Group on Nanomedicines (UGent)

372: Clinical-Grade Platelet-Derived mRNA-Loaded NanoVesicles (mRNA-NVs) for Tunable Therapeutic Delivery

Giovanna Della Porta, PhD, Università degli Studi di Salerno, Italy
Erwin Lamparelli – University of Salerno, Dept. of Medicine, Surger and Dentistry; Saveria Batti – University of Salerno, Dept. of Medicine, Surger and Dentistry

373: Investigating the Immune Modulatory Responses from Penta-Galloyl-Glucose for Alzheimer's Disease Treatment.

Bernadette DSouza, BPharm, PhD, MEd, Samford University, United States
Patricia Jumbo-Lucioni – Samford University; Olivia Backan-Stewart – Samford University

374: Semaglutide as an Intra-Articular Anti-Inflammatory Therapy in LPS-Stimulated RAW264.7 Macrophages

Sara Faghihi, University College Dublin, Ireland
David Brayden – School of Veterinary Medicine and Conway Institute, University College Dublin, Ireland; John Browne – School of Agriculture and Food Science, University College Dublin, Ireland; Gina Duggan – School of Veterinary Medicine and Conway Institute, University College Dublin, Ireland; Bridget Hogg – School of Veterinary Medicine and Conway Institute, University College Dublin, Ireland; Muhammad Ijaz – School of Veterinary Medicine and Conway Institute, University College Dublin, Ireland

375: Impact of Lignin Nanoparticles' Properties on their Biological Response

Patrícia Figueiredo, University of Helsinki, Finland
Mengxue Lu – University of Helsinki; Kirsi Mikkonen – University of Helsinki; Leena Peltonen – University of Helsinki

376: Laser-Induced Vapor Nanobubbles Trigger Immunogenic Cell Death Prophylactic Immunity in Bladder Cancer Models

Ainhoa González Caelles, Institut de Bioenginyeria de Catalunya (IBEC) and Nanobots therapeutics, Spain
Núria Sabando García – Autonomous University of Barcelona; Samuel Sánchez Ordoñez – Institut de Bioenginyeria de Catalunya; Esther Julián Gómez – Autonomous University of Barcelona; Juan C. Fraire – Institute for Advanced Chemistry of Catalonia (IQAC-CSIC), Jordi Girona 20, 08034 Barcelona, Spain

377: Neoantigen cancer vaccine: LNP delivery of multi-epitope mRNA extends survival in aggressive melanoma cancer model

Edward Graham, PhD, Cytiva, United Kingdom
Dana Arab – Cytiva; Sijo Chemmannur – Cytiva; Zhengyu Chen – Cytiva; Avisek Deyati – Cytiva; Pierrot Harvie – Cytiva; Nikita Jain – Cytiva; Vinay Mayya – Cytiva; Darius Menezes – Cytiva; Jay Paquette – Cytiva; Sams Sadat – Cytiva; Ruchi Sharma – Cytiva; Anitha Thomas – Cytiva; Tony Wu – Cytiva; Leanna Yee – Cytiva

378: Development of biodegradable implants for sustained release of a sensitive allergen extract by hot-melt extrusion

Charlotte Heublein, Christian-Albrechts-Universität zu Kiel, Germany
Anne Cossé – Allergopharma GmbH & Co.KG; Melanie Mertens-Beer – Allergopharma GmbH & Co.KG; Steffen Augustin – Allergopharma GmbH & Co.KG; Regina Scherließ – Christian-Albrechts-Universität zu Kiel

379: In situ vaccination integrated with photothermal therapy via carrier-free nanoparticles for cancer therapy

Chenlu Huang, Institute of Biomedical Engineering, Chinese Academy of Medical Sciences & Peking Union Medical College, China (People's Republic)
Meitong Ou – Institute of Biomedical Engineering, Chinese Academy of Medical Sciences & Peking Union Medical College; Guilei Ma – Institute of Biomedical Engineering, Chinese Academy of Medical Sciences & Peking Union Medical College;

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Lin Mei - Institute of Biomedical Engineering, Chinese Academy of Medical Sciences & Peking Union Medical College; Linhua Zhang - Institute of Biomedical Engineering, Chinese Academy of Medical Sciences & Peking Union Medical College; Dunwan Zhu - Institute of Biomedical Engineering, Chinese Academy of Medical Sciences & Peking Union Medical College

380: Evaluation of Montanide™ ISA 201 for Polyvalent Anti-snake Venom Production in Equines

Sakshi Kalamkar, MPharm, School of Pharmacy, Indira University, Pune, India

Madhur Kulkarni - School of Pharmacy, Indira University, India 411033; Abhijeet Pokharkar - Raut Serums India Pvt. Ltd., Pune, India

381: Endoplasmic Reticulum Stress-Conditioned Tumor-Derived Extracellular Vesicles for Enhanced Cancer Vaccination

Min Jun Kim, Sungkyunkwan University, Republic of Korea
Kyung Hee Han - Celltrion; Chan Ho Kim - School of Chemical Engineering, Sungkyunkwan University; Jae Hyung Park - School of Chemical Engineering, Sungkyunkwan University

382: Nanobubble-Induced Tumor Cell Cavitation Releases IL-33 for Immunotherapy

Sungyoon Kim, Sungkyunkwan University, Republic of Korea
Yeari Song - Samsung Bioepis Corp.; Dong Gil You - Tech University of Korea; Jae Hyung Park - Sungkyunkwan University

383: Growth phase dictates function of Gardnerella vaginalis-derived bacterial extracellular vesicles

Robert Kirian, University of Maryland, College Park, United States
Darby Steinman - University of Maryland, College Park; Rajan Jsankar - University of Maryland, College Park; Alyssa Peterson - University of Maryland, College Park; Hannah Zierden - University of Maryland, College Park

384: Nitric Oxide-Shielded T Cells for Enhanced Antitumor Immunotherapy

Jihye Lee, POSTECH, United States

385: Chemoimmunological Intervention of Crosstalk between TME and TDLN for Improved Cancer Immunotherapy

Su Yeon Lim, PhD, Sungkyunkwan University, Republic of Korea
Ji Hoon Jeong - Sungkyunkwan University; Dahyun Kim - Sungkyunkwan University; Byung Deok Kim - Sungkyunkwan University

386: Intranasal Delivery of PD-L1 Antibody Nanoconjugates for Non-Invasive Modulation of Neuroimmune Checkpoints

Maria Medel, CIPF, Spain

Rita Acurcio - Universidad de Lisboa; Helena Florindo - Universidad de Lisboa; Julia Lorenzo - Universidad Autonoma de Barcelona; Marta Mulero - Universidad de Barcelona; Inmaculada Sánchez Conejos - Centro de Investigacion Principe Felipe; Maria Jesus Vicent - Centro de Investigacion Principe Felipe

387: Immune Organ-Targeted MicroRNA Delivery Systems for Cancer Nanoimmunotherapy

Pooria Mohammadi Arvejeh, IMDEA Nanociencia, Spain
Guillermo González Salso - IMDEA Nanociencia, Madrid, Spain;
Miguel Fernandez de la Torre - Universidad Carlos III de Madrid, Madrid, Spain; Clara Gomez-Cruz - 60Nd S.L., Leganés, Spain; Daniel Garcia-Gonzalez - Universidad Carlos III de Madrid, Madrid, Spain; Lola Fernandez-Messina - Universidad Complutense de Madrid, Madrid, Spain; Milagros Castellanos - IMDEA Nanociencia, Madrid, Spain

388: α -GalCer-Adjuvanted mRNA-LNP Vaccines Induce Activation of iNKT cells and Other Unconventional T Cell Subsets

Kevin Mwangi, Ghent University, Belgium
Ilke Aernout - Laboratory of General Biochemistry and Physical Pharmacy, Ghent University; Thomas Ehouarne - Laboratory of General Biochemistry and Physical Pharmacy, Ghent University; Margo De Velder - Laboratory of General Biochemistry and Physical Pharmacy, Ghent University; Janne Swinnen - Laboratory of General Biochemistry and Physical Pharmacy, Ghent University; Aaron Verplancke - Laboratory of Pharmaceutical Biotechnology, Ghent University, Ghent, Belgium; Zifu Zhong - Laboratory of Pharmaceutical Technology, Ghent University; Bruno De Geest - Laboratory of Pharmaceutical Technology, Ghent University; Lorenzo Franceschini - Vrije Universiteit Brussel, Department of Biomedical Sciences, Translational Oncology Research Center, team Laboratory for Molecular and Cellular Therapy, Brussels; Karine Breckpot - Vrije Universiteit Brussel, Department of Biomedical Sciences, Translational Oncology Research Center, team Laboratory for Molecular and Cellular Therapy, Brussels; Stefaan De Smedt - Laboratory of General Biochemistry and Physical Pharmacy, Ghent University; Rein Verbeke - Laboratory of General Biochemistry and Physical Pharmacy, Ghent University; Ine Lentacker - Laboratory of General Biochemistry and Physical Pharmacy, Ghent University

389: PD-L1-targeted immunoliposomal doxorubicin as a dual chemo-immunotherapy for hepatocellular carcinoma

Gianfranco Pasut, University of Padua, Italy
Maria Natalia Calienni - National Scientific and Technical Research Council (CONICET); Sara De Martin - University of Padova; Daniela Gabbia - University of Padova; Antonella Grigoletto - University of Padova; Margherita Toffanin - University of Padova; Ilaria Zanotto - University of Padova

390: Polycarbonates as RNA Polyplex Delivery Systems

Yannick Pilger, University Würzburg, Germany
Lutz Nuhn - University Würzburg

391: Development of bispecific T cell engager-based nanosystems for targeted lung cancer therapy

Inês Pinto, University of Coimbra, Portugal
Annalee W. Nguyen - Department of Chemical Engineering, University of Texas, Austin, TX 78712, USA; Jennifer A. Maynard - Department of Chemical Engineering, University of Texas, Austin, TX 78712, USA; Helena Florindo - Research Institute for

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Medicines (iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa, Av. Prof. Gama Pinto, Lisboa, 1649-003 Portugal; Henrique Faneca - CIBB - Centre for Innovative Biomedicine and Biotechnology, University of Coimbra, 3004-504 Coimbra, Portugal

392: Advancing Fucoïdan Mediated Immunotherapy and Anticancer Activity in PDAC Using Liposomal Delivery Systems

Ungsari Purwanto, MSc, Queen's University Belfast, United Kingdom
Wafa Al-Jamal - Queen's University Belfast

393: Programmable PVDMA-PEG Hydrogels with Spatial Compartmentalization for Sequential Immunotherapy

Emily Rasmussen, MS, University of Mississippi, United States
Sophia Kladias - Binghampton University; Nidhi Patel - University of Mississippi; Adam Smith - University of Mississippi; Thomas Werfel - University of Mississippi

394: Detection of Factors Influencing the Immune Response to Chitin Particles from Different Origins

Bernadette Riemann, University of Bonn, Germany
Alf Lamprecht - University of Bonn

395: Investigating the Impact of Liposome Properties on Immunomodulatory Responses

Anne Rodallec, PharmD, PhD, COMPO/SMARTc-CRCM - Aix Marseille University, France
Alf LAMPRECHT - Department of Pharmaceutics, Institute of Pharmacy, University of Bonn, Germany; Ambre Aubert - COMPO-CRCM, Aix-Marseille University, France; Hadjer MERBARKI - COMPO-CRCM, Aix-Marseille University, France; Maryam SHETAB BOUSHEHRI - Department of Pharmaceutics, Institute of Pharmacy, University of Bonn, Germany

396: Advancing a ready-to-use RNA transfection kit for immune cells through nanotechnology

Lucía Sanjurjo, PhD, IDIS, Health Research Institute of Santiago de Compostela, Spain
Philipp Lapuhs - Santiago de Compostela University (USC); Alberto Jiménez - Santiago de Compostela University (USC); Sergio Garrido-Areal - Santiago de Compostela University (USC); María José Alonso - Santiago de Compostela University (USC); IMDEA Nanociencia, Health research Institute of Santiago de Compostela (IDIS)

397: Accelerating the development of immunomodulatory nanomedicine with high-throughput library design and screening

Anastasis Savellos, BSc, Nanoworx, Netherlands
Milou Meulendijks - Eindhoven University of Technology (TU/e); Chiara Tramotano - Eindhoven University of Technology (TU/e); Ayla Hokke - Eindhoven University of Technology (TU/e); Ewelina Kluzka - Eindhoven University of Technology (TU/e); Roy van der Meel - Eindhoven University of Technology (TU/e); Stijn Hofstraat - Nanoworx; Anne de Dreu - Nanoworx; Peter Hendriks - Nanoworx; Willem Mulder - Eindhoven University of Technology (TU/e); Anna-Maria Makri-Pitsikou - Nanoworx

398: Developing Molecularly Imprinted Nanoparticles (nanoMIPs) for Oral Delivery using Solid Phase Polymerisation

Amjad Ali Shah, Queen's University Belfast, United Kingdom
Minao Zhang - Queen's University Belfast; Paula Preethi Irripothu - Queen's University Belfast; Yi Ge - Queen's University Belfast; Wafa Al Jamal - Queen's University Belfast

399: Exploring the potential of mRNA-LNPs for the induction of immune tolerance

Janne Swinnen, Ghent University, Belgium
Greta Webb - VIB; Rein Verbeke - Ghent University; Farzaneh Fayazpour - Ghent University; Sofie Rennen - VIB; Dorien Autaers - VUB; Lorenzo Franceschini - VUB; Karine Breckpot - VUB; sophie Janssens - VIB; Ine Lentacker - Ghent University

400: Dissolvable microneedles containing peptide-conjugate vaccines effectively induce cancer-specific T cells

Beau van Hulst, LUMC, Netherlands
Felicia Spitzer - LUMC; Ferry Ossendorp - LUMC; Koen van der Maaden - LUMC

401: Schizophyllan/Oxaliplatin Conjugates Combining Chemotherapy with Dectin-Independent Macrophage Activation

Jan Vícha, Tomas Bata University in Zlín, Czech Republic
Michaela Fojtů - Masaryk University; Filip Latečka - Tomas Bata University in Zlín; Lukáš Münster - Tomas Bata University in Zlín

402: Itaconate polymer microparticles for intracellular regulation of pro-inflammatory macrophages

Kaitlyn Woodworth, Dalhousie University, Canada
Zachary Froom - Dalhousie University; Natasha Osborne - Dalhousie University; Christian Rempe - Dalhousie University; Brenden Wheeler - Dalhousie University; Kyle Medd - Dalhousie University; Neal Callaghan - Dalhousie University; Huikang Qian - Case Western Reserve University; Abhinav Acharya - Case Western Reserve University; Carlie Charron - Dalhousie University; Locke Davenport Huyer - Dalhousie University

403: Co-delivery of a NO Donor and Sorafenib Suppresses AKT-mTOR Signaling for Hepatocellular Carcinoma Immunotherapy

Sheng Yang, National Tsing Hua University / Academia Sinica, Taiwan (Republic of China)
Yun-Ching Chen - Academia Sinica; Yun-Chieh Sung - National Tsing Hua University; Chia-Tung Shen - National Tsing Hua University

404: Extracellular vesicles from canine MSCs suppress IgE-mediated allergic responses in mice

Ji-Young Yoon, Jeonbuk National University, Republic of Korea
Do-Kyun Kim - Jeonbuk National University

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405: Programmable Release of a Negatively Charged Compound from a 3D-Printed Electroresponsive Drug Delivery System

Manal Alkahtani, PhD, AFHEA AMRSC, Prince Sattam bin Abdulaziz University, Saudi Arabia
Abdul Basit - UCL; Christopher Chapman - QMUL; Moe Elbadawi - QMUL; Simon Gaisford - UCL; Rylie Green - Imperial college london; Mine Orlu - UCL

406: Utilizing AF4 to Enable Accurate HPLC-CAD Composition Analysis of PEGylated Liposomes

Silvia Appleton, Joint Research Centre, European Commission, Italy
Guillaume Bucher - JRC; Dora Mehn - JRC; Jessica Ponti - JRC

407: Influence of salcaprozate sodium material attributes on tablet mechanical properties and dissolution

Lasse Blaabjerg, F. Hoffmann-La Roche Ltd, Switzerland
Timo Cacheux - F. Hoffmann-La Roche Ltd; Felipe Varum - F. Hoffmann-La Roche Ltd

408: N-acetylcysteine spray dried powders with antioxidant activity for pulmonary delivery

Marianna Boraschi, PhD, University of Parma, Italy
Matteo Incerti - University of Parma; Paolo Pio Mazzeo - University of Parma; Immacolata Maresca - University of Ferrara; Gianni Sacchetti - University of Ferrara; Alessandra Rossi - University of Parma

409: Scalable Continuous Manufacturing of Multi-drug Liposomes: Tuning Size and PDI via Post-loading

Luke Burroughs, University of Connecticut, United States
Diane Burgess - University of Connecticut

410: Creating customized 3D printing dressings with potential to deliver active compounds into the wound site

Sara Cardoso, Research Institute for Medicines (iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa, Portugal
Victor Martin - 3 BoneLab, Faculdade de Medicina Dentária, Universidade do Porto, Rua Dr. Manuel Pereira da Silva, 4200-393 Porto, Portugal; 4 LAQV/REQUIMTE, University of Porto, Praça Coronel Pacheco, 4050-453 Porto, Portugal, Porto, Portugal; Catarina Leal - 5 Departamento de Física, Instituto Superior de Engenharia de Lisboa, Instituto Politécnico de Lisboa, 1959-007 Lisboa, Portugal, Lisbon, Portugal; 6 CENIMAT/ISN, NOVA School of Science and Technology, NOVA University Lisbon, 2829-516 Caparica, Portugal, Lisbon, Portugal; 7 Centro de Física e Engenharia de Materiais Avançados, Instituto Superior Técnico, Universidade de Lisboa, 1049-001 Lisboa, Portugal, Lisbon, Portugal; Pedro Gomes - 3 BoneLab, Faculdade de Medicina Dentária, Universidade do Porto, Rua Dr. Manuel Pereira da Silva, 4200-393 Porto, Portugal; 4 LAQV/REQUIMTE, University of Porto, Praça Coronel Pacheco, 4050-453 Porto, Portugal, Porto, Portugal; Nuno Monge - 8 Lisbon School of Education, Polytechnic University of Lisbon, Campus de Benfica do IPL,

Lisbon 1549-003, Portugal; Ana Bettencourt - 1 Research Institute for Medicines (iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa, Avenida Prof. Gama Pinto, 1649-003 Lisboa, Portugal, Lisbon, Portugal; 2 Faculty of Pharmacy, Universidade de Lisboa, Avenida Prof. Gama Pinto, 1649-003 Lisboa, Portugal, Lisbon, Portugal; Isabel Ribeiro - 1 Research Institute for Medicines (iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa, Avenida Prof. Gama Pinto, 1649-003 Lisboa, Portugal, Lisbon, Portugal; 2 Faculty of Pharmacy, Universidade de Lisboa, Avenida Prof. Gama Pinto, 1649-003 Lisboa, Portugal, Lisbon, Portugal.

411: Scalable mRNA-LNP Manufacturing Enabled by Microfluidic In-Line Dilution Across Development and Production Scale

Hyeongju Choe, Inventage Lab, Republic of Korea
Sanghun Lee - Inventage lab; Chan Hee Chon - Inventage lab; Jung Min Oh - Inventage lab; Joo Young Cha - Inventage lab; Donghoon Kim - Inventage lab; Ju Hee Kim - Inventage lab

412: Rapid Optimization and Scale-Up of PBAE-Based siRNA Delivery via DoE-Guided Microfluidics

Laetitia Eller, LMU Munich, Germany
Adrian Kromer - LMU Munich; Olivia Merkel - LMU Munich

413: Microfluidic cIJM Technology for Robust, CMC-Aligned Manufacturing of Therapeutic Nanoparticles

Sergio Esteban Perez, Curapath, Spain
Silvia Alonso de Castro - Curapath; Carla Colprim - Curapath; Aroa Duro Castaño - Curapath; Elena Gallon - Curapath; Ines Garcia - Curapath; Lidia Herrera - Curapath; Paula Martínez Colomina - Curapath; Javier Martínez-Faraz - Curapath; Rafael Miravet-Martí - Curapath; Vicent Nebot Carda - Curapath; Veronica Serrano - Curapath

414: Development of a 3D-printed flexible-dose antihypertensive polypill incorporating a floating propranolol unit

Ahmed Faheem, PhD, RAK Medical and Health Sciences University, United Arab Emirates
Yasir Karkar - University of Sunderland

415: Stability-Optimized High-Concentration Hydroxocobalamin (50 mg/mL) for Pediatric Parenteral Administration

Mihaela Friciu, Université de Montréal, Canada
Léanne Bui - Université de Montréal; Jean-Marc Forest - CHU Sainte-Justine; Grégoire Leclair - Université de Montréal

416: Hydroxyl labelling and analysis of poly(lactide-co-glycolide) polymers by naphthyl isocyanate and limitations

John Garner, BS, Akina, Inc., United States
Justin Hadar - Akina, Inc.; Young Jhon - Food and Drug Administration; Haesun Park - Akina, Inc.; Kinam Park - Akina, Inc.; Christine Plavchak - Food and Drug Administration; Sarah Skidmore - Akina, Inc.; William Smith - Food and Drug Administration; Yang Wang - Food and Drug Administration; Deyi Zhang - Food and Drug Administration; Yuan Zou - Food and Drug Administration

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417: NanoPulse: A Scalable Micromixing Method for Robust and Reproducible RNA-LNP Formulation Across All Scales

Elio Gereige, MSc, *Inside Therapeutics, Bordeaux, France*
Claire Counil - *Inside Therapeutics, Bordeaux, France*; Milad Baroud - *ART ARNm Inserm UMS 55 and LI2RSO - University of Orléans, Orléans, France*; Matthieu Kerhuel - *Inside Therapeutics, Bordeaux, France*; Robin Oliveres - *Inside Therapeutics, Bordeaux, France*; Thomas Guérinier - *Inside Therapeutics, Bordeaux, France*; Chantal Pichon - *ART ARNm Inserm UMS 55 and LI2RSO - University of Orléans, Orléans, France*; Marie Bonnin - *SFR ICAT, Angers, MINT, Univ Angers, Inserm, CNRS, France*; Brice Calvignac - *SFR ICAT, Angers, MINT, Univ Angers, Inserm, CNRS, France*; Audrey Nsamela - *Inside Therapeutics, Bordeaux, France*

418: Improvement of the Bioavailability of Poorly Soluble Drugs via Wet Bead Milling and Fluid Bed Processing - Scale Up

Annette Grave, *Glatt Pharmaceutical Services GmbH & Co. KG, Germany*
Alexander Schmidt - *Willy A. Bachofen AG; Dominik Eugster - Willy A. Bachofen AG; Adele Rakotonirina - Glatt Pharmaceutical Services GmbH und Co. KG; shuai Shi - Glatt Pharmaceutical Services GmbH und Co. KG*

419: From Biotech to Pharma: Sustainable and innovative manufacturing strategies for Europe

Nazende Günday-Türel, *MyBiotech GmbH, Germany*
Daniela Becher - *MyBiotech GmbH; Maximilian Schelden - MyBiotech GmbH; Matthias Jourdain - MyBiotech GmbH; Iria Naveira Souto - Reig Jofre; Alina Zaiachkivska - Saarland University; Andriy Luzhetskyy - Saarland University; Emre Türel - MyBiotech GmbH*

420: Impact of different MCC grades on processability and dissolution of IR tablet

Lutz Horster, *Rottendorf Pharma GmbH, Germany*

421: High-throughput formulation strategies for screening Amorphous Solid Dispersions (ASDs)

Alexandra Howard, *Nottingham University, United Kingdom*
Amjad Abousleo - *AstraZeneca; Jonathan Burley - Nottingham University; Michael Cook - University College London; Giuseppe Mantovani - Nottingham University*

422: High Throughput Single Particle Interferometric-based Sizing and Payload Analyser for Lipid Nanoparticles

Lan Anh Huynh, BA, *McGill University, Canada*
David Juncker - *Juncker Lab - McGill University; Andreas Wallucks - Juncker Lab - McGill University*

423: A 3D printed PCL-collagen hybrid mesh (TissueDerm™) for breast reconstruction after mastectomy in a pig model

Han-saem JO, MS, *PLCOskin, Republic of Korea*
Do-Hyun Kim - *PLCOskin Co., Ltd; Na-Yeon Koo - PLCOskin Co., Ltd; Jeong-Woo Park - PLCOskin Co., Ltd; Tai-Suk Roh - Department of Plastic and Reconstructive Surgery, Yonsei University College of Medicine; Woo-Yeol Baek - Department of Plastic and Reconstructive Surgery, Yonsei University College of Medicine*

424: Scalable production of bioresorbable, monodisperse, injectable microparticles using IN-AIR MICROFLUIDICS

Tom Kamperman, PhD, *IamFluidics BV, Netherlands*
Yuanyuan Liao - *IamFluidics B.V.; Iris Lambrichs - IamFluidics B.V.; Don Hertsig - IamFluidics B.V.; Thijs Duursma - IamFluidics B.V.; Jenny Parraga - IamFluidics B.V.; Lisette van Lith - IamFluidics B.V.; Jieke Jiang - University of Twente; Claas Willem Visser - IamFluidics B.V. / University of Twente; Bahar Yeniad - Corbion*

425: The Double Role of Surfactants in Microfluidic-Assisted Nanoparticle Manufacturing

Janet Kolejian, *Istituto Italiano di Tecnologia, IIT, Italy*
Pier Luca Maffettone - *University of Naples Federico II; Daniele Tammaro - University of Naples Federico II; Tommaso Tedeschini - Istituto Italiano di Tecnologia; Nicola Tirelli - Istituto Italiano di Tecnologia*

426: Simple quantification of mRNA-LNP encapsulation efficiency with scatter-free absorption spectroscopy

Eric Le Ru, *Victoria University of Wellington / Marama Labs, New Zealand*
Aida López Espinar - *Marama Labs IE; Kirsty Smith - Marama Labs IE; Piotr Kowalski - University College Cork; Brendan Darby - Marama Labs IE*

427: Monolith-Based Solutions for Fast and Efficient LNP Purification at High-Throughput and Lab Scales

Tjaša Leban, MSc, *Sartorius BIA Separations, Slovenia*
Ana Železnik - *Sartorius BIA Separations d.o.o.; Maja Štokelj - Sartorius BIA Separations d.o.o.; Nika Samsa - Sartorius BIA Separations d.o.o.; Sergeja Lebar - Sartorius BIA Separations d.o.o.; Tristan Kovačič - Sartorius BIA Separations d.o.o.; Petra Dekleva - Sartorius BIA Separations d.o.o.; Andreja Gramc Livk - Sartorius BIA Separations d.o.o.; Maja Leskovec - Sartorius BIA Separations d.o.o.; Aleš Štrancar - BIA Separations, Inc; Mojca Tajnik Sbaizero - Sartorius BIA Separations d.o.o.*

428: Design-Controlled Co-Administration of Ibuprofen and Itraconazole via an HME-FDM 3D Printing Platform

Vlad-Nicolae Lesutan, *Queen's University Belfast, United Kingdom*
Dimitrios Lamprou - *Queen's University Belfast; Sune Andersen - Johnson & Johnson Innovative Medicine; Thomas Quinten - Johnson & Johnson Innovative Medicine*

429: Printing the future of vaccines: Dissolvable 3D printed microneedles using PBAEs for drug delivery

Krystian Lewandowski, MEng, *University of Nottingham, United Kingdom*
Karen Alvey - *University of Nottingham; Robert Owen - University of Nottingham; Cameron Alexander - University of Nottingham; David Scurr - University of Nottingham*

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430: Development of liposomes loaded with Cannabis sativa extract using a quality-by-design approach

Luiza Luna Silvério, *Universidade Estadual de Campinas (Unicamp), Brazil*

Nicole Ferrari de Carvalho - *Universidade Estadual de Campinas (Unicamp)*; Janaína Artem Ataíde - *Universidade de São Paulo*; Priscila Gava Mazzola - *Universidade Estadual de Campinas (Unicamp)*

431: Mesophase-Driven Piezoelectric PLLA Scaffolds for Enhanced Long Term Delivery for Bone Regeneration

Zakhar Lyakhovych, ScM, *Brown University, United States*
Cameron Baptista - *Brown University*; Edith Mathiowitz - *Brown University*

432: Probing Nanomedicine Structures with Analytical Ultracentrifugation: Lipid Based Nanoparticles and Liposomes

Dora Mehn, PhD, *European Commission, Joint Research Centre, Italy*

Silvia Appleton - *European Commission, Joint Research Centre*; Ambra Sarracino - *European Commission, Joint Research Centre*; Jessica Ponti - *European Commission, Joint Research Centre*; Luigi Calzolari - *European Commission, Joint Research Centre*; Miffy Hok Yan Cheng - *Faculty of Pharmaceutical Sciences, Vancouver, British Columbia, Canada*; Mariana Hugo Silva - *Ghent University, Ghent, Belgium*; Rein Verbeke - *Ghent University, Ghent, Belgium*; Stefaan De Smedt - *Ghent University, Ghent, Belgium*; Ine Lentacker - *Ghent University, Ghent, Belgium*

433: A simple and scalable method for the efficient remote loading of hydrophilic drugs into liposomes

Sabrina Mendes, PhD, *Universidade Federal de Minas Gerais, Brazil*

Carolina De Barros - *Universidade Federal de Minas Gerais*; Sabrina Mendes - *Universidade Federal de Minas Gerais*; Gabriel Pereira - *Universidade Federal de Minas Gerais*; Robson Santos - *Universidade Federal de Minas Gerais*; Frédéric Frézard - *Universidade Federal de Minas Gerais*

434: Controlled release acceleration of a lipophilic drug from PEVA-based implants using hydrophilic additives

Zilin Mo, *Freie University Berlin, Germany*
Andriy Dashevskiy - *Freie University Berlin*; Anne Seidnitz - *Freie Universität Berlin*; Roland Bodmeier - *Freie University Berlin*; Pensatech Pharma

435: All-in-one microfluidic manufacturing method of targeted lipid nanoparticles: showcase of in vivo CAR T production

Ian Oesterle, *EPFL, Switzerland*
Dzhangar Dzhumashev - *University of Geneva*; Valérie Dutoit-Vallotton - *University of Geneva*; Gaspard Pardon - *EPFL*; Denis Migliorini - *University of Geneva*

436: Microstructural modifications to achieve tunable drug release from PLGA microspheres

Pawan Kumar Pandey, *University of Connecticut, United States*
Diane Burgess - *University of Connecticut*

437: Scalable Supercritical Fluid-Based Manufacture of Amorphous Esomeprazole for Improved Oral Delivery

Jeong-Sook Park, *Chungnam National University, Republic of Korea*
Chang-Seon Myung - *Chungnam National University*; Hwa-Young Son - *Chungnam National University*

438: A 2D Chromatographic Tool for the Comprehensive Characterisation of Complex Novel RNA-LNP Drug Products

Nejc Pavlin, *Sartorius BIA Separations, Slovenia*
Mojca Bavčar - *Sartorius BIA Separations*; Tristan Kovačič - *Sartorius BIA Separations*; Andreja Gramc Livk - *Sartorius BIA Separations*; Aleš Štrancar - *Sartorius BIA Separations*

439: Multiparticulate and matrix-based strategies for modified Melatonin release

Simon Roberts, *IMCD Deutschland GmbH, Germany*
Chhanda Kapadia - *IMCD Group*; Nishant Nirale - *IMCD India*; Simon Roberts - *IMCD UK*

440: Simultaneous Quantification of RNA and Antibodies in Lipid Nanoparticles by Scatter-Free Absorption Spectroscopy

Inés Rubio-Prego, *University of Santiago de Compostela, Spain*
Kirsty Smith - *Marama Labs*; Eric Le Ru - *Marama Labs*; Moritz Beck-Broichsitter - *Merck Life Science KGaA*; Eleni Samaridou - *Merck Life Science KGaA*; María José Alonso - *University of Santiago de Compostela*; Brendan Darby - *Marama Labs*; Johanna Simon - *Merck Life Science KGaA*

441: A Self-unfolding Proximity Enabling Device via Mucoadhesive Activation for Better Retention in the Small Intestine

Christhian Salas Cotaquispe, *Denmark Technical University, Denmark*
Anja Boisen - *Denmark Technical University*; Juliane Fjelrad Christfort - *Denmark Technical University*; Khorshid Kamguyan - *Denmark Technical University*; Morten Søndergaard Svendsen - *Denmark Technical University*

442: High-Throughput Electronebulization for the Scalable Production of Controlled-Release Particles

Ana Salevic, *CSIC and Bionanopharma, Spain*
Ana Salevic - *Bionanopharma*; Jose Lagaron - *CSIC and Bionanopharma*

443: Fine-tuning the Structure and Properties of Lipid Nanoparticles with Microfluidics

Sruthy Sanjeev Ambady, *Institute of Experimental Molecular Imaging, RWTH Aachen University, Germany*
Luca Casettari - *Department of Biomolecular Sciences, University of Urbino Carlo Bo, Urbino 61029, Italy*; Sara Elsafy - *Institute of Experimental Molecular Imaging, RWTH Aachen*

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University; Fabian Kiessling - Institute of Experimental Molecular Imaging, RWTH Aachen University; Twan Lammers - Institute of Experimental Molecular Imaging, RWTH Aachen University; Josbert Metselaar - Institute of Experimental Molecular Imaging, RWTH Aachen University; Roger Pallares - Institute of Experimental Molecular Imaging, RWTH Aachen University; Mattia Tiboni - Department of Biomolecular Sciences, University of Urbino Carlo Bo, Urbino 61029, Italy

444: Linking viscosity to higher-order interactions of chemically modified double-stranded oligonucleotides

Juliette Sarciron, University of Nottingham, United Kingdom
Jonathan Booth - AstraZeneca; Kevin Treacher - AstraZeneca; Snow Stolnik - University of Nottingham; Mischa Zelzer - University of Nottingham

445: Advanced Purification Strategies for LNP Therapeutics: Enhanced Purity, Uniformity, and Performance

Mojca Tajnik Sbaizer, Sartorius BIA Separations, Slovenia
Ana Železnik - Sartorius BIA Separations; Tjaša Leban - Sartorius BIA Separations; Tristan Kovacic - Sartorius BIA Separations; Maja Štokelj - Sartorius BIA Separations; Jasmina Puc - Sartorius BIA Separations; Nina Mencin - Sartorius BIA Separations; Sergeja Lebar - Sartorius BIA Separations; Rok Sekirnik - Sartorius BIA Separations; Andreja Gramc Livk - Sartorius BIA Separations; Ales Strancar - Sartorius BIA Separations; Maja Leskovec - Sartorius BIA Separations

446: PERaME: Personalised polypills with programmable release made by 3D printing

Ken Tam, University of Liverpool, United Kingdom
Jiongyi Yan - Loughborough University; Andrew Gleadall - Loughborough University; Sheng Qi - University of Liverpool

447: From lab to scalable siRNA-loaded Lipid@PLGA hybrid nanoparticles production via double-chip configuration

Ersilia Villano, University of Naples Federico II, Italy
Teresa Silvestri - University of Naples Federico II; Susy Brusco - University of Naples Federico II; Erika Esposito - University of Naples Federico II; Chiara Indolfi - University of Naples Federico II; Thomas Lee Moore - University of Naples Federico II; Emma Mitidieri - University of Naples Federico II; Raffaella Sorrentino - University of Naples Federico II; Fabiana Quaglia - University of Naples Federico II; Paola Brocca - University of Milano; Ivana d'Angelo - University of Campania Luigi Vanvitelli; Roberta d'Emmanuele di Villa Bianca - University of Naples Federico II; Gabriella Costabile - University of Naples Federico II; Francesca Ungaro - University of Naples Federico II

448: Development of Vacuum Compression Molding as an Alternative Method for Discovery -scale Biodegradable Implants

Wunan Zhang, Johnson and Johnson Innovative medicine, Belgium

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449: Casein-PAA micelles enhance vortioxetine solubility, penetration, and oral bioavailability.

Samaa Abdullah, PhD, MSc, BSc, Applied Science Private University, Jordan

450: Polymer-gated magnetic mesoporous silica nanocarriers for pH- and temperature-tunable resveratrol release

Giulia Accomasso, University of Turin, Italy
Marcos Emanuel Peralta - Universidad Nacional del Comahue (Argentina), Instituto de Investigación y Desarrollo en Ingeniería de Procesos, Biotecnología y Energías Alternativas, PROBIEN (CONICET-UNCO), Facultad de Ingeniería; Giuliana Magnacca - University of Turin (Italy), Department of Chemistry and NIS Centre; Gabriela Bosio - Universidad Nacional de La Plata, (Argentina), Instituto de Investigaciones Físicoquímicas Teóricas y Aplicadas (INIFTA), CCT-La Plata- CONICET; A Jadhav Sushilkumar - School of Nanoscience and Technology, Shivaji University Kolhapur, Vidyanagar, Kolhapur, Maharashtra, India; Daniela Chirio - University of Turin (Italy), Department of Drug Science and Technology; Elena Peira - University of Turin (Italy), Department of Drug Science and Technology; Chiara Riganti - University of Turin (Italy), Department of Oncology; Simona Sapino - University of Turin (Italy), Department of Drug Science and Technology; Daniel Mártire - Universidad Nacional de La Plata, (Argentina), Instituto de Investigaciones Físicoquímicas Teóricas y Aplicadas (INIFTA), CCT-La Plata- CONICET; Marina Gallarate - University of Turin (Italy), Department of Drug Science and Technology; Carlos Luciano - Universidad Nacional del Comahue (Argentina), Instituto de Investigación y Desarrollo en Ingeniería de Procesos, Biotecnología y Energías Alternativas, PROBIEN (CONICET-UNCO), Facultad de Ingeniería

451: Developing an Innovative Controlled-release Implant to Enhance Tumour Radiosensitivity in Prostate Cancer.

Masoud Adhami, MSc, Queen's University Belfast, United Kingdom
Rayhanul Islam - Queen's University Belfast; Sarah Chambers - Queen's University Belfast; Stephen McMahon - Queen's University Belfast; Helen McCarthy - Queen's University Belfast; Eneko Larrañeta - Queen's University Belfast; Jonathan Coulter - Queen's University Belfast

452: Upconversion nanoparticles co-generating ROS/RNS for enhanced tumor photodynamic therapy

Dowook Ahn, Sungkyunkwan University, Republic of Korea
JeongGyu Cha - Sungkyunkwan University, School of Pharmacy; Woo Tak Lee - Sungkyunkwan University, School of Pharmacy; Yu Seok Youn - Sungkyunkwan University, School of Pharmacy

453: Evaluation of thymol loaded phytosome and niosome formulations for lung cancer

Aslı Akgül, Marmara University & Fenerbahçe University, Turkey
Oya Kerimoğlu - Marmara University; Özgül Gök Özatay - Acıbadem University

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454: 3D bio-scaffold for controlled release of lipid nanoparticles in post-surgical GBM therapy

Rosanna Alfieri, *University of Chieti-Pescara, Italy*
Edmondo Battista - *University of Chieti - Pescara "G. d'Annunzio"*; Shameer Pillarisetti - *University of Chieti - Pescara "G. d'Annunzio"*; Paola Palumbo - *University of L'Aquila*; Christian Celia - *University of Chieti - Pescara "G. d'Annunzio"*

455: Development and in vitro Biological Evaluation of Polymer-Thalidomide Conjugates for Anti-Cancer Applications

Ahmed Alhajmee, *University of Reading, United Kingdom*
Madonna Mitry - *Faculty of Pharmacy, Ain Shams University, Cairo*; Francesca Greco - *School of Pharmacy, University of Reading, UK*; Helen Osborn - *School of Pharmacy, University of Reading, UK*

456: Mucoadhesiveness evaluation of mannosylated chitosan nanoparticle for intranasal vaccine

Camila Almeida, MSc, *University of São Paulo, Brazil*
Fabiana Vicentini - *University of São Paulo*

457: Mechanoluminescent nanoparticles preparation for biomedical applications

Adérito Amaral, *University of Coimbra, Portugal*
Ana Margarida Gândara - *University of Coimbra*; Rosemeyre Cordeiro - *University of Coimbra*

458: Development and Preclinical Evaluation of Docetaxel-loaded Micelles for Glioblastoma Treatment

Fernanda Andrade, *University of Barcelona, Spain*
Júlia German-Cortés - *Vall d'Hebron Research Institute*; Narine Fischer-Albiol - *Vall d'Hebron Research Institute*; Sandra Mancilla - *Vall d'Hebron Research Institute*; Belén García - *Vall d'Hebron Research Institute*; Zamira V. Diaz-Riascos - *Vall d'Hebron Research Institute*; Cláudia Martins - *I3S*; Simó Schwartz - *Vall d'Hebron Research Institute*; Roser Ferrer Costa - *Vall d'Hebron Research Institute*; Ibane Abasolo - *IQAC*; Pilar Sánchez-Gomez - *ISCI*; Bruno Sarmiento - *I3S*; Diana Rafael - *Vall d'Hebron Research Institute*

459: Functionalized chitosan nanobubbles as a strategy to reverse immunosuppressive tumor microenvironment

Monica Argenziano, PhD, *University of Turin, Italy*
Carmela Tangredi - *IRCCS CRO Aviano*; Davide Busato - *IRCCS CRO Aviano*; Sara Capolla - *IRCCS CRO Aviano*; Antonella Zucchetto - *IRCCS CRO Aviano*; Valter Gattei - *IRCCS CRO Aviano*; Paolo Macor - *University of Trieste*; Giuseppe Toffoli - *IRCCS CRO Aviano*; Michele dal Bo - *IRCCS CRO Aviano*; Roberta Cavalli - *University of Turin*

460: Evaluating the Cytotoxic Potential of Rifamycin-Loaded Liposomes in 2D and 3D Cancer Models

Janaina Ataíde, *University of Sao Paulo, Brazil*
Nina Filipczak - *Northeastern University*; Satya Siva Kishan Yalamarty - *Northeastern University*; Priscila Mazzola - *University of Campinas*; Vladimir Torchilin - *Northeastern University*

461: Development of In Vitro Release Testing Methods for Long-Acting Oily Depot Formulations

Saurabh Badole, *University of Connecticut, United States*
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462: A gum-like implant for the local treatment of the post-operative glioblastoma

Sofia Banzato, *University of Padova, Italy*
Alessio Malfanti - *University of Padova*; Cristiano Pesce - *University of Padova*; Paolo Caliceti - *University of Padova*; Stefano Salmasso - *University of Padova*; Agnese Fragassi - *University of Padova*; Mariangela Garofalo - *University of Padova*; Antonio Nardi - *University of Padova*

463: Storage and Stress Stability of Lipid Nanoparticles with Different Ionizable Lipids

Sara Barham, *University of Strathclyde, United Kingdom*
Yvonne Perrie - *University of Strathclyde*; Sarah Lindsay - *University of Strathclyde*

464: CROHNtrol – Local Combination Nanotherapy for Crohn's Disease

Andreia Sofia Barros, *Instituto de Investigação e Inovação em Saúde (I3S), University of Porto, Portugal*
Catarina Caetano - *Instituto de Investigação e Inovação em Saúde (I3S), University of Porto*; Rute Nunes - *Instituto de Investigação e Inovação em Saúde (I3S), University of Porto*; Bruno Sarmiento - *Instituto de Investigação e Inovação em Saúde (I3S), University of Porto*

465: Multicomponent reaction based polymerization for drug delivery application

SAROJ BASHYAL, *Keimyung University, Republic of Korea*
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466: The Avidity Paradox: Optimising T7-Polymerosome Valency for Enhanced Blood-Brain Barrier Transcytosis

Iris Batalha, PhD, *University of Bath, United Kingdom*
Ana Alves - *Universidade do Porto*; Peter Pfeifer - *Institute for Bioengineering of Catalonia (IBEC)*; Giuseppe Battaglia - *Institute for Bioengineering of Catalonia (IBEC)*; Cátia Lopes - *Institute for Bioengineering of Catalonia (IBEC)*

467: Lipid-CTPP Conjugated Nanocarriers for Targeted Drug Delivery in Glioblastoma: In-vitro and in-vivo effects

Sanya Batheja, MPharm, *Central University of Rajasthan, India*
Rakesh Kumar Sahoo - *Central University of Rajasthan*; Kushagra Nagori - *Rungta College of Pharmaceutical Sciences & Research*; Ajazuddin - *Rungta College of Pharmaceutical Sciences & Research*; Gajanan Paul - *National Institute of Pharmaceutical Education and Research, (NIPER) Raebareli*; Awesh Yadav - *National Institute of Pharmaceutical Education and Research, (NIPER) Raebareli*; Umesh Gupta - *Central University of Rajasthan*

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468: Engineered Ag–Nanoparticle–based SERS Sensors for Therapeutic Drug Monitoring of Antibiotics in Biofluids

Melisa Bayrak, MSc, *Stockholm University, Sweden*
Georgios Sotiriou – *Stockholm University*

469: Incorporation of Lipophilic Drugs into Surface Modified Mesoporous Silica Nanoparticles using Supercritical CO₂

Heather Benson, PhD, *Curtin Univeristy, Australia*
Jiachen Yan – *University of New South Wales*; Dutong Liu – *University of New South Wales*; Tushar Kumeria – *University of New South Wales*

470: Enzyme–Loaded Immunoliposomes Targeting Cardiomyocytes as a Therapeutic Strategy for Fabry Disease

Maria Vitoria Bentley, *University of Sao Paulo, Brazil*
Luiz Souza – *University of Sao Paulo*; Daniel Cerri – *University of Sao Paulo*; Livia Depieri – *University of Sao Paulo*

471: Immunomodulatory Hydroxide Layered Nanoparticles for Local Periodontal Therapy

Ana Bettencourt, *Faculdade de Farmacia, Universidade de Lisboa, Portugal*
Victor Martin – *BoneLab, Faculty of Dental Medicine; LAQV/REQUIMTE, University of Porto, Portugal*; Isabel Ribeiro – *Research Institute for Medicines (iMed.U LISBOA) Faculdade de Farmácia, Universidade de Lisboa, Portugal*; Helena Fernandes – *BoneLab, Faculty of Dental Medicine; LAQV/REQUIMTE, University of Porto, Portugal*; Catarina Santos – *CQE Instituto Superior Técnico, Universidade de Lisboa, Instituto Politécnico de Setúbal, Portugal*; Pedro Gomes – *BoneLab, Faculty of Dental Medicine; LAQV/REQUIMTE, University of Porto, Portugal*

472: IgG–Loaded Flame–Made Amorphous Calcium Phosphate Nanoparticles for Transdermal Microneedle Patch Delivery

Pradeep Kumar Reddy Bhumireddy, PhD, *SciLifeLab, Sweden*
Georgios Sotiriou – *SciLifeLab*

473: Lipid Nanoparticles for miR–182–3p delivery in the treatment of triple negative breast cancer

Rita Bifano, *University of Naples Federico II, Italy*
Alessia Angelillo – *University of Naples Federico II*; Annamaria Biroccio – *IRCCS Regina Elena National Cancer Institute, Rome*; Virginia Campani – *University of Rome Link Campus*; Giuseppe De Rosa – *University of Naples Federico II*; Valeria Nele – *University of Naples Federico II*; Manuela Porru – *IRCCS Regina Elena National Cancer Institute, Rome*

474: Janus–dendrimer supramolecular structures as delivery agents for small molecules, peptides and proteins

Luis Bimbo, PhD, *Faculty of Pharmacy, University of Coimbra, Portugal*
Luis Bimbo – *University of Coimbra*; Sami Nummelin – *Aalto University*; Jarmo Ropponen – *VTT Technical Centre of Finland*; Sacha Legrand – *Optitune*; Ville Liljestrom – *Aalto University*; Antti Nykanen – *Aalto University*; Jari Koivisto – *Aalto University*; Manu Lahtinen – *University of Jyväskylä*; Jouni Hirvonen – *University of Helsinki*; Leena Peltonen – *University of Helsinki*; Tapani Viitala – *University of Helsinki*; Jani Seitsonen – *Aalto*

University; Mauri Kostianen – Aalto University

475: DoE–Guided Liposomal Optimization of Novel Pyrrolobenzodiazepine for Solubility and TNBC Targeting

Syed Alhafiz Bin Syed Hashim, *King's College London / The National University of Malaysia, Malaysia*
Victor Manuel Moreno Zafra – *King's College London*; Sihan Liu – *King's College London*; Sheeba Irshad – *King's College London*; Miraz Rahman – *King's College London*; Adam Walters – *King's College London*; Khuloud Al-Jamal – *King's College London / The University of Hong Kong*

476: Mixed polymeric thermogel for locoregional delivery of gemcitabine/rapamycin in metastatic pancreatic cancer

SungHyun Bong, *Chungbuk national university, Republic of Korea*
Su jeong Kang – *Chungbuk National University*

477: Boosting the delivery efficiency of peptide based mRNA nanoparticles by fine–tuning of formulation parameters

Roland Brock, *Radboudumc, Netherlands*
Ward Jacobs – *Radboudumc*; Lucía Tocornal Díaz – *Radboudumc*; Luco Rutten – *Radboudumc*; Rona Roverts – *Radboudumc*; Nico Sommerdijk – *Radboudumc*

478: Synthesis and characterization of gelatin nanoparticles coupled GFP for potential release of antineoplastic drugs

Citlaly Bucio Arzate, *Universidad Autonoma de Baja California, Mexico*
Hector Magaña – *Autonomous University of Baja California*; Giovanni Palomino–Vizcaino – *Autonomous University of Baja California*; Kenia Palomino–Vizcaino – *Autonomous University of Baja California*

479: Gemcitabine nanotherapeutics with increased stability and different rate of hydrolytic release

Alžběta Bulková, Bc., *Institute of Macromolecular Chemistry of the Czech Academy of Sciences, Czech Republic*
Kateřina Běhalová – *Institute of Microbiology of the CAS*; Tomáš Etrych – *Institute of Macromolecular Chemistry CAS*; Kevin Kotalík – *Institute of Macromolecular Chemistry CAS*; Marek Kovář – *Institute of Microbiology of the CAS*; Robert Pola – *Institute of Macromolecular Chemistry CAS*

480: Anle138b – Vitamin C Solid Lipid Nanoparticles: in vitro studies for intranasal administration in Parkinson disease

Philippe Caisse, *Gattefosse SAS, France*
adriana trapani – *University of Bari "Aldo Moro"*; Giuseppe Fracchiolla – *University of Bari "Aldo Moro"*; Anna Patrizia de Nichilo – *University of Bari "Aldo Moro"*; Stefano Castellani – *University of Bari "Aldo Moro"*; Rosanna Mallamaci – *University of Bari "Aldo Moro", 70125 Bari, Italy*; Annalucia Carbone – *University of Foggia, 71122, Foggia, Italy*; Giuditta Colangelo – *University of Foggia, 71122, Foggia, Italy*; Massimo Conese – *University of Foggia, 71122, Foggia, Italy*

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481: Lipid nanoparticles for the treatment of inflammatory lung cancer in 3D and organ-on-chip models

Christian Celia, *University of Chieti - Pescara "G. d'Annunzio", Italy*
Shameer Pillarisetti - *University of Chieti - Pescara "G. d'Annunzio"*; Roberto Plebani - *University of Chieti - Pescara "G. d'Annunzio"*; Luigi Ciriolo - *University of Catanzaro "Magna Graecia"*; Nicola d'Avanzo - *University of Catanzaro "Magna Graecia"*; Rosanna Alfieri - *University of Chieti - Pescara "G. d'Annunzio"*; Piero Di Carlo - *University of Chieti - Pescara "G. d'Annunzio"*; Massimo Fresta - *University of Catanzaro "Magna Graecia"*; Mario Romano - *University of Chieti - Pescara "G. d'Annunzio"*

482: Single atom-doped MOF upconversion photocatalyst for rheumatoid arthritis therapy

Jeonggyu Cha, *Sungkyunkwan university, Republic of Korea*
Dwook Ahn - *Sungkyunkwan University, School of Pharmacy*;
Yunkyung Yang - *Sungkyunkwan University, School of Pharmacy*;
Yu Seok Youn - *Sungkyunkwan University, School of Pharmacy*

483: Controlled release of lyophilized gold nanoparticles from biodegradable implants for local radiosensitization

Sarah Chambers, PhD, *Queen's University Belfast, United Kingdom*
Rayhanul Islam - *QUB*; Masoud Adhami - *QUB*; Shannon Thompson - *QUB*; Usanee Detamornrat - *QUB*; Niall Byrne - *QUB*;
Sunell Jain - *QUB*; Jonathan Acheson - *Ulster University*; Helen McCarthy - *QUB*; Stephen McMahon - *QUB*; Eneko Larrañeta - *QUB*; Jonathan Coulter - *QUB*

484: Enzyme-switchable polymer conjugate induces lysosomal pyroptosis and enhances PD-1 blockade

Joonsuk Chang, MSc, *Sungkyunkwan University, Republic of Korea*
Torsha Ghosh - *Sungkyunkwan University*; Jueun Jeon - *Sungkyunkwan University*; Jae Hyung Park - *Sungkyunkwan University*

485: Peroxidase-Mimicking Nanozymes Coupled with Receptor-Mediated Targeting for Breast Cancer Therapy

Surbhi Chauhan, *Indian Institute of Technology Delhi, India, India*
Prashant Mishra - *Indian Institute of Technology Delhi, India*

486: Development and Characterization of a Nanoemulsion for Antibody-Based Therapy Against *Candidozyma auris*

Martha Chaves Magalhães, *University of São Paulo, Brazil*
Gabriel Davi Marena - *USP*; Danilo Henrique Ramos - *USP*;
Carlos Pelleschi Taborda - *USP*

487: PEGylated Liposomes as a Delivery Strategy to Enhance Rapamycin Anti-tumour Activity in Vascular Sarcoma

Zilu Chen, *University of Toronto, Canada*
Lucy Wang - *University of Toronto*; Linyu Fan - *University of Toronto*; Albiruni Razak - *Princess Margaret Cancer Centre, University of Toronto*; Christine Allen - *University of Toronto*

488: Selective Depletion of Tumor-Associated Macrophages Enhances Anti-Tumor Immunity in Pancreatic Cancer

Sheng Liang Cheng, *Academia Sinica, Taiwan (Republic of China)*
Yunching Chen - *Academia Sinica*; HsinMei Lee - *Academia Sinica*

489: Electron Microscopy Analysis of Lipid Nanoparticles: Effect of Lipid Components on Morphology

Calvin Chun Long Cheung, *The University of Hong Kong, Hong Kong*
Khuloud Al-Jamal - *The University of Hong Kong*; Alaa Zam - *King's College London*

490: Cell-Selective Modulation of Mechanotransduction using CD44-Mediated Nanocarriers to Reverse Cardiac Fibrosis

Enrica Chiesa, *University of Pavia, Italy*
Gloria Garofolo - *Centro Cardiologico Monzino*; Jose Inácio - *Universidade de NOVA de Lisboa*; Rebecca Dutton - *Universidade de NOVA de Lisboa*; José Belo - *Universidade de NOVA de Lisboa*;
Henrique Girao - *University of Coimbra*; Maurizio Pesce - *Centro Cardiologico Monzino*; Angel Raya - *Institut d'Investigació Biomèdica de Bellvitge*; Ida Genta - *University of Pavia*

491: A Biomimetic Bilirubin-Albumin Nanoplatform Enables OATP-Mediated Liver Targeting

Cheong-Weon Cho, *Chungnam National University, Republic of Korea*
Young Ju Jo - *Chungnam National University*; Samuel Lee - *Chungnam National University*; Ji Hyun Bang - *Chungnam National University*; So Min Lim - *Chungnam National University*;
Sung-Ho Lee - *Chungnam National University*; Young-Guk Na - *Chungnam National University*

492: Dexamethasone palmitate delivered in solid lipid nanoparticles ameliorated its effects in acute skin inflammation

Ho-ik Choi, *College of pharmacy, Hanyang university, Republic of Korea*
Jeong-Su Ryu - *Hanyang university*; Ha-Yeon Noh - *Hanyang university*; Min-Ju Kim - *Hanyang university*; Se-Yun Kim - *Hanyang university*; Ho-Seung Han - *Hanyang university*; Alam Zeb - *Hanyang university*; Jin-Ki Kim - *Hanyang university*

493: Warburg Effect-Driven Photothermal Therapy of Tumors using Glycosylated β -C3N4 Carbon Nanodots

Roberta Cillari, *Fondazione Umberto Veronesi - University of Palermo, Italy*
Alice Sciortino - *University of Palermo*; Radian Popescu - *Karlsruhe Institute of Technology*; Riccardo Rubino - *University of Palermo*; Yolita M. Eggeler - *Karlsruhe Institute of Technology*;
Marco Cannas - *University of Palermo*; Fabrizio Messina - *University of Palermo*; Nicolò Mauro - *University of Palermo*;
Gennara Cavallaro - *University of Palermo*

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494: Folate-Targeted, Polydopamine-Coated Mesoporous Silica Nanoparticles for Everolimus Delivery

Viola Colaco, Manipal College of Pharmaceutical Sciences, India
Namdev Dhas - Manipal College of Pharmaceutical Sciences

495: pH-Responsive Polymersomes Prepared Using Polymerization-Induced Self-Assembly for Biotherapeutic Delivery

Helen Colley, PhD, University of Sheffield, United Kingdom
Klaudia Slowik - University of Sheffield; Helen Colley - University of Sheffield; Craig Murdoch - University of Sheffield; Paul Hatton - University of Sheffield; Steven Armes - University of Sheffield

496: CD44-targeted PLGA-based nanoparticles for the delivery of siRNA to cancer cells

Claudia Conte, University of Naples Federico II, Italy
Pasquale D'Anna - University of Naples Federico II; Virgilio Piccolo - University of Naples Federico II; Simona Laurino - IRCCS-CROB, Referral Cancer Center of Basilicata; Sabino Russi - IRCCS-CROB, Referral Cancer Center of Basilicata; Geppino Falco - Biogem scari, Istituto di Ricerche Genetiche 'Gaetano Salvatore', Avellino, Italy; Salvatore Emanuele Drago - University of Palermo; Gennara Cavallaro - University of Palermo; Cameron Alexander - University of Nottingham, UK; Fabiana Quaglia - University of Naples Federico II

497: Dual-loaded nanoemulsion as a promising strategy for Candidozyma auris systemic infections

Gabriela Corrêa Carvalho, Federal University of Mato Grosso Do Sul (UFMS), Brazil
Gabriel Marena - University of São Paulo; Alejandro López - Health Research Institute La Fe; Jose Manuel Pérez-Royo - Health Research Institute La Fe; Patricia Bernarbe - Health Research Institute La Fe; Maria Ángeles Tormo-Más - Health Research Institute La Fe; Taís Maria Bauab - São Paulo State University; Marlus Chorilli - São Paulo State University; Javier Pemán - Health Research Institute La Fe; Alba Ruiz-Gatián - Health Research Institute La Fe

498: Cathepsin B-sensitive drug delivery from redox responsive BSA nanoparticles

Alejandro Cortés, Credentials, Universidad Complutense de Madrid, Spain
María Vallet Regí - Universidad Complutense de Madrid; Miguel Gisbert-Garzarán - Universidad Complutense de Madrid

499: Polymer-level functionalization yields biologically active and traceable enzyme-powered nanobots

Ezequiel Coscueta, Universidade Católica Portuguesa, Portugal
Ana Sousa - Universidade Católica Portuguesa; Bruna Costa - i3S - Instituto de Investigação e Inovação em Saúde, University of Porto; Joana Gomes - i3S - Instituto de Investigação e Inovação em Saúde, University of Porto; Ana Magalhães - i3S - Instituto de Investigação e Inovação em Saúde, University of Porto; Celso Reis - i3S - Instituto de Investigação e Inovação em Saúde, University of Porto; Maria Pintado - Universidade Católica Portuguesa

500: Development of complementary liposomal drug delivery systems of DNase for immediate and sustained of CF

Aoife Cotter, University of Limerick, Ireland
Clarinda Costa - University of Limerick; Manuela Colla Carvalherio - Universidade de Lisboa; Ana Aguiar-Ricardo - Universidade NOVA de Lisboa; Paula Leandro - Universidade de Lisboa; Sandra Simões - Universidade de Lisboa; Luis Padrela - University of Limerick; Maria Luísa Corvo - Universidade de Lisboa

501: AuX2R: A Dual-Functional Gold Nanoparticle Modulating Radiation Response and IL-8 Signalling

Jonathan Coulter, PhD, Queen's University Belfast, United Kingdom
Niall Byrne - Queen's University Belfast; Sarah Chambers - Queen's University Belfast; Jie Feng - Queen's University Belfast; Lydia McQuoid - Queen's University Belfast; Suneil Jain - Queen's University Belfast

502: Innovative Synthetic Sugars for Stable, Low-viscosity High-Concentration Biologic Formulations

Joana Cristovao, Hovione, Portugal
Margarida Ferreira - Hovione; Eva Lourenço - Hovione; Luis Marques - Hovione; Pilar Portela - Hovione

503: Cationic Amphiphilic Hybrid System for siRNA-Based Combination Strategy in Triple-Negative Breast Cancer

Pasquale D'Anna, Department of Pharmacy, University of Federico II, Naples, Italy
Cameron Alexander - School of Pharmacy, University of Nottingham; Claudia Conte - Department of Pharmacy, University of Naples; Fabiana Quaglia - Department of Pharmacy, University of Naples

504: Surface modification of flame sprayed calcium phosphate nanoparticles for neuroblastoma treatment

Vendela Damberg, MSc, Stockholm University, Sweden
Niki Karouta - Scilifelab; David Juriga - Scilifelab; Georgios Sotiriou - Stockholm University

505: Engineering Peptide-Decorated Lipid Nanoparticles for Active Tumor-Directed RNA Delivery

Laura de Miguel, PhD, Certest Biotec S.L., Spain
Esther Broset - CerTest Biotec S.L.; Diego Casabona Agudo - CerTest Biotec S.L.; Diego De Miguel - Certest Biotec SL; Javier Gimenez-Warren - Certest Pharma; Juan Enrique Martinez Olivan - Certest Biotec S.L.; Elena Mata - CerTest Biotec S.L.; Esther Perez - CerTest Biotec S.L.; Andrei Mihai Stoian - Certest Biotec S.L.

506: Development of GE11-Functionalized Liposomes for Doxorubicin and Curcumin Delivery in Breast Cancer Treatment

Eneida de Paula, PhD, University of Campinas (Unicamp), Brazil
Juliana Oliveira - University of Campinas; Talita Mendonça - University of Campinas (Unicamp); Daniely Paspardelli - University of Campinas; Eneida de Paula - University of Campinas (Unicamp)

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507: Alginate–Pectin Nanocomposite Powders Loading with PLGA Nanoparticles for Wound Healing Applications

Chiara De Soricellis, PhD, *University of Salerno, Italy*
Giovanni Falcone – *University of Salerno*; Rosaria Margherita Rispoli – *University of Salerno*; Chiara Amante – *University of Salerno*; Paola Russo – *University of Salerno*; Rita Patrizia Aquino – *University of Salerno*; Stefania Marzocco – *University of Salerno*; Pasquale Del Gaudio – *University of Salerno*

508: Unveiling the Role of Lipid Composition on Stability and Fusion of Biomimetic Liposomes

Lucas De Sousa, UFG, *Brazil*
Tacio Hayasaki – *UFG*; Eliana Lima – *UFG*; Sebastião Mendanha – *UFG*

509: Self-Assembled Polymeric Micelles for Targeted Dual-Drug Delivery to Neuroendocrine Tumors

Damla Demirkol, MSc, *Bogazici University, Turkey*
Tugce Karatas – *RS Research Inc.*; Gulsah Nomak – *RS Research Inc.*; Amitav Sanyal – *Bogazici University*; Rana Sanyal – *Bogazici University*

510: Association Pathways in Apoferritin-Based Nanovaccines: Structural Effects of pH-Driven and Direct Assembly

Isabella demonari, *School of pharmaceutical sciences of ribeirão preto at university of sao paulo, Brazil*
Camila Machado França de Almeida – *school of pharmaceutical sciences of ribeirão preto at university of sao paulo*; Natalia Floriano Paiva – *school of pharmaceutical sciences of ribeirão preto at university of sao paulo*; Fabiana Testa Moura de Carvalho Vicentini – *school of pharmaceutical sciences of ribeirão preto at university of sao paulo*

511: Glycosylated Hybrid Lipid Polymer Nanoparticles for Inhalable Co-Delivery of Docetaxel and Nintedanib in NSCLC

Akanksha Dessai, *Manipal College of Pharmaceutical Sciences, India*
Usha Nayak – *Manipal College of Pharmaceutical Sciences*; Sanjay Garg – *Adelaide University*

512: Development of long-acting polymer–single domain antibody conjugates to inhibit neutrophil elastase in COPD

Fanny Detroz, *UCLouvain, Belgium*
Mireille Dumoulin – *ULiège*; Francisco Javier Morales Yáñez – *ULiège*; Rita Vanbever – *UCLouvain*; Jessica Vanderstraeten – *UCLouvain*

513: sHDL Remodeling: Impact of Lipid Composition, Acyl Chain Length, Charge, and Cholesterol

Sagar Dhakal, *University of Helsinki, Finland*
Artturi Koivuniemi – *University of Helsinki*; Tuomas Niemi-Aro – *University of Helsinki*

514: Self-assembled hyaluronic acid nanoparticles for targeted co-delivery of betulinic acid and paclitaxel in cancer

Sayali Dighe, *National Inst.Of Pharmaceutical Education & Research – SAS Nagar, India*
Sanyog Jain – *NIPER, Mohali*

515: Polymer-based nanogel tailored for in situ and parenteral administration

Cátia Domingues, *Faculty of Pharmacy of the University of Coimbra, Portugal*
Jarak Ivana – *FFUC*; Jorge Coelho – *FCTUC*; Carla Varela – *FCTUC*; Elisiário Silva – *FFUC*; Fernanda Roleira – *FFUC*; Marília Dourado – *FMUC*; Ana Figueiras – *FFUC*

516: Advances in Light Scattering Detection for the Characterization of Drug Delivery Systems

Snezana Dordevic, *Tosoh Bioscience GmbH, Germany*
Subin Damodaran – *Tosoh Bioscience GmbH*

517: Next-Generation Nanoparticle Carrier Enables Highly Efficient and Safe mRNA Delivery

Patrick Duffy, *Ashland, United States*
Hamza Chuirfa – *Ashland*; Kathryn Messina – *Ashland*; Michael Kogan – *Ashland*; Patrick Duffy – *Ashland*; Cory Mahnen – *Ashland*

518: Controlled siRNA Release from Chitosan–PEI Polyplexes: A Structure–Activity Study

Simon Dumolard, *EPFL, Switzerland*
Simone Spinozzi – *UNIL*; Dario Diviani – *UNIL*; Sandrine Gerber – *EPFL*

519: MECHANICALLY RESPONSIVE MICROAGGREGATES FOR SITE-SPECIFIC DRUG DELIVERY

Matilde Durán-Lobato, PhD, *Universidad de Sevilla, Spain*
Mazen M. El-Hammadi – *Universidad de Sevilla*; María Dolores Cayero-Otero – *Universidad de Sevilla*; Lucía Martín-Navarro – *Universidad de Sevilla*; Maripaz Jiménez-Guerrero – *Universidad de Sevilla*; Noelia Sola-Idígora – *Instituto de Biomedicina de Sevilla (IBiS), Sevilla, Spain*; David Fernández Rivas – *University of Twente, The Netherlands*; Elena Castro-Hernández – *Universidad de Sevilla*; Josefa Álvarez-Fuentes – *Universidad de Sevilla*; Remedios Otero-Candelera – *Respiratory Department, Virgen del Rocio University Hospital, Sevilla, Spain*; Lucía Martín-Banderas – *Universidad de Sevilla*

520: Development of Biocompatible Inks for 3D and 4D Printed Drug Delivery Systems

Yehonatan Edri, B.Sc. B.B.A, *The Hebrew University of Jerusalem, Israel*

521: Biorthogonal Surface Engineering of Biodegradable Polymer Nanogels for Vaccine Delivery

Katharina Eigen, M.Sc., *Julius–Maximilians–University, Germany*
Lutz Nuhn – *Julius–Maximilians University Würzburg*

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522: Antioxidant and anti-inflammatory stealth polymer, PGS outperforms PEG and enhances protein-conjugate stability

Farah EL MOHTADI, PhD, *Portsmouth Univesity, United Kingdom*
Richard D'Arcy - *Arizona state University*; Nicola Tirelli - *Italian Institute of Technology. iit*

523: Transdermal Dual-Therapy of Metformin and Trans-Resveratrol Nanococheleates with Synergistic Anticancer Effects

Mohamed Elmelegy, MSc, PhD, SRPharmS, *Faculty of pharmacy, Alexandria University, Egypt*

Mohamed El-Melegy - *Faculty of pharmacy, Alexandria University*; Radwa Mehanna - *Faculty of Medicine, Alexandria University*; Ahmed Gaballah - *Medical Research Institute, Alexandria University*; Amal El-Kamel - *Faculty of pharmacy, Alexandria University*

524: Delivery strategy and timing shape macrophage responses to glucocorticoid-loaded PLGA nanoparticles

Natalia Esteban-Pérez, *Instituto de Nanociencia y Materiales de Aragón (INMA), Spain*

Susel Del Sol-Fernández - *Instituto de Ciencias Físicas, Universidad Nacional Autónoma de México, Mexico*; Rafael Martín-Rapún - *Instituto de Nanociencia y Materiales de Aragón, Spain*; Jesús Martínez de la Fuente - *Instituto de Nanociencia y Materiales de Aragón, Spain*

525: In Vivo CAR-T Generation Using scFv-Decorated Lipid Nanoparticles Targeting T-Lymphocytes for mRNA Delivery

Roger Fàbrega Alsina, *Reig Jofre / IBEC, Spain*

Laura Molero Solís - *Reig Jofre*; Jessica Malavia Muñoz - *Reig Jofre*; Ferran Roig Roig - *Reig jofre*; Manpreet Kaur - *LEITAT*; Julieta Carabelli - *LEITAT*; Laura Padilla - *LEITAT*; Anna Lagunas - *IBEC*; Elisabet Rosell Vives - *Reig Jofre*; Josep Samitier - *IBEC*; Laia Montell Bonaventura - *Reig Jofre*

526: A New Bioinspired Mucin-Based Nanoplatform for Transmucosal Drug Delivery and Medical Device Functionalization

Evelina Fassina, *University of Turin, Italy*

Helena Villavicencio - *University of Turin*; Olga Valentina Garbero - *University of Turin*; Enrica Frasca - *University of Turin*; Cosmin Stefan Butnarusu - *University of Turin*; Lorenzo Sardelli - *University of Turin*; Narcisa Mandras - *University of Turin*; Giuliana Banche - *University of Turin*; Sonja Visentin - *University of Turin*

527: Folic acid-functionalized smart eicosapentaenoic acid liposomes for the delivery of quercetin against cancer

Andile Faya, *University of KwaZulu-Natal, South Africa*

Samukelisiwe Gabela - *University of Kwazulu-Natal*; Terisha Ghazi - *University of Kwazulu-Natal*; Nokukhanya Ndimande - *University of Kwazulu Natal*; Amanda Ngcamu - *University of Kwazulu-Natal*; Joshua Nwabuike - *University of the FreeState*; Mamello Sekhoacha - *University of the FreeState*

528: Distinct Endocytic Pathways Affect Transfection Efficiency of SORT Lipid Nanoparticles

Heba Fayyaz, *Groning Research Institute of Pharmacy, Netherlands*

Adam Fajriawan - *University of Groningen*; Anna Salvati - *University of Groningen*

529: Protection against ischaemic-reperfusion injury with graphene oxide nanomaterials for nitric oxide delivery.

Thomas Foster, *University of Oxford, United Kingdom*

Tanveer Tabish - *University of Oxford*

530: Lectin-functionalized liposomes for interaction and modulation of the intestinal mucoepithelial interface

Leticia Freitas, *UFG, Brazil*

Miriane Gomes - *UFG*; Tácio Hayasaki - *UFG*; Eliana Lima - *UFG*; Artur Christian Silva - *UFG*; Luís Antônio Silva - *UFG*

531: Development of a Stable Pickering Emulsion for Oral Delivery of Insulin

Grahmm Funk, M.S., *University of Kansas, United States*

Hyunjoon Kim - *University of Kansas*; Jin Xie - *University of Kansas*

532: Synthetic Lipid Particle Models Elucidate Lipid-Lipid Interactions Underlying LNP-Membrane Fusion

Kozue Furuya, *Toshiba Corporation, Japan*

Shu Okumura - *Toshiba Corporation*; Nao Kobayashi - *Toshiba Corporation*; Kohei Miyata - *Toshiba Corporation*; Jin Machida - *Toshiba Corporation*; Masaaki Takada - *Toshiba Corporation*; Mitsuko Sugano - *Toshiba Corporation*

533: Aptamer-LNP Conjugation Optimization for Targeted Drug Delivery: A Comparative Study

Hiba Gafar, *King's College London, United Kingdom*

Khuloud T. Al-Jamal - *King's College London, UK and The University of Hong Kong*; Mauro Giacca - *King's College London, UK and The University of Hong Kong*; Osama Hassuneh - *The University of Hong Kong, Hong Kong*; Alexandra R. Paul - *King's College London, UK and The University of Hong Kong*; Adam A. Walters - *King's College London*

534: Microfluidics - Preparation of polymer nanoparticles with an new oscillating device (FDmIX)

El'za Galieva, *Martin-Luther-University Halle-Wittenberg, Germany*

Karsten Mäder - *Martin-Luther-University Halle-Wittenberg*

535: Adhesive Hydrogel Loaded with mRNA Lipid Nanoparticles for the Treatment of Osteoarthritis

Jose Carlos Garcia Perdiguero, *Complutense university of Madrid, Spain*

Natividad Gómez Cerezo - *Complutense University of Madrid*; Miguel Manzano García - *Complutense University of Madrid*; María Vallet-Regí - *Complutense University of Madrid*

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536: Metabolic Glycoengineering–Driven ‘Clickable’

Nanoemulsions for Biomarker–Agnostic Tumour Targeting

Jenifer García–Fernández, *Health Research Institute of Santiago de Compostela (IDIS), Spain*

Maria Iglesias Baleato – *Health Research Institute of Santiago de Compostela (IDIS)*; Iria Fontán Luis – *Health Research Institute of Santiago de Compostela (IDIS)*; María de la Fuente Freire – *Health Research Institute of Santiago de Compostela (IDIS)*

537: Chitosan–Coated Liposomes Reduce Tumor Growth in Pancreatic Adenocarcinoma Model

Guilherme Gelfuso, *Universidade de Brasília (UnB), Brazil*

Mateus Silva – *Universidade de Brasília*; Davi Ferreira – *Universidade de Brasília*; Tais Gratieri – *Universidade de Brasília*; Marcílio Cunha–Filho – *Universidade de Brasília*; Moacyr Rêgo – *Universidade Federal de Pernambuco*; Miguel Merlos Rodrigo – *Mendel Univesity*

538: Solid Lipid Nanoparticles for Blood–Brain Barrier Targeted Delivery of Repurposed Drugs in Glioblastoma models

Júlia German–Cortés, *Vall d’Hebron Research Institute (VHIR), Barcelona, Spain*

Mireia Vilar–Hernández – *Lipocoat & University of Twente, Enchede, Netherlands*; Magalí Sureda – *Vall d’Hebron Research Institute (VHIR), Barcelona, Spain*; Vincenzo Montanarella – *Vall d’Hebron Research Institute (VHIR), Barcelona, Spain*; Giacomoluciano Vitelli – *Vall d’Hebron Research Institute (VHIR), Barcelona, Spain*; Narine Fischer–Albiol – *Vall d’Hebron Research Institute (VHIR), Barcelona, Spain*; Andrea Dorado – *Vall d’Hebron Research Institute (VHIR), Barcelona, Spain*; Sandra Mancilla – *Vall d’Hebron Research Institute (VHIR), Barcelona, Spain*; Belén García – *Vall d’Hebron Research Institute (VHIR), Barcelona, Spain*; Zamira Vanessa Díaz–Riascos – *Vall d’Hebron Research Institute (VHIR), Barcelona, Spain*; Roser Ferrer–Costa – *Vall d’Hebron Research Institute (VHIR), Barcelona, Spain*; Simo Schwartz Jr – *Vall d’Hebron Research Institute (VHIR), Barcelona, Spain*; Fernanda Andrade – *Universitat de Barcelona (UB), Barcelona, Spain*; Diana Rafael – *Vall d’Hebron Research Institute (VHIR), Barcelona, Spain*

539: Silk Sericin Nanohydrogel–Encapsulated Biogenic MgO Nanoparticles: Characterization and Anticancer Activity

Maria Rosa Gigliobianco, *University of G. d’Annunzio, Italy*

Kunle Okaiyeto – *University G. d’Annunzio od Chieti and Pescara*; Bartosz Klebowski – *Institute of Nuclear Physics, Polish Academy of Sciences, 31–342 Krakow, Poland*; Camilla Elena Di Bella – *University of G. d’Annunzio of Chieti and Pescara*; Angela Maria Dabbicco – *University G. d’Annunzio Chieti–Pescara*; Joice Maria Joseph – *University G. d’Annunzio of Cheiti–Pescara*; Susi Zara – *University of G. d’Annunzio of Cheiti and Pescara*; Piera Di Martino – *University of G. d’Annunzio Chieti–Pescara*

540: Self–assembling hyaluronic acid–lipid conjugates as platforms for targeted drug delivery

Cristiane Giuberti, PhD, *Federal University of Espírito Santo, Brazil*

Ilaria Andreana – *University of Torino*; Stefano Boetti – *University of Torino*; Maria Emilia Cano – *Université de Picardie Jules Verne*; Chiara Riganti – *University of Torino*; Barbara Stella – *University of Torino*; Silvia Arpicco – *University of Torino*; José Kovensky – *Université de Picardie Jules Verne*

541: When carriers are not inert: exploring formulation–dependent immune responses to LNPs in THP–1 cells

Mafalda Gonçalves, *CiQUS – USC, Spain*

Ester Polo – *CiQUS – USC*; Beatriz Pelaz – *CiQUS – USC*; Pablo del Pino – *CiQUS – USC*

542: Nanocarriers for Cardiac RNA Delivery

María González Portela, *Credentials, University of Santiago de Compostela and University of Groningen, Spain*

Laura Piñeiro Alonso – *University of Santiago de Compostela – CiMUS*; María José Alonso – *University of Santiago de Compostela – CiMUS*; Hélder A. Santos – *University of Groningen – UMG*

543: Design of Lectin–functionalized Lipid Nanocarriers as therapeutics for pulmonary biofilm associated infections

Ana Gonzalez–Paredes, *Institute of Medicinal Chemistry–Spanish National Research Council, Spain*

Anani Afanou – *National Institute of Occupational Health (Norway)*; Francesco Barbero – *Department of Chemistry, University of Turin (Italy)*; Sandra Bonillo–Marcos – *Institute of Medicinal Chemistry–Spanish National Research Council*; Ivana Fenoglio – *Department of Chemistry, University of Turin (Italy)*; Øyvind Haugen – *National Institute of Occupational Health (Norway)*; Shan Narui – *National Institute of Occupational Health (Norway)*; Alaa Eddin Tarhouchi El Morabit – *Institute of Medicinal Chemistry–Spanish National Research Council*; Fikirte Zegeye – *National Institute of Occupational Health (Norway)*

544: XV–122 Provides Ultra–long acting Dolutegravir Exposure in Rhesus Macaques

Bhoomika Suresh Gowda, MS, *University of Nebraska Medical Center, United States*

Arpan Acharya – *University of Nebraska Medical Center*; Debapriya Sutar – *University of Nebraska Medical Center*; Brady Sillman – *University of Nebraska Medical Center*; Samiksha Raut – *University of Nebraska Medical Center*; Nam Thai Hoang Le – *University of Nebraska Medical Center*; Brandon Hanson – *University of Nebraska Medical Center*; Brian Kearney – *Exavir Therapeutics Inc.*; Alborz Yazdi – *Exavir Therapeutics Inc.*; Siddappa Byaredy – *University of Nebraska Medical Center*; Howard Gendelman – *University of Nebraska Medical Center*; Benson Edagwa – *University of Nebraska Medical Center*

545: Nanostructural Insights into Cubosome–Mediated Delivery of Neuroprotective Polyphenols

Lucrezia Guarneri, MSc, *Monash University, Australia*

Andrew Clulow – *The Australian Synchrotron*; Anton Le Brun – *ANSTO*; Charlotte Conn – *RMIT University*; Leonie van’t Hag – *Monash university*

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546: Senotherapeutic Nanoformulations for the Treatment of Vascular Ageing

Carolina Guimarães, MSc, *Center for Neuroscience and Cell Biology (CNC-UC), Portugal*

Rita Sá Ferreira - CNC-UC; Marta Barão - CNC-UC; Joana Padrão - CNC-UC; Renata Castro - CNC-UC; Johan Panek - Newcastle University; Edward Fielder - Newcastle University; Javier Huete-Acevedo - University of Valencia; Viktor Korolchuk - Newcastle University; Consuelo Borrás - University of Valencia; Patricia Pitrez - CNC-UC; Lino Ferreira - CNC-UC

547: Ionizable small molecule drug-incorporated lipid nanoparticles for treatment of breast cancer

Sangwoo Han, Ph.D., *University of Toronto, Canada*
David Cescon - *University Health Network*; Eric Donders - *University of Toronto*; Molly Shoichet - *University of Toronto*; Kai Slaughter - *University of Toronto*

548: Analytical methods to evaluate antibody conjugation on polymeric nanoparticles

Rama Hassoun, *UCL, United Kingdom*
Maryam Parhizkar - *UCL*; Daniel Stuckey - *UCL*; David Shorthouse - *UCL*

549: Aptamer-Targeted Lipid Nanoparticles for Immunotherapeutics delivery for glioblastoma

Osama Hassuneh, *Hong Kong University, Hong Kong*
Khuloud Al-Jamal - *Hong Kong University*; Alexandra Paul - *Hong Kong University*

550: Glioblastoma Treatment: A Comprehensive DoE Optimization of Cerepep-modified Nanodisc loaded with Docetaxel

Yu He, *University Medical Center Groningen University of Groningen, Netherlands*
Kristina Põšnograjeva - *University of Tartu*; Giuseppe Portale - *University of Groningen*; Kaarel Kurm - *University of Tartu*; Tambet Teesalu - *University of Tartu*; Mohammad-Ali Shahbazi - *University Medical Center Groningen University of Groningen*; Hélder Santos - *University Medical Center Groningen University of Groningen*

551: Enhancement of Lymphocyte Infiltration in Solid Tumours to Improve Immunotherapeutic Efficacy

Yuchen He, *University of Auckland, New Zealand*
Guo-Liang Lu - *University of Auckland*; Jingyuan Wen - *University of Auckland*; Naibo Yin - *University of Auckland*; Zhiwen Zhang - *Fudan University*

552: Dual-Function Sutures: Chlorhexidine and Dexamethasone delivery for Infection and Inflammation Control

Brisa Guadalupe Hernández-Ramírez, *Universidad Autónoma de Baja California, Mexico*
Héctor Magaña - *Autonomous University of Baja California*; José Manuel Cornejo-Bravo - *Autonomous University of Baja California*; Lilia Angélica Hurtado-Ayala - *Autonomous University of Baja California*; Kenia Palomino-Vizcaino - *Autonomous University of Baja California*; Giovanni Palomino-Vizcaino - *Autonomous University of Baja California*; Jonathan

V. Lopez-Baena - *Autonomous University of Baja California*

553: Induction of antibodies against membrane proteins by spleen immunization with antigen-loading liposomes

Takanori Higashi, *Department of Pharmacokinetics and Biopharmaceutics, Institute of Biomedical Sciences, Tokushima University, Japan*
Hidenori Ando - *Department of Pharmacokinetics and Biopharmaceutics, Institute of Biomedical Sciences, Tokushima University*; Shunto Yamamoto - *Department of Pharmacokinetics and Biopharmaceutics, Institute of Biomedical Sciences, Tokushima University*; Haruki Tanaka - *Department of Pharmacokinetics and Biopharmaceutics, Institute of Biomedical Sciences, Tokushima University*; Haruka Takata - *Department of Pharmacokinetics and Biopharmaceutics, Institute of Biomedical Sciences, Tokushima University*; Shingo Kobayashi - *Department of Pharmacokinetics and Biopharmaceutics, Institute of Biomedical Sciences, Tokushima University*; Tatsuhiro Ishida - *Department of Pharmacokinetics and Biopharmaceutics, Institute of Biomedical Sciences, Tokushima University*

554: Lyophilization of LNPs in 96-well plate - A high-throughput approach for excipient screening of freeze-dried LNPs

Jenny Hong Hoang, *University of Heidelberg; Merck Life Science KGaA, Germany*
Eleni Samaridou - *Merck Life Science KGaA*; Johanna Simon - *Merck Life Science KGaA*

555: Ethyl oleate-based in situ forming gel for long-term peptide delivery via lamellar phase transition

Lu Huang, *Sichuan University, China (People's Republic)*
Tao Gong - *West China School of Pharmacy, Sichuan University*

556: Intranuclear delivery of proteins in fibroblasts through the Platelet-Derived Growth Factor Receptor

Zhiyi Huo, *University of Groningen, Netherlands*
Marry Duin - *University of Groningen*; Klaas Poelstra - *University of Groningen*

557: Mesoporous Silica Nanostars for Rifampicin Delivery: Toward Damage-State-Selective Activation

Abbas Ibarhim, *University of Surrey, United Kingdom*
Alessandra Pinna - *University of Surrey*

558: Protein Crystallization for Drug Delivery Applications

Elissar Ibraheem, B.Sc., *Technion Israel Institute of Technology, Israel*
Eid Nassar-Marjia - *Technion Israel Institute of Technology*; Simran Jindal - *Technion Israel Institute of Technology*; Shady Farah - *Technion Israel Institute of Technology*

559: Lipid-Entrapped GLP-1RA Ionic Complexes in Mucoadhesive Bilayer Films: Ex-Vivo Porcine Buccal Mucosal Permeation

Muhammad Ijaz, *University College Dublin, Ireland*

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Sandeep Karki - University College Dublin; David Brayden - University College Dublin

560: Drug conjugates and delivery systems targeting carbonic anhydrase IX for treatment of hypoxic tumors

Marc Ilies, PhD, Temple University School of Pharmacy, United States

Ahmed Shabana - Temple University School of Pharmacy; Md. Abu Sufian - Temple University School of Pharmacy

561: Repurposed Therapeutics in Synergistic Liposomal Formulations for Pancreatic Ductal Adenocarcinoma Treatment

Susan Immanuel, Ph.D., South Dakota State University, United States

Serala Karabo - University of Cape Town; Sharon Prince - University of Cape Town; Joshua Reineke - South Dakota State University

562: Amphotericin B-Loaded Extracellular Vesicles Derived from Infected Macrophages for Antileishmanial Therapy

Zeynep Islek Koklu, Yeditepe University, Turkey
Batuhan Bozkurt - Yeditepe University (at the time of study);
Oguz Kirbas - Yeditepe University; Mehmet Ucisik - Yeditepe University (at the time of study); Fikretin Sahin - Yeditepe University

563: Tailoring Versatile Biopolymer-Lipid Hybrid Nanocarriers toward Multifunctional Cancer Therapeutics

Banu Iyisan, PhD, Bogazici University, Turkey
Öznur Safgöl - Bogazici University; Damla Kelle - Bogazici University

564: Enhanced mRNA Transfection via modification of Optimised linker-RGD peptide

Hongning Sun, MSc, Imperial College London, United Kingdom

565: Co-delivery of SN38 and curcumin by Pluronic micelles for synergistic therapy of colorectal cancer

Ivana Jarak, PhD, University of Coimbra, Portugal
Sofia Dias - i3S; Ana Figueiras - University of Coimbra; Bruno Sarmiento - i3S; Natália Teixeira - i3S

566: In Situ Forming Hydrogels for Post Resection Drug Delivery: Understanding Factors Governing Sustained Release

Aimée Jeluk, University of Nottingham, United Kingdom
Cara Moloney - University of Nottingham; Maria Marlow - University of Nottingham; Snow Stolnik - University of Nottingham; Ruman Rahman - University of Nottingham; Cameron Alexander - University of Nottingham

567: Paclitaxel Lipid Nanoparticles from Paclitaxel Prodrug Conjugates for the Treatment of Breast Cancer

Liang Jia, Erasmus MC, Netherlands
Andrea Sacchetti - Erasmus MC; Christoph Stingl - Erasmus MC; Tarun Ojha - Erasmus MC; Yu Cai - Erasmus MC; Timo ten

Hagen - Erasmus MC; Mohamadreza Amin - Erasmus MC

568: Translocation of liposomes under angiogenic conditions mimicking the EPR effect in paediatric cancer

Marie-Christine Jones, BPharm, PhD, University of Birmingham, United Kingdom
Emma Morris - University of Birmingham

569: Stimuli-responsive antimicrobial electrospun wound dressings

Krisztina Juriga-Tóth, Uppsala University, Sweden
Michael Malkoch - Royal Institute of Technology (KTH); Reshma Ramachandran - Stockholm University; Georgios Sotiriou - Stockholm University; Alexandra Teleki - Uppsala University

570: NH₂-terminated PEG modified lipid nanoparticles (LNP) deliver siL-23 to fibrotic kidney

Yuka Kano, Credentials, Department of Pharmacokinetics and Biopharmaceutics, Institute of Biomedical Sciences, Tokushima University, Japan
Haruka Takata - Tokushima University; Hitoshi Matsumoto - Tokushima University; Ayano Aihara - Tokushima University; Shingo Kobayashi - Tokushima University; Hidenori Ando - Tokushima University; Tatsuhiro Ishida - Tokushima University

571: Boron cluster assembled nanosystems as boron agents for BNCT

Riku Kawasaki, Ph. D., Hiroshima University, Japan
Takeshi Nagasaki - Osaka Metropolitan University; Yu Sanada - Kyoto University; Minoru Suzuki - Kyoto University; Keita Yamana - Hiroshima University; Atsushi Ikeda - Hiroshima University

572: Expanding the range and capabilities of ROS-sensitive lipid nanoparticle formulations for cancer therapy

Roosa Kekki, M.Sc, University of Helsinki, Finland
Ellen Jurland - University of Gothenburg; Olga Lem - Tampere University; Timo Laaksonen - University of Helsinki; Nikita Durandin - Tampere University

573: Resveratrol-Loaded Hyperfine Nanocapsules: Enhanced Skin Penetration and Efficacy for Advanced Cosmetics

Sangwoo Kim, M.D, Kolmar Korea, Republic of Korea
Hyunkyung Kim - HK KOLMAR; Jungeun Lee - HK KOLMAR; Hyungjin Bae - HK KOLMAR; Jinmo Kim - HK KOLMAR

574: Screening of Inhalable Nebulization Formulations and Elucidation of Aerosol Stabilization Mechanisms

Hanul Kim, Chungbuk National University, Republic of Korea
Jinhyuk Jeong - Chungbuk National University, Republic of Korea; Jihyun Kang - Jeonbuk National University, Republic of Korea; Dongwook Kim - College of pharmacy, Wonkwang University, Republic of Korea; Chunwoong Park - Chungbuk National University, Republic of Korea

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575: Ginseng-Derived Nanovesicles Suppress Liver Fibrosis via TIMP2 Pathway Modulation and Gut Microbiota balance.

Dong-ha Kim, PhD, *Gyeongbuk National University, Republic of Korea*

Young-Eun Cho - *Gyeongbuk National University*; Do-Kyun Kim - *Kora Zoonosis Research Institute*; Jae-Hee Kwon - *Gyeongbuk National University*; Bum-Joon Koo - *Gyeongbuk National University*

576: Sargassum fusiforme-Derived Exosome-Like NVs Enhance Osteogenesis, Suppress Osteoclastogenesis in OVX Mice

Bum-Joon Koo, BS, *Gyeongbuk National University, Republic of Korea*

Jae-Hee Kwon - *Gyeongbuk National University*; Dong-ha Kim - *Gyeongbuk National University*; Young-Eun Cho - *Gyeongbuk National University*; Dokyun Kim - *Jeonbuk National University*

577: Engineering Long-Acting Injectable In situ forming implant for Effective Treatment of Depression

HariPriya Koppiseti, *Adelaide University, Australia*

Souha Youssef - *Adelaide University*; Weranga Rajapaksha Gedara - *Adelaide University*; Deepa Nakmode - *Adelaide University*; Yumnei Song - *Adelaide University*; Sanjay Garg - *Adelaide University*

578: Acid-degradable Dextran as a Carrier for Melanoma Gene Therapy

Joseph Kost, PhD, *Ben Gurion University, Israel*

Riki Goldbart - *Ben-Gurion University of the Negev*; Tamar Traitel - *Ben-Gurion University of the Negev*; Doron Pappo - *Ben-Gurion University of the Negev*; Moshe Elkabets - *Ben-Gurion University of the Negev*; Joseph Kost - *Ben-Gurion University of the Negev*

579: Improved Development of LNP Formulations for Organ Targeting using Chromatographic Tools

Tristan Kovačić, *Sartorius BIA Separations, Slovenia*

580: High-Throughput SEC-MALS Enables 8 Minute Determination of AAV Fill State and Titer

Andrea Krumm, *Tosoh Bioscience GmbH, Germany*

Tianyu Li - *Tosoh Bioscience LLC*; Ryuichi Sato - *Tosoh Bioscience LLC*; Caroline Costello - *Tosoh Bioscience LLC*; Jukka Kervinen - *Tosoh Bioscience LLC*

581: Osteogenic Effects of Human Breast Milk-Derived Extracellular Vesicles Mediated by BMP2/MAPK Signaling

Jaehee Kwon, MSc, *Gyeongbuk National University, Republic of Korea*

Dong-ha Kim - *Gyeongbuk National University*; Bum-Joon Koo - *Gyeongbuk National University*; Do-Kyun Kim - *Jeonbuk National University*; Young-Eun Cho - *Gyeongbuk National University*

582: Harnessing a Synthetic TLR4 Agonist for Immune-Active LNP Vaccines

Theodoros Kyriakou, *University of Strathclyde, United Kingdom*
Donald Kelemen - *ABITEC Corporation*; Yvonne Perrie -

University of Strathclyde

583: Co-administration of lipid nanoparticles and cationic amphiphilic drugs to improve RNA delivery for cancer therapy

Eileen Lambrechts, *Ghent University, Belgium*

Jonas Steenbrugge - *Ghent University*; Evelyne Meyer - *Ghent University*; Aliona Debisschop - *Ghent University*; Kristel Demeyere - *Ghent University*; Lars Koeken - *Ghent University*; Ine Lentacker - *Ghent University*; Koen Raemdonck - *Ghent University*

584: Systematic design of mesoporous silica nanoparticles to overcome the mucus barrier for targeted oral therapy of IBD

Hanna Lavén, *Uppsala University, Sweden*

Rebecca Fransson - *Astra Zeneca, Sweden*; Alexandra Teleki - *Uppsala University, Sweden*

585: Investigating CNS delivery of ASOs formulated on DNA-based virus-like particles

Duy An Le, *Massachusetts Institute of Technology, United States*

Sarah Al-Abdullatif - *Massachusetts Institute of Technology*; Mark Bathe - *Massachusetts Institute of Technology*; Kha Uyen Dam - *UMass Chan Medical School*; Grant Knappe - *Massachusetts Institute of Technology*; Rachael Sirianni - *UMass Chan Medical School*

586: Bile acid-peptide conjugates as additives in lipid nanoparticles for enhanced small interfering RNA delivery

Jun Hyuk Lee, BS, *Konkuk University, Republic of Korea*

Yeonho Bae - *Konkuk University*; Hyejung Mok - *Konkuk University*

587: TME-responsive detachable PEG masking for immune-selective safety and restored antitumor efficacy

Chaemin Lee, B.S., *Sungkyunkwan University, Republic of Korea*

Jae Hyung Park - *Sungkyunkwan University*; Seok Ho Song - *Sungkyunkwan University*; Torsha Ghosh - *Sungkyunkwan University*

588: Effects of D-Mannitol and Leucine on Viability and Aerodynamic Performance of Spray-Dried Lactobacillus

Min A Lee, *Chungbuk National University, Republic of Korea*

Jin-ju Ha - *Chungbuk National University*; I-Hyeon Seo - *Chungbuk National University*; Dong-Wook Kim - *Wonkwang University*; Ji-Hyun Kang - *Jeonbuk National University*; Chun-Woong Park - *Chungbuk National University*

589: Echogenic polymer-lipid hybrid nanoparticles for adipose tissue reduction

Kuen Yong Lee, *Hanyang University, Republic of Korea*

In Young Lee - *Hanyang University*; Eun Ju Jeong - *Supernova Bio*

590: Targeted Delivery of Apoptotic Priming Agents to PDAC to Overcome TME Nutrient-Driven Chemoresistance

Elaine Lee, BS, *University of Chicago Pritzker School of Molecular Engineering, United States*

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591: TPGS Micelle/Hydrogel Combination for Peritoneal Metastatic and Drug-Resistant Ovarian Cancer

YESEUNG LEE, *Chungbuk National University, Republic of Korea*
Jae Min LEE - *Chungbuk national university*

592: Daptomycin-Loaded Lipid Nanoparticles with Intrinsic Antimicrobial Activity against *S. aureus*

Nicolas LEVRIER, *ICMAB-CSIC, Spain*
Marc Martínez-Miguel - *ICMAB-CSIC; Marta Alcaina Hernando - Nanomol Technologies S.L.; Anna Arís - Institut de Recerca I Tecnologia Agroalimentàries (IRTA); Elena Garcia-Fruitós - Institut de Recerca I Tecnologia Agroalimentàries (IRTA); Alba Córdoba - Nanomol Technologies S.L.; Imma Ratera - ICMAB-CSIC*

593: Shaping extracellular vesicle fate through functional protein corona formation for liver fibrosis treatment

Revadee Liam-Or, PhD, *The University of Hong Kong, Hong Kong*
Calvin Chun Long Cheung - *The University of Hong Kong;*
Debajyoti Chowdhury - *The University of Hong Kong;* Khuloud Al-Jamal - *The University of Hong Kong*

595: Designing Lipid Nanoparticles for RNA therapeutics

Suiyang Liao, *University of British Columbia, Canada*
Kevin Fox - *UBC;* Alex Birkenshaw - *UBC;* Abishek Wadhwa - *UBC;*
Shuangyu Wang - *UBC;* Anna Blakney - *UBC;* Pieter Cullis - *UBC*

596: Hydrogen-Induced Mucus Barrier Disruption Augments Inhaled RNA Therapeutics to Reverse Pulmonary Fibrosis

Chang Liu, *Shenyang Pharmaceutical University, China (People's Republic)*

597: DESIGN OF EXPERIMENTS OPTIMIZATION IN THE FORMULATION OF CORTICOSTEROID NANOCRYSTALS FOR OPHTHALMIC DRUG DELIVERY

Pedro Londono, *Queen's University Belfast, United Kingdom*
Co-Authors: All names listed

598: Toward Precision Protein Degradation: Targeted Delivery of Molecular Glues in Multiple Myeloma

Pedro Lopez Navarro, *Institut Strauss, France*
Charline Keller - *Institut Pluridisciplinaire Hubert Curien (UMR 7178), CNRS, Université de Strasbourg;* Mainak Banerjee - *Institut Strauss;* Christine Carapito - *Institut Pluridisciplinaire Hubert Curien (UMR 7178), CNRS Université de Strasbourg;* Alexandre Detappe - *Institut Strauss*

599: Nano-in-micro inhalable spray-dried formulations co-delivering repurposed drugs for lung cancer treatment

Rute Lourenço, *Faculty of Pharmacy of University of Coimbra, Portugal*
Francesca Buttini - *Università degli Studi di Parma, Parma, Italy;*
Margherita Contigliani - *Faculty of Pharmacy from University of Coimbra;* Mendes Maria - *Faculty of Pharmacy from University of Coimbra;* Carla Vitorino - *Faculty of Pharmacy from University of Coimbra*

600: Characterizing Exparel® through an Innovative Dissolution Testing Method

Jeslyn Low, *National University of Singapore, Singapore*
Matthias Wacker - *KU Leuven;* Wei Wu - *National University of Singapore;* Carin Siow - *Roquette Asia Pacific Pte Ltd;* Bing Xun Tan - *Roquette Asia Pacific Pte Ltd*

601: Chitosan-Functionalized Lignin Nanoparticles as a Bioactive Microneedle Platform

Mengxue Lu, *University of Helsinki, Finland*
Patrícia Figueiredo - *University of Helsinki;* Kirsi Mikkonen - *University of Helsinki;* Leena Peltonen - *University of Helsinki*

602: FGFR3-targeted bladder cancer therapy using biocompatible nanobots

Inés Macías Tarrío, *IBEC, Spain*
Inés Macías Tarrío - *IBEC;* Nuria Sabando - *Universitat Autònoma de Barcelona;* Acsah Konuparamban - *CiCBiomaGUNE;* Kristin Fichna - *IBEC;* carles prado morales - *IBEC;* Tanja Ducic - *ALBA Synchrotron;* Valerio Di Carlo - *IBEC;* Jordi Llop - *Universitat Autònoma de Barcelona;* Esther Julian - *Universitat Autònoma de Barcelona;* Samuel Sánchez - *IBEC*

603: Intranasal Cannabidiol Microemulsion: Design and Characterization for Brain Delivery

Rubiana Mainardes, *Midwestern State University - UNICENTRO, Brazil*
Samila Peczek - *Midwest State University - Brazil;* Ana Daniela Alves - *Faculdade de Farmácia da Universidade do Porto;*
Paulo da Costa - *Universidade do Porto;* Maria dos Anjos Rodrigues - *Faculdade de Farmácia da Univesidade do Porto*

604: Optimization of an NLC-loaded hydrogel for fenretinide and YARA local codelivery

Isabella Malagó, *Universidade de São Paulo, Brazil*
Vanessa Dartora - *Georgia Institute of Technology;* Luciana Lopes - *Universidade de São Paulo;* Alyssa Panitch - *Georgia Institute of Technology*

605: From Bench Notes to Shared Knowledge: A Curated Database for Nanoparticle Design Scientific Community

Raphael Marcelli, *Cell Biology and Immunology / Wageningen University & Research, Netherlands*
Mangala Srinivas - *Wageningen University & Research*

606: Nanotherapy to control transmission and systemic infection caused by *Candidozyma auris*

Gabriel Marena, *Institute of Biomedical Sciences, ICB II, University of São Paulo, Brazil*
Danilo Henrique Ramos - *Institute of Biomedical Sciences, ICB II, University of São Paulo - USP;* Martha Helena Chaves Magalhães - *Institute of Biomedical Sciences, ICB II, University of São Paulo - USP;* Carlos Pelleschi Taborda - *Institute of Biomedical Sciences, ICB II, University of São Paulo - USP*

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607: Effect of Nanogel Size and Stiffness on Red Blood Cell Interactions and Hemocompatibility

Ginevra Mariani, *University Medical Center Groningen (UMCG), Netherlands*

Laís Ribovski - *University Medical Center Groningen (UMCG); Inge Zuhorn - University Medical Center Groningen (UMCG)*

608: Nanostructured lipid carriers encapsulating drug repurposed drugs for glioblastoma treatment

Bárbara Marques, *University of Coimbra, Portugal*

Maria Mendes - *University of Coimbra; Alberto Canela Pais - University of Coimbra; Carla Vitorino - University of Coimbra*

609: NANOCLAY/CHITOSAN/COLLAGEN NANOCOMPOSITES FOR CHRONIC WOUNDS: CHARACTERIZATION AND IN VITRO CELL EVALUATION

Tomás Martínez Rodríguez, *University of Granada, Spain*

Daiana Ianev - *University of Pavia; Caterina Valentino - University of Pavia; Barbara Vignani - University of Pavia; Pablo José Hernández Benavides - University of Granada; Silvia Rossi - University of Pavia; Carola Aguzzi - University of Granada*

610: Turning the body into a biofactory: in situ generation of immunostimulatory virus-like nanoparticles

Raquel Martinez-Campelo, *University of Santiago de Compostela, Spain*

Ranieri Bizzarri - *Scuola Normale Superiore and Istituto Nanoscienze-CNR; Istituto Italiano di Tecnologia; Department of Surgical, Medical and Molecular Pathology, and Critical Care Medicine, University of Pisa, Italy; Chiara Migone - Department of Pharmacy, University of Pisa, Italy; Anna Maria Piras - Department of Pharmacy, University of Pisa, Italy; Marcos Garcia-Fuentes - Center for Research in Molecular Medicine and Chronic Diseases and Health Research Institute of Santiago de Compostela, University of Santiago de Compostela, Spain.*

611: A Comparative Study of Nanostructured Photolyase Delivery Systems for Counteracting UV-Induced DNA Photodamage

Carla Martins, *University of São Paulo, Brazil*

Chiara Bufalini - *Department of Civil, Chemical and Environmental Engineering, University of Genoa, Genoa 16145, Italy; Roberta Campardelli - Department of Civil, Chemical and Environmental Engineering, University of Genoa, Genoa 16145, Italy; Carlota de Oliveira Rangel-Yagui - Department of Biochemical and Pharmaceutical Technology, School of Pharmaceutical Sciences, University of São Paulo, São Paulo 05508-000, Brazil; Pier Francesco Ferrari - Department of Civil, Chemical and Environmental Engineering, University of Genoa, Genoa 16145, Italy; Paul Frederick Long - Institute of Pharmaceutical Science, King's College London, London SE19NQ, UK; Felipe Gonçalves - Department of Biochemical and Pharmaceutical Technology, School of Pharmaceutical Sciences, University of São Paulo, São Paulo 05508-000, Brazil; Patrícia Perego - Department of Civil, Chemical and Environmental Engineering, University of Genoa, Genoa 16145, Italy; Karin Torres-Obreque - Department of Biochemical and Pharmaceutical Technology, School of Pharmaceutical Sciences, University of São Paulo, São Paulo 05508-000, Brazil*

612: FLIM Guided Nanomedicine: PLGA Nanoparticles for Controlled Baricitinib Delivery

Pasquale Mastella, *Scuola Normale Superiore di Pisa, Italy*
Aldo Moscardini - *Scuola Normale Superiore; Valentina De Lorenzi - Scuola Normale Superiore; Francesco Cardarelli - Scuola Normale Superiore*

613: Optimized Nanostructured Lipid Carriers Improve the Oral Delivery of Cannabidiol

Ananda Matarazzo, *University of Campinas, Brazil*

Gabriela GERÔNIMO - *University of Campinas; Pedro GONÇALVES - Croda Pharma; ENEIDA De PAULA - University of Campinas; Marcia BREITKREITZ - University of Campinas*

614: Mechanistic Insights into Liposomal Disassembly: Effects of Serum Proteins, Lipid Exchange, and Drug Release

Phyo Darli Maw, *National University of Singapore, Singapore*
Camillo Benetti - *National University of Singapore; Matthias Gerhard Wacker - Katholieke Universiteit Leuven, Belgium*

615: Polycaprolactone nanoparticles for encapsulation black pepper extract

Priscila Mazzola, *UNICAMP, Brazil*

Janaina Ataide - *School of Pharmaceutical Sciences, USP/RP; Julia Coco - Myralis; Erica dos Santos - Faculty of Pharmaceutical Sciences UNICAMP; Luiza Silverio - Faculty of Pharmaceutical Sciences UNICAMP*

616: Size dependent PASylation critically regulates H-Ferritin nanocage stability and functionality

Serena Mazzucchelli, *University of Milan, Italy*

Beatrice Bignami - *Università degli Studi di Milano; Francesca Gorgoglione - Università degli Studi di Milano; Valeria Giacobbo - Università di Milano; Marta Sevieri - Università degli Studi di Milano; Claudia Pigliacelli - Politecnico di Milano; Francesca Baldelli Bombelli - Politecnico di Milano; Renata Tisi - Università degli Studi di Milano-Bicocca; Fabio Corsi - University of Milan*

617: PEGylation of cationic diblock polymeric nanoparticles improves physical properties and biological function

Andrea McCue, PhD, *Battelle Memorial Inst., United States*

Kenneth Sims - *Battelle Memorial Institute; Danielle Huk - Battelle Memorial Institute; Tony Duong - Battelle Memorial Institute; Ashlee Colbert - Battelle Memorial Institute; Emma Schmitz - Battelle Memorial Institute; Molly Kaufman - Battelle Memorial Institute*

618: Aptamer-Functionalized Lipid Nanoparticles for T-cell Mediated Delivery

Colleen McVay, B.S., *University of Washington, United States*

Garrett Collett - *Bristol Myers Squibb; Nataly Kacherovsky - University of Washington; Suzie Pun - University of Washington*

619: Colorectal Cancer Management at the Intersection between Drug Repurposing and Nanoparticle Formulation

Mohammed Mehanna, *Lebanese American University, Lebanon*
Siham Bazzi - *School of Pharmacy, Lebanese American University; Vanessa Tarraf - School of Pharmacy, Lebanese*

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American University; Alia Khalil – School of Pharmacy, Lebanese American University; Wassim Shebaby – School of Pharmacy, Lebanese American University; Rami Mhanna – American University of Beirut; Kawthar abla – Faculty of pharmacy, Beirut Arab University; Mohammad Mroueh – School of Pharmacy, Lebanese American University

620: Biomimetic platelet-membrane cloaked nanoparticles for cardiovascular diseases

Mina Mehanny, German International University, Egypt
Mariagiulia Spazzapan – International Centre for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy; Andrea Colliva – International Centre for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy; Serena Zacchigna – International Centre for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy; Hélder A. Santos – University Medical Center Groningen (UMCG), Groningen, the Netherlands

621: Oscillation-generating micromixing (FDmiX) – a new method for the manufacturing of mRNA-lipid nanoparticles

Fitore Mejzini, Martin-Luther University, Germany
Frank Erdmann – Institute of Pharmaceutical Technologies; Julia Kollan – Institute of Pharmaceutical Technologies; Henrike Lucas – Institute of Pharmaceutical Technologies; Stephanie Krüger – Biozentrum Halle; Karsten Mäder – Institute of Pharmaceutical Technologies

622: Macrophage-derived hybrid lipid vesicles loaded with cyanocobalamin for antiinflammatory therapy enhancement

Ana Melero, Universitat de València, Spain
Melissa Merl – Goethe University Frankfurt; Antonio J. Guillot – Universitat de València; Ana Melero – Universitat de València

623: Cytotoxic and molecular outcomes of a theranostic nanosystem in breast cancer cell models

Giovanna Melo, Institute of Biomedical Sciences – University of São Paulo, Brazil
Koiti Araki – Institute of Chemistry – University of São Paulo; Robson Guimarães – Institute of Chemistry – University of São Paulo; Rodrigo Kawassaki – Institute of Chemistry – University of São Paulo; Luciana Lopes – Institute of Biomedical Sciences – University of São Paulo

624: Development of immuno-radiosensitizing nanoparticles for glioblastoma

Thomas Ménard, Université de Caen Normandie, CNRS, Normandie Univ, ISTCT UMR6030, CYCERON, F-14000 CAEN, France
Anasthasia Ilongo-Koumba – Université de Caen Normandie, CNRS, Normandie Univ, ISTCT UMR6030, CYCERON, F-14000 CAEN, France; Abdallah Amedlous – Université de Caen Normandie, ENSICAEN, CNRS, LCS, Laboratoire Catalyse et Spectrochimie, 14000 Caen, France; Fabien Fillesoy – Université de Caen Normandie, CNRS, Normandie Univ, ISTCT UMR6030, CYCERON, F-14000 CAEN, France; Valérie Ruau – Université de Caen Normandie, ENSICAEN, CNRS, LCS, Laboratoire Catalyse et Spectrochimie, 14000 Caen, France; Marie Lozier-Desmurs – Université de Caen Normandie, ENSICAEN, CNRS, LCS, Laboratoire

Catalyse et Spectrochimie, 14000 Caen, France; Svetlana Mintova – Université de Caen Normandie, ENSICAEN, CNRS, LCS, Laboratoire Catalyse et Spectrochimie, 14000 Caen, France; Samuel Valable – Université de Caen Normandie, CNRS, Normandie Univ, ISTCT UMR6030, CYCERON, F-14000 CAEN, France; Clément Anfray – Université de Caen Normandie, CNRS, Normandie Univ, ISTCT UMR6030, CYCERON, F-14000 CAEN, France

625: Cholesterol-Driven Optimization of Liposomal Systems for Ivermectin Detoxification

Sebastião Mendanha, Federal University of Goiás, Brazil
Jader Pires – Federal University of Goiás; Karinna Mendanha – Federal University of Goiás; Lucas de Sousa – Federal University of Goiás; Bianca Fontanezi – Federal University of Goiás; Ana Flávia Botelho – Federal University of Goiás; Guilherme Colherinhas – Federal University of Goiás; Sebastião Mendanha – Federal University of Goiás; Eliana Lima – Federal University of Goiás

626: A self-immolative prodrug micelle-hydrogel targets key genomic signalling pathways in PDAC metastatic model

Bárbara Mendes, Nova Medical School, NOVA University of Lisbon, Portugal
Carlos Afonso – Instituto de Investigação do Medicamento (iMed), Faculdade de Farmácia, Universidade de Lisboa, Av. Prof. Gama Pinto, 1649-003 Lisboa, Portugal.; João Conde – NOVA Medical School/Faculdade de Ciências Médicas, NMS/FCM, Universidade NOVA de Lisboa, Lisbon, Portugal.; João Coniot – NOVA Medical School/Faculdade de Ciências Médicas, NMS/FCM, Universidade NOVA de Lisboa, Lisbon, Portugal.; Susete Fernandes – i3N/CENIMAT, Department of Materials Science, NOVA School of Science and Technology, Universidade NOVA de Lisboa, Campus de Caparica, Caparica, Portugal.; Catarina Leal – i3N/CENIMAT, Department of Materials Science, NOVA School of Science and Technology, Universidade NOVA de Lisboa, Campus de Caparica, Caparica, Portugal.; Jhenifer Oliveira – NOVA Medical School/Faculdade de Ciências Médicas, NMS/FCM, Universidade NOVA de Lisboa, Lisbon, Portugal.; João Ravasco – NOVA Medical School/Faculdade de Ciências Médicas, NMS/FCM, Universidade NOVA de Lisboa, Lisbon, Portugal

627: Cholesterol-modified hyaluronic acid nanohydrogels for targeted delivery of anti-inflammatory agents

Claudia Migliorini, Sapienza University of Rome, Italy
Chiara Di Meo – University Sapienza di Roma; Catherine Cailleau – University of Paris Saclay; Séverine Domenichini – University of Paris Saclay; Pietro Matricardi – Università Roma Tor Vergata; Elias Fattal – University of Paris Saclay

628: EGFR-Targeted Mesoporous Silica Nanoparticles Enhance Docetaxel Efficacy in Prostate Cancer Cells

Rafael Miguel Sábio, São Paulo State University (UNESP), Brazil
Christian Carnero Canales – São Paulo State University, UNESP; Karen Oliveira – São Paulo State University, UNESP; Thiago Scaliza – São Pulo State University, UNESP; Alexandra Medeiros – São Paulo State University, UNESP; Andréia Meneguim – São Paulo State University, UNESP; Fernando Pavan – São Paulo

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State University, UNESP; Marlus Chorilli – São Paulo State University, UNESP; Hélder Santos – University Medical Center Groningen (UMCG), University of Groningen, The Netherlands

629: Protein nanoparticles for combined chemotherapy and oligonucleotide therapy in lung cancer

Paula Milan Rois, University of Cambridge, United Kingdom
Alexander Evtushenko – University of Cambridge; Ljiljana Fruk – University of Cambridge; Eric Miska – University of Cambridge

630: Microfluidic Production of PLGA@Lipid Hybrid Nanoparticles for Co-Delivery of Two Anticancer Agents

Simone Misto, University of Naples Federico II, United States
Simona Barone – University of Naples Federico II; Margherita Brindisi – University of Naples Federico II; Thomas Moore – University of Naples Federico II

631: Hybrid nanoparticle system loaded with novel anti-biofilm compound for the treatment of skin wound infections

Adithya Mohan, MSc, University of Groningen Medical Centre (UMCG), Netherlands
Patrick Rijn – University of Groningen; Helder Santos – University of Groningen; Wouter Hinrichs – University of Groningen; Peter Nibbering – HHV Biotech

632: Comparing Liposome-Photosensitizers for Photodynamic and Photothermal Treatment Against *S. aureus* Biofilms

Paria Mojarad, University of Helsinki, Finland
Zahra Gounani – University of Helsinki; Timo Laaksonen – University of Helsinki; Deborah A. Nkansah – University of Helsinki

633: Impact of Lipid Composition and Formulation Parameters on mRNA-LNPs

Laura Molero, MSc, University of Barcelona, Spain
Sandra Perez Torras – University of Barcelona; Ferran Roig Roig – Reig Jofre

634: Development and Characterization of a Novel Lipid-Polymer Hybrid Nanocarrier

Munira Sirazum, University of Alberta, Canada
Aria Khalili – Quantum and Nanotechnology Research Centre, National Research Council Canada, 11421 Saskatchewan Drive, Edmonton, Alberta T6G 2M9, Canada; Sohey! Tadjiki – Postnova Analytics Inc; Jae-Young Cho – Quantum and Nanotechnology Research Centre, National Research Council Canada, 11421 Saskatchewan Drive, Edmonton, Alberta T6G 2M9, Canada; Afsaneh Lavasanifar – Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, Alberta, Canada.

635: Preparation of cyanocobalamin-loaded PLGA microspheres for ALS treatment through dry processing using a ball mill

Satoshi Murao, Ph.D., Osaka Ohtani University, Japan
Akihiro Matsumoto – Osaka Ohtani University

636: Fc-region presence and antibody format shape the organ distribution characteristics in fibrotic kidneys

Yuki Nakamura, BSc, Hokkaido University of Science, Japan
Kohei Togami – Hokkaido University of Science; Sumio Chono – Hokkaido University of Science

637: Self-Immunomodulatory Nanoparticles for the Locoregional Treatment of Glioblastoma

Antonio Nardi, University of Padova, Italy
Serena Zilio – Veneto Institute of Oncology, IOV-IRCCS; Weisha Qi – Veneto Institute of Oncology, IOV-IRCCS; Sofia Banzato – University of Padova; Mariangela Garofalo – University of Padova; Ilaria Marigo – Veneto Institute of Oncology, IOV-IRCCS; Stefefano Salmaso – University of Padova; Paolo Caliceti – University of Padova; Alessio Malfanti – University of Padova

638: Characterization and Biological Evaluation of Lipid Nanoparticles Delivering PPRHs Targeting HPV-16 and HPV-18 E7

Iria Naveira Souto, University of Barcelona/Reig Jofre, Spain
Roger Fàbrega Alsina – IBEC/Reig Jofre; Xavier Julià Camprodon – Reig Jofre; Jessica Malavia Muñoz – Reig Jofre; Anna Lagunas Targarona – IBEC; Máté Lengyel – BioTalentum; Vivien Tamás – BioTalentum; Anna Meller – BioTalentum; Kornél Kistamás – BioTalentum; András Dinnyés – BioTalentum; Josep Samitier i Martí – IBEC; Carlos J Ciudad – Universidad de Barcelona; Laia Montell Bonaventura – Reig Jofre; Veronica Noe – IBEC/IN2UB

639: Glycan-Directed Nanogels for Selective Cellular Targeting

Jolana Both, University Würzburg, Germany
Lutz Nuhn – University Würzburg

640: Novel Injectable Otic Drug Delivery Systems for Local Retention and Sustained Release

Mari Nekohashi, Astellas Pharma Inc., Japan
Masanori Kobayashi – Astellas Pharma Inc.; Takayuki Yoshida – Astellas Pharma Inc.

641: ROS-Responsive Polymeric Dexamethasone Prodrug for Targeted Anti-Inflammatory Therapy

Thu Nguyen, Saarland University, Germany
Britta Diesel – Saarland University; Alexandra Kiemer – Saarland University; Sangeun Lee – Saarland University

642: Targeted delivery of NSC59984 via thermoresponsive nanocarriers inhibits mutant p53 in metastatic prostate cancer

Raditya Nugraheni, Queen's University Belfast, United Kingdom
Ann Maria Anto – Queen's University Belfast; Adam Moore – Queen's University Belfast; Wafa Al-Jamal – Queen's University Belfast

643: Towards Topical Transdermal Chemoprevention with Hyaluronic Acid-Functionalized Nanocarriers

Jessica Nunes, University of São Paulo, Brazil
Luciana Lopes – University of São Paulo; Julia Passos – University of São Paulo

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644: Oxidation Responsiveness of Polythioacetals and their Anti-Inflammatory Potential

Claudia Ogliastro, MSc, *Italian Institute of Technology, Italy*
Nora Francini - *Vanderbilt University Biomedical Engineering*;
Giulia Della Rosa - *Italian Institute of Technology*; Cristina
Manuela Santi - *Italian Institute of Technology*; Nicola Tirelli -
Italian Institute of Technology

645: Design and characterization of novel nanobody-conjugated lipid nanoparticles for targeted in vivo CAR-T therapy

Miina Ojansivu, *Karolinska Institute, Sweden*
Yanjie Huang - *Karolinska Institute*; Oliver Hayes - *Karolinska
Institute*; Ruben De Coen - *eTheRNA Immunotherapies*; Sabah
Kasmi - *eTheRNA Immunotherapies*; Stefaan De Koker -
eTheRNA Immunotherapies; Samir El Andaloussi - *Karolinska
Institute*

646: Critical Variables in MTT Cytotoxicity Assessment of Liposomal Drug Delivery Systems

Nathalia Oliveira, *University of Goias, Brazil*
Tacio Hayasaki - *FarmaTec - Laboratory for RD&I in
Pharmaceutical Nanotechnology and Drug Delivery Systems,
Samambaia Technology Park, Goiania - GO - Brazil*; Lucas
Sousa - *FarmaTec - Laboratory for RD&I in Pharmaceutical
Nanotechnology and Drug Delivery Systems, Samambaia
Technology Park, Goiania - GO - Brazil*; Lucas Santos - *FarmaTec
- Laboratory for RD&I in Pharmaceutical Nanotechnology and
Drug Delivery Systems, Samambaia Technology Park, Goiania
- GO - Brazil*; Sebastião Mendanha - *FarmaTec - Laboratory
for RD&I in Pharmaceutical Nanotechnology and Drug Delivery
Systems, Samambaia Technology Park, Goiania - GO - Brazil*;
Eliana Lima - *FarmaTec - Laboratory for RD&I in Pharmaceutical
Nanotechnology and Drug Delivery Systems, Samambaia
Technology Park, Goiania - GO - Brazil*

647: NICLOSAMIDE-LOADED LIPOSOMAL PLATFORMS AS BREAST ANTICANCER THERAPIES

Ana Ortega Galindo, MSc, *University Medical Center Groningen
(UMCG)/UG and National Autonomous University of Mexico
(UNAM), Mexico*
Renata Faria Maia - *University Medical Center Groningen
(UMCG)/UG*; Maria Lobita - *University Medical Center Groningen
(UMCG)/UG*; Luigia Serpico - *University Medical Center
Groningen (UMCG)/UG*; Mohammad-Ali Shahbazi - *University
Medical Center Groningen (UMCG)/UG*; Hélder A. Santos -
University Medical Center Groningen (UMCG)/UG; Yareli Rojas
Aguirre - *National Autonomous University of Mexico*

648: Multi-target Intestinal Barrier Repair for Gut Inflammation and Gut-Liver Axis-Related Metabolic Diseases

Meitong Ou, *Institute of Biomedical Engineering, Chinese
Academy of Medical Sciences, China (People's Republic)*
Wen Li - *Institute of Biomedical Engineering, Chinese Academy
of Medical Sciences and Peking Union Medical College*; Linhua
Zhang - *Institute of Biomedical Engineering, Chinese Academy
of Medical Sciences and Peking Union Medical College*; Guilei

Ma - *Institute of Biomedical Engineering, Chinese Academy of
Medical Sciences and Peking Union Medical College*; Dunwan
Zhu - *Institute of Biomedical Engineering, Chinese Academy
of Medical Sciences and Peking Union Medical College*; Lin
Mei - *Institute of Biomedical Engineering, Chinese Academy of
Medical Sciences and Peking Union Medical College*

649: Effect of Hypoxia & Radiotherapy on Drug Sensitivity & Particle Uptake in Cancer Cell Lines & Patient-Derived Cells

Mor Ozeri, *The Hebrew University of Jerusalem, Israel*

650: Formulation of Cannabidiol-Loaded Micro/Nanoparticles via Electrospray Technique

Ziya Canberk Öztürk, *Gazi University, Turkey*
Hatice SEÇİNTİ KLOPF - *Yozgat Bozok University*; SERDAR TORT -
Gazi University

651: Novel dual phytocompound-loaded liposomes for improved wound treatment

Ana Paiva-Santos, *Faculty of Pharmacy of University of
Coimbra, Portugal*
Mariana Antunes - *Faculty of Pharmacy, University of Coimbra*;
Ana Macário-Soares - *Faculty of Pharmacy, University of
Coimbra*; Francisco Veiga - *Faculty of Pharmacy, University of
Coimbra*; Patrícia Pires - *University of Aveiro*

652: Biotinylated PAMAM Dendrimers-mediated Delivery of Temozolomide for the Effective Management of Glioblastoma

Karthikeya Lalitha Siddhartha Pallem, *MPharm, Central
University of Rajasthan, India*
Sanya Batheja - *Central University of Rajasthan*; Rakesh Kumar
Sahoo - *Central University of Rajasthan*; Parag Jain - *Rungta
College of Pharmaceutical Sciences and Research*; Ajazuddin
. - *Rungta College of Pharmaceutical Sciences and Research*;
Umesh Gupta - *Central University of Rajasthan*

653: Immunogenic cell death in glioblastoma via lipid nanoparticle co-delivery of chemotherapy and siRNA

Pratistha Panday, *King's College London, United Kingdom*
Hend Abdelbar - *King's College London*; Khuloud Al-Jamal
- *King's College London*; Osama Hassuneh - *Hong Kong
University*; Victor Moreno-Zafra - *King's College London*; Nadia
Rouatbi - *King's College London*; Julie Tzu-Wen Wang - *King's
College London*; Adam Walters - *King's College London*; Alla
Zam - *King's College London*

654: A targeted aptamer delivery system for glioblastoma immunotherapy

Alexandra Paul, *The University of Hong Kong, Hong Kong*
Yutong Luo - *The University of Hong Kong*; Alexandra Moreno
Mitchell - *King's College London*; Alaa Zam - *King's College
London*; Alessia Marrocu - *King's College London*; Adam Walters
- *King's College London*; Khuloud Al-Jamal - *The University of
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Andreia Pereira, Hovione, Portugal

Patrícia Henriques – Hovione; Susana Ramos – Hovione; Paulo Lino – Hovione; Diogo Salgueiro – Hovione; Vitor Francisco – CoLAB4Ageing; Artur Filipe Rodrigues – CNC – Center for Neuroscience and Cell Biology; Susana Simões – CNC – Center for Neuroscience and Cell Biology; Lino Ferreira – CNC – Center for Neuroscience and Cell Biology; Eunice Costa – Hovione

656: Development of pH/Temperature-Sensitive Nanogel for Active Targeting of Folate Receptor-Alpha in Cervical Cancer

Angel Perez, UABC, Mexico

Kenia Palomino Vizcaíno – Autonomous University of Baja California; José Manuel Cornejo Bravo – Autonomous University of Baja California; Giovanni Palomino Vizcaino – Autonomous University of Baja California; Héctor Alfonso Magaña Badilla – Autonomous University of Baja California; Teresa Guadalupe Rodríguez Téllez – Autonomous University of Baja California

657: Library of Gene Delivery Systems: Delivery of Genetic Material via Polyplexes Embedded in Thermosensitive Hydrogel

Alice PICCININI, UNICAM, Italy

Saniya Salathia – UNICAM; Cristina Casadidio – UNICAM; Roberta Censi – UNICAM

658: Stimuli-sensitive PEGylated sheddable nanoparticles for the delivery of siRNA to cancer cells

Virgilio Piccolo, University Federico II, Italy

Annarita Velleca – Department of Pharmacy University Federico II of Naples; Mariano Stornaiuolo – Department of Pharmacy University Federico II of Naples; Simona Laurino – IRCCS-CROB Referral cancer center of basilicata; Sabino Russi – IRCCS-CROB Referral cancer center of basilicata; Geppino Falco – Department of Biology University Federico II of Naples; Fabiana Quaglia – Department of Pharmacy University Federico II of Naples; Claudia Conte – Department of Pharmacy University Federico II of Naples

659: Metabolic state rewires hepatic delivery of LNP-encapsulated mRNA

Alejandra Puentes Tellez, UMC Utrecht, Netherlands

Joël Tissink – Helmholtz Munich; Mariona Estape Senti – University Medical Center Utrecht; Marcel Fens – Utrecht University; Anja Zeigerer – University Medical Center Mannheim; Raymond Schiffelers – UMC Utrecht; Pol Escudé Martínez de Castilla – UMC Utrecht

660: Entinostat-Loaded PLGA Microparticles for Local Mesothelioma Therapy

Obaida Qatawy, B.Sc. Pharm., Hebrew University of Jerusalem (HUJI), Israel

Esti Stern – Hadassah Medical Center; Ori Wald – Hadassah Medical Center & Faculty of Medicine, The Hebrew University of Jerusalem; Ofra Benny – School of Pharmacy, Faculty of Medicine, The Hebrew University of Jerusalem,

661: Tunable Self-Assembled PETOX-b-P4VP Nanoparticles for Drug Delivery Applications

Meng Qiao, University of Groningen, University Medical Center Groningen, Netherlands

Roujia Chang – University of Groningen, University Medical Center Groningen; Bryn Monnery – University of Groningen, University Medical Center Groningen; Inge Zuhorn – University of Groningen, University Medical Center Groningen

662: Trastuzumab-conjugated liposomes for Breast Cancer: Development, characterization and in vivo assessment

Sarjana Raikwar, Gyan Ganga Institute of Technology & Sciences, Jabalpur, India

Sanjay Jain – Dr. Harisingh Gour Central University

663: Pre-Formulation of Amphiphilic Cyclodextrin Nanosystems

Sara Ramos, Faculty of Pharmacy of the University of Coimbra, Portugal

Cátia Domingues – Faculty of Pharmacy of the University of Coimbra; Ana Figueiras – Faculty of Pharmacy of the University of Coimbra; Ivana Jarak – Faculty of Pharmacy of the University of Coimbra

664: Novel Ionizable Lipids Enable DoE-Optimized Lipid Nanoparticles for pDNA Delivery

Laís Ramos, PhD, Federal University of Minas Gerais, Brazil

Ana Clara Silva – Federal University of Minas Gerais; Gabriel Azevedo – Federal University of Minas Gerais; Pedro Guimarães – Federal University of Minas Gerais

665: Optimisation of ultrasound-responsive niosomes for localised delivery of chemotherapy

Fahima Reete, University of Auckland, New Zealand

Sachin Thakur – University of Auckland; Zimei Wu – University of Auckland

666: Green manufacturing process using spinning disc system for preparation of Acetalated maltodextrin nanoparticles

Saad Ur Rehman, MSc, Saarland University, Germany

Marc Schneider – Saarland University

667 Characterization and Safety of Biomimetic MOFs in the Raw 264.7 Cell Line

Joshua Reineke, PhD, South Dakota State University, United States

Cindy Venegas Mata – South Dakota State University; Irabin Aime Fabius – South Dakota State University; Jiahui Yuan – South Dakota State University; Zihao Yu – Institut des Matériaux Poreux de Paris; Mathilde Lepoitevin – Institut des Matériaux Poreux de Paris; Christian Serre – Institut des Matériaux Poreux de Paris; Samantha Sampson – Stellenbosch University; Admire Dube – University of Western Cape

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668: BBB-Penetrative Metformin-MnO₂ Hybrid Nanoparticles for Enhancing Radiotherapy of Glioblastoma Multiforme

Mahya Rezaeifarmani, HBSc, *University of Toronto, Canada*
Azhar Abbasi - *University of Toronto*; Chungsheng He - *University of Toronto*; Jeffrey Henderson - *University of Toronto*; Michael Milosevic - *University of Toronto*; Liting Wang - *University of Toronto*; Xiao Yu Wu - *University of Toronto*

669: The photo-oxidation effect of palladium phthalocyanine regioisomers in liposomes

Riikka Rimmistö, M.Sc., *University of Helsinki, Finland*
Aleksandr Penni - *Tampere University*; Alexander Efimov - *Tampere University*; Nikita Durandin - *Tampere University*; Timo Laaksonen - *University of Helsinki*

670: Ibuprofen nanocrystals: improving dissolution, bioavailability, and scalable production

Eleonora Rizzi, *Phoenix OITB gGmbH, Germany*
Ailing Qiao - *MyBiotech GmbH*; Matthias Jourdain - *PHOENIX OITB gGmbH*; Anamaria Gojanović Rajić - *Institute for Medical Research and Occupational Health*; Nikolina Peranić - *Institute for Medical Research and Occupational Health*; Nikolina Kalčec - *Institute for Medical Research and Occupational Health*; Ivana Vinković Vrček - *Institute for Medical Research and Occupational Health*; Nazende Günday-Türelİ - *Phoenix OITB gGmbH*; Emre Türelİ - *MyBiotech GmbH*

671: Multipronged nano-based approach targeting rectal cancer and radiation fibrosis

Vania Rocha, PhD, *i3S - Instituto de Investigação e Inovação em Saúde, Portugal*
Diogo Coelho - *i3S - Instituto de Investigação e Inovação em Saúde, Universidade Do Porto, Porto, Portugal*; Eduarda Silva - *Associate Laboratory i4HB - Institute for Health and Bioeconomy, University Institute of Health Sciences - CESPU, 4585-116 Gandra, Portugal*; UCIBIO - *Applied Molecular Biosciences Unit, Translational Toxicology Research Laboratory, University Institute of Health Sciences (IH-TOXRUN, IUCS-CESPU), 4585-116 Gandra, Portugal*; Maria Oliveira - *i3S - Instituto de Investigação e Inovação em Saúde, Universidade Do Porto, Porto, Portugal*; Bruno Sarmiento - *i3S - Instituto de Investigação e Inovação em Saúde, Universidade Do Porto, Porto, Portugal*

672: Formulation of Nanosuspensions of Challenging Drugs Using Amphiphilic Janus-Dendrimers as Stabilizing Agents

Telma Rodrigues, *University of Coimbra, Portugal*
Sami Nummelin - *Aalto University*; Mauri Kostianen - *Aalto University*; Vera Moura - *Basinnov Life Sciences*; Ana Fortuna - *University of Coimbra*; Luís Bimbo - *University of Coimbra*

673: Folate Functionalized Dual Responsive Nanogels for Targeted Intracellular Drug Delivery in Cancer Therapy

Teresa Rodriguez-Tellez, M.Sc., *Autonomous University of Baja California, Mexico*
José-Manuel Cornejo-Bravo - *Autonomous University of Baja California*; Arturo Estolano-Cobian - *Autonomous University of Baja California*; Héctor-Alfonso Magaña-Badilla - *Autonomous University of Baja California*; Kenia Palomino-Vizcaino - *Autonomous University of Baja California*; Giovanni Palomino-Vizcaino - *Autonomous University of Baja California*

674: Impact of phospholipid on nanoparticles' properties for oral delivery

Emilie Roger, PhD, PharmD, *University of Angers, France*
Kimia Jandaghi Alaei - *University of Angers*; Jerome Bejaud - *University of Angers*; Isabelle Verdu - *University of Angers*; Catherine Guillet - *University of Angers*; Jérémie Rlou - *University of Angers*; Marie-Claire Venier - *University of Angers*

675: Uncovering the potential of gallium-dendritic zeolites for advanced antimicrobial therapy

Eva Romaní Cubells, *IMDEA Energy Institute, Spain*
Beatrice Fodor - *IMDEA Energy Institute*; Tania Hidalgo - *IMDEA Energy Institute*; María del Mar Alonso - *IMDEA Energy Institute*; David P. Serrano - *IMDEA Energy Institute*; Patricia Horcajada - *IMDEA Energy Institute*

676: Nanocarrier-Enabled Dissolving Microneedles for Tailored Transdermal Delivery of Diclofenac

Sabrina Roussel, *Queen's University Belfast, United Kingdom*
Octavio Fandiño - *Queen's University Belfast*; Marta G. Fuster - *Queen's University Belfast*; Alejandro Paredes - *Queen's University Belfast*; Eneko Larrañeta - *Queen's University Belfast*; Ryan Donnelly - *Queen's University Belfast*

677: Protein Corona as a Translational Barrier in Nanocarrier Design

Jorge Ruz Ortega, *Center for Research in Molecular Medicine and Chronic Diseases (CiMUS) - USC, Spain*
Paloma Rial Paz - *University of Santiago de Compostela-CiMUS*; Philipp Lapuhs - *University of Santiago de Compostela-CiMUS*; Lucía Sanjurjo Bouza - *Health Research Institute of Santiago de Compostela (IDIS)*; Huanzhen Ni - *Eli Lilly and Company*; Abraham H. Abouzeid - *Eli Lilly and Company*; Faiz Ahmad Mohammed - *Eli Lilly and Company*; Young Ho Song(†) - *Eli Lilly and Company*; Anand Subramony - *Eli Lilly and Company*; María José Alonso Fernández - *University of Santiago de Compostela-CiMUS*

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678: Cerium-catalyzed synthesis of PLGA and PLGA-PEG copolymers for advanced nanoparticle engineering

Saniya Salathia, *University of Camerino, Italy*
Cristina Casadidio - *University of Camerino*; Dario Gentili - *University of Camerino*; Giacomo Di Giambattista - *University of Camerino*; Gabriele Lupidi - *University of Camerino*; Genny Pastore - *University of Camerino*; Francesca Stella - *Politecnico di Torino*; Maria Sabbieti - *University of Camerino*; Dimitrios Agas - *University of Camerino*; Enrico Marcantoni - *University of Camerino*; Serena Gabrielli - *University of Camerino*; Roberta Censi - *University of Camerino*

679: Design and Characterization of Chitosan Nanoparticles with Ciprofloxacin, potential coating for wound dressings

Aurora Santos, *Universidad Autonoma de Baja California, Mexico*
Citlaly Bucio-Arzate - *UABC*; Karla Leon-Martinez - *UABC*; Teresa Rodriguez-Tellez - *UABC*; Daniel Soza-Ruiz - *UABC*; Arturo Estolano-Cobian - *UABC*; Hector Magaña-Badilla - *UABC*; Kenia Palomino-Viscaino - *UABC*

680: Poly(orthoester) (POE) Based Injectables

Christian Schneider, *Celanese, Germany*
Edward Dobrzykowski - *Celanese*; Vijay Gyanani - *Celanese*; Jeffery Haley - *Celanese*

681: Local administration of antibodies in inflammatory bowel diseases using non-crosslinked gelatin nanoparticles

Julia Schumacher, *Saarland University, Germany*
Marc Schneider - *Saarland University*

682: Polymer-based Nanomedicines for Drug Repurposing in Mesothelioma Therapy

Anna Scomparin, *University of Turin, Italy*
Federica Maione - *Candiolo Cancer Institute, FPO-IRCCS, University of Turin*; Francesca Simbolo - *University of Turin*; Elizabeth Klavon - *Helix Biotech*; Haden Scott - *Helix Biotech*; Federica Di Nicolantonio - *Candiolo Cancer Institute, FPO-IRCCS, University of Turin*; Roberta Cavalli - *University of Turin*

683: EGFRVIII peptide nanovaccine with chitosan and apoferritin carrier system: characterization and in vitro response

Maya Scrideli, *USP - Universidade de São Paulo, Brazil*
Camila Machado França de Almeida - *USP - Universidade de São Paulo*; Fabiana Testa Moura de Carvalho Vicentini - *USP - Universidade de São Paulo*

684: AI-Driven Development of Oral and Long-Acting GLP-1 Prodrug Constructs for Type 2 Diabetes and Obesity Treatment:

Michael Sekar, *MMS, Jenetech Informatics LLC, United States*

685: Microfluidic Co-encapsulated Liposomes of Levofloxacin and Polymyxin B for Inhalation and Biofilm Penetration

I-Hyeon Seo, *Chungbuk National University, Republic of Korea*
Min-Ji Son - *Chungbuk National University, Korea*; Min-A Lee - *Chungbuk National University, Korea*; Chun-Woong Park - *Chungbuk National University, Korea*

686: Swarm Communication of Enzyme-Powered Nanobots for Inflammatory Bowel Disease Therapy

Yewon Seo, B.S., *Pohang University of Science and Technology (POSTECH), Republic of Korea*
Sei Kwang Hahn - *POSTECH*

687: Injectable Mg-doped calcium phosphate cement for controlled BMP2 delivery aiming bone regeneration

Ana Serro, *Instituto Superior Técnico - University of Lisbon, Portugal*
Nuno Ribeiro - *Hospital Cuf Cascais*; João Silva - *Instituto Superior Técnico*; Filipe Miguel - *Instituto Superior Técnico*; Lara Neves - *Ceramed*; Frederico Barbosa - *Instituto Superior Técnico*; Amélia Almeida - *Instituto Superior Técnico*; Manuel Pereira - *Instituto Superior Técnico*; Nadia Toffoletto - *University of Parma*; Lígia Figueiredo - *Intertek Portugal*; Ana Branco - *Instituto Superior Técnico*; Rogério Colaço - *Instituto Superior Técnico*

688: Formulation and Stabilization of Perfluorocarbon Nanoemulsions with Plasma Volume Expanders

Gayong Shim, Ph. D., *Soongsil University, Republic of Korea*
Hyeseon Park - *School of Systems Biomedical Science and Integrative Institute of Basic Sciences*,

689: Design and Characterization of a TROP2-Targeting Non-Cleavable ADC with Enhanced Antitumor Activity

Yulim Shin, B.S., *Sungkyunkwan University School, Republic of Korea*
Simmyung Yook - *Sungkyunkwan University, College of Pharmacy*

690: Engineering Lipid Nanoparticles for Cardiac-Specific Delivery of Self-Amplifying RNA and Messenger RNA

Talia Shmool, PhD, *Imperial College London, United Kingdom*
Costanza Emanuelli - *Imperial College London*; Robin Shattock - *Imperial College London*

691: A Long-acting in situ organo-gel for combination therapy in Alzheimer's Disease

Baljinder Singh, *Adelaide University, Australia*
Sanjay Garg - *Adelaide University*; haripriya koppiseti - *Adelaide University*; Deepa Nakmode - *Adelaide University*; Weranga Rajapaksha - *Adelaide University*; Yunmei Song - *Adelaide University*

692: Freeze-drying of PLGA hybrid nanoparticles with doxycycline for pulmonary delivery

Victória Soares Soeiro, *Universidade Estadual de Campinas, Brazil*
Rafaela Nanini Figueiredo - *Universidade Estadual de Campinas*; Alice Baldassin Mendes - *Universidade Estadual de Campinas*; Laura De Oliveira Nascimento - *Universidade Estadual de Campinas*

693: Elasticity-Driven Nanoparticle Penetration Across Hydrogel Barriers

Chathuri Sodimanage, MSc, *Saarland University, Germany*
Marc Schneider - *Saarland University*; Agnes-Valencia Weiß - *Saarland University*

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694: Folate-Functionalized Microgels for Targeted Delivery in Triple-Negative Breast Cancer

Angel Solis-Morelos, UABC, Mexico

Teresa Guadalupe Rodríguez Téllez – Autonomous University of Baja California; Héctor Alfonso Magaña Badilla – Autonomous University of Baja California; Giovanni Palomino Vizcaino – Autonomous University of Baja California; José Manuel Cornejo Bravo – Autonomous University of Baja California; Kenia Palomino Vizcaino – Autonomous University of Baja California

695: Mannose-conjugated chitosan nanoparticles for delivery moxifloxacin against Mycobacterium tuberculosis

Larissa Sposito, São Paulo State University (UNESP), School of Pharmaceutical Sciences, Araraquara, SP, Brazil

Andréia Bagliotti Meneguim – São Paulo State University (UNESP), School of Pharmaceutical Sciences, Araraquara, SP, Brazil; Fernando Pavan – São Paulo State University (UNESP), School of Pharmaceutical Sciences, Araraquara, SP, Brazil

696: Extracellular vesicles regulate stress granule dynamics and distribute to the brain following intranasal delivery

Steven Tandiono, King's College London, United Kingdom

Adam Walters – King's College London; Meiling Yu – The University of Hong Kong; Revadee Liam-Or – The University of Hong Kong; Khuloud Al-Jamal – King's College London and The University of Hong Kong

697: Remodeling Cholesterol Metabolism and Ferroptotic Immunity for NASH-HCC Therapy

Lu Tang, RWTH Aachen University, Germany

Wei Wang – China Pharmaceutical University; Qiaqia Xiao – China Pharmaceutical University

698: Long-Term In Vitro Release from Amphiphilic Porous PDMS Membranes in Soft Implantable Drug Delivery Devices

MUHAMMAD TAUSIF, MS, DGIST, Republic of Korea

Sohee Kim – Daegu Gyeongbuk Institute of Science and Technology (DGIST)

699: Development and characterization of thiolated polysaccharide-based nanogels for topical nail delivery

Stephania Taveira, Universidade Federal de Goiás – UFG, Brazil

Adrielly B Damaceno – UFG; Gabrielly B Damaceno – UFG; Bruna Spindola – UFG; Ricardo Marreto – UFG; Stephânia Taveira – UFG

700: Flame-made nanoparticles for FcRn-mediated miRNA delivery in chemoresistant colorectal cancer therapy

Natália Teixeira, Instituto de Investigação e Inovação em Saúde (i3S), Portugal

Georgios Sotiriou – SciLifeLab; Bruno Sarmiento – i3S-Instituto de Investigação e Inovação em Saúde

701: Nanogel-Based Repurposing of Dapagliflozin for Targeted Colorectal Cancer Therapy

Samar Thiab, PhD, MSc, BSc, Applied Science Private University, Jordan

Samar Thiab – Applied Science Private University

702: Development of a multifunctional injectable system for cancer treatment

Cezar Tipa, School of Science and Technology, NOVA University Lisbon, Portugal

João Borges – Department of Materials Science, School of Science and Technology, NOVA University Lisbon; Luis Costa – I3N and Physics Department, University of Aveiro; Jorge Silva – 3CENIMAT/I3N, Department of Physics, School of Science and Technology, NOVA University Lisbon; Paula Soares – Department of Materials Science, School of Science and Technology, NOVA University Lisbon

703: Pulmonary delivery of pirfenidone-loaded succinylated gelatin-coated liposomes for pulmonary fibrosis therapy

Kohei Togami, Hokkaido University of Science, Japan

Yuki Nakamura – Hokkaido University of Science; Sumio Chono – Hokkaido University of Science

704: Click-Engineered Polymeric Nanoparticles Enable Tunable and Targeted RNA Delivery in the Lung

Antoni Torres Coll, Institut Químic de Sarrià (IQS), Spain

Savador Borrós – Institut Químic de Sarrià (IQS); Cristina Fornaguera – Institut Químic de Sarrià (IQS)

705: Drug-eluting melt-spun liquid-core fibers for hernia meshes

Dimitra Toumpa, Swiss Federal Laboratories for Materials Science and Technology (Empa), Switzerland

Markus Rottmar – Swiss Federal Laboratories for Materials Science and Technology (Empa); Qun Ren Zulian – Swiss Federal Laboratories for Materials Science and Technology (Empa); Rudolf Hufenus – Swiss Federal Laboratories for Materials Science and Technology (Empa); Edith Perret – Swiss Federal Laboratories for Materials Science and Technology (Empa)

706: Lipid-Coated Polyplexes Prepared via 3D Printed Microfluidic Chip Enhance Cellular Uptake and Reduce Cytotoxicity

Ioannis Tsiachlis, National and Kapodistrian University of Athens, Greece

Timothy Gomez – University of Greenwich; Simon Richardson – University of Greenwich; Dennis Douroumis – University of Nicosia; Costas Demetzos – National and Kapodistrian University of Athens

707: Effect of Media on the Stability and Acoustic Behavior of Lipid-Microbubbles for Controlled Release Applications

Awaneesh Upadhyay, University of Oxford, United Kingdom

Qiang Wu – University of Oxford; Meng Chen Michelle Li – University of Southampton; Dariusz Kosk – University of Southampton; Janos Kanczler – University of Southampton; Nick Evans – University of Southampton; Dario Carugo – University of Oxford; Eleanor Stride – University of Oxford

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708: Targeting the Pancreatic Tumor Microenvironment Using Gold Nanoparticle-Based Phototherapy

Ruben Valente, *NOVA School of Science and Technologies, Portugal*

Duarte Serôdio - *NOVA School of Science and Technology*; Carolina Cabete - *NOVA School of Science and Technology*; Alexandra Fernandes - *NOVA School of Science and Technology*; Pedro Baptista - *NOVA School of Science and Technology*

709: When Escape Isn't: Reevaluating LysoTracker for Proton Sponge-Driven Endosomal Escape

Indra Van Zundert, *KU Leuven, Belgium*

Steven Huysecom - *KU Leuven*; Thibo Iven - *KU Leuven*; Sandra Krzyzowska - *KU Leuven*; Beatrice Fortuni - *KU Leuven*; Hiroshi Uji-i - *RIES Hokkaido*; Susana Rocha - *KU Leuven*

710: Biological evaluation of pH-responsive salicylate prodrug polymers for potential biomedical applications.

HEBRÓN VAZQUEZ ESTUDILLO, *AUTONOMOUS UNIVERSITY OF BAJA CALIFORNIA, Mexico*

Kenia Palomino Vizcaino - *Autonomous University of Baja California (UABC)*; Lilia Angelica Hurtado Ayala - *Autonomous University of Baja California (UABC)*; Brisa Guadalupe Hernandez Ramirez - *Autonomous University of Baja California (UABC)*; Giovanni Palomino Vizcaino - *Autonomous University of Baja California (UABC)*; Arturo Estolano Cobian - *Autonomous University of Baja California (UABC)*; Ivan Cordova Guerrero - *Autonomous University of Baja California (UABC)*; Jose Manuel Cornejo Bravo - *Autonomous University of Baja California (UABC)*; Héctor Alfonso Magaña Badilla - *Autonomous University of Baja California (UABC)*

711: Lyophilization approach to improve long-term stability of LGA-PEI nanoparticles for drug delivery

Osvaldo Vega-Martínez, *Speratum Biopharma Inc, United States*
Laura Chaves-Martínez - *Speratum Biopharma Inc*; Yendry Corrales-Ureña - *National Center for High Technology (CeNAT)*; Maria López-Brenes - *Speratum Biopharma Inc*; Jian-Ming Lü - *Baylor College of Medicine*; Christian Marín-Müller - *Speratum Biopharma Inc*

712: Development of chitosan nanoparticles via microfluidics for pulmonary delivery of a novel ApoB-derived peptide

Vincenzo Vendemia, MSc, *University of Campania "Luigi Vanvitelli", Italy*
Andrea Casale - *Di.S.T.A.Bi.F., University of Campania "Luigi Vanvitelli", Caserta, Italy*; Rosa Gaglione - *Department of Chemical Sciences, University of Napoli "Federico II", Napoli, Italy*; Francesca Ungaro - *Department of Pharmacy, University of Napoli "Federico II", Napoli, Italy*; Angela Arciello - *Department of Chemical Sciences, University of Napoli "Federico II", Napoli, Italy*; Ivana d'Angelo - *Di.S.T.A.Bi.F., University of Campania "Luigi Vanvitelli", Caserta, Italy*

713: DELOS nanovesicle-based thermosensitive hydrogels for extended subcutaneous delivery

Marta Vieira, *Nanomol Technologies / ICMAB-CSIC, Spain*
Alba Córdoba - *Nanomol Technologies*; Carla Castellar-Álvarez - *Nanomol Technologies*; Lidia Ferrer-Tasies - *Nanomol Technologies*; Elisabet Gonzalez-Mira - *ICMAB-CSIC*; Santi Sala - *Nanomol Technologies*; Nora Ventosa - *ICMAB-CSIC/Nanomol Technologies*

714: Mentha genus plant extract-loaded liposomes for cosmetic and dermopharmaceutical applications

Amélia Vieira, *Faculty of Pharmacy of University of Coimbra, Portugal*
Nádia Santos - *Faculty of Pharmacy, University of Coimbra*; Ana Macário-Soares - *Faculty of Pharmacy, University of Coimbra*; Mariana Antunes - *Faculty of Pharmacy, University of Coimbra*; Francisco Veiga - *Faculty of Pharmacy, University of Coimbra*; Patrícia Pires - *University of Aveiro*; Ana Paiva-Santos - *Faculty of Pharmacy, University of Coimbra*

715: Self-Assembling CAV-C Peptide Nanostructures as Antagonists of CXCR4-Mediated Migration in HCC

Gonzalo Villaverde Cantizano, *Universidad Complutense de Madrid (UCM), Spain*
Alejandro Ruperti-Repilado - *Universidad Complutense de Madrid (UCM)*; Mohammed Alqudwa Fattouh - *Universidad Complutense de Madrid (UCM)*; Juan Pedro Cascales-Sandoval - *Universidad Complutense de Madrid (UCM)*; Jorge Rubio-Retama - *Universidad Complutense de Madrid (UCM)*

716: Development and Characterisation of auto-regulatory nanosystem for the delivery of Glycosylated Insulin

Nikhar Vishwakarma, PhD, *Gyan Ganga Institute of Technology and Sciences, India*
Sarjana Raikwar - *Gyan Ganga Institute of Technology and Sciences*; Suresh Vyas - *Dr. Harisingh Gour University*

717: Ultrahigh-Concentration Subcutaneous Delivery of Biotherapeutics Enabled by a High-Tg Excipient

Chris Wahl, MD, MBA, *Halozyme Therapeutics, United States*
Anna Putnam - *Halozyme Therapeutics*; Charles Theuer - *Halozyme Therapeutics*; David Kang - *Halozyme Therapeutics*; Carolyn Jons - *Halozyme Therapeutics*; Marie Printz - *Halozyme Therapeutics*; Ryan Nolan - *Halozyme Therapeutics*; Mike Bledsoe - *Halozyme Therapeutics*; Doug Hecker - *Halozyme Therapeutics*; Lexie Niroomand - *Halozyme Therapeutics*

718: Biofunctional lipid delivery system for reversing vascular remodeling in pulmonary arterial hypertension

Xiaochun Wang, *Sichuan University, China (People's Republic)*

719: Tunable Semaglutide Release from CHHA Nanogel Depots via Concentration Control

Kohei Yabuuchi, Ph.D., *Asahi Kasei Corporation, Japan*
Shogo Aso - *Asahi Kasei Corporation*; Hiroki Fujisawa - *Asahi Kasei Corporation*; Keisuke Fukumoto - *Asahi-kasei Corp.*; Toru Katsumata - *Asahi-kasei Corp.*; Tsuyoshi Shimoboji - *Asahi-kasei Corp.*

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720: Heat-guided drug delivery via thermally induced crosslinking of polymeric micelles

Sota Yamada, *Keio University, Japan*
Kenjiro Hanaoka - *Keio University*

721: Anti-PEG IgG may be one of causes to induce anaphylaxis following administration of PEGylated therapeutics

Shuto Yamaguchi, *Department of Pharmacokinetics and Biopharmaceutics, Institute of Biomedical Sciences, Tokushima University, Japan*
Haruka Takata - *Tokushima University*; Shingo Kobayashi - *Tokushima University*; Hidenori Ando - *Tokushima University*; Tatsuhiko Ishida - *Tokushima University*

722: Co-Delivery of Atorvastatin via Baicalein-Copper-Network for Atherosclerosis

Jing Yang, *Institute of Biomedical Engineering, Chinese Academy of Medical Science & Peking Union Medical College, China (People's Republic)*

723: Synergistic transarterial electronanotherapy for unresectable hepatic cancer treatment

Su-Geun Yang, *Inha University, Republic of Korea*

724: Hepa-SENSTM: Development of a Hepatocyte-Selective mRNA Delivery Platform Overcoming LDLR Dependence.

Suyeon Yeom, Ph.D., *Samyang biopharm, Republic of Korea*
Goo-Yong Kim - *Samyang Biopharm*; Sojin Lee - *Samyang Biopharm*; Hyosuk Kim - *Samyang Biopharm*; Hyejin Park - *Samyang Biopharm*; Yisak Kim - *Samyang Biopharm*; Jihye Choi - *Samyang Biopharm*; Jongmin Kim - *Samyang Biopharm*; Jongmin Park - *Samyang Biopharm*; Joungpyo Nam - *Samyang Biopharm*; Wonil Seo - *Samyang Biopharm*; Helen Cho - *Samyang Biopharm*

725: Gallium-based Drug Nanocarriers for the Treatment of Lung Infections

Shengtao Yu, *Karolinska Institutet, Sweden*
Jinjin Cui - *Karolinska Institutet*; Georgios Sotiriou - *Stockholm University*

726: Impact of Hydrophilic Corona Design on Telodendrimer Micelles: Fluorescence-Based Insights into Unimer Exchange

Jessica Yu, Ph.D., *AstraZeneca, United Kingdom*
Marianne Ashford - *AstraZeneca*; Richard England - *AstraZeneca*; Anders Gunnarsson - *AstraZeneca*; Robert Luxenhofer - *Helsinki University*; Kevin Treacher - *AstraZeneca*

727: Co-delivery of TRAIL and hydroxycamptothecin by enzyme-activatable disk-shaped nanocarriers

Hanming Zhang, MSPh, *West China School of Pharmacy, Sichuan University, China (People's Republic)*
Zhirong Zhang - *West China School of Pharmacy, Sichuan University*

728: Tumor Microenvironment Responsive R848-Loaded Yolk-shell Nanoparticles for enhanced colon cancer therapy

Yuewen Zhu, *University Medical Center Groningen University of Groningen, China (People's Republic)*
Qiang Yang - *Southwest University*; Jiachen Li - *University Medical Center Groningen University of Groningen*; Jie Gao - *University Medical Center Groningen University of Groningen*; Gésinda Geertsema-Doornbusch - *University Medical Center Groningen University of Groningen*; Kiyan Musaie - *University Medical Center Groningen University of Groningen*; Helder Santos - *University Medical Center Groningen University of Groningen*; Mohammad-Ali Shahbazi - *University Medical Center Groningen University of Groningen*

729: Targeting cartilage matrix for osteoarthritis therapy: Cationic drug conjugates vs cationic liposomes

Olivier Jordan, *University of Geneva, Switzerland*
Luca Morici - *University of Geneva*; Paula Gonzalez-Fernandez - *University of Geneva*; Eric Allémann - *University of Geneva*

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730: Repeat mRNA LNP administrations to normal and tumor-bearing mice to advance safe and efficacious mRNA therapeutics

Anitha Thomas, Ph.D., *Cytiva, Canada*
Leanna Yee - *Cytiva*; Sams M.A. Sadat - *Cytiva*; Kalyan Golla - *Cytiva*; Tony Wu - *Cytiva*; Jay Paquette - *Cytiva*; Nikita Jain - *Cytiva*

730A: ANTICELLURONIC – trailing triple-negative breast cancer treatment

Ana Figueiras, Ph.D., *Faculty of Pharmacy University of Coimbra, Portugal*
Cátia Domingues - *University of Coimbra*; Ivana Jarak - *University of Coimbra*; Francisco Veiga - *University of Coimbra*

731: A Customizable Antibody Delivery Strategy Using Fc-affinity Ligands

Noor El-Huda Bahsoun, *University of Toronto, Canada*
Daniela Isaacs-Bernal - *Ripple Therapeutics*; Lia Huo - *University of Toronto*; Gennady Poda - *University of Toronto*; Dima Kozakov - *Stony Brook University*; Molly Shoichet - *University of Toronto*

732: Synthesis and characterization of lipoplex (Lpx) loaded PLGA Microparticles (MPs) for posterior eye (PE) delivery.

Ayah Burhan, *South East Technological University, Ireland*
Vanessa Andres Guerrero - *University Complutense Madrid, Spain*; Mark Byrne - *Rowan University*; Wayne Cummins - *South East Technological University*; Laurence Fitzhenry - *South East Technological University*; Helen Hughes - *South East Technological University*

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733: MuLens: contact lenses loaded with mucin-based nanoparticles for eye diseases therapy

Cosmin Butnarusu, *University of Turin, Italy*
Evelina Fassina - *Department of Molecular Biotechnology and Health Sciences, University of Turin, 10126, Torino - Italy*;
Enrica Frasca - *Department of Molecular Biotechnology and Health Sciences, University of Turin, 10126, Torino - Italy*;
Antonio Shkreli - *Department of Molecular Biotechnology and Health Sciences, University of Turin, 10126, Torino - Italy*;
Diana Massai - *Department of Mechanical and Aerospace Engineering - DIMEAS, Politecnico di Torino, 10129 Torino - Italy*;
Lorenzo Sardelli - *Department of Molecular Biotechnology and Health Sciences, University of Turin, 10126, Torino - Italy*;
Gianpaolo Serino - *Department of Mechanical and Aerospace Engineering - DIMEAS, Politecnico di Torino, 10129 Torino - Italy*;
Mauro Frisani - *Department of Physics, University of Turin, 10125, Turin - Italy*;
Marta Tosini - *Department of Mechanical and Aerospace Engineering - DIMEAS, Politecnico di Torino, 10129 Torino - Italy*;
Sonja Visentin - *Department of Molecular Biotechnology and Health Sciences, University of Turin, 10126, Torino - Italy*

734: Predicting Posterior Ocular Delivery and Retinal Exposure of Topical Enavogliflozin Using Mechanistic Modeling

Hea-Young Cho, Ph.D., Pharm.D., *CHA University, Republic of Korea*
Minji Kim - *CHA university*; Go-Wun Choi - *CHA university*; Dong Wook Kang - *CHA university*; Ju Hee Kim - *CHA university*

735: Thermoresponsive Poloxamer-CMC in situ gel for antiangiogenic peptide delivery in corneal neovascularization

Armando da Silva Cunha Junior, MSc, *Bióloga, Spain*
Carolina Da Silva - *Universidade Federal de Minas Gerais*;
Thomas Toshio Inoue - *Universidade Federal de Minas Gerais*; Maria Clara De Lima - *Universidade Federal de Minas Gerais*; Maria Elena De Lima - *Faculdade Santa Casa de Belo Horizonte*; Armando Cunha Júnior - *Universidade Federal de Minas Gerais*

736: Dual-Ligand Pirfenidone-Loaded Liposomes for Targeted Ocular Therapy of Fibrosis in Diabetic Retinopathy

Chirasmitta Das, *CSIR-Indian Institute Of Chemical Biology, Kolkata, India, India*
Dr. G Senthil kumar - *CSIR-Indian Institute Of Chemical Biology, Kolkata, India*

737: Intravitreal CBD-loaded niosomes enhance retinal neuroprotection in ischemic injury

Marina Dias, PhD, *Ezequiel Dias Foundation, Brazil*
Lays Dourado - *Ezequiel Dias Foundation*; Sílvia Fialho - *Ezequiel Dias Foundation*; Carolína Silva - *Ezequiel Dias Foundation*

738: Toward Clinical Corneal Microneedles for Intrastromal Delivery: Confocal Validation in Ex Vivo Human Cornea

Richard Gemeinhart, PhD, *University of Illinois Chicago, United States*
Sonia Alavi - *University of Illinois Chicago*; Mohammadali Ashraf - *University of Illinois Chicago*; Elie Abi Khalil - *University of Illinois Chicago*; Steve Seung-Young Lee - *University of Illinois*

Chicago; Jie Xu - *University of Illinois Chicago*; Hajirah Saeed - *University of Illinois Chicago*; Richard Gemeinhart - *University of Illinois Chicago*

739: Meloxicam and Tobramycin Thermosensitive Hydrogel: An innovativel Veterinary Drug Delivery System

Maria Carolina Guerra, *Funed, Brazil*
Danilo Augusto Vianna - *Funed - Ezequiel Dias Foundation*;
Gabriela Aguiar - *Funed - Ezequiel Dias Foundation*;
Amaury Souza - *Funed - Ezequiel Dias Foundation*;
Marina Dias - *Funed - Ezequiel Dias Foundation*;
Sílvia Fialho - *Funed - Ezequiel Dias Foundation*

740: Bioactive nanofiber scaffolds with antifibrotic peptide: Synthesis and activity

Thomas Toshio Inoue, MSc, *Universidade Federal de Minas Gerais, Brazil*
Carolina Nunes da Silva - *Universidade Federal de Minas Gerais*;
Luciana Souza Oliveira - *Fundação Ezequiel Dias*;
Ricardo José Alves - *Universidade Federal de Minas Gerais*;
Armando da Silva Cunha Júnior - *Universidade Federal de Minas Gerais*

741: Impact of Sunscreens and UV Filters on Viability of Corneal Cells

Cornelia Keck, PhD, *Philipps Universität Marburg, Germany*
Charlotte Ferdinand - *Philipps Universität Marburg*;
Antonio de Souza - *University of Auckland*;
Lola Mugisho - *University of Auckland*;
Jingyuan Wen - *University of Auckland*;
Ilva Rupenthal - *University of Auckland*

742: Unveiling the Immunomodulatory Role of Microglia Membranes as Functional Vehicles for Targeted Retinal Therapy

Huan Li, *the Hong Kong Polytechnic University, Hong Kong*
Yingkun Cui - *The Hong Kong Polytechnic University*;
Chi Wai Do - *The Hong Kong Polytechnic University*;
Emmanuel Ho - *University of Waterloo*;
Thomas Chuen Lam - *The Hong Kong Polytechnic University*;
Ying Hon Sze - *Centre for Eye and Vision Research (CEVR), Hong Kong*;
Kahing Wong - *The Hong Kong Polytechnic University*;
Margaret Wu - *Centre for Eye and Vision Research (CEVR), Hong Kong*

743: Development and Characterizations of Chitosan Nanoparticles for Ocular Gene Delivery Applications

Lina Liu, MAS, *McMaster University, Canada*
Chelsea Hang - *McMaster University*;
Lindsay Sheardown - *McMaster University*;
Emily Ann Hicks - *McMaster University*;
Heather Sheardown - *McMaster University*

744: Impact of the Mucin Barrier on Drug Delivery from Nanoemulsions in Topical Ophthalmic Applications

Andela Nosić, *University of Zagreb Faculty of Pharmacy and Biochemistry, Croatia*
Jelena Štimac - *University of Zagreb Faculty of Pharmacy and Biochemistry*;
Josip Ljubica - *University of Zagreb Faculty of Pharmacy and Biochemistry*;
Jasmina Lovrić - *University of Zagreb Faculty of Pharmacy and Biochemistry*

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745: Cyclosporine A-Loaded Cationic Nanoemulsion for Ocular Delivery: An In Vitro Release Study

Gokselin Ozgen, Ege University, Turkey
Evren Homan Gokce - Ege University

746: Triamcinolone acetonide SCCO₂-impregnated soft contact lenses for the treatment of retinal diseases

Rita Pais, NOVA Medical School // Instituto Superior Técnico, Portugal
Diana Silva - Centro de Química Estrutural (CQE), Instituto Superior Técnico, Lisbon, Portugal // Egas Moniz Center for Interdisciplinary Research, Egas Moniz School of Health & Science, Caparica, Almada, Portugal; Margarida Brites - Centro de Química Estrutural (CQE), Instituto Superior Técnico, Lisbon, Portugal; Madalena Salema-Oom - Egas Moniz Center for Interdisciplinary Research, Egas Moniz School of Health & Science, Caparica, Almada, Portugal; Ana Paula Serro - Centro de Química Estrutural (CQE), Instituto Superior Técnico, Lisbon, Portugal // Egas Moniz Center for Interdisciplinary Research, Egas Moniz School of Health & Science, Caparica, Almada, Portugal; Beatriz Nobre - Centro de Química Estrutural (CQE), Instituto Superior Técnico, Lisbon, Portugal // Departamento de Engenharia Química, Instituto Superior de Engenharia, IPL, Lisboa, Portugal

747: Size matters: investigating corneal penetration and endothelial targeting of antibodies and nanobodies

Luca Paoletti, Ghent University, Belgium
Ines De Hoon - Ghent University; Hristo Svilenov - Ghent University; Stefaan De Smedt - Ghent University; Félix Sauvage - Ghent University

748: Targeting Microbial Keratitis Through Chlorhexidine-Based Lens Disinfection

Sonia Pedro, University of Nottingham, United Kingdom
Anna Kotowska - University of Nottingham; Lily Riordan - University of Nottingham; Stefana Duca - University of Nottingham; Madeline Berrow - University of Nottingham; Maria Vivero-Lopez - University of Nottingham; Hany Elsheikha - University of Nottingham; Felicity de Cogan - University of Nottingham

749: Synthesis and Optimization of PEG-Vitamin E Block Copolymer Micelles for Sustained Ocular Drug Delivery

Sara Salimi, PhD, McMaster, Canada
Heather Sheardown - McMaster University; Helen Lin - McMaster University

750: Sustained dexamethasone delivery from 3D-printable hyaluronic acid-based hydrogels for corneal regeneration

Arina Starostina, MSc, Tampere University, Finland
Anni Mörö - Tampere University; Elina Vuorimaa-Laukkanen - Tampere University

751: Layer-by-Layer Lipid Nanoparticles Enable Efficient miR-181a Delivery and Anti-Tumor Activity in Uveal Melanoma

Houda Tahiri, CHU Sainte Justine, Université de Montréal, Montreal, QC, Canada
Houda Tahiri - CHU Sainte Justine, Université de Montréal, Montreal; Victor Gibson Passos - Department of Pharmacology and Physiology, Université de Montréal, Montreal, QC, Canada.; Rui Wang - Department of Pharmacology and Physiology, Université de Montréal, Montreal, QC, Canada.; Pierre Hardy - CHU Sainte Justine, Department of Pharmacology and Physiology, Université de Montréal, Montreal, QC, Canada.

752: Vapor nanobubble-mediated photoablation of eye floaters using a Trypan Blue conjugate

Jonathan Tavernier, Ghent University, Belgium
Pouria Ramezani - Ghent University; Jerry Sebag - VMR Institute; Stefaan De Smedt - Ghent University; Félix Sauvage - Ghent University

753: Ocular pharmacokinetics and kinase inhibition by benzathine salt suspension of inhibitory cGMP analog

Eetu Valkama, University of Eastern Finland (UEF), Finland
Tatu Lajunen - University of Eastern Finland; Jooseppi Puranen - University of Eastern Finland; Arto Urtti - University of Eastern Finland; Kati-Sisko Vellonen - University of Eastern Finland; Elisa Toropainen - University of Eastern Finland

754: A decorin-inspired anti-scarring peptide delivered by nanoparticles for the prevention of corneal blindness

Celina Worraker, University of Nottingham, United Kingdom
Jonathan Aylott - University of Nottingham; Felicity de Cogan - University of Nottingham

755: Fenofibrate Microemulsion eyedrop enhances the Diabetic keratopathy Wound Healing

Qingguo Xu, PhD, Virginia Commonwealth University, United States
Ehsan Kaffash - Virginia Commonwealth University; Wentao Liang - Wake Forest University School of Medicine; Rudra Pangenji - Virginia Commonwealth University; Sagun Poudel - Virginia Commonwealth University; Jina-xing Ma - Wake Forest University School of Medicine

756: Design and Synthesis of IDU with Hydrolyzable Linkers for Hydrogel-Based Medical Devices

YOSHIKO YAMAZAKI, PhD, SEED Co., Ltd., Japan
Hideyuki Otake - SEED Co., Ltd.; Yukako Saito - Tohoku Medical and Pharmaceutical University; Yuichi Yoshimura - Tohoku Medical and Pharmaceutical University

757: In situ gelling ocular drug delivery vehicle (ODDV) for increased residence time of topical ophthalmic therapies

Benjamin Yee, MS, Rutgers, The State University of New Jersey, United States
Dayuan Gao - Rutgers, The State University of New Jersey; Natasha Amaravadi - Rutgers, The State University of New Jersey; Patrick Sinko - Uppsala University; Patrick Sinko - Rutgers, The State University of New Jersey

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758: Illuminating corneal cell therapy: Photoporation as non-viral gateway for genetic enhancement

Beyza Yücesan, Ghent University, Belgium
Aranit Harizaj - Trince; Bernd Vanmeerhaeghe - Ghent University; Stefaan De Smedt - Ghent University; Kevin Braeckmans - Ghent University; Félix Sauvage - Ghent University

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759: Nitrosamine Mitigation: A) Development of Direct Compressible Extended-Release (ER) Metformin HCl Tablets

Sarah Aboelela, PhD, Colorcon, United States
Anne Fuller - Colorcon; Kevin Hughes - Colorcon

760: Differential Modulation of the Human Gut Microbiome by Biodegradable Polymeric Excipients

Haya Alfassam, Credentials, University College London - Advanced Diagnostics and Therapeutics Institute (KACST), United Kingdom
Abdul Basit - University College London; Simon Gaisford - University College London; Mine Orlu - University College London

761: Characterization of Permeation Enhancers Effects: From High-Content Morphological Mapping to Molecular Dynamics

Moamin Alkakaei, Uppsala University, Sweden
King Buwaila - Uppsala University; Shakhawath Hossain - Uppsala University; Rosita Kneiszl - Uppsala University; Per Larsson - Uppsala University; Maria Karlgren - Uppsala University

762: Dextrin-Derived Polymers for Oral Delivery of Peptide Targeting Gram-Negative Bacteria in Agri-Food Applications

Carolina Balera Trombini, Università di Torino (Italy), Universidade Federal de Viçosa (Brazil) and Associação de Ensino, Pesquisa e Extensão Biopark - Biopark Educação (Brazil)
Monica Argenziano - Università di Torino (Italy); Gjyljije Hoti - Università di Torino (Italy); Francesco Trotta - Università di Torino (Italy); Tiago Antonio de Oliveira Mendes - Universidade Federal de Viçosa and Associação de Ensino, Pesquisa e Extensão Biopark - Biopark Educação, (Brazil); Roberta Cavalli - Università di Torino (Italy)

763: Colon-targeted spray-dried nano-in-microparticles with triple action for inflammatory bowel disease.

Vinicius Cardoso, São Paulo State University, Brazil
Andréia Meneguim - São Paulo State University

764: In vivo biodistribution of nanoemulsion-loaded hybrid systems in the gastrointestinal tract of CD1 mice.

Marcos Carreño Diaz, University of Castilla-La Mancha, Spain
Joaquín Gonzalez Fuentes - University of Castilla-La Mancha; María Plaza Oliver - University of Castilla-La Mancha; María Francisca Galindo Anaya - University of Castilla-La Mancha; Antonio José Guillot - University of Valencia; Ana Melero - University of Valencia; María Victoria Lozano López - University of Castilla-La Mancha; Manuel Jesús Santander Ortega - University of Castilla-La Mancha

765: The formation of gastrointestinal corona on lipid mesophase particles

Qianying Chen, Monash University, Australia
Benjamin Boyd - Monash University; Martin Malmsten - University of Copenhagen; Jie Tang - Monash University

766: Nanostructured Lipid Carriers for the enhancement of oral bioavailability : investigation of the lymphatic pathway

Valentine Daret, Skyepharma Production SAS, France
Sandrine Bourgeois - LAGEPP UMR CNRS 5007, Villeurbanne, France; Oksana Lemasson - LAGEPP UMR CNRS 5007, Villeurbanne, France; Marion Guichard - LAGEPP UMR CNRS 5007, Villeurbanne, France; Vanessa Bourdeaux - Skyepharma Production SAS, Saint-Quentin-Fallavier, France; Stéphanie Brianchon - LAGEPP UMR CNRS 5007, Villeurbanne, France

767: Additive manufacturing of solid formulations customized for oral administration in preclinical applications

Davide de Angelis, Chiesi Pharmaceuticals, Italy
Anna Giulia Balducci - Chiesi Pharmaceuticals; Alessandro Fioni - Chiesi Pharmaceuticals; Giulia Marengi - Chiesi Pharmaceuticals; Alessandra Rossi - University of Parma

768: Machine Learning-Optimized Co-delivery of Small Molecules and Lipid Nanoparticles for Oral mRNA Transfection

Rajib Dey, PhD, MIT, United States

769: Milk EV-LNP Hybrids Enable Barrier-Compatible Oral siRNA Delivery

Ning Ding, KINGS COLLEGE LONDON, United Kingdom

770: Benchmarking of an encapsulated water-soluble vitamin for nutraceutical gummy application

Viviane Doggwiler, PhD, dsm-firmenich, Switzerland
Yuan Ding - dsm-firmenich; Marina Kostesic - dsm-firmenich; Jonathan Medlock - dsm-firmenich; Belén Nieto-Ortega - dsm-firmenich; Andrea Otter - dsm-firmenich; Olivia Vidoni - dsm-firmenich

771: Development and Characterization of Sodium Alginate Mucoadhesive Films for Oral Applications

Caroline dos Santos, Unicamp, Brazil
Priscila Gava Mazzola - Unicamp

772: Customized Enteric Capsules Enabling High-Load Sodium Caprate Formulations for Oral Delivery of Large Molecules

Camille Dumont, PhD, Capsugel France SAS, France
Marine Agisson - Capsugel France SAS; Serena Corsi - Capsugel France SAS; Céline Kientz - Capsugel France SAS; Delphine Nombret - Capsugel France SAS; Vincent Jannin - Capsugel France SAS

773: Release control of HPC matrix tablets - influence of various fillers

Johannes Frenzel, University of Bonn, Germany
Johanna Heyne - University of Bonn; Edmont Stoyanov - Nisso Chemical Europe GmbH; Karl Wagner - University of Bonn

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774: Ionic liquids composed of lactic acid and trometamol enhance the oral absorption of 10 kDa dextran

Shoichiro Fukuda, *Tokushima University, Japan*
Haruka Takata – *Tokushima University*; Ryo Hayashi – *Tokushima University*; Haruka Yamamoto – *Tokushima University*; Takashi Nakae – *MEDRx Co., Ltd.*; Noboru Tatsumi – *MEDRx Co., Ltd.*; Hidetoshi Hamamoto – *MEDRx Co., Ltd.*; Shingo Kobayashi – *Tokushima University*; Hidenori Ando – *Tokushima University*; Tatsuhiko Ishida – *Tokushima University*

775: Improved understanding of interactions in ASDs: the case of Lumefantrine–Soluplus® produced by Vertical HME

Maël Gallas, *Rondol Industrie, France*
Fan Yang – *Institut Jean Lamour – Université de Lorraine CNRS*; Ghouti Medjahdi – *Institut Jean Lamour – CNRS–Université de Lorraine*; Pascal Boulet – *Institut Jean Lamour – Université de Lorraine–CNRS*; Victoire de Margerie – *Rondol Industrie*

776: Engineering a 3D printed Deployable Oral Device for Localised Peptide Delivery

Atabak Ghani Zadeh Tabrizi, *University of Nottingham, United Kingdom*
Susanna Abrahamsen Alami – *AstraZeneca*; Cameron Alexander – *University of Nottingham*; Morgan Alexander – *University of Nottingham*; Jonathan Booth – *AstraZeneca*; Nigel Davies – *AstraZeneca*; Michael Garle – *University of Nottingham*; Alice Goode – *University of Nottingham*; Anna Katowska – *University of Nottingham*; Wen-Jung Lu – *University of Nottingham*; Kyriaki Pafiti – *University of Nottingham*; Clive J Roberts – *University of Nottingham*; Ricky Wildman – *University of Nottingham*

777: DEVELOPMENT OF A SYNERGISTIC DUAL-THERAPY ORODISPERSIBLE FILM OF CURCUMIN AND BETEL LEAF EXTRACT FOR ASTHMA CONTROL

Mohammed Ghazwani, *King Khalid University, Saudi Arabia*
Umme Hani – *King Khalid University*

778: Exploring Oral GLP-1 Delivery: A Caco-2-Based In Vitro Formulation Approach

Alana Gouveia, *Merck Life Science KGaA, Germany*
Alana Gouveia – *Merck Life Science KGaA/ University of Heidelberg*; Zhizhou Fang – *Merck Healthcare KGaA*; Jason Tonillo – *Merck Healthcare KGaA*; Philipp Uhl – *Heidelberg University*; Gert Fricker – *Heidelberg University*

779: Effect of diluent and binder type on the acetaminophen release from tablets under simulated fasted and fed conditions

Katarina Gurkina, *Riga Stradins University, Latvia*
Alina Jaroslava Frolova – *Riga Stradins University, Faculty of Pharmacy, Leading Research Group*; Kirils Kukuls – *Riga Stradins University, Faculty of Pharmacy, Leading Research Group*; Valentyn Mohylyuk – *Riga Stradins University, Faculty of Pharmacy, Leading Research Group*

780: In vitro evaluation of Clostridium Perfringens Phospholipase C as a permeation enhancer

Miguel Heussi, *ETH Zurich, Switzerland*
Marilena Bohley Steiger – *ETH Zurich*; Jean-Christophe Leroux – *ETH Zurich*

781: Intestinal TGR5-Targeted Carrier-Drug Conjugate Improves Glycemic Control in Mice and Pigs

Peizhou Hou, BSc, *Shanghai Institute of Materia Medica, Chinese Academy of Sciences, China (People's Republic)*
Yong Gan – *Shanghai Institute of Materia Medica, Chinese Academy of Sciences*; Shiyun Guo – *Shanghai Institute of Materia Medica, Chinese Academy of Sciences*; Di Nie – *Shanghai Institute of Materia Medica, Chinese Academy of Sciences*; Miaorong Yu – *Shanghai Institute of Materia Medica, Chinese Academy of Sciences*; Chunliu Zhu – *Shanghai Institute of Materia Medica, Chinese Academy of Sciences*

782: Permexa™ C10: An Engineered Sodium Caprate for Improved Flowability and Compressibility in Oral Peptide Tablets

Hendrik Hübscher, MS, *Ashland, United States*
Kapish Karan – *Ashland*

783: Cellulose Acetate coatings to convert IR (immediate release) tablet to USP compliant ER (extended release) tablet

Ankitkumar Jain, *Eastman, India*
Raj Arunagiri – *Eastman*; Chhanda Kapadia – *IMCD India Pvt Ltd*; Pramod Kolsure – *IMCD India Pvt Ltd*; Nishant Nirale – *IMCD India Pvt Ltd*; Matt Stephens – *Eastman*; Walter Thompson – *Eastman*

784: Improvement of Effervescent Tablet Disintegration Using Sodium Stearyl Fumarate as a Lubricant

Yuji Kamachi, MS, *NIPPON SODA CO.,LTD., Japan*
Toshiaki Okado – *NIPPON SODA CO.,LTD.*; Edmont Stoyanov – *NISSO CHEMICAL EUROPE GmbH*

785: Improving PROTAC Dissolution with Ionic Liquid API Encapsulation

Patrick Keady, *University College Dublin, Ireland*
Brunella Grassiri – *Trinity College Dublin*; Michael Stocker – *University College Dublin*; David Brayden – *University College Dublin*; Anne Marie Healy – *Trinity College Dublin*; Steven Ferguson – *University College Dublin*

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786: Development of Enhanced Phosphate-Accumulating CKD Nutraceuticals for Oral Management of Hyperphosphatemia

Hyo Jin Kim, PhD, Seoul National University, Republic of Korea
Soyoung Park – Seoul National University

787: Development of a self-microemulsifying drug delivery system of raloxifene for enhanced oral bioavailability

Jin-Ki Kim, Hanyang University ERICA, Republic of Korea
Alam Zeb – College of Pharmacy, Hanyang University ERICA, Ansan, Republic of Korea; Muhammad Mohsin Ansari – Riphah Institute of Pharmaceutical Sciences, Riphah International University, Islamabad, Pakistan; Ho-Ik Choi – College of Pharmacy, Hanyang University ERICA, Ansan, Republic of Korea; Jeong-Su Ryu – College of Pharmacy, Hanyang University ERICA, Ansan, Republic of Korea; Ha-Yeon Noh – College of Pharmacy, Hanyang University ERICA, Ansan, Republic of Korea; Min-Ju Kim – College of Pharmacy, Hanyang University ERICA, Ansan, Republic of Korea; Se-Yun Kim – College of Pharmacy, Hanyang University ERICA, Ansan, Republic of Korea; Hoseung Han – College of Pharmacy, Hanyang University ERICA, Ansan, Republic of Korea

788: Quantitative trajectory evaluation system for the adhesion and migration of porous microspheres on cell surfaces

Takeo Kitazawa, PhD, Yasuda Women's University, Japan
Akihiro Matsumoto – Osaka Ohtani University; Mikhisa Takano – Yasuda Women's University; Yuta Hatori – Yasuda Women's University

789: In vitro drug release test for muco-adhesive formulations on muco-adhesive porous microspheres

Shota Kojima, OSAKA Ohtani University, Japan
Satoshi Murao – Osaka Ohtani University; Masayuki Kaneda – Osaka Metropolitan University; Syou Maki – Okayama University of Science; Takeo Kitazawa – Yasuda Women's University; Yuta Hatori – Yasuda Women's University; Akihiro Matsumoto – Osaka Ohtani university

790: L-Carnosine as a Biocompatible Dipeptide Carrier for Oral Delivery of Poorly Soluble Bosentan Hydrate

Anna Krupa, Jagiellonian University, Poland
Dominik Strojewski – Doctoral School Jagiellonian University Medical College; Michał Duda – Jagiellonian University; Agnieszka Skórska-Stania – Jagiellonian University; Natalia Górska – Jagiellonian University; Gniewomir Latacz – Jagiellonian University Medical College; Maja Kudrycka – Jagiellonian University Medical College; Florence Danede – Université de Lille UMR CNRS; Laurent Paccou – Université de Lille UMR CNRS; Yannick Guinet – Université de Lille UMR CNRS; Alain Hedoux – Université de Lille UMR CNRS; Jean-Francois Willart – Université de Lille UMR CNRS

791: Development of Amorphous Solid Dispersions of Dapsone for Improved Dissolution and Oral Bioavailability

Madhur Kulkarni, PhD(Tech), School of Pharmacy, Indira University, India
Sanskruiti Jadhav – School of Pharmacy, Indira University; Vaishali Shirsat – Bombay College of Pharmacy; Suhas Yewale – Image ProVision Pvt Ltd; Poonam Desale – Bombay College of Pharmacy

792: Oral Protein Delivery for the Local Treatment of Crohn's Disease Using Targeted Supramolecular Nanoparticles

Rachael Lever, AMRSC, University of Nottingham, United Kingdom
Sonia Pedro – University of Nottingham; Aimee Scott – University of Nottingham; Veeren Chauhan – University of Nottingham; Felicity de Cogan – University of Nottingham

793: Preparation and characterization of sustained-release mini-tablets incorporating ticagrelor nanosuspension

So Min Lim, B.S., Chungnam National University / College of Pharmacy, Republic of Korea
Sung Ho Lee – Chungnam National University; Ji Hyun Bang – Chungnam National University; Young Ju Jo – Chungnam National University; Samuel Lee – Chungnam National University; Cheong-Won Cho – Chungnam National University; Young-Guk Na – Chungnam National University

794: Phosphodiesterase inhibition's effect on oral bioavailability of acylated peptides in conjunction with SNAC

Marianne Lind, Novo Nordisk, Denmark
Co-Authors: All names listed

795: Development of ketoprofen controlled release system for oral administration

Sara Lippolis, MS, University of Parma, Italy
Maria Concetta Dragani – Dompè Pharmaceuticals; Alessandra Rossi – University of Parma

796: From Needle to Nibble: PEGylated Nanocarriers for Oral Thymopentin Immunomodulation

Jingyuan Wen, PhD, The University of Auckland, New Zealand
Darren Svirskis – The University of Auckland; Thomas Proft – The University of Auckland; Jacelyn Loh – The University of Auckland; Jingyuan Wen – The University of Auckland

797: Bioavailability Enhancing and Incretin Inducing Nanostructured Lipid Carriers for Diabetes: An In Vivo Evaluation

Kok Hou Lok, Monash University Malaysia, Malaysia
Lay-Hong Chuah – Monash University; Chee Wun How – Monash University Malaysia; Rajesh Sreedharan Nair – University of Nottingham Malaysia

798: Cell Penetrating Peptide Engineered Liposomal Nanocarriers for Improved Oral Delivery of CNS-Targeted Asenapine

Geethu M, PhD, MCOPS, India
Srinivas Mutalik – MCOPS; Alan Raj – MCOPS

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799: Transporter-Driven Supramolecular Nanocomplex for Oral Delivery of Peptide Therapeutics

Gaeun Ma, *konkuk university, Republic of Korea*
Yeonsu Ryu – *konkuk university*; Bison Seo – *konkuk university*;
Minho Seo – *konkuk university*; Jae-Hyeon Lee – *konkuk university*;
Seong-Bin Yang – *konkuk university*; Jooho Park – *konkuk university*

800: From Bitterness to Compliance: Ion-Exchange Resin-Mediated Taste Masking of Famotidine in Chewable Tablets

Roza Markovski, *IMCD Deutschland GmbH, Germany*
Harshada Patale – *Dr. L.H. Hiranandani College of Pharmacy*;
Pramod Kolsure – *IMCD India Pvt Ltd*; Nishant Nirale – *IMCD India Pvt Ltd*;
Rachana Sarawade – *Dr. L.H. Hiranandani College of Pharmacy*;
Chhanda Kapadia – *IMCD India Pvt Ltd*

801: ROS-Responsive, Macrophage-Targeted Microparticles for Colon-Specific 5-ASA Delivery

Andréia Meneguim, PhD, *São Paulo State University (UNESP), Brazil*
Maria Fernanda Pollini – *São Paulo State University (UNESP)*;
Augusto Oliveira – *São Paulo State University (UNESP)*

802: Oral delivery of adalimumab with BIONDD® technology achieving bioavailability comparable to s.c. injection

Nina Mertz, *Biograil ApS, Denmark*
Liv von Voss – *Biograil ApS*; Carmen Milian Guimera – *Biograil ApS*;
Anne Tungelund Larsen – *Biograil ApS*; Nils Piwon – *Biograil ApS*;
Karsten Lindhardt – *Biograil ApS*; Nikolaj Skak – *Biograil ApS*

803: Comparison of Standard and Biorelevant Media for the Evaluation of Enteric Capsule Performance

Elisa MILLET, *LONZA (Capsugel), France*
Vincent Jannin – *Capsugel France SAS*; Brendan Griffin – *School of Pharmacy/University College Cork*;
Joseph O'Shea – *School of Pharmacy/University College Cork*

804: Co-administration of ASDs and SNEDDS for improving bioavailability of nilotinib compared to ASD alone

Anette Müllertz, *University of Copenhagen, Denmark*
Anette Müllertz – *University of Copenhagen*; Thomas Rades – *University of Copenhagen*

805: Improving the Drug Loading Capacity and Downstream Processing of HPMCAS using Gelucire® 48/16 in Hot-Melt Extrusion

David Nakhla, PhD, *SE Tylose USA, Inc., United States*
Masumi Dave – *Gattefossé USA*; Nicholas DiFranco – *Gattefossé USA*;
Inayet Ellis – *Gattefossé USA*

806: Sex-specific systemic drug exposure enhancement through excipient-enabled 3D printed medications

Laxmi Prasanna Nandiraju, MPharm (Hons), *UCL School of Pharmacy, 29-39 Brunswick Square, London, WC1N 1AX, United Kingdom*
Alvaro Goyanes – *Departamento de Farmacología, Farmacia y Tecnología Farmacéutica, I+D Farma Group (GI-1645),*

Facultad de Farmacia, iMATUS and Health Research Institute of Santiago de Compostela (IDIS), Universidade de Santiago de Compostela (USC), Santiago de Compostela, 15782, Spain;
Yang Mai – *School of Pharmaceutical Sciences (Shenzen), Sun Yat-Sen University, Shenzen 518107, China*;
Abdul W. Basit – *UCL School of Pharmacy, University College London, 29-39 Brunswick Square, London WC1N 1AX, United Kingdom*

807: A Manihot esculenta Starch-Based Floating Gastroretentive System for Sustained Oral Delivery of Methotrexate

Yinka James OYENIYI, *Usmanu Danfodiyo University Sokoto, Nigeria*
Emmanuel Omenazu – *Usmanu Danfodiyo University Sokoto*

808: Polymer-coated sporopollenin exine capsules for colon-targeted Lenvatinib delivery

Naile Öztürk, PhD, *Inonu University, Turkey*
Hayrettin Tonbul – *Inonu University*; Seher Guler – *Inonu University*;
Harun Kaya – *Malatya Turgut Ozal University*; Funda Ersoy Atalay – *Inonu University*

809: Poly(β -amino ester)-based 3D printed devices for oral biotherapeutic delivery: effect of composition and geometry

Kyriaki Pafiti, *UNIVERSITY OF NOTTINGHAM, United Kingdom*
Atabak Ghanizadeh Tabriz – *University of Nottingham*;
Jonathan Booth – *AstraZeneca Macclesfield, United Kingdom*;
Susanna Abrahmsén-Alami – *AstraZeneca, Gothenburg, Sweden*;
Nigel Davies – *AstraZeneca, Gothenburg, Sweden*;
Morgan Alexander – *University of Nottingham*;
Ricky Wildman – *University of Nottingham*;
Clive Roberts – *University of Nottingham*;
Cameron Alexander – *University of Nottingham*

810: Thioether-Containing ROS-Responsive Fibers for the Treatment of Intestinal Inflammation

Magdalena Prosolowicz, *Technical University of Denmark, Denmark*
Fateme Ajalloueiian – *Technical University of Denmark*;
Anja Boisen – *Technical University of Denmark*

811: Hot Melt Extrusion and 3D Printing in the Preparation of Bupropion Tablets Using Different Grades of Ethylcellulose

Chrystalla Protopapa, MPharm, MSc, *National and Kapodistrian University of Athens, Greece*
Dennis Douroumis – *University of Nicosia Athens*;
Marilena Vlachou – *National and Kapodistrian University of Athens*;
Angeliki Siamidi – *National and Kapodistrian University of Athens*

812: Synthesis of pH-responsive Hydrogel in Gastro-Resistant Capsules shell for Colon-Targeted Drug Delivery.

Mohammad Rabeh, PhD, *Jerash University, Jordan*
Colin Mccoy – *Queen University Belfast*;
Matthew Wylie – *Queen University Belfast*;
Mai Tayyem – *Middle East University*;
Abdelrahim Alqudah – *Hashemite University*;
Ahmad Rabei – *Jerash University*

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813: Microfluidic Development and Characterization of Oral Flavonoid Nanoformulation for Colorectal Cancer Therapy

Thiécla Rosales, PhD, *University Medical Center of Groningen, Netherlands*

Hélder A. Santos - *University Medical Center of Groningen;*

Graziela Scheuer Gomes - *University Medical Center of Groningen*

814: Calcium alginate particles for prolonged release of nanoemulsions of hydrophobic drugs.

Adriana Santos, *University of Beira Interior, Portugal*

Catarina Diniz - *University of Beira Interior; Alexandra Jorge -*

University of Beira Interior; Sara Meirinho - University of Beira Interior; Liliana Pinto - University of Beira Interior

815: Enzyme and fluorophore pre-functionalized chitosan enables robust biocatalytic nanobots

Ana Sofia Sousa, CBQF - *Universidade Católica Portuguesa & i3S - Universidade do Porto, Portugal*

Bruna Costa - *i3S - Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Porto, Portugal; Joana Gomes - i3S - Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Porto, Portugal; Ana Magalhães - i3S - Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Porto, Portugal; Celso Reis - i3S - Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Porto, Portugal; Maria Pintado - Universidade Católica Portuguesa, CBQF - Centro de Biotecnologia e Química Fina - Laboratório Associado, Escola Superior de Biotecnologia; Ezequiel Coscueta - Universidade Católica Portuguesa, CBQF - Centro de Biotecnologia e Química Fina - Laboratório Associado, Escola Superior de Biotecnologia*

816: Formulation-Driven Solubility Enhancement of PROTAC ARCC-4 through Acid-Incorporated Eudragit® EPO ASDs

Alicia Stakemeier, *Department of Pharmaceutics, University of Bonn, Germany*

Lukas Mild - *Department of Pharmaceutics, University of Bonn, Germany; Christian Steinebach - Department of Pharmaceutical/ Medicinal Chemistry, Institute of Pharmacy, University of Greifswald, Germany; Karl G. Wagner - Department of Pharmaceutics, University of Bonn, Germany*

817: Development of a Controlled Porosity Osmotic Pump (CPOP) Zero-Order Release tablet in lieu of a Laser Drilled Orifice

Raj Arunagir, PhD, *Eastman, United States*

Raj Arunagiri - *Eastman; Ankikumar Jain - Eastman; Matt Stephens - Eastman*

818: Development of SNEDDS to improve the bioavailability of a new antileishmanial drug

Carlos Torrado Salmerón, *Complutense University of Madrid, Spain*

Luis Junior Barrionuevo Quintana - *Complutense University of Madrid; Christophe Dardonville - Institute of Medicinal*

Chemistry, IQM-CSIC; Almudena Laguna - Complutense

University of Madrid; Santiago Torrado - Complutense

University of Madrid; Adriana Oliveira Santos - Universidade da Beira Interior

819: Nanostructuring of Pectins for the Delivery of Fermentable Pectic Oligosaccharides to the Distal Colon

Pedro Viana da Silva, MSc, *University of São Paulo (USP), Brazil*

Thiécla Rosales - *University Medical Center of Groningen;*

Hélder Santos - *University Medical Center of Groningen; João Paulo Fabi - University of São Paulo*

820: Advanced Encapsulation Technology for the Oral Delivery of Micronutrients

Yilun Weng, PhD, *The University of Queensland, Australia*

821: To die or not to die? Modulating ferroptosis in liver fibrosis using PPC-rich lipid as bioactive excipients in tablets

Assumpta Widak, MSc., *University of Bern, Switzerland*

Yasmin Jocar - *University of Bern; Simone Aleandri - University of Bern; Solveigh Cornelia Koeberle - University of Graz; Andreas Koeberle - University of Graz; Paola Luciani - University of Bern*

822: Effect of succinic acid on the bioavailability of water insoluble ondansetron in three kinds of nanoparticle systems

Sanghyun Woo, *Hanyang University, Republic of Korea*

Han-Gon Choi - *Hanyang University; Sung Gyu Jin - Dongguk University*

823: Oral delivery of engineered bacterial membrane vesicles to ameliorate inflammatory bowel diseases

Beibei Wu, MS, *Sichuan University, China (People's Republic)*

Jinhan He - *Department of Pharmacy, Institute of Metabolic Diseases and Pharmacotherapy, West China Hospital, Sichuan University*

824: Probiotic Lactobacillus as Living Drug Carriers: Mechanistic Insights into Duloxetine Bioaccumulation

Charlotte Yeung, BSc, MPhil, *University College London, United Kingdom*

825: A self-unfolding origami device for oral delivery of macromolecules

Kai Zhang, *DTU, Denmark*

Anja Boisen - *DTU; Gafaru Moro - DTU; Morten Svendsen - DTU*

826: Construction of Paeoniflorin Glycosides-Piperine Mixed Micelles and its application in murine ulcerative colitis

Jiahuan Zhu, *Zhejiang Pharmaceutical University, China (People's Republic)*

Jiale Chen - *Zhejiang Pharmaceutical University; Jin Tao -*

Zhejiang Pharmaceutical University; Chunjie Zhu - Zhejiang Pharmaceutical University; Ying Hu - Zhejiang Pharmaceutical University

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827: A Dual-PEGylation Strategy to Enhance Mucus Transport of Drug Nanocrystals

Hayam Abdelgawad, MSc, POLYMAT, University of the Basque Country, Spain

Marcelo Calderón – POLYMAT, University of the Basque Country, Donostia-San Sebastián, Spain; Upashi Goswami – POLYMAT, University of the Basque Country, Donostia-San Sebastián, Spain.; Soledad Orellano – POLYMAT, University of the Basque Country, Donostia-San Sebastián, Spain; Alejandro Paredes – School of Pharmacy, Queen's University Belfast, Belfast, U.K

828: Architectural Control of Hydration and Drug Permeation in Monoaxial and Coaxial Electrospun Nanofibres

Rand Abdulhussain, University of Huddersfield, United Kingdom
Adeola Adebisi – University of Huddersfield; Kofi Asare-Addo – University of Huddersfield

829: Lipid nanoparticles for pulmonary delivery of mRNA

Noorjahan Aibani, PhD, Cytiva, Canada
Nikita Jain – Cytiva; Sams Sadat – Cytiva; Anitha Thomas – Cytiva

830: Innovative biomaterials for wound healing

Maria Alleva, MyBiotech GmbH, Germany
Daniela Becher – MyBiotech GmbH; Selestina Gorgieva – University of Maribor, Faculty of Mechanical Engineering; Eleonora Rizzi – MyBiotech GmbH; Maša Hren – University of Maribor, Faculty of Mechanical Engineering; Urška Jančič – University of Maribor, Faculty of Mechanical Engineering; Emre Türel – MyBiotech GmbH; Nazende Günday-Türel – MyBiotech GmbH

831: Innovative topical bifunctional nano-hydrogel for the treatment of childhood atopic dermatitis

María Javiera Alvarez-Figueroa, Pontificia Universidad Católica de Chile, Chile
Arturo Borzutzky – Pontificia Universidad Católica de Chile; Ricardo Carrillo-Gallardo – Pontificia Universidad Católica de Chile; José Vicente González-Aramundiz – Pontificia Universidad Católica de Chile

832: Dissolving microarray patches loaded with rosuvastatin calcium : A potential transdermal drug delivery device

Saja Alzughoul, Queens University Belfast, United Kingdom
Yaocun Li – Queen's University Belfast; Ryan Donnelly – Queen's University Belfast

833: Use of X-ray micro-computed tomography to assess skin penetration depth of microneedles loaded with contrast agent

Daisuke Ando, National Institute of Health Sciences, Japan
Co-Authors: All names listed

834: Transdermal delivery of multiple antibiotics using GMP compliant low molecular weight PVA PVP hydrogel forming MAPs

Maria Galleri, PhD, Queen's University Belfast, United States
Andang Miatmoko – Airlangga University; Maria Galleri – Queen's University Belfast; Ryan Donnelly – Queen's University Belfast

835: FucoPol-based dissolving microneedles as a bioactive platform for transdermal drug delivery

Diana Araújo, NOVA University Lisbon, Portugal
Co-Authors: All names listed

836: Charge Switching Mechanism in Multilayered Silk Films Allows Controlled and Long-Term Release of Multiple Drugs

Christine Jurene Bacal, PhD, Ear Science Institute Australia, Australia
Benjamin Allardyce – Deakin University; Pramod Dorishetty – Ear Science Institute Australia; Fatemeh Ezheian – Edith Cowan University; Amir Razmjou Chaharmahali – Edith Cowan University; Filippo Valente – Ear Science Institute Australia

837: Lung Delivery of Advanced Lipid-Based Nanoplatform via Dry Powder Inhalers for Drugs with Poor Aqueous Solubility

Tihana Baniček, RCPE GmbH / University of Graz, Austria
Marlena Neišli – RCPE GmbH, Graz, Austria / University of Graz, Institute of Pharmaceutical Sciences, Department of Pharmaceutical Technology and Biopharmacy, Graz, Austria; Valerio Todaro – CHIESI Farmaceutici S.p.A., Parma, Italy; Alessandro Cavecchi – CHIESI Farmaceutici S.p.A., Parma, Italy; Eleonore Fröhlich – RCPE GmbH, Graz, Austria / Medical University of Graz, Center for Medical Research, Graz, Austria; Andreas Zimmer – University of Graz, Institute of Pharmaceutical Sciences, Department of Pharmaceutical Technology and Biopharmacy, Graz, Austria; Sharareh Salar-Behzadi – RCPE GmbH, Graz, Austria / University of Graz, Institute of Pharmaceutical Sciences, Department of Pharmaceutical Technology and Biopharmacy, Graz, Austria

838: Development of triamcinolone pharmaceutical gummies for the treatment of oral lichen planus

Luis Barrionuevo, Complutense University of Madrid, Spain
Carlos Torrado-Salmerón – Faculty of Pharmacy, Complutense University; Víctor Guarnizo-Herrero – Faculty of Pharmacy, University of Alcalá; Borja Martínez-Alonso – Faculty of Pharmacy, University of Alcalá; Hugo Pardo – Faculty of Pharmacy, University of Alcalá; Norma Sofía Torres Pabón – Faculty of Pharmacy, University of Alcalá; Guillermo Torrado Durán – Faculty of Pharmacy, University of Alcalá

839: Dissolving Microneedle as an Alternative Transdermal Delivery Strategy for Memantine

Sheng Bi, Queen's University Belfast, United Kingdom
Qonita Anjani – Queen's University Belfast; Ryan Donnelly – Queen's University Belfast

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840: Thermoresponsive systems containing sericin for topical delivery: DLS and rheological characterization

Marcos Bruschi, *State University of Maringa, Brazil*
Gabrielli Furlan – *State University of Maringa – UEM*; Michael Cook – *University College London*

841: Thermostable Delivery of Recombinant VZV gE Vaccine Using Solid-Formulated Microneedle Patches

Seojin Byun, *Gachon University, Republic of Korea*
Jung-Hwan Park – *Gachon University*

842: Engineering environment-responsive nanogels for the treatment of rare dermal diseases

Rakesh Kumar Maji, PhD, *POLYMAT – Basque Center for Macromolecular Design and Engineering, Spain*
Gaurav Sadhnani – *Berlin Institute of Health, Charité – Universitätsmedizin Berlin*; Maria Orellano – *POLYMAT – Basque Center for Macromolecular Design and Engineering*; Alfonso Arguello – *Faculté de Pharmacie, Université de Montréal*; Rakesh Kumar – *POLYMAT – Basque Center for Macromolecular Design and Engineering*; Ana Beloqui – *POLYMAT – Basque Center for Macromolecular Design and Engineering*; Davide Brambilla – *3. Faculté de Pharmacie, Université de Montréal*; Sarah Hedtrich – *1. Berlin Institute of Health, Charité – Universitätsmedizin Berlin*

843: Exploring thermal water serum containing α -CD microsponges for Pistacia terebinthus L. extract topical delivery

Roberta Cavalli, PhD, *University of Turin, United States*
Monica Argenziano – *University of Turin*; Mário Pedro Marques – *University of Coimbra*; Francesco Trotta – *University of Turin*; André Araújo – *Instituto Politécnico da Guarda*; Célia Cabral – *University of Coimbra*

844: Engineering Hydrogels for Chronic Wound Diagnostics: Repurposing Biomaterials into Autonomous pH Sensors

Katia Cherif, M.Sc., *Université de Montréal, Canada*
Marie-Lynn Al-Hawat – *Université de Montréal*; Farnoush Toupchinejad – *McGill University*; Nancy Abdel Samad – *Université de Montréal*; Arnaud Morin – *Polytechnique Montréal*; Simon Matoori – *Université de Montréal*

845: Influence of Microneedle Design on Variability in Dermal Interstitial Fluid Collection from Human Subjects

Chizimuzo Chibuko, *Georgia Institute of Technology, United States*
Youseong Kim – *Georgia Institute of Technology*; Isaree Pitaktong – *Georgia Institute of Technology*; B. Pradeep K.Reddy – *Georgia Institute of Technology*; Erkan Azizoglu – *Georgia Institute of Technology*; Danial Hosseini – *Georgia Institute of Technology*; Mark Prausnitz – *Georgia Institute of Technology*

846: Quality-by-design optimization of chitosan-based nanoparticles for mucosal delivery of H. pylori OMP antigens

Tomas Concha, *Faculdade de Farmácia, Universidade de Lisboa, Portugal*
Inês Guerreiro – *iMed.Ulisboa, Faculdade de Farmácia, Universidade de Lisboa*; André da Silva – *iMed.Ulisboa, Faculdade de Farmácia, Universidade de Lisboa*; António Almeida – *iMed.Ulisboa, Faculdade de Farmácia, Universidade de Lisboa*; Lídia Gonçalves – *iMed.Ulisboa, Faculdade de Farmácia, Universidade de Lisboa*

847: 3D-Printed Carboxymethyl Cellulose Hydrogels for Melatonin Delivery in Chronic Wound Management

Angel Concheiro, *Universidade de Santiago de Compostela, Spain*
Mariana Zarur – *Universidade de Santiago de Compostela*; Alvaro Goyanes – *Universidade de Santiago de Compostela*; Carmen Alvarez-Lorenzo – *Universidade de Santiago de Compostela*

848: Tiny needles, big relief: Investigating microneedle systems for transdermal antiemetic therapy

Ana Sara Cordeiro, PhD, *University of Strathclyde, United Kingdom*
Arshdeep Sran – *University of Strathclyde*

849: High-Cholesterol Usnic Acid-Loaded Liposomes for Infected Chronic Wounds: Development and Characterization

Mafalda Correia, Credentials, *Faculty of Pharmacy, University of Coimbra and The University of Texas at Austin, Portugal*
Ana Colette Maurício – *Instituto de Ciências Biomédicas Abel Salazar of the University of Porto (ICBAS-U.Porto)*; Ana Clotilde Fonseca – *Centre for Mechanical Engineering, Materials and Processes (CEMMPRE), University of Coimbra*; Ana Cláudia Paiva-Santos – *Faculty of Pharmacy, University of Coimbra*; Nicholas A. Peppas – *The University of Texas at Austin*

850: pH-Responsive Weak Organic Acid-Incorporated Hydrogel Coatings for Antimicrobial Urinary Catheters

Linfei Dai, BSc, *Queen's University Belfast, United Kingdom*
Colin McCoy – *Queen's University Belfast*; Matthew Wylie – *Queen's University Belfast*

851: Formulation and Characterisation of Spirolactone-Eugenol-Loaded LeciPlexes for Topical Delivery

Saedah Dereiah, PhD, *Huddersfield university, United Kingdom*
Barbara Conway – *Huddersfield University*; Muhammad Usman Ghori – *Huddersfield University*

852: Development of Peptide Hydrogel-Loaded Core-Shell Microneedles for Subunit Vaccine Delivery

Alisher Djumae, MSc, *De Montfort University, United Kingdom*
Omar Mansour – *De Montfort University*; Shokhista Tashmukhamedova – *National University of Uzbekistan*; Maitreyi Shivkumar – *De Montfort University*; Mohammed Elsayy – *University of Manchester*; Sara Cordeiro – *University of Strathclyde*

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853: From Self Assembly to Skin Repair: The Versatility of Janus Dendrimer Hydrogels

Rodrigo Dores, *University of Coimbra, Portugal*
Sami Nummelin - *Aalto University*; Mauri Kostainen - *Aalto University*; Vera Moura - *Basinnov Life Sciences*; Anthony Burke - *University of Coimbra*; Luis Bimbo - *University of Coimbra*

854: Niosomal Film-Forming Gel for Topical Delivery of Colchicine: Formulation, and Controlled Release Performance

Farid Dorkoosh, *Tehran university of medical sciences, Iran*

855: Bacterial cellulose dressings from kombucha tea combined with casein to treat chronic wounds

Elisabeth Ekoh, *Instituto Superior Tecnico, Portugal*
João Teixeira - *Instituto Superior Tecnico*; Diana Silva - *Instituto Superior Tecnico*; Madalena Oom - *Egas Moniz Center for Interdisciplinary Research, Egas Moniz School of Health & Science*; Helena Barroso - *Egas Moniz Center for Interdisciplinary Research, Egas Moniz School of Health & Science*; Benilde Saramago - *Instituto Superior Tecnico*; Ana Paula Serro - *Instituto Superior Tecnico*

856: Development and Evaluation of Vitamin E-Functionalized Nanoformulation for Transdermal Drug Delivery

Menna Ezzat, BPharm, MSc, *Misr International University, Egypt*
Lobna Hatem - *Misr International University*; Randa Latif - *Cairo University*; Hany Mahmoud - *Misr International University*; Mai Tawfik - *Egyptian Chinese University*

857: Development and Evaluation of Ex Vivo Human Skin Models to Predict Injection Site Reactions

Brie Falkard, PhD, *Gilead Sciences, United States*
Marcus Deloney - *Gilead Sciences*; Dana Levine - *Gilead Sciences*; Tyler Novak - *Gilead Sciences*

858: First in Class Isoniazid Cocrystal Integrated into Dissolving Microneedles for Sustained Tuberculosis Therapy

Octavio Fandiño, *Queens University Belfast, United Kingdom*
Ryan Donnelly - *Queen's University Belfast, UK*; Huanhuan Li - *Queen's University Belfast, UK*; Yaocun Li - *Queen's University Belfast, UK*; Lucia McPeake - *Queen's University Belfast, UK*

859: Improving Topical Skin Cancer Therapy by Local Increased Oxygenation

Sofia Fureby, *Malmö Universitet, Sweden*
Sebastian Björklund - *Malmö Universitet, Biofilms Research Centre for Biointerfaces*; Adam Clauss - *Clauss Science Support, Malmö University*; Sanja Bulut - *Bioglan AB*; Mogens Larsen Andersen - *Copenhagen University*; Tautgirdas Ruzgas - *Malmö Universitet, Biofilms Research Centre for Biointerfaces*; Chris Anderson - *Linköping University*; Johan Engblom - *Malmö Universitet, Biofilms Research Centre for Biointerfaces*

860: Transdermal administration of vitamin D through innovative hybrid nanoparticles

JV González-Aramundiz, *Pontificia Universidad Católica de Chile, Chile*
MJ Alvarez-Figueroa - *Pontificia Universidad Católica de Chile*; J Serer - *Pontificia Universidad Católica de Chile*; A Alegria-gallardo - *Pontificia Universidad Católica de Chile*; A Vergara-Aranda - *Pontificia Universidad Católica de Chile*

861: Ex vivo platform using viable human skin to investigate subcutaneous administration of macromolecules

Si Gou, *University of Geneva, Switzerland*
Yogeshvar N. KALIA - *University of Geneva*

862: Colistin-loaded dissolving microneedles for local treatment of skin infections: preparation, characterization

Antonio Guillot, *Universitat de València (UV), Spain*
Miguel Ángel Rubio-López - *Universitat de València (UV)*; José Alejandro Bernabeu-Martínez - *Universitat de València (UV)*; Miquel Martínez-Navarrete - *Universitat de València (UV)*; Ana Melero - *Universitat de València (UV)*

863: Nanocomposite Hydrogels for Topical Delivery of Quorum Sensing Inhibitors in Group A Streptococcus

Elisabeth Gutierrez Manzanares, *University of Illinois at Chicago, United States*
Jennifer Chang - *UIC*; Michael Federle - *UIC*; Richard Gemeinhart - *UIC*

864: How polymer and drug interactions affect dissolving microneedle migraine therapy

Brianna Haase, B.S., M.S., *University of Iowa, United States*
Nicole Brogden - *University of Iowa*

865: Permeation of Formoterol into Human Skin and Local Skin Irritation Response

Annina Hahn, *University of Bonn, Germany*
Alf Lamprecht - *University of Bonn*

866: Ionic liquid 1 enhances nasal absorption of dextran as a model of mid-sized macromolecule

Ryo Hayashi, *Tokushima university, Japan*
Shoichiro Fukuda - *Tokushima University*; Haruka Takata - *Tokushima University*; Takashi Nakae - *MEDRx Co., Ltd*; Noboru Tatsumi - *MEDRx Co., Ltd*; Hidetoshi Hamamoto - *MEDRx Co., Ltd*; Shingo Kobayashi - *Tokushima University*; Hidenori Ando - *Tokushima University*; Tatsuhiro Ishida - *Tokushima University*

868: Interfacial Self-assembled Microsphere-Integrated Microneedle for Enhanced Drug-Loading Transdermal Delivery

Shuai Hu, *University Medical Center Groningen, Netherlands*
Maria Lobita - *University Medical Center Groningen*; Yu He - *University Medical Center Groningen*; Hélder Santos - *University Medical Center Groningen*; Mohammad-Ali Shahbazi - *University Medical Center Groningen*

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869: Development and Therapeutic Evaluation of Osteole-Loaded Nano-gel for Atopic Dermatitis

Ying Hu, Zhejiang Pharmaceutical University, China (People's Republic)

Xiaohao Chen - Zhejiang Pharmaceutical University; Xuling Sun - Zhejiang Pharmaceutical University; Xinjie Zhou - Zhejiang Pharmaceutical University; Jinjin Wu - Zhejiang Pharmaceutical University; Jin Tao - Zhejiang Pharmaceutical University

870: Electrospun Biodegradable Polycaprolactone/Casein Nanofibrous Mats for Bioactive Wound Dressings

Marta Jesus, Instituto Superior Técnico, Portugal
Elisabeth Ekoh - Centro de Química Estrutural, Institute of Molecular Sciences, Departamento de Engenharia Química, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal; Egas Moniz Center for Interdisciplinary Research (CiEM), Egas Moniz School of Health and Science, 2829-511 Caparica, Almada, Portugal; Isabela Sales - Centre for Textile Science and Technology (2C2T), University of Minho, 4800-058 Guimarães, Portugal; André Carvalho - Centre for Textile Science and Technology (2C2T), University of Minho, 4800-058 Guimarães, Portugal; Vânia Pais - Fibrenamics, Institute of Innovation on Fiber-Based Materials and Composites, University of Minho, 4800-058 Guimarães, Portugal; Helena Barroso - Egas Moniz Center for Interdisciplinary Research (CiEM), Egas Moniz School of Health and Science, 2829-511 Caparica, Almada, Portugal; Madalena Salema-Oom - Egas Moniz Center for Interdisciplinary Research (CiEM), Egas Moniz School of Health and Science, 2829-511 Caparica, Almada, Portugal; Raúl Fanguero - Centre for Textile Science and Technology (2C2T), University of Minho, 4800-058 Guimarães, Portugal; Fibrenamics, Institute of Innovation on Fiber-Based Materials and Composites, University of Minho, 4800-058 Guimarães, Portugal; Raquel Galante - Universidade dos Açores, Açores, Portugal; Biotrust Solutions, Lagoa, Açores, Portugal; Ana Paula Serro - Centro de Química Estrutural, Institute of Molecular Sciences, Departamento de Engenharia Química, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal; Egas Moniz Center for Interdisciplinary Research (CiEM), Egas Moniz School of Health and Science, 2829-511 Caparica, Almada, Portugal

871: Microneedle-based transdermal co-delivery of chondroitin sulfate and stem cell-derived exosomes for RA treatment

Yu Jin Jo, Sungkyunkwan university, Republic of Korea
Van Dat Bui - Vinmec International Hospital, Vin University;
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872: Enhancing the Performance of Lipidic Nanosystems with Choline-Based Ionic Liquids

Ana Júlio, CBIOS - U.Lusófona, Portugal
Luis Oliveira - ECTS, Universidade Lusófona, Lisboa, PORTUGAL; Madalena Batista - ECTS, Universidade Lusófona, Lisboa, PORTUGAL; Carlos Ventura - Escola Superior de Tecnologia do Barreiro, Instituto Politécnico de Setúbal, Setúbal, PORTUGAL; Margarida Caroco - ECTS, Universidade Lusófona, Lisboa,

PORTUGAL; Raquel Mendes - ECTS, Universidade Lusófona, Lisboa, PORTUGAL; Marta B. Martins - CBIOS, ECTS, Universidade Lusófona, Lisboa, PORTUGAL; João Vieira - Universidad de Alcalá, Departamento de Ciencias Biomédicas, Ctra, Madrid-Barcelona, Madrid, ESPAÑA; CBIOS, ECTS, Universidade Lusófona, Lisboa, PORTUGAL; Nuno Saraiva - CBIOS, ECTS, Universidade Lusófona, Lisboa, PORTUGAL; Catarina Pereira-Leite - CBIOS, ECTS, Universidade Lusófona, Lisboa, PORTUGAL; Catarina Rosado - CBIOS, ECTS, Universidade Lusófona, Lisboa, PORTUGAL

873: Recombinant Human Hyaluronidase Improves PK of Subcutaneous ADC: Comparative Minipig Evaluation

David Kang, Credentials, Halozyme Therapeutics, United States
Robert Connor - Halozyme Therapeutics; Ryan Nolan - Halozyme Therapeutics; Tara Nekoroski - Halozyme Therapeutics; Limin Liu - Halozyme Therapeutics; Yan Wang - Halozyme Therapeutics; Marie Printz - Halozyme Therapeutics; Chris Wahl - Halozyme Therapeutics

874: Development and characterisation of topically applied oxygen-loaded hydrogels for chronic wound healing

Srikar Kasha, The University of Auckland, New Zealand
Sara Hanning - The University of Auckland; Odunayo Mugisho - The University of Auckland; Sachin Thakur - The University of Auckland

875: Beyond the Needle: Engineering novel mRNA lipid nanoparticle formulations for mucosal vaccination

Neha Kaushal, Sanofi, United States

876: Sequential Intradermal Delivery of Antigen and Adjuvant Using Separate Microneedle Patches Enhances Immunity

Cheayeon Kim, Gachon University, Republic of Korea

877: Meso-Macro Porous Hydrogel-Based Microneedles for Direct Exosome Isolation and Release in Wound Healing

Mina Kim, MS, KU-KIST Graduate School of Converging Science and Technology, Republic of Korea
Nakwon Choi - Korea University

878: Structure-Dependent Nicotine Release from Inkjet-Printed Buccal Films via Geometric Folding

Ji-seung Kim, Chungbuk National University, Republic of Korea
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879: Bioengineering a needle-free intranasal nanovaccine with TLR7/8 agonist for potent antimetastatic immunity

Byung Deok Kim, BS, Sungkyunkwan University, Republic of Korea
Su Yeon Lim - SUNGKYUNKWAN UNIVERSITY; Dahyun Kim - SUNGKYUNKWAN UNIVERSITY; Ji Hoon Jeong - SUNGKYUNKWAN UNIVERSITY

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881: A Cholesterol-Modified Polyacrylate System for Stable Vitamin D3 Topical Delivery

Doris Laçej, *Sapienza University of Rome, Italy*
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882: Enhancing dermal delivery of tocotrienol via nanoemulsion and microneedles: Is two better than one ?

Jing Yi Lee, *Universiti Sains Malaysia, Malaysia*
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Newcastle University; Ju Yen Fu – *Malaysian Palm Oil Board;*
Gong Tao Ding – *Northwest Minzu University*

883: Development of a Novel Incretin-based Triple agonist_ Loaded microneedle Formulation

Kangseok Lee, *Hanmi Pharm. Co., Ltd., Republic of Korea*
Inyoung Lee – *Hanmi Pharm. Co., Ltd.; Hyunwoo Yu* – *Hanmi*
Pharm. Co., Ltd.; TaekKwan Kwon – *Hanmi pharm. Co., Ltd.;*
Hotaek Im – *Hanmi pharm. Co., Ltd.*

884: Bioinspired Ultratiny Patterned Janus Patch for Selective Tissue Adhesion and Anti-Adhesion in Skin

ShinYull Lee, *Chonnam National University, Republic of Korea*
Woochan Kim – *Chonnam National University; Dream Kim* –
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National University

885: Co-injection of Hyaluronidase Enhanced Bioavailability and Expression Level of Lipid Nanoparticle Delivered mRNA

QIN LI, *University of Pennsylvania, United States*
Ruiqi Shi – *University of Pennsylvania; Drew Weissman* –
University of Pennsylvania

886: 3D printed responsive microneedle for transdermal drug delivery

Dutong Liu, *the University of New South Wales, Australia*
Heather Benson – *Curtin univerty; Tushar Kumeria* – *the*
University of New South Wales

887: Long-Acting Microneedle Delivery of a Novel Rilpivirine Coamorphous Phase

Lauren Liversage, *BSc, Queen's University Belfast, United Kingdom*
Ryan Donnelly – *Queen's University Belfast; Maria Galleri* –
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Belfast; Octavio Fandiño – *Queen's University Belfast*

888: MOF Nanoparticles in Dissolving Microneedles for Macrophage Polarization: In Vitro and Zebrafish Studies

Maria Lobita, *MSc, University Medical Center Groningen, Netherlands*
Idaira Pacheco-Fernández – *UMCG; Willem Hoogaars* – *UMCG;*
Kiyán MUSAIE – *UMCG; Edwin Bremer* – *UMCG; Peter van der*
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889: Development of poly(acrylic acid)-based dissolving microarray patches loaded with anti-hypertensive drugs

Michellaine Luminari, *Queen's University Belfast, United Kingdom*
Qonita Anjani – *Queen's University Belfast; Ryan Donnelly* –
Queen's University Belfast

890: Intranasal MK-801 delivery and LC-MS/MS quantification in plasma and brain following concussion in rats

Louiza Mahrouche, *MSc, Université de Montréal, Canada*
Louis De Beaumont – *Research Center, Hôpital du Sacré-Cœur*
de Montréal; Martin Jutras – *Plateforme de Biopharmacie,*
Faculté de Pharmacie, Université de Montréal; Grégoire
Leclair – *Plateforme de Biopharmacie, Faculté de Pharmacie,*
Université de Montréal; Ian Massé – *Research Center, Hôpital*
du Sacré-Cœur de Montréal; Mihaela Friciu – *Plateforme de*
Biopharmacie, Faculté de Pharmacie, Université de Montréal

891: An Engineered Spray-dried Inhalation Powder Containing HPMC Capable to Prolong In Vivo Cough Suppression

Diletta Mandrioli, *University of Parma, Italy*
Cataldo Martucci – *Chiesi Farmaceutici; Franco Bassani* –
Chiesi Farmaceutici; Daniela Miglietta – *Chiesi Farmaceutici;*
Gino Villetti – *Chiesi Farmaceutici; Annagiulia Balducci* – *Chiesi*
Farmaceutici; Fabio Sonvico – *Università di Parma; Francesca*
Buttini – *Università di Parma*

892: Hydrogel containing liposomal enzyme microreactors for molecular diagnostics in diabetic foot ulcers

Gabriela Manrique Vera, *MSc, Université de Montréal, Canada*
Simon Matoori – *Université de Montréal*

893: 3D-Printed Dissolving Microneedles for Controlled Transdermal Release of Ferulic Acid

Rafaela Martins, *iMed.Ulisboa Faculty of Pharmacy University of Lisbon, Portugal*
Francisca Baptista – *Research Institute for Medicines (iMed.*
ULisboa), Faculty of Pharmacy, Universidade de Lisboa,
Portugal; Cátia Duarte – *Research Institute for Medicines*
(iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa,
Portugal; Ana Ruas – *Research Institute for Medicines (iMed.*
ULisboa), Faculty of Pharmacy, Universidade de Lisboa,
Portugal; Joana Duarte – *Research Institute for Medicines*
(iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa,
Portugal; Sara Bom – *Research Institute for Medicines (iMed.*
ULisboa), Faculty of Pharmacy, Universidade de Lisboa,
Portugal; Andreia Barateiro – *Research Institute for Medicines*
(iMed.Ulisboa), Faculty of Pharmacy, Universidade de Lisboa,
Portugal; Joana Marto – *Research Institute for Medicines (iMed.*
ULisboa), Faculty of Pharmacy, Universidade de Lisboa, Portugal

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894: Melatonin-loaded crosslinked chitosan nanofibers via microfluidic blow spinning for wound healing

Ana Filipa Matos, *Università degli Studi di Urbino Carlo Bo, Italy*
Emanuele Brugnoli - *Università degli Studi di Urbino Carlo Bo*; Maria Gemma Nasoni - *Università degli Studi di Urbino Carlo Bo*; Francesca Luchetti - *Università degli Studi di Urbino Carlo Bo*; Mattia Tiboni - *Università degli Studi di Urbino Carlo Bo*; Luca Casettari - *Università degli Studi di Urbino Carlo Bo*; Annalisa Aluigi - *Università degli Studi di Urbino Carlo Bo*

895: A transdermal edaravone patch for amyotrophic lateral sclerosis (ALS): preparation method using calcium silica

Akihiro Matsumoto, *Osaka Ohtani University, Japan*
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896: Imaging aided strategy for improved transdermal patch biopharmaceutical performance

Barbara Mikolaszek, *Medical University of Gdansk, Poland*
Michał Dufke - *Medical University of Gdansk*; Malgorzata Sznitowska - *Medical University of Gdansk*

897: Optimization of the nebulization parameters for enhanced pulmonary delivery of extracellular vesicles

Marie Morille, *IRMB, Univ. Montpellier, INSERM, CHU Montpellier, 34295 Montpellier, France, France*
Morgane Daurat - *IRMB, Univ. Montpellier, INSERM, CHU Montpellier, 34295 Montpellier, France*; Jade Berthelot - *ICGM, Univ Montpellier, CNRS, ENSCM, Montpellier, France*; Marie Maumus - *IRMB, Univ. Montpellier, INSERM, CHU Montpellier, 34295 Montpellier, France*; Anne Aubert-Poussel - *ICGM, Univ Montpellier, CNRS, ENSCM, Montpellier, France*; Marie Morille - *IRMB, Univ. Montpellier, INSERM, CHU Montpellier, 34295 Montpellier, France + Institut universitaire de France (IUF), Paris, France*

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Hanne Mørck Nielsen, *University of Copenhagen, Denmark*
Cristiana Cunha - *University of Copenhagen*; Freja Bohr - *University of Copenhagen*; Panagiota Kalomoiri - *Norvartis*; Nikos Hakzakis - *University of Copenhagen*; Mikkel Thygesen - *University of Copenhagen*; Hanne Nielsen - *University of Copenhagen*

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Katie Ollerton, *University of Liverpool, United Kingdom*
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Oluwapelumi Oyeniya, *Universidade de Sao Paulo, Brazil*
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901: GELATIN-AGAR: BIODEGRADABLE PLATFORMS FOR CONTROLLED PROTEIN DELIVERY

Kenia Palomino Vizcaino, *Autonomous University of Baja California, Mexico*
Eliseo Reyes-Vasquez - *Autonomous University of Baja California*; Hector Magaña - *Autonomous University of Baja California*; Giovanni Palomino-Vizcaino - *Autonomous University of Baja California*

902: Understanding Depot Formation of Long-acting Microneedles in Skin-Mimicking In Vitro Models

Anjali Kiran Pandya, PhD, *Queen's University Belfast, United Kingdom*
Natalia Porfiryeva - *Queen's University Belfast*; Lalitkumar Vora - *Queen's University Belfast*; Ryan Donnelly - *Queen's University Belfast*

903: A Multi-Format Microneedle Patch Platform for Skin Vaccination

JUNG-HWAN PARK, Ph.D, *Gachon University / QuadMedicine Inc., Republic of Korea*
Seung-Ki Baek - *QuadMedicine Inc.*

904: Optimization of stable liquid crystal nanoparticles for intranasal delivery

Heejun Park, *Duksung Women's University, Republic of Korea*

905: Development of inhalable andrographolide microparticles for treating pulmonary inflammation and viral infection

Peerapong PRABHAKORNRIITA, MD, PhD, MSc, *Cosmetics and Natural Products Research Center (CosNat), Faculty of Pharmaceutical Sciences, Naresuan University, Phitsanulok 65000, Thailand*
Siwaporn Boonyasuppayakorn - *Faculty of Medicine, Chulalongkorn University, Thailand*; Kantapich Srikkham - *Faculty of Pharmaceutical Sciences, Naresuan University, Thailand*; Aphinya Suroengrit - *Faculty of Medicine, Chulalongkorn University*; Jeerakit Kerd Siri - *Faculty of Pharmaceutical Sciences, Naresuan University, Thailand*; Sasiprapa Anoma - *Faculty of Medicine, Chulalongkorn University, Thailand*; Ittipon Siridechakorn - *Faculty of Pharmaceutical Sciences, Naresuan University, Thailand*; Kowit Hengphasatporn - *University of Tsukuba*; Yasuteru Shigeta - *University of Tsukuba, Japan*; Tasana Pitaksuteepong - *Faculty of Pharmaceutical Sciences, Naresuan University, Thailand*; Parvapan Bhattarakosol - *Faculty of Medicine, Chulalongkorn University, Thailand*; Neti Waranuch Neti Waranuch - *Faculty of Pharmaceutical Sciences, Naresuan University, Thailand*

906: Enhancing Human Skin Penetration with Biodegradable Enzymatic Nanomotors

Carles Prado Morales, *IBEC, Spain*
Taco Waaijman - *Amsterdam UMC*; Inés Macías Tarrío - *IBEC*; Cristián Huck Iriart - *ALBA Synchrotron*; Tiziana Russo - *IBEC*; César Rodríguez-Emmenegger - *IBEC*; Jasper J Koning - *Amsterdam UMC*; Samuel Sánchez Ordóñez - *IBEC*

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908: Development of protein antigen-loaded nanocarriers for intranasal pneumococcal vaccine

Febby Purwadi, *University of Santiago de Compostela, Spain*
Florian Bock – *University of Lausanne*; Jean-Claude Sirard – *Institut Pasteur de Lille*; Jan-Willem Veening – *University of Lausanne*; María Alonso – *University of Santiago de Compostela*; Noemi Csaba – *University of Santiago de Compostela*

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Ousama Rachid, PhD, *Qatar University, Qatar*
Nour Alhuda Alaghawani – *Qatar University*; Alaaldin Alkilyani – *Qatar University*; Badreldin Ismail – *Qatar University*; Salih Muhammed – *Qatar University*

910: Powder-cast microneedle fabrication for high-dose delivery of protein therapeutics

Nisha Raman, B.S., *Georgia Institute of Technology, United States*
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911: Development and Evaluation of a Hesperidin Ternary Inclusion Complex Based Topical Gel for Psoriasis Management

Tanisha Rangnekar, *Shobhaben Pratapbhai Patel School Of Pharmacy & Technology Management,SVKM's NMIMS, India*
Nikita Chaudhari – *Shobhaben Pratapbhai Patel School Of Pharmacy & Technology Management SVKM's NMIMS*; Vaishali Londhe – *Shobhaben Pratapbhai Patel School Of Pharmacy & Technology Management SVKM's NMIMS*

912: Optimization of Psoriasis-like spheroids for pre-clinical screening of therapies

Diana Ribeiro, *Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Portugal*
Marta Ferreira – *Inovapoteq*; Vânia Rocha – *Instituto de Investigação e Inovação em Saúde*; Bruno Sarmiento – *Instituto de Investigação e Inovação em Saúde*; Juliana Viegas – *Instituto de Investigação e Inovação em Saúde*

913: Polyethylene glycol-polyester branched copolymers as ingredient for long-acting injectable formulations

Roxane Ridolfo, *Medincell, France*
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914: Q3 considerations for in situ forming implants: an in vivo evaluation of particle size effects

Mckenzie Roy, *The University of Connecticut, United States*
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915: Restoring Pro-Healing microRNA-132 Signaling in Chronic Wounds via Nanoparticle Delivery

Maria Samara, MEng, *Stockholm University, Sweden*
Ning Xu Landén – *Karolinska Institutet*; Bruno Sarmiento – *Universidade do Porto, Universitário de Ciências da Saúde (IUCS – CESPU)*; Sergiu-Bogdan Catrina – *Karolinska Institute, Center for Diabetes, Academic Specialist Center*; Georgios A. Sotiriou – *Stockholm University*

916: Development of Bioactive Chitosan-Based Structures for Diabetic Wound Healing

Francisco Santos, *UCIBIO/i4HB, NOVA University Lisbon, Portugal*
Mariana Oliveira – *UCIBIO/i4HB, NOVA University Lisbon*; Diana Araújo – *UCIBIO/i4HB, NOVA University Lisbon*; Patrícia Concórdio-Reis – *UCIBIO/i4HB, NOVA University Lisbon*; Tânia Vieira – *CENIMAT/i3N, NOVA University Lisbon*; Jorge Silva – *CENIMAT/i3N, NOVA University Lisbon*; Filomena Freitas – *UCIBIO/i4HB, NOVA University Lisbon*

917: Microfluidic Hybrid-Nanoparticles Integrated into Dissolvable Microneedles for Targeted Skin Immunotherapy

Graziela Scheuer Gomes, *The University Medical Center Groningen (UMCG), Netherlands*
Thiecla Katiane Rosales – *The University Medical Center Groningen (UMCG)*; Maria Lobita – *The University Medical Center Groningen (UMCG)*; Hélder Santos – *The University Medical Center Groningen (UMCG)*

918: Transdermal Delivery of Adalimumab for the Treatment of Crohn's Disease

Aimee Scott, *University of Nottingham, United Kingdom*
Stefana Duca – *University of Nottingham*; Rachael Lever – *University of Nottingham*; Sonia Pedro – *University of Nottingham*; Madeline Berrow – *University of Nottingham*; Felicity De Cogan – *University of Nottingham*

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Manisha Sharma, *The University of Auckland, New Zealand*
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920: Development of a Casein-Based Hydrogel Incorporating Apple Peel Extract for Enhanced Chronic Wound Treatment

Diana Silva, *University of Lisbon, Instituto Superior Técnico, Portugal*

Elisabeth Ekoh - *University of Lisbon, Instituto Superior Técnico*; Helena Barroso - *Egas Moniz Center for Interdisciplinary Research*; Madalena Salema-Oom - *Egas Moniz Center for Interdisciplinary Research*; Benilde Saramago - *University of Lisbon, Instituto Superior Técnico*; Ana Paula Serro - *University of Lisbon, Instituto Superior Técnico*

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Yee Shan SIM, RPh, *Universiti Sains Malaysia, Malaysia*
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Ajay Sivakumar, *National University of Singapore, Singapore*
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Klaudia Slowik, PhD, BSc (Hons), *University of Sheffield, United Kingdom*
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924: Volatile Oil-Based Baicalin Nano-Phytogel for Enhanced Antioxidant and Anti-Inflammatory Psoriasis Therapy

Ashish Sutar, *NIPER-Raebareli, India*
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Jin Tao, *Zhejiang Pharmaceutical University, China (People's Republic)*
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Malina Tofan, *Queen's University Belfast, United Kingdom*
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Paarkavi Udayakumar, *Uppsala University, Sweden*
Ilsanne van Noorden - *Uppsala University*; Juan Du - *Karolinska Institute*; Alexandra Teleki - *Uppsala University*

928: Pterodon pubescens-Benth loaded microarray patches for targeted anti-inflammatory therapy

Meredith Underhill, *Ulster University, United Kingdom*
Ana Clara Brito Maria - *University of Campinas, Brazil*; Sara Dobbin - *Ulster University, UK*; Mary Ann Foglio - *University of Campinas, Brazil*; Rogério Machado - *University of Campinas, Brazil*; Peter McPherson - *Ulster University*; Jessica Moore - *Ulster University, UK*; Fabiana Volpe-Zanutto - *Ulster University*

929: Electrospun in situ cross-linked nanofibers for sustained and triggered drug delivery in wound healing

Reshma V. Ramachandran, *Stockholm University, Sweden*
David Juriga - *Stockholm University*; Georgios Sotiriou - *Stockholm University*

930: Advanced Hydrogel Dressings with Antioxidant and Antimicrobial Activity for Malignant Fungating Wounds

Maria Vivero-Lopez, PhD, *School of Pharmacy, University of Nottingham, Spain*
Lara Leote - *Centro de Química Estrutural, Institute of Molecular Sciences, Departamento de Engenharia Química, Instituto Superior Técnico (IST), Universidade de Lisboa (UL), Lisboa, Portugal*; Alfredo Pozuelo - *Centro de Química Estrutural, Institute of Molecular Sciences, Departamento de Engenharia Química, Instituto Superior Técnico (IST), Universidade de Lisboa (UL), Lisboa, Portugal*; Madalena Salema-Oom - *CIEEM, Instituto Superior de Ciências da Saúde Egas Moniz, Caparica, Portugal*; Ricardo F.S. Pereira - *Department of Bioengineering, iBB-Institute for Bioengineering and Biosciences, IST, UL, Lisboa, Portugal*. Associate Laboratory i4HB-Institute for Health and Bioeconomy, IST, UL, Lisboa, Portugal; Carla C.C.R. de Carvalho - *Department of Bioengineering, iBB-Institute for Bioengineering and Biosciences, IST, UL, Lisboa, Portugal*. Associate Laboratory i4HB-Institute for Health and Bioeconomy, IST, UL, Lisboa, Portugal; Ana Paula Serro - *Centro de Química Estrutural, Institute of Molecular Sciences, Departamento de Engenharia Química, Instituto Superior Técnico (IST), Universidade de Lisboa (UL), Lisboa, Portugal*. CIEEM, Instituto Superior de Ciências da Saúde Egas Moniz, Caparica, Portugal; Diana C. Silva - *Centro de Química Estrutural, Institute of Molecular Sciences, Departamento de Engenharia Química, Instituto Superior Técnico (IST), Universidade de Lisboa (UL), Lisboa, Portugal*. CIEEM, Instituto Superior de Ciências da Saúde Egas Moniz, Caparica, Portugal

931: Multilayer nanofilms enhance microneedle mechanical strength and enable programmable drug release in skin

Leo Wang, MD, PhD, FAAD, *University of Pennsylvania, United States*
Junjira Tanum - *University of Pennsylvania*

ABSTRACTS

POSTER ABSTRACTS

932: Novel hydrogel coatings for the prevention of catheter-associated urinary tract infections and encrustation

Anqi Wang, B.Sc., *Queen's University Belfast, United Kingdom*
Colin McCoy - *Queen's University of Belfast*; Matthew Wylie - *Queen's University of Belfast*

933: Polyphenol-Enabled 2D Nanopatch for Enhanced Nasal Mucoadhesion and Immune Activation

Su Cheong Yeom, *Seoul National University, Republic of Korea*

934: Microneedle induced immune tolerance for the treatment of rheumatoid arthritis

Yuanhao Zhao, Credentials, *West China School of Pharmacy, Sichuan University, China (People's Republic)*
Xun Sun - *West China School of Pharmacy, Sichuan University*



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