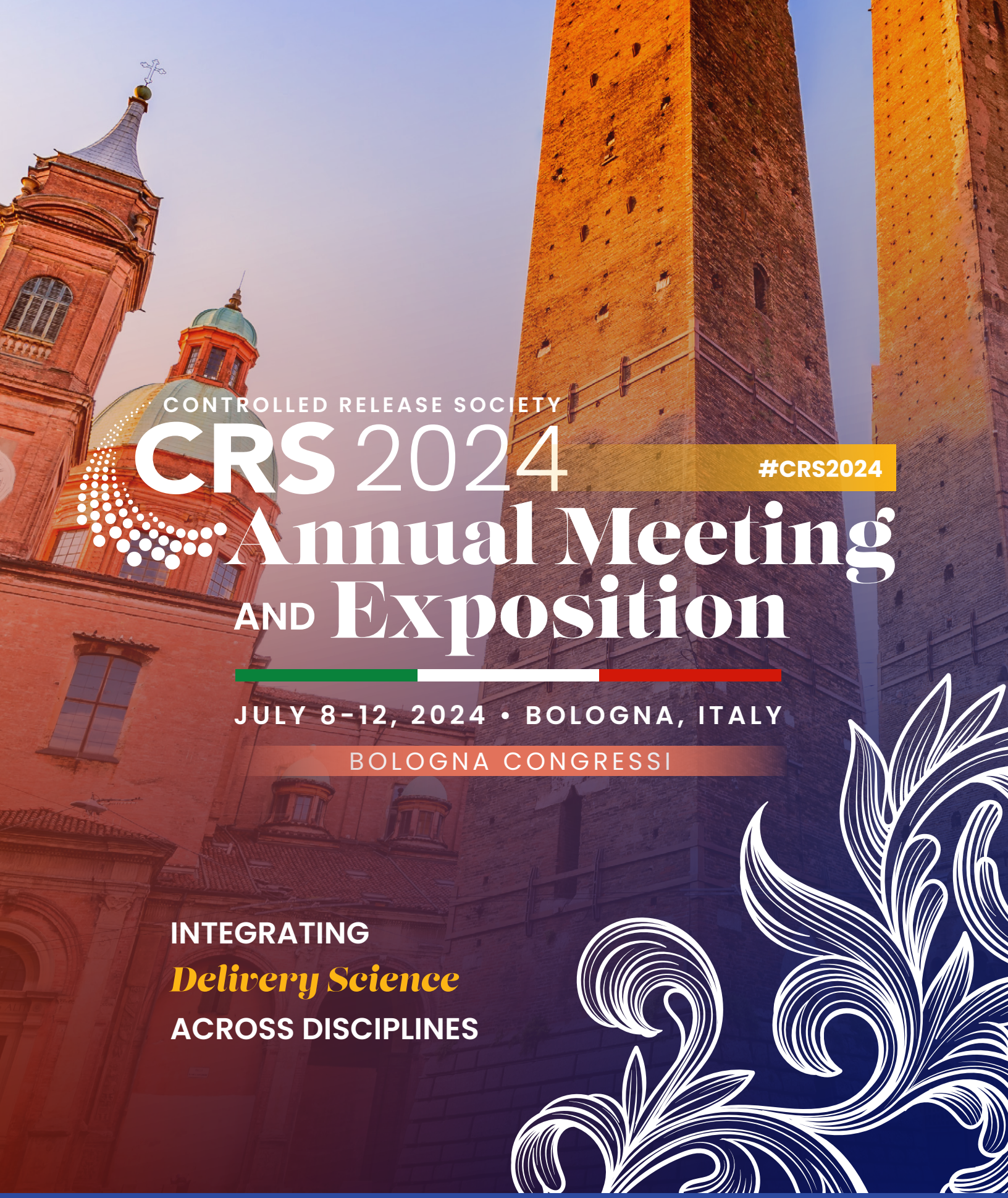


CONTROLLED RELEASE SOCIETY

CRS 2024 Annual Meeting AND Exposition

#CRS2024

JULY 8–12, 2024 • BOLOGNA, ITALY

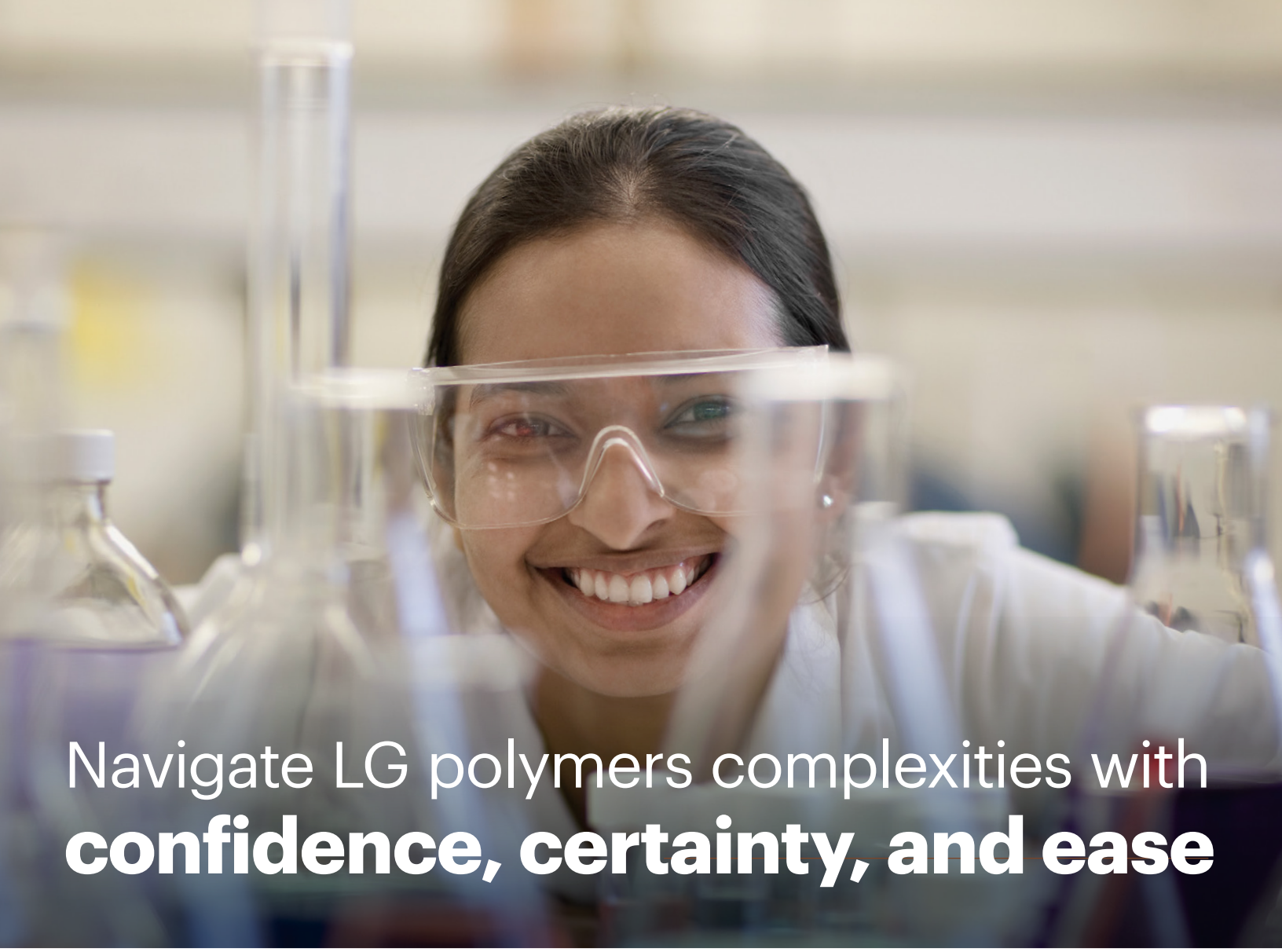
BOLOGNA CONGRESSI

INTEGRATING

Delivery Science

ACROSS DISCIPLINES

ABSTRACT GUIDE



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Explore USP's suite of LG polymer solutions to ensure quality without compromise

NEW! Explore USP's LG polymer reference materials, application notes, General Chapters, monographs, and more

Get updates on USP's work on novel excipients and tell us your top challenges

The standard of trust **usp.org**

Welcome to CRS 2024

On behalf of the CRS Annual Meeting Program Committee (AMPC) and the CRS Board of Directors, I am excited and truly honored to invite all of you to the CRS 2024 Annual Meeting and Exposition in Bologna (Italy) at the Bologna Congressi, July 8-12, 2024.

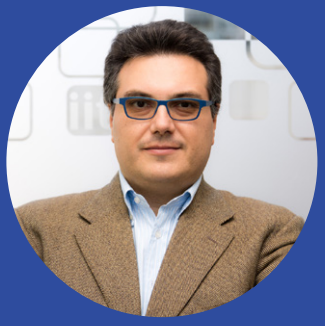
This year, our conference theme is "***Integrating Delivery Science Across Disciplines***", building on the notion that our daily activities rely on the continuous integration of multiple knowledge domains and expertise, from pharmaceutical sciences to engineering, from biotechnology to materials science and chemistry, from molecular imaging to clinical translation, with the ultimate objective of benefiting patients and their families.

For the first time ever, this year our conference will be in Italy, in the splendid city of Bologna, known as "**la dotta**" (*the erudite*) for its University, the oldest in the Western world founded in 1088; "**la grassa**" (*the fat*) for its opulent culinary tradition, and "**la rossa**" (*the red*) for the characteristic color of its Medieval buildings.

The AMPC is developing an exciting program with the right balance between learning from luminaries in the fields of delivery sciences, nanomedicine, imaging, artificial intelligence, and more to exploring Bologna's rich history and culture by walking down the 38 kilometers of porticos, from attending industry-led workshops and scientific forums to engaging in scientific discussions while savoring the oldest local traditions in a trattoria.

We are working on creating a memorable event to celebrate science, friendship, and life.

"***Ci vediamo a Bologna***" – see you all in Bologna!



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CRS 2024 Annual Meeting Program Chair
Italian Institute of Technology
Director, Laboratory of Nanotechnology for Precision Medicine
Genova, Italy

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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 - 5:00 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!

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General Information

ALL EVENTS WILL TAKE PLACE AT THE BOLOGNA CONGRESSI IN BOLOGNA, ITALY, JULY 8-12, 2024.

**All times listed in Central European Time*

REGISTRATION HOURS

The registration desk will be open daily from 7:00 am – 7:00 PM

USE OF CRS SCIENTIFIC PROGRAM CONTENT

Information presented during the 2024 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 8:	7:00 am – 7:00 pm
Tuesday, July 9:	7:00 am – 7:00 pm
Wednesday, July 10:	7:00 am – 7:00 pm
Thursday, July 11:	7:00 am – 7:00 pm

The Speaker Ready Room is located in the **Speaker Ready**. All speakers are requested to check in at least 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 Meeting Mobile App or through this abstract book. Within the app, click on the Posters icon to begin viewing poster abstracts, and view podium abstracts directly from the schedule. The abstracts will be available on the CRS website after the meeting.

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. For childcare services please contact the meetings team at meetings@controlledreleasesociety.org or stop by the Registration desk during designated hours.

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.

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 at 9:30 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.

Installation:

MONDAY, JULY 8: 2:00 pm –4:30 pm
TUESDAY, JULY 9: 8:00 am – 4:00 pm

Exhibit Hours

TUESDAY, JULY 9
6:00 pm – 8:00 pm *(coffee & lite bites provided)*

Welcome Reception / Exhibit Hall & Posters
7:30 pm – 9:30 pm

WEDNESDAY, JULY 10
9:30 am to 8:00 pm

Coffee Break /Exhibit Hall & Posters
11:00 am – 12:00 pm *(coffee & lite bites provided)*

Lunch Break /Exhibit Hall & Posters
1:30 pm – 2:30 pm *(box lunch)*

Networking Break - Exhibit Hall & Posters
6:00 pm – 8:00 pm *(coffee & lite bites provided)*

General Information *(CONTINUED)*

Exhibit Hours (continued)

THURSDAY, JULY 11
9:30 am – 8:00 pm

Coffee Break /Exhibit Hall & Posters
11:00 am – 12:00 pm *(coffee & lite bites provided)*

Lunch Break /Exhibit Hall & Posters
1:30 pm – 2:30 pm *(box lunch)*

Networking Break - Exhibit Hall & Posters
6:30 pm – 8:00 pm *(food & beverages provided)*

Closing Party all Exhibitors Welcome
8:00 pm – 10:00 pm *(onsite - food & beverage provided)*

Dismantle:
THURSDAY, JULY 11: 8:00 pm – 10:00 pm
FRIDAY, JULY 12: 8:00 am – 12:30 pm

POSTER SESSIONS

Posters are located in the Exhibit Hall. 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:
TUESDAY, JULY 9
4:00 pm – 6:00 pm ***(installation must be complete by 6:00 pm)***

Presentation Times:
WELCOME RECEPTION
Tuesday, July 9
7:30 pm – 9:30 pm

EXHIBIT HALL & POSTERS

Wednesday, July 10	**Thursday, July 11**
11:00 am – 12:00 pm	11:00 am – 12:00 pm
1:30 pm – 2:30 pm	1:30 pm – 2:30 pm
6:00 pm – 8:00 pm	6:30 pm – 8:00 pm

Dismantle:

Thursday, July 11	**Friday, July 12**
8:00 pm – 9:00 pm	10:00 am – 12:00 pm

(IF YOUR POSTER IS NOT COLLECTED BY 10:00 AM ON FRIDAY, JULY 12, IT WILL BE DISCARDED)

2024 CRS Awards & Recognition

Congratulations to the 2024 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 2024 Annual Meeting & Exposition.

DISTINGUISHED SERVICE AWARD

Andrew Lewis, PhD
Quotient Sciences

Marianne Ashford, PhD
AstraZeneca

FOUNDERS AWARD

Patrick Couvreur, PhD
University Paris-Saclay

MEMBER OF THE YEAR AWARD

Mariah Arral
Carnegie Mellon University

SAMYANG AWARD IN HONOR OF SUNG WAN KIM

Maria Vicent, PhD
F.C.V Centro Investigacion Principe Felipe

WOMEN IN SCIENCE AWARD

Padma Devarajan, PhD
Institute of Chemical Technology

RISING WOMEN IN SCIENCE AWARD

Ana Beloqui, PhD
Université Catholique de Louvain

CRS EXCEPTIONAL LEADERSHIP AWARD - BY THE YOUNG SCIENTIST COMMITTEE

Sara Cordeiro, PhD
De Montfort University

YOUNG INVESTIGATOR AWARD

Michael Mitchell, PhD
University of Pennsylvania

Roy van der Meel, PhD
Eindhoven University of Technology

TRANSDERMAL DELIVERY KYDONIEUS FOUNDATION AWARD

Ryan Donnelly, PhD
Queen's University Belfast

PhD THESIS AWARD

Allen Jiang
Massachusetts Institute of Technology
"Development and evaluation of localized mRNA delivery systems for vaccines and inhaled therapies"

JOURNAL OF CONTROLLED RELEASE BEST PAPER AWARD

Rein Verbeke, PhD
Ghent University
"Continuous freeze-drying of messenger RNA lipid nanoparticles enables storage at higher temperatures"

DRUG DELIVERY AND TRANSLATIONAL RESEARCH JOURNAL BEST PAPER AWARD

Lalitkumar Vora, PhD
Queen's University Belfast
"Rapidly dissolving bilayer microneedles enabling minimally invasive and efficient protein delivery to the posterior segment of the eye"

CRS Committee Meetings

MONDAY, JULY 8	TIME	ROOM
ED&I Committee Meeting I	12:00 PM - 1:00 PM	Magenta B
TUESDAY, JULY 9	**TIME**	**ROOM**
DDTR Meeting	1:30 PM – 2:30 PM	Rossa A
ED&I Committee Meeting II	1:30 PM – 2:30 PM	Rossa B
IC Board Meeting	1:30 PM – 2:30 PM	Rossa C
WEDNESDAY, JULY 10	**TIME**	**ROOM**
ADDR Editorial Meeting	1:30 PM – 2:30 PM	Rossa A
FG Leadership Meeting	1:30 PM – 2:30 PM	Rossa B
THURSDAY, JULY 11	**TIME**	**ROOM**
JCR Board Meeting	1:30 PM – 2:30 PM	Rossa A
YSC & Industry Foresight Council Meeting	1:30 PM – 2:30 PM	Sala Italia
C&DP Board Meeting	2:30 PM – 3:30 PM	Rossa B
JCR Editorial Meeting	2:30 PM – 3:30 PM	Rossa A

Connect @ the EXPO

EXPOSITION HALL

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. 2024 Exhibitors as of 6/14/24

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

EXHIBIT HALL HOURS

Tuesday, July 9

Welcome Reception / Exhibit Hall & Posters
7:30 pm – 9:30 pm

Wednesday, July 10

Coffee Break /Exhibit Hall & Posters
11:00 am – 12:00 pm (coffee & lite bites provided)

Lunch Break /Exhibit Hall & Posters
1:30 pm – 2:30 pm (box lunch)

Networking Break - Exhibit Hall & Postes
6:00 pm – 8:00 pm (food & beverages provided)

Thursday, July 11

Coffee Break /Exhibit Hall & Posters
11:00 am – 12:00 pm (coffee & lite bites provided)

Lunch Break /Exhibit Hall & Posters
1:30 pm – 2:30 pm (box lunch)

Networking Break - Exhibit Hall & Posters
6:30 pm – 8:00 pm (food & beverages provided)

Closing Party all Exhibitors Welcome / 8:00 pm – 12:00 am **(onsite)**

COMPANY NAME	BOOTH NUMBER
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AdhexPharma	32
Agilent Technologies	48
Alfatest	62
Asahi Kasei Corporation	52
Ashland Inc	26
Colorcon	53
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DigiM Solution	60
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Gattefosse	41
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COMPANY NAME	BOOTH NUMBER
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Merck	68
Microfluidics International Corporation	64
My Biotech	59
Nano FCM	38
Nanoscale Metrix	35
Nisso Chemical Europe GmbH	28
NOF CORPORATION	46
Oakwood Labs	30
PharmaCircle	37
Pion, Inc	67
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Polyplus	58
Polypure AS	39
Precigenome LLC	21
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Shin-Etsu Chemical Company Ltd	33
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Sotax AG	51
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ADARE PHARMA SOLUTIONS

Booth # 20

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Adare Pharma Solutions is a global technology-driven CDMO providing end-to-end integrated services, from product development through commercial manufacturing and packaging, with small molecule expertise focusing on oral dosage forms. Our specialized technology platforms provide taste masking, customized release, solubility enhancement, and patient-centric dosing solutions. We have developed and manufacture more than 65 products sold by customers worldwide.

ADHEXPHARMA

Booth # 32

www.adhexpharma.com

At AdhexPharma, we are a leading CDMO specializing in cutting-edge patch and oral film technologies. We offer expertise, facilities, and equipment for product development and manufacturing, along with out-licensing opportunities.

AGILENT TECHNOLOGIES

Booth # 48

www.agilent.com

Agilent Technologies Inc. (NYSE: A) is a global leader in life sciences, diagnostics, and applied chemical markets, delivering insight and innovation toward improving the quality of life. Agilent instruments, software, services, solutions, and people provide trusted answers to customers' most challenging questions. The company generated revenue of $5.34 billion in fiscal 2021 and employs 16,400 people worldwide. Information about Agilent is available at www.agilent.com. To receive the latest Agilent news, subscribe to the Agilent Newsroom. Follow Agilent on LinkedIn, Twitter and Facebook.

ALFATEST

Booth #62

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ANELLEO

www.anelleo.com

AnelleO is harnessing the advancements in the speed and scale of 3D printing technology for novel solutions in Women's Health.

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Arcturus Therapeutics is a global messenger RNA medicines and vaccines company focused on the discovery, development and commercialization of therapeutics for rare diseases and vaccines. We have proprietary technologies, validating partnerships, and an experienced team with deep expertise in delivery and RNA-based therapeutics

ASAHI KASEI CORPORATION

Booth #52

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https://www.ceolus.com/en/sonanos/hyaluronic_acid_nanogel/

Asahi Kasei Corporation (Headquarters: Tokyo, Japan) is the leading manufacturer and supplier of functional pharma excipients, such as microcrystalline cellulose. In order to further address the rising demands in formulation research, we are now developing a cutting-edge pharma excipient mainly for injections: hyaluronic acid nanogel, Sonanos™. The Sonanos™ can act as a DDS carrier, facilitating solubilization, sustained release, or lymph node delivery of APIs.

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http://www.ashland.com/pharma

Ashland is a focused additives and specialty ingredients company serving customers in pharmaceuticals, nutraceuticals, food and beverage and other consumer and industrial markets. Approximately 3,800 passionate, tenacious solvers – from renowned scientists and research chemists to talented engineers and plant operators – thrive on developing practical, innovative and elegant solutions to complex problems for customers in more than 100 countries.

ASTRAZENECA

http://www.astrazeneca.com

AstraZeneca are a global, science-led, patient-focused pharmaceutical company. AstraZeneca are dedicated to transforming the future of healthcare by unlocking the power of what science can do for people, society and the planet.

BILL & MELINDA GATES FOUNDATION

BIOMATERIALS RESEARCH, A SCIENCE PARTNER JOURNAL

https://spj.science.org/journal/bm

The open access journal Biomaterials Research, published in association with the Korean Society for Biomaterials, covers the interdisciplinary fields of biomaterials research, including novel biomaterials, cutting-edge technologies of biomaterials synthesis and fabrication, and biomedical applications in clinics and industry.

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CALLA LILY

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CATALENT

http://www.catalent.com

Catalent specializes in comprehensive development, analytical and bioavailability enhancement from candidate selection to fully integrated solutions, to help get your drug to market faster. Using a rigorous, data-driven scientific approach and innovative technologies within a global network, Catalent can help solve the most complex challenges to accelerate your development process.

CHIESI FARMACEUTICI S.p.A.

BRONZE SPONSOR

http://www.chiesi.com

Chiesi is research-oriented international biopharmaceutical group that develops and markets innovative therapeutic solutions in respiratory health, rare diseases, and specialty care. The company's mission is to improve people's quality of life and act responsibly towards both the community and the environment.

By changing its legal status to a Benefit Corporation in Italy, the US, and France, Chiesi's commitment to create shared value for society as a whole is legally binding and central to company-wide decision-making. As a certified B Corp since 2019, we're part of a global community of businesses that meet high standards of social and environmental impact. The company aims to reach Net-Zero greenhouse gases (GHG) emissions by 2035.

With over 85 years of experience, Chiesi is headquartered in Parma (Italy), with 31 affiliates worldwide, and counts more than 7,000 employees. The Group's research and development centre in Parma works alongside 6 other important R&D hubs in France, the US, Canada, China, the UK, and Sweden.

COLORCON

Booth #53

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http://www.colorcon.com

Colorcon is a global leader in the healthcare industry, specializing in the development, supply, and technical support of film coating systems, modified release technologies, specialty excipients, and functional packaging. With a focus on delivering innovative products and technologies, we also provide value-added services to support solid dose design, development and manufacturing.

CORBION

http://info@corbion.com/biomaterials.html

Corbion Biomaterials is a leading supplier of GMP-grade bioresorbable polymers used in the creation of long-acting injectables (LAIs). Our versatile PURASORB® portfolio provides enabling functionality used by our partners in the design and formulation of innovative therapies, releasing APIs over specific time periods, from weeks to years. Our unique quality-by-design approach also allows our partners to de-risk and accelerate their product development.

CORDOUAN TECHNOLOGIES

Booth #31

http://cordouan-tech.com

CORDOUAN Technologies is a French SME based in Bordeaux. Our company is specialized in the design, manufacturing and commercialization of innovative & advanced solutions for the nanoparticle and colloidal media characterization. After many years of progress and innovation, many recognized academic research laboratories and famous industrial company, French and international, have trusted us and are now using our instruments in very wide range of applications, such as microbiology, life science, bio-pharma, cosmetics, nano-medicine, petroleum, energy production, transformation and storage, functionalized inks & printing, nano polymers, environment, etc. Innovation is at the heart of our development process. We propose to our customers advanced and innovative solutions to match their needs, including the customization of the instruments to match the application. We'll be proud to help you to make great developments and advanced science.

CURAPATH

Booth #61

http://www.curapath.com

CDMO oriented in the development and manufacturing of lipids and polymers (GMP), and LNP/PNP formulations and F&F (GMP)

DELSITCH

http://www.delsitech.com

DIGIM SOLUTION

Booth # 60

http://www.digimsolution.com

digiM is a technology leader providing CRO services in microstructure analysis and in silico modeling for the development of drug products.

DOLOMITE MICROFLUIDICS

Booth #40

https://www.dolomite-microfluidics.com/

Dolomite Microfluidics (part of Unchained Labs) is dedicated to providing scientists state of the art microparticle synthesis systems, enabling its customers to optimise and scale up their drug, vaccine, medicine and therapy research and development.

DSM-FIRMENICH BIOMEDICAL

Booth #36

SILVER SPONSOR

http://www.dsmbiomedical.com

As the world's unrivaled biomaterials expert and committed partner in driving sustainable innovation in healthcare, DSM Biomedical, part of dsm-firmenich, is at the forefront of biomaterial science and process innovation. The company's technologies and support are recognized for their unmatched quality, reliability, and performance in multiple markets worldwide.

ELSEVIER

Table Top 5

https://www.elsevier.com/

As a global leader in scientific information and analytics, Elsevier helps researchers and healthcare professionals advance science and improve health outcomes for the benefit of society. We do this by facilitating insights and critical decision-making with innovative solutions based on trusted, evidence-based content and advanced AI-enabled digital technologies.

ENCAPSOLUTIONS

http://www.encapsolutions.com.au

EncapSolutions is a drug delivery company based in Sydney Australia. We design and manufacture dissolvable transdermal patches for pain relief using our proprietary encapsulation technology.

EVONIK

Booth #65

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www.evonik.com

Evonik is one of the world's leading specialty chemical companies.

F. HOFFMAN LA ROCHE

http://www.roche.com

Founded in 1896 in Basel, Switzerland, as one of the first industrial manufacturers of branded medicines, Roche has grown into the world's largest biotechnology company and the global leader in in-vitro diagnostics. The company pursues scientific excellence to discover and develop medicines and diagnostics for improving and saving the lives of people around the world. We are a pioneer in personalised healthcare and want to further transform how healthcare is delivered to have an even greater impact. To provide the best care for each person we partner with many stakeholders and combine our strengths in Diagnostics and Pharma with data insights from the clinical practice. In recognising our endeavour to pursue a long-term perspective in all we do, Roche has been named one of the most sustainable companies in the pharmaceuticals industry by the Dow Jones Sustainability Indices for the fifteenth consecutive year. This distinction also reflects our efforts to improve access to healthcare together with local partners in every country we work. Genentech, in the United States, is a wholly owned member of the Roche Group. Roche is the majority shareholder in Chugai Pharmaceutical, Japan

FUJIFILM PHARMACEUTICALS

Booth #55

SILVER SPONSOR

https://www.fujifilmpharma.com/

FUJIFILM Corporation is transforming itself into a healthcare company by utilizing fine chemical technologies such as organic chemistry and nanotechnology. We have established a one-stop CDMO service from formulation design to GMP manufacturing for LNPs and liposome. A series of proprietary ionizable lipids in our library are open for out-licensing.

GATTEFOSSE

Booth #41

http://www.gattefosse.com

Gattefossé develops and manufactures pharmaceutical excipients and cosmetic ingredients for the health and beauty industries. Gattefossé offers to the pharmaceutical industry innovative lipid excipients for oral solubilization, bioavailability enhancement, sustained release, lubrication, and taste-masking. We provide penetration enhancers and emulsifiers for improved topical formulations. As part of Gattefossé offer, technical support is provided by fully trained experts to accelerate customers' development programs thanks to our 4 Technical Centers of Excellence in France, China, India and the USA. Environmental and social issues have always been part of our culture. Today, Gattefossé relies on a purposeful CSR approach to build its innovation strategy.

SPONSORS & EXHIBITORS

GILEAD SCIENCES, INC

http://www.gilead.com

At Gilead, we set – and achieve – bold ambitions to create a healthier world for all people. From our pioneering virology medicines to our growing impact in oncology, we're delivering innovations once thought impossible in medicine.
Our focus goes beyond medicines, and we also strive to remedy health inequities and break down barriers to care. We empower our people to tackle these challenges, and we're all united in our commitment to help millions of people live healthier lives.

GSK

http://www.gsk.com

HALOZYME

Booth #43
BRONZE SPONSOR
http://halozyme.com
Innovative drug delivery solutions

HELIX BIOTECH

Booth # 23
http://www.helix-biotech.com
Helix Biotech is a Customer and Quality focused CDMO specializing in LNPs, Liposomes, and Hybrid Nanoparticles. Browse our selection of innovative nanoparticle manufacturing systems and products, or reach out to us for assistance with your pre-clinical or clinical stage development, manufacturing, and analytical project.

IAMFLUIDICS B.V

https://iamfluidics.com/
IamFluidics, an award-winning high-tech company from The Netherlands, advances scalable, precision-controlled microparticle production with its patented IN-AIR MICROFLUIDICS™ technology. This mild process encapsulates complex materials like live biotherapeutics, (stem) cells, and biologics, enhancing drug delivery and cell & gene therapy. We offer CDMO services, improving formulation performance from prototyping to industrial production.

INNOCORE PHARMACEUTICALS

Booth # 18
http://www.innocorepharma.com
InnoCore Pharmaceuticals is a biopharmaceutical drug delivery company specialized in the development of long acting and minimally invasive drug delivery products for the treatment of several (chronic) diseases e.g. oncology, pain, atherosclerosis, macular degeneration, CV, osteoarthritis.

INNOGI TECHNOLOGIES

Booth # 27
http://www.innogitechnologies.com
InnoGI Technologies, formerly The TIM Company, headquartered in Delft, Netherlands, is an innovative CRO and technology provider for the pharmaceutical and food industries. Its SurroGUT™ platform uses advanced in vitro models such as TIM, mimicking the dynamics of the human gut. TIM replicates dynamic pH profiles, peristalsis enzyme secretions and digestive fluid volumes at true-to-life rates. The TIM Technology has been used to evaluate more than 250 active pharmaceutical ingredients in commercial drug products and has guided clients worldwide with decision-making at different stages of oral drug development. This reduces the number of formulation iterations, de-risks clinical trials, and shortens the time to market, as evidenced in more than 260 scientific publications.

INSIDE THERAPEUTICS

Booth # 19
https://insidetx.com
At InsideTX, we are revolutionizing nanoparticle manufacturing, to unlock the full potential of RNA-LNP therapeutics and nanomedicines by providing easy to use systems, as well as scalable microfluidic-based nanoparticle synthesis platforms.

IPEC AMERICAS

http://www.ipecamericas.org
IPEC-Americas is the industry association that develops, implements, and promotes global use of appropriate quality, safety, and functionality standards for pharmaceutical excipients and excipient delivery systems. IPEC-Americas, along with our counterparts around the world, serves as the primary international resource on excipients for its members, governments and public audiences.

LIPOID

Booth # 47
BRONZE SPONSOR
http://www.lipoid.com
Lipoid – We Invest in Quality
The Ludwigshafen-based Lipoid Group is the world's leading supplier for the whole range of cGMP natural, hydrogenated, and synthetic phospholipids for pharmaceutical applications at industrial scale.
Naturally derived raw materials and environmentally friendly processes ensure a sustainable supply from renewable sources under highest environmental standards.

MANA.BIO

http://www.mana.bio/

MARAMA LABS

Booth # 49

www.maramalabs.com

Marama Labs' CloudSpec instrument characterises nanoparticles using its novel scatter-corrected absorption (SCA) spectroscopy technology. CloudSpec removes the optical scatter caused by nanoparticles that normally prevents UV/Vis quantitation of payloads such as RNA or DNA; CloudSpec does this "at source", not by mathematical approximation, enabling simple and fast RNA quantification in LNPs with no *a priori* information about the formulation or particle properties. SCA takes around 10 seconds, has high precision (typically ca. 1% measurement variability), requires only dilution, uses no dyes or other additives and leaves the LNPs intact. SCA is a simple and practical alternative to fluorescence or HPLC assays for drug load from formulation to batch testing.

MDPI AG

Booth # 29

https://www.mdpi.com/journal/pharmaceutics?ci=26619&si=23439&_utm_from=bd08059898

A pioneer in scholarly, open access publishing, MDPI has supported academic communities since 1996. Based in Basel, Switzerland, MDPI has the mission to foster open scientific exchange in all forms, across all disciplines.
Our 441 diverse and open access journals, including 432 peer-reviewed journals and 9 conference journals, are supported by more than 295,000 academic experts who share our mission, values, and commitment to providing high-quality service for our authors.

MELTPREP

Booth # 25

BRONZE SPONSOR

http://www.meltprep.com

MeltPrep specializes in laboratory equipment for fast and lossless prototyping of new dosage forms, allowing for homogeneous sample preparation directly from powders without air inclusions. Our revolutionary Vacuum Compression Molding (VCM) technology accelerates formulation screening, offering mg-to-gram-scale sample molding. We provide solutions for various applications, including Hot Melt Extrusion (HME), Amorphous Solid Dispersion (ASD), and implant formulation screening.

MERCK

Booth # 68

BRONZE SPONSOR

www.SigmaAldrich.com/MilliporeCTDMOServices

Merck provides solutions to help you overcome your mRNA manufacturing and LNP formulation challenges. Our integrated CTDMO capabilities include the development and manufacturing of custom mRNAs, synthetic lipids, lipid nanoparticle formulation and fill and finish. Discover how our capabilities, technical expertise and regulatory know-how can help you deliver and scale up your mRNA-based therapeutics, accelerate time to market and mitigate risks.

METIS

http://metistx.com

METiS is a therapeutics company focused on applying AI and ML to design organ-targeting LNPs.

MICROFLUIDICS INTERNATIONAL CORPORATION

Booth # 64

http://www.microfluidics-mpt.com

Microfluidics International Corporation is the leader in high-shear fluid processors.

MYBIOTECH

Booth # 59

http://www.mybiotech.de

MyBiotech is an innovative SME with long years of R&D&I track as CDMO offering end to end development, manufacturing services and innovative products for biotech and pharma with proprietary production and processing technologies. MyBiotech`s mission is bringing biotechnology and pharmaceutical products into the market in a fast and efficient way.

NaDeNo NANOSCIENCE AS

https://nadeno.com/

NaDeNo is developing drug delivery products for improved clinical outcomes for cancer patients. We focus on unleashing the potential of hard-to-deliver hydrophobic small molecule drugs using our patent-protected nanotechnology. Our lead product is in advanced preclinical testing with a target of clinical state in H2 2025.

SPONSORS & EXHIBITORS

NANOFCM

Booth #38

http://www.nanofcm.com

NanoFCM provides a versatile and powerful platform - Flow NanoAnalyzer for the multiparameter analysis of functional nanoparticles (7-500 nm) at single-particle level which has the capacity to measure the size, concentration, and biological properties of nanoparticles. To our knowledge, Flow NanoAnalyzer is the only flow cytometry instrument that covers the size range of exosomes (30-120 nm). Flow NanoAnalyzer is expected to become a powerful tool for life science, nanoscience and nanotechnology studies.

NANOSCALE METRIX

Booth # 35

http://nanoscale-metrix.com

Nanoscale Metrix is a french company which provides a new strategy to determine size distribution by Taylor Dispersion Analysis

NANOVATION THERAPEUTICS (NTX)

https://nanovationtx.com

NanoVation Therapeutics™ (NTx) develops customized nucleic acid and lipid nanoparticle technologies to empower its partners' genetic medicines. By enabling the safe and efficacious delivery of nucleic acids to a variety of tissues, NTx's unique toolbox can rapidly advance therapeutic concepts into clinical reality.
NTx is delivering tomorrow's genetic medicines, today.

NISSO CHEMICAL EUROPE GMBH

Booth # 28

http://nisso-chem.de

Nisso Chemical Europe offers NISSO HPC, a high-quality excipient for the pharmaceutical industry providing hydroxypropyl cellulose in a wide range of viscosities and particle sizes for diverse applications, offering solutions for direct compression, roller compaction, wet granulation, orodispersible tablets, extrusion, drug solubility enhancement, controlled release matrices, and film coating.

NOF CORPORATION

Booth # 46

http://www.nofamerica.com

NOF CORPORATION, the leading commercial supplier of drug delivery products through R&D to commercial scale, provides activated PEGs for protein modification, single molecular PEGs for ADCs, Polysorbate 80 for formulation of biological medicines, PEG lipids and ionizable lipids for lipid nanoparticle (LNP) formulations.

OAKWOOD LABS

Booth # 30

BRONZE SPONSOR

http://www.oakwoodlabs.com

Oakwood Labs is a world leading CDMO specializing in Sustained Release Drug Delivery with a focus on long acting injectables (LAI). What makes us unique is our patented Chroniject™ microsphere technology for sustained release injectable development from proof-of-concept feasibility studies through to clinical material and FDA-approved commercial supply. This is coupled with our capabilities for analytical development, formulation development, and process scale-up. Oakwood's continuous flow process enables lot-to-lot reproducibility, reliable scalability, and quick timelines.

PET FLAVORS

http://petflavors.com

Pet Flavors is a world leading developer and manufacturer of quality powdered flavor bases used in the pharmaceutical and nutraceutical companion animal health industry.

PHARMACIRCLE

Booth # 37

http://www.pharmacircle.com

PharmaCircle is a leading information provider to the pharmaceutical, biotechnology and device industries and scientific community – publishing the Drug Delivery & Formulation Newsletter, and providing through its subscription database pipeline and product intelligence on drugs and biologics, expert analysis of drug delivery technologies and devices, extensive coverage of medical diagnostics, and detailed reports on emerging stage and commercial life sciences companies and suppliers from around the world. To learn more, visit www.pharmacircle.com

PHOSPHOLIPID RESEARCH CENTER

BRONZE SPONSOR

http://www.phospholipid-research-center.com

The independent and non-profit Phospholipid Research Center connects scientists from academia and industry all over the world with the aim to discover and utilize the full potential of phospholipids. To build up the knowledge on phospholipids we foster the dialog and exchange between various areas of research by: 1) Organizing and sponsoring symposia, meetings and educational workshops; 2) Sponsoring PhD and Postdoc research projects at universities worldwide; and 3) Providing information and literature.

PION, INC

Booth # 67

http://www.pion-inc.com

Unique Instruments and Services that Help Scientists Make Informed Decisions About Food and Drug Formulation from R&D to Manufacturing.

PMC ISOCHEM

Booth # 56

http://www.pmcisochem.fr

POLYPLUS

Booth # 58

BRONZE SPONSOR

https://www.polyplus-sartorius.com

Polypure AS is producing high quality single-length or uniform polyethylene glycol (PEG) and PEG derivatives for advanced applications.
Monodisperse PEG linkers are used to improve solubility and pharmacokinetic properties of peptides, proteins, biopharmaceuticals and organic drug molecules.
Our PEGs are thoroughly fractionated by proprietary chromatography from polydisperse PEG to individual components. These ultrapure PEGs are no longer polymer mixtures. Our products contain less than 2% n-1 (polydispersity < 1.0002).

POLYPURE AS

Booth # 39

http://www.polypure.com

Polypure is a manufacturer of high purity, single length, PEG derivatives.

PRECIGENOME LLC

Booth # 21

http://www.precignome.com

PROMED PHARMA

http://www.promedmolding.com

ProMed Pharma is a leading contract drug manufacturing organization specializing in complex dosage forms and drug-eluting components for medical devices.

REGENERON PHARMACEUTICALS INC

http://www.regeneron.com

Regeneron is a leading biotechnology company that invents, develops and commercializes life-transforming medicines for people with serious diseases. Founded and led for 35 years by physician-scientists, our unique ability to repeatedly and consistently translate science into medicine has led to numerous FDA-approved treatments and candidates in development, almost all of which were homegrown in our laboratories. Regeneron is accelerating and improving the traditional drug development process through our proprietary VelociSuite® technologies, and through ambitious research initiatives such as the Regeneron Genetics Center. Visit www.Regeneron.com to learn more.

RSC PHARMACEUTICS

Table Top 4

https://www.rsc.org/journals-books-databases/about-journals/rsc-pharmaceutics

RSC Pharmaceutics, published by the Royal Society of Chemistry and led by Editor-in-Chief Professor Yvonne Perrie, is a new gold open access journal leading the way in the field of pharmaceutics. This journal publishes research focused on formulating a drug into a medicine, with the intention of achieving controllable drug delivery with high efficacy.

SANOFI

http://www.sanofi.com

We are an innovative global healthcare company with one purpose: to chase the miracles of science to improve people's lives.

SCHRODINGER GMBH

Booth # 54

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http://schrodinger.com

Schrödinger is transforming the way therapeutics and materials are discovered. Schrödinger has pioneered a physics-based computational platform that enables discovery of high-quality, novel molecules for drug development and materials applications more rapidly and at lower cost compared to traditional methods. The computational platform is licensed by biopharmaceutical and industrial companies, academic institutions, and government laboratories around the world. Schrödinger's multidisciplinary drug discovery team also leverages the software platform to advance a portfolio of collaborative and proprietary programs to address unmet medical needs. To learn more, visit www.schrodinger.com, follow us on LinkedIn, or visit our blog, Extrapolations.com.

SEQENS

https://www.seqens.com/fr/

SEQENS is a worldwide leader in the development and production of active ingredients, pharmaceutical intermediates, specialty ingredients and personal care leveraging 16 manufacturing sites, 9 R&D centers and 3,300 employees in 9 countries.

SEQENS provides key expertise and capabilities in Drug Delivery Solutions ingredients:

- API vectorization for RNA/DNA vaccines, oncology, etc.
- GMP Materials for medical devices
- Bioavailability improvement (controlled-release particles, hydrogels, liposomes...)

SPONSORS & EXHIBITORS

SEVER PHARMA SOLUTIONS

Booth # 42

http://www.severpharmasolutions.com

Sever Pharma Solutions is a CDMO focused on development andGMP commercial supply of polymer oral and long acting implant dosage forms, including HPAPI. We also have prefilled syringe and cartridge filling capability. We are located in Putnam CT and Malmo Sweden.

SHIN-ETSU CHEMICAL COMPANY

Booth # 33

BRONZE SPONSOR

http://www.sinetsupharmausa.com

Shin-Etsu is a leading manufacturer of pharmaceutical excipients based on cellulose chemistry. In addition to our portfolio of HPMC and Methylcellulose, Shin-Etsu is the originator of HPMCAS and HPMCP for solid dispersion and enteric coating. Our innovative L-HPC has been recognized as a problem-solving binder and disintegrant. We are committed to stimulating innovation and advancing cellulose polymer sciences through our technical expertise in a range of applications including modified release matrix systems and enhancement of solubility and bioavailability.

SIMULATIONS PLUS

Booth # 34

http://www.simulations-plus.com

Serving clients worldwide for more than 25 years, Simulations Plus is a leading provider in the biosimulation market providing software and consulting services supporting drug discovery, development, research, and regulatory submissions. We offer solutions that bridge artificial intelligence (AI)/machine learning, physiologically based pharmacokinetics, quantitative systems pharmacology/toxicology, and population PK/PD modeling approaches. Our technology is licensed and applied by major pharmaceutical, biotechnology, and regulatory agencies worldwide.

SOTAX AG

Booth # 51

http://sotax.com

The SOTAX Group, founded in 1973 in Switzerland, is a fast-growing leader in providing high-quality dissolution testing systems, automated sample preparation workstations for composite assay and content uniformity testing, and physical tablet testing instruments for the pharmaceutical industry throughout the world. Part of the product and service portfolio are also SOTAX Pharma Services (CRO), which are set in a US FDA-inspected facility with a cGMP-compliant environment with strict quality management processes and help pharmaceutical companies worldwide in overcoming the various challenges associated with dissolution and release testing from pharmaceutical dosage forms. SOTAX' scientific expertise paired with state-of-the-art instrumentation ensures best-in-class services and ease of regulatory compliance for all customers.

SOUTHWEST RESEARCH INSTITUTE

Booth # 63

http://www.microencapsulation.swri.org

SwRI® provides extensive contract R&D capabilities, including the development of custom encapsulation and controlled release formulations for applications ranging from pharmaceuticals to consumer and diversified products. Capsules and particles can be prepared in sizes from nanometers to several millimeters. Biomaterials, materials development, synthesis, and modeling capabilities are also available

STABLE MICRO SYSTEMS

Booth # 57

http://stablemicrosystems.com

Stable Micro Systems will be exhibiting the TA.XTplus connect which can be used for many controlled release applications. It is ideal at measuring the fracture force of Micro Spheres, tablet swelling properties and disintegration rates. Special devices are used for simulating and measuring Muco and Bio-adhesion together with tablet fracture properties.

TELEDYNE LABS

Booth # 66

http://www.teledynelabs.com

Teledyne LABS consolidates CETAC, Hanson, ISCO chromatography and pumps, Leeman Labs and Tekmar for Chromatography, GC Sample Prep, Elemental Analysis, Automated Liquid Handling, Pumping and Dissolution, Diffusion, Physical Tablet Testing. These complementary brands support our commitment to delivering innovative laboratory instruments that improve our environmental sustainability and quality of life.

TRIASTEK

http://www.triastek.com

Triastek is a global healthcare company, specializing in developing medicines using our proprietary 3D printing technology. Our commitment is to transform the landscape of pharmaceutical formulation development and production, ushering in a new era of medicines with the innovative potential of 3D printing.

UNITED STATES PHARMACOPEIA (USP)

http://usp.org

USP is an independent scientific organization that collaborates with the world's top experts in health and science to develop quality resources and standards for medicines, active ingredients and excipients, dietary supplements and food ingredients. Through our resources, standards, advocacy and education, USP helps ensure the availability of quality medicines, excipients, supplements and foods for billions of people worldwide. Learn more at usp.org.

WATERS | WYATT TECHNOLOGY

Booth # 44

SILVER SPONSOR

http://www.wyatt.com

Waters | Wyatt Technology is the recognized leader in light scattering instrumentation for characterizing macromolecules, nanoparticles and gene vectors in solution. Wyatt's products determine absolute molar mass, size, charge, interactions, conformation, conjugation and payload. Wyatt offers a complete suite of multi-angle light scattering (MALS) instruments, field-flow fractionation (FFF) systems, dynamic light scattering (DLS) and zeta potential instruments, refractive index and intrinsic viscosity detectors.

2024 CRS/ESMI Joint Session

X-ray-responsive nanoliposomes that contain high-Z element nanoclusters for chemo-radiation dose-enhancement
Mans Broekgaarden, *INSERM*

E-selectin-targeted polymer-drug conjugate is highly effective in regressing colorectal cancer liver metastases and preventing tumor recurrence in mice
Ayelet David, *Ben-Gurion University of the Negev*

Model System Characterizing Subcutaneous Long-Acting Injectable Depots
Robert Gresham, *Gilead Sciences*

PDGFR-β Targeted Fibrobody™ for Molecular Imaging of Kidney Fibrosis
Vedangi Kulkarni, *Uniklinik RWTH Aachen*

Imaging Heterogenous Tumor Accumulation and Intratumoral Distribution of Nanoparticles
Xiuling Lu, *University of Connecticut*

Engineering Stimuli-Responsive Nanocarriers for Cancer Diagnosis and Immunotherapy
Peng Mi, *Sichuan University*

Alternative Methods to Animal Testing

Application of Polypeptide-based Combination Therapeutics in Advanced Cell Culture Models for the Development of Luminal A Breast Cancer Treatments
Ana Armiñán, *Príncipe Felipe Research Center, IISCIII*

Primary small intestinal epithelium as a physiological alternative to the Caco-2 lymphatic transport model
Rebecca Carrier, *Northeastern University*

Advanced in vitro tumoroids for investigating fibroblast phenotypic plasticity
Rasika Daware, *Institue for Experimental Molecular Imaging (ExMI), RWTH Aachen University Hospital*

In – vitro enzymatic drug degradation in Fed state i ntestinal fluids
Hristina Mircheva, *Sofia university*

A multi-organ-on-chip platform for exploring gut-skin axis and microbiota dysbiosis effects in skin disorders
Elisabetta Palama, *React4life*

Optimization of in vitro release setup for in situ forming depot technology
Charlotte Peloso, *MedinCell S.A.*

Artificial Intelligence and Predictive Models in Pharmaceutical Technologies

A novel in vivo/in silico approach for predicting bioavailability of subcutaneously administered antibody drugs
Thomas Birngruber, *Joanneum Research*

A closed-loop system for personalized chemotherapeutic dosing
Louis DeRidder, *MIT, Harvard Medical School*

Validation and application of a Caco-2 microfluidic Gut-on-a-Chip model for assessing intestinal absorption: Small molecules, peptides and intestinal permeation enhancers
John Gleeson, *Merck & Co.*

Computational simulation for structural stability and formation of DOPC and DPPC lipid vesicle using coarse-grained simulation with Martini Force Field
Pardeep Gupta, *Saint Joseph's University*

Machine Learning for the Functionalization of Drug-Excipient Nanoparticles
Daniel Reker, *Duke University*

FormulationDT: an artificial intelligence formulation strategy decision system for small molecule drug development—Learning from approved drugs with partially supervised learning
Nannan Wang, *State Key Laboratory of Quality Research in Chinese Medicine, Institute of Chinese Medical Sciences (ICMS), University of Macau, Macau, China*

Bioengineering (FG)

Dual-crosslinked antibacterial antioxidant self-healable hydrogel with hemostatic property synergized with photothermal therapy for accelerated wound healing
Samin Abbaszadeh, *Zanjan University of Medical Sciences, Urmia University of Medical Sciences*

Combining robotics and AI to generate therapeutic synthetic cells
Shanny Ackerman, *Technion*

Hybrid carbon nanohorns-lipid platforms for the targeted cancer therapy
Hoda Alavizadeh, *School of Pharmacy, Mashhad University of Medical Sciences*

Advancing mRNA Vaccine Delivery: Evaluating the Stability, Safety, and Efficacy of PEG-Free Branched Amphiphilic Peptide Capsules (BAPCs)
Adriana Avila Flores, *Auburn University*

Targeting cells through their unique metabolomic profile
Iris L. Batalha, *Institute for Bioengineering of Catalonia (IBEC)*

Synthetic high-density lipoprotein nanotherapeutics for managing bone inflammation
Marco Bottino, *University of Michigan*

Enhancing nano-immunotherapy efficacy in mouse sarcoma models through tumor microenvironment reprogramming
Antonia Charalambous, *University of Cyprus*

In Situ Immune Cell Recruitment Platform For Targeted Immunomodulation
Corrine Ying Xuan Chua, *Houston Methodist Research Institute*

Human Tendon Stem Cell-inspired NanoVesicles (TSC-iNVs): an innovative therapeutic tool for Tenomodulin protein delivery in tendinopathy
Maria Camilla Ciardulli, *Translational Nanomedicine Laboratory, University of Salerno*

Targeted autophagy activation in tumor-draining lymph nodes via albumin-hitchhiking strategy for enhanced antitumor immunotherapy
Qin He, *West China School of Pharmacy, Sichuan University*

A novel immune stimulating antibody conjugate (ISAC) against CD47 for cancer immunotherapy
Byoungjae Kong, *University of Maryland School of Medicine*

Ultrasound as a noninvasive selective skin cancer therapy
Joseph Kost, *Ben-Gurion University*

Age-associated disparity in phagocytic clearance affects the efficacy of cancer nanotherapeutics
Wen Jiang, *University of Texas MD Anderson Cancer Center*

Modulation of Nanoparticles' Interaction with Human Placenta
Hagar Labouta, *University of Toronto, University of Toronto*

Enabling Intramuscular Injections for Nerve Regeneration In Vivo
Jessica Larsen, *Clemson University*

Catalyzing Therapeutic Breakthroughs: Engineering Targeted Extracellular Vesicles for Liver Fibrosis Treatment
Revadee Liam-Or, *King's College London, University of Hong Kong*

Smart Wound Dressing for Infected Wound Healing and Monitoring Applications
Zong-Hong Lin, *National Taiwan University*

Development of the Conjugated-Antibody Specificity Assay for Mechanistic Determination of Antibody-Drug Conjugates and Real-Time Drug Release Visualization
Molly Major, *University of Utah*

Advanced multilayer islet encapsulation incorporating CTLA-4 and ZnO nanoparticles for localized immunomodulation
Ahlem Meziadi, *McGill University*

Enzyme-catalyzed depots for biological therapeutics
Lorenz Meinel, *Institute of Pharmacy and Food Chemistry, Helmholtz Institute for RNA-based Infection research*

Aliphatic Polycarbonate Block Copolymers as Biodegradable Nanocarriers for (Immuno-)Drug Delivery
Lutz Nuhn, *Julius-Maximilians-Universität Würzburg*

Synergistic Strength: Chitosan-conjugated Antimicrobial Peptides Reshaping the Battle against ESKAPE Pathogens
Viorica Patrulea, *University of Geneva, University of Oxford*

Comparison of protein corona on mRNA lipid nanoparticles
Elizabeth Voke, *UC Berkeley*

Orally cascade targeting delivery systems alleviate colitis by protecting mitochondria and regulating gut microbiota
Liyun Xing, *Key laboratory of Drug Targeting and Drug Delivery System (Ministry of Education), West China School of Pharmacy, Sichuan University.*

Delivery Technologies for Diversified Products

High yield production of ferromagnetic and biodegradable microrobots
Gulsen Aybar Tural, *Ege University, Max Planck Institute for Intelligent Systems*

Nasal breath intake of antiviral powder against airborne infections
Sabrina Banella, *University Of Ferrara*

Novel microplastic-free microcapsules using interfacial self-assembly of bis-urea molecules
Siddhant Bhutkar, *University of Birmingham*

Multi-method approach to study the impact of major stressors on hair health: development of targeted hair cosmetic products
Camilla Elena Di Bella, *University "G.d'Annunzio" Chieti-Pescara, Recusol srl*

Integrated microfluidic manufacturing platform for lipid-based DDS: micro-mixer, rapid flow dialysis and lipid synthesizer
Kim Dong-Pyo, *postech*

Impact of Lipid Composition on Maintaining Bioactivity of mRNA-LNPs in Thermostable mRNA-Vaccines
Behnaz Eshaghi, *MIT*

Water-Insoluble α-Glucan Polysaccharide Nanoparticles for Controlled Release of Compounds
Kervin Evans, *USDA*

Electrospun Yarns with Controlled Release of Ciprofloxacin for Surgical Suture Applications
José Lagaron, *CSIC*

Ultra-long-acting Injectable, Biodegradable, and Removable In-situ Forming Implant with Cabotegravir for HIV Prevention
Thy Le, *North Carolina State University and The University of North Carolina at Chapel Hill*

Development of drug-loaded orodispersible films with controlled release by direct powder extrusion 3D printing
Giuseppe Racaniello, *University of Bari*

Lipid submicron particles designed to deliver peptide to epidermis
Renata Raffin, *Croda*

Two-dimensional inhibition of SARS-CoV-2 by inhaling ACE2-targeting peptide-modified remdesivir nanoemulsions
Xun Sun, *Sichuan University*

Delivery to the Nervous System

Improving Drug Delivery to Brain Tumors Using Nonspherical Microbubbles, Ultrasound and Multidrug Micelles
Anshuman Dasgupta, *RWTH Aachen*

Biomass-derived polymers in the development of nose to brain delivery platforms.
Michele Guida, *National Research Council*

Development of protein nanocage-based immunomodulatory strategy to enhance the immunotherapy of malignant brain tumors
Daiheon Lee, *University of Maryland, School of Medicine*

GD2-PEG Bispecific Antibodies Influence Delivery and Efficacy of siRNA Lipid Nanoparticles in Neuroblastoma
Amy Logan, *Children's Cancer Institute, University of New South Wales*

Donepezil nanoemulsion induces a torpor-like state in non-hibernating tadpoles
Maria Plaza Oliver, *Wyss Institute at Harvard University, Vascular Biology Program & Department of Surgery, Boston Children's Hospital and Harvard Medical School.*

Anti-inflammatory Microparticles to tackle Neurodevelopmental Disorders
Corinne Portioli, *Italian Institute of Technology*

Gene Delivery and Gene Editing (GDGE - FG)

Advancements in mRNA Delivery Strategies: pioneering the future of therapeutics by ionizable lipid and biodegradable polymer-based Stability Enhanced Nano Shell (SENSTM) platform technology
Helen Cho, *Samyang Holdings*

Bioorthogonal conjugate platform development for in vivo gene editing and therapy
Hyun Jung Chung, *KAIST*

Lipid Nanoparticle Formulation Characterization: Bridging the Gap from R&D to GMP
Sergio Esteban Pérez, *Curapath*

Investigating The Role of Hypoxia on the Efficacy and Mechanism of mRNA Lipid Nanoparticles
Owen Fenton, *University of North Carolina at Chapel Hill*

Extracellular Vesicle based in vivo Delivery for Targeted Gene Therapy
Mei He, *University of Florida*

Tardigrade-based mRNA therapy for radioprotection
Ameya Kirtane, *Brigham and Women's Hospital*

Genetic engineering of megakaryocytes from blood progenitor cells using mRNA lipid nanoparticles
Jerry Leung, *University of British Columbia*

Construction of novel EPC derived exosomes for efficient drug delivery and its targeted therapy for rheumatic heart disease
Ni Li, *Ningbo Medical Centre Lihuili Hospital, Zhejiang University*

Harnessing RNA Technology To Advance Therapeutic Vaccine Antigens Against Chagas Disease.
Chiara Mancino, *Houston Methodist Academic Institute*

Exploring mRNA vaccine using lipid nanoparticles: the involvement of muscle cells
Mathieu Repellin, *LAGEPP_University of Lyon, PULSALYS*

Genetic Engineering of Transfusable Platelets with mRNA-Lipid Nanoparticles is Compatible with Blood Banking Practices
Colton Strong, *University of British Columbia*

Global Health and Special Populations

Formation of a gastrointestinal biomolecular corona on drug particles
Ben Boyd, *University of Copenhagen, Monash Institute of Pharmaceutical Sciences*

Multi-drug compartment nanofibrous patch for treatment of Cutaneous Leishmaniasis
Rebecca Byler, *Yale University, CIDEIM*

Pharmacokinetic Assessment and Mucosal Toxicity Study of Vaginal Multipurpose Prevention Technology
Trinette Fernandes, *SVKM's Dr Bhanuben Nanavati College of Pharmacy (Pharmaceutics)*

Bioengineered colorimetric pH-sensing bandage for point-of-care wound diagnostics
Simon Matoori, *Université de Montréal*

An ultra-low-cost handheld electroporator for intradermal delivery of mRNA
Pankaj Rohilla, *Georgia Institute of Technology*

Inhalable siRNA-containing Dry Powder Formulation for Treating Severe Type 2 Asthma.
Benjamin Winkeljann, *Ludwig-Maximilians-University Munich, RNhale GmbH*

Mannosylated cationic glycopolymers as pDNA delivery systems for cancer immunotherapy
Marco Zanon, *University of Padova*

Immuno Delivery (ID – FG)

Tumor-targeted Nanocytokine Boosts Anticancer Immunity through pH-Triggered Inflammation
Horacio Cabral, *The University of Tokyo, Innovation Center of Nanomedicine*

Quality assessment of LNP-RNA therapeutics
Jocelyn Campa Carranza, *Houston Methodist Research Institute, Tecnologico de Monterrey*

Immunoprotection of pancreatic islet transplants through localized immunosuppressant delivery
Luigi Calzolai, *European Commission, Joint Research Centre*

Principles for Enhancing the Stability of Cytokines in Polymeric Nanoparticle Delivery Platforms
Nicole Day, *University of Colorado Boulder*

Refining the Immunomodulatory Properties of pBAE mRNA nano-vaccines through precise Sub-Particle Component Structuring and Interaction with Biologicals
Cristina Fornaguera I Puigvert, *Institut Químic de Sarrià (IQS), Universitat Ramon Llull (URL)*

Controlled delivery and activation of CAR T cells x2
Sarah Hook, *University of Otago*

Collagen binding interleukin-12 shows specific delivery to the tumours, showing decreased side effects and increased anti-tumour efficacy after intravenous injections
Jun Ishihara, *Imperial College London*

Engineering nanoparticle systems to target lymphatics and their underlying cellular mechanisms
Katharina Maisel, *University of Maryland*

Lyophilized lymph nodes for improved delivery of chimeric antigen receptor T cells
Jiaqi Shi, *Zhejiang University*

Programming Naïve Primary T Cells for Enhanced Immunotherapy
Ankur Singh, *Georgia Institute of Technology*

mRNA Lipid Nanoparticles for the Engineering of Immunosuppressive T cells for Autoimmunity Therapies
Ajay Thatte, *University of Pennsylvania*

Enhancing Personalized Cancer Vaccination: Effective Tumor Control with MHC Class I and Class II Neoepitopes formulated in Cationic Liposomes
Koen van der Maaden, *LUMC*

Targeted and efficient mitochondrial delivery using engineered stem cells: A novel strategy for pulmonary fibrosis intervention
Tianyuan Zhang, *Zhejiang University*

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Development of immune modulating ionizable lipids and their lipid nanoparticle formulation for mRNA vaccines and therapeutics
Hyukjin Lee, *Ewha Womans University*

Play it Nano: Assessing the power of music in enhancing brain nanoparticle uptake
Patricia Mora-Raimundo, *Technion Israel Institute of Technology*

Exploring the interface between pulmonary surfactant and RNA inhalation therapy
Koen Raemdonck, *Ghent University*

Lipid nanoparticle formulations of a triple adjuvant to enhance the immunogenicity of intranasally delivered subunit vaccines
Ellen Wasan, *University of Saskatchewan (College of Pharmacy and Nutrition)*

Long-Acting Drug Delivery Formulations

Design and evaluation of insulin granule-loaded microPLates: a novel approach for type 1 diabetes management
Greta Avancini, *Fondazione Istituto Italiano di Tecnologia*

Next Generation 3D-Printed MPT Intravaginal Ring for Prevention of STIs and Unintended Pregnancy.
Rahima Benhabbour, *University of North Carolina at Chapel Hill, University of North Carolina*

Formulation Development of Live Biotherapeutic Products for Women's and Neonatal Health Applications
Kimberley Biggs, *Massachusetts Institute of Technology*

Injectable thermosensitive hydrogel for cardiac delivery of therapeutics
Cristina Casadidio, *University of Camerino, Utrecht University*

A combined nanomedicine exerts synergetic fibrinolysis for the targeted treatment of venous thromboembolism
Matilde Durán-Lobato, *Universidad de Sevilla*

3D-printed vaginal inserts for controlled progesterone release
Simone Eder, *RCPE GmbH*

5D3(CC-MLN8237)3.2 as a novel antibody-theranostic conjugate for PSMA(+) prostate cancer therapy.
Sudath Hapuarachchige, *The Johns Hopkins School of Medicine, The Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins Medicine*

Dendritic carriers for targeting HIV reservoirs
Nilesh Mahajan, *Dadasaheb Balpande College of Pharmacy*

EP-104, A NOVEL MICROPARTICLE FORMULATION ACHIEVING EXTENDED-RELEASE OF FLUTICASONE PROPIONATE
Amanda Malone, *Eupraxia Pharmaceuticals*

Enhancing the controlled release of small-molecule, peptide, and protein therapeutics from self-assembling peptide hydrogels with dynamic covalent bonding
Kevin McHugh, *Rice University*

Shape Memory Scaffolds loaded with antibiotic drug to prevent infection onset after implantation
Silvia Pisani, *University of Pavia*

Manufacturing Science and Technology

Engineering Extracellular Vesicles as Nanotherapeutics for Cardiovascular Disease
Eunji Chung, *University of Southern California*

Controlled colonic release formulation based on a dual trigger, microplastic-free multi-unit pellet system for food and dietary supplements
Viviane Doggwiler, *dsm-firmenich*

Risperidone-loaded sustained release implants – from benchtop to commercial scale
Patrick Duffy, *Ashland*

Enabling the next-generation non-viral gene therapy through Lipid-PEG alternatives based on bioinspired polymers.
Aroa Duro-Castaño, *Curapath*

Human Leukocyte Antigen-free Biomimetic Proteolipid Vesicles as a donor-independent delivery platform for overcoming alloreactivity
Pasqualina Scala, *University of Salerno*

Nanomedicine and Nanoscale Delivery (NND – FG)

A unique spleen-targeted antigen delivery system to obtain antigen-specific antibodies
Hidenori Ando, *Institute of Biomedical Sciences, Tokushima University, Innovative Research Center for Drug Delivery System, Institute of Biomedical Sciences, Tokushima University*

Enhanced antitumor efficacy of Liposomal Doxorubicin against melanoma with a tumor-homing peptide
Leila Arabi, *School of Pharmacy*

Bottom-up templating of drug nanoparticles in core-shell hydrogel particles for versatile oral drug delivery
Lucas Attia, *MIT*

Tuning peptide-based nanofibers for achieving selective Doxorubicin and RNA delivery in Triple-Negative Breast Cancer
Rosa Bellavita, *University of Naples, Federico II*

Enhancing Tumor-Targeting Bacteria Efficacy via Smart Polymer Shield Encapsulation
Quentin Boussau, *Center of Structural Biology (CBS)*

Innovative Intranasal SARS-CoV-2 Vaccine: Exploiting TLR Agonist with Carbohydrate-Functionalized Chitosan Nanoparticles
Mariana Colaço, *Faculty of Pharmacy, University of Coimbra, Portugal, Center for Neuroscience and Cell Biology, University of Coimbra*

Exploiting the protein corona for plasma proteome profiling in diagnostics
Claudia Corbo, *University of Milano Bicocca*

Thermostability of mRNA-Lipid Nanoparticles for Vaccines
Federica Costamagna, *Sanofi*

Tailoring Polymer-Drug Interactions for Ultrahigh-Loading, ROS-Triggered Release, and Tumor Elimination
Richard d'Arcy, *Arizona State University, Vanderbilt University*

Development of a once-a-month formulation of semaglutide from an innovative injectable and biodegradable hydrogel
Emmanuel Dauty, *Adocia*

Magnetic biohybrid microrobots for macrophage transport, activation, and imaging
Nicole Day, *University of Colorado Boulder*

In Vitro Therapeutic Potential of PLGA Nanoparticles containing 18-β-Glycyrrhetinic Acid-Loaded against Cigarette Smoke-Induced Chronic Obstructive Pulmonary Disease (COPD)
Gabriele De Rubis, *University of Technology Sydney, University of Technology Sydney*

Resolving sepsis-induced immunoparalysis via trained immunity by targeting interleukin-4 to myeloid cells
Jeroen Deckers, *Radboud University Medical Center, Eindhoven University of Technology*

Combining retinoic acid and calcitriol delivery via the nose-to-brain pathways resulted in the recovery of mature oligodendrocyte population in a demyelination cuprizone model.
Anne des Rieux, *UCLouvain*

Combination therapy using semaglutide-loaded lipid nanocapsules and a peptidomimetic against integrin alpha 5 in the treatment of metabolic dysfunction-associated steatotic liver
Inês Domingues, *Université Catholique de Louvain*

Chemotherapeutic Nanomedicines For simultaneous Brain and GBM Targeted Treatments
Jason Duskey, *University of Modena and Reggio Emilia*

Viral/nonviral nanoparticles as promising vectors for siRNA transfection to the eye
Silvia Fialho, *Funed- Ezequiel Dias Foundation*

Down-Selection of New Lipids for mRNA Delivery in Vaccine Application
Marie Garinot, *Sanofi*

RAVIOLI: A Hyaluronic Acid-Based Platform for the Treatment of post-traumatic Osteoarthritis
Antonietta Greco, *University of Milano Bicocca, Istituto Italiano di Tecnologioa*

Evaluation of Degradation Mechanisms and Release Kinetics for multi-Compartmentalized Polymeric microMESH Implants
Irene Guerriero, *Fondazione Istituto Italiano di Tecnologia, University of Genoa*

Urease-Powered Nanomotor Containing STING Agonist for Bladder Cancer Immunotherapy
Sei Kwang Hahn, *POSTECH*

Co-delivery of TRAIL and paclitaxel by fibronectin-targeted nanodisk for effective treatment of lung melanoma metastasis
Shiqi Huang, *Sichuan University*

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Lipid Vesicles Offer a Selective Splenic Targeting Strategy for Peripheral Immunomodulation Following Ischemic Stroke
Satinderdeep Kaur, *Nottingham Trent University*

Identification of a collagen-binding peptide for nano theranostics modification applied on enhanced imaging and regeneration of osteoarthritic articular cartilage
Chin-Yu Lin, *Tzu Chi University*

Artificial intelligence for effective treatment selection using biodegradable poly(N-(2-hydroxypropyl) methacrylamide) based nanodrugs for blood brain barrier delivery and immunotherapy of brain primary central nervous system lymphoma
Vladimir Ljubimov, *Terasaki Institute for Biomedical Innovation*

Long-Term Removable and Degradable Implants for Contraception in Resource-Limited Areas
Nathan Lockwood, *ProMed Pharma, LLC*

AMPK activator 991-loaded Nanoparticles for the treatment of Duchenne Muscular Dystrophy
Giovanna Lollo, *University Lyon*

CANNABINOID-LOADED PLGA NANOPARTICLES REDUCE ATHEROMA PLAQUE IN APOE-/- MICE
Lucía Martín-Banderas, *Universidad de Sevilla, Instituto de Biomedicina de Sevilla (IBiS), Hospital Universitario Virgen del Rocío/ CSIC/ Universidad de Sevilla*

Engineered Extracellular Vesicles for Drug Delivery Platform
Wanrong Meng, *West China Hospital of Stomatology, Sichuan University*

Intermittent fasting enhances nanomedicine tumour targeting
Jeffrey Momoh, *Institute for Experimental Molecular Imaging*

Combining two strategies to modulate the tumor microenvironment and optimize efficacy of nano-immunotherapy
Fotios Mpekris, *University of Cyprus*

Polymeric micelles loaded with Pirfenidone enhance immunotherapy in murine tumor models
Constantina Neophytou, *University of Cyprus*

Desmoplastic Tumor Priming using Clinical-stage Dexamethasone Liposomes
Tarun Ojha, *Institute for Experimental Molecular Imaging, Utrecht Institute for Pharmaceutical Sciences*

'Tail-flipping' nanoliposomes to target metastasis-associated macrophages in lung metastasis
Kunal Pednekar, *University of Twente*

Bioengineered nanomedicines targeting the intestinal Fc receptor improves the glucorregulatory effect of semaglutide in type 2 diabetic mice
Soraia Pinto, *Instituto de Investigação e Inovação em Saúde (i3S), Universidade do Porto, Instituto de Ciências Biomédicas Abel Salazar (ICBAS), Universidade do Porto*

Designing Platinum Prodrugs for Cancer Nanotherapy
Marie Pinvidic, *Uniklinik RWTH Aachen*

Nanomedicine-enabled Methylprednisolone Prodrug Promotes Neuroprotection and Functional Recovery and Mitigates Adverse Effects After Acute Spinal Cord Injury in Rats
Weiping Qin, *The Icahn School of Medicine at Mount Sinai*

Forward genetic screening to identify receptors and proteins involved in nanoparticle uptake and intracellular trafficking
Anna Salvati, *University of Groningen*

Urease-powered nanobots for radionuclide bladder cancer therapy
Meritxell Serra-Casablancas, *Institute for Bioengineering of Catalonia (IBEC)*

Predicting Meta-Synergy and High Complexity Combinations in Cancer Nanomedicine with Artificial Intelligence
Yosi Shamay, *Technion*

Sequential cancer therapy and wound healing by a bismuth sulfide/allantoin loaded Injectable Hydrogel
Mohammad-Ali Shahbazi, *University Medical Center Groningen*

A pH-sensitive nanoparticle enables efficient delivery of Glucose oxidase and apoptosis-based anti-cancer agents for effective cancer therapy in Hepatocellular Carcinoma.
Yen-Nhi Ta, *National Tsing Hua University, National Tsing Hua University*

Smart polymersomes: pH-responsive nanocarriers for improved intestinal delivery of immunosuppressants.
Matteo Tollemeto, *Technical University of Denmark*

Opportunities and challenges in nanofiber-based controlled drug delivery systems
Serdar Tort, *Gazi University Faculty of Pharmacy (Pharmaceutical Technology)*

Is your idea stuck within a 3d printer? Bring it to life with Free-D Molding.
Daniel Treffer, *MeltPrep*

Understanding and predicting drug solubilization in biorelevant media
Zahari Vinarov, *Sofia University*

Breaking barriers in glioblastoma with a lipid-based nanotherapy: an enhanced in vivo interpretation
Carla Vitorino, *Faculty of Pharmacy, University of Coimbra, Coimbra Chemistry Centre, Institute of Molecular Sciences – IMS, Department of Chemistry, University of Coimbra*

Drug-free macromolecular therapeutics: Multi-antigen T cell hybridizers
Jane Yang, *University of Utah, University of Utah*

Ocular Delivery (OcD - FG)

Antifibrotic drug delivery theramem prevents corneal scarring
Ghanashyam Acharya, *Baylor College of Medicine*

Bioinspired contact lenses that deliver antioxidant agents
Carmen Alvarez-Lorenzo, *Universidade de Santiago de Compostela*

Absolute quantitation of barcoded liposomes in ocular tissues
Arto Merivaara, *University of Eastern Finland*

Advanced ex vivo ocular models: essential tools in ophthalmic formulation development
Silvia Pescina, *University of Parma (Food and Drug)*

Lipid nanoparticles for non-immunogenic mRNA delivery to the retina
Katrien Remaut, *Ghent University*

Rapidly dissolving bilayer microneedles for minimally invasive and efficient protein delivery to the posterior segment of the eye
Lalitkumar K. Vora, *Queen's university*

Oral Delivery (OrD - FG)

Labrafac™ MC60 and Capryol® 90 act as permeation enhancers in ex vivo and in vivo models of the rat intestine.
David Brayden, *University College Dublin*

Lipidic drug delivery systems: is the microbiome a cause for concern?
Khay Fong, *Monash University*

3D-Printed Lipid Mesophases for The Treatment of Chronic Liver Disease
Rafaela Gazzi, *University of Bern*

OraFuse Continuous Oral Drug Delivery: Results from a Phase 2 Trial
Jennifer Harmon, *Nanaspire Consulting, SynAgile Corporation*

Mycelium in fabrication of micropatches for oral drug delivery
Khorshid Kamguyan, *Technical University of Denmark*

Enhanced Oral Bioavailability of Sorafenib and Liver Fibrosis Mitigation through Modified Chitosan-Sorafenib Loaded Micelles
Nashmia Nashmia, *University of Toronto, Nanomedicine Innovation Network*

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SmartReservoir and hydrogel forming-microneedles: merging the best of both worlds to improve the transdermal drug delivery of lipophilic drugs
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Protein Loaded Biomaterial-based Composite Scaffolds for Potential Healing of Chronic Wounds
Joshua Boateng, *University of Greenwich*

Clinical Trial to Investigate the Tolerability of a Rapid 10 mL Subcutaneous Injection with Recombinant Human Hyaluronidase (rHuPH20) Using a High-Volume Auto-Injector (HVAI) in Healthy Subjects
David Kang, *Halozyme Therapeutics*

Microneedle-assisted topical delivery of baricitinib for the treatment of alopecia areata
Jeong Yeon Kang, *QuadMedicine*

Development of light-activatable microemulsions delivering Hyaluronic Acid and Nitric Oxide in the skin
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Dissolving microarray patches for malaria chemoprophylaxis: Mapping solid drug nanoparticle incorporation and long-acting release in vivo
Sam Morris, *University of Liverpool*

Advances in controlled transdermal delivery of antitubercular drugs
Mariia Nesterkina, *Helmholtz Institute for Pharmaceutical Research Saarland*

LL37 MICROSPHERES LOADED ON ACTIVATED CARBON-CHITOSAN HYDROGEL: ANTI-BACTERIAL AND ANTI-TOXIN WOUND DRESSING FOR WOUND INFECTIONS
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3D-printed Lattice Micro-Array Patches (L-MAPs) for Versatile and Tunable Transdermal Delivery
Netra Rajesh, *Stanford University*

Ionic liquids for transdermal drug delivery: coupling solution structure with efficacy
Stine Ronholt, *University of Copenhagen*

Biodegradable and elastic oral drug delivery devices with shapeshifting properties
Yulia Yuts, *ETH Zurich*

A gas-promoted in situ bioadhesive foam as a platform for antibody fragment (FAb) delivery across the colon to treat inflammatory bowel disease
Wunan Zhang, *UCLouvain*

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Phenol-based Nanoparticles Prevent Hyperglycemia-related Detrimental Effects on the Placenta Development
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siRNA-based Nanomicrobicides for the Reactivation of Autophagy as a Strategy for Preventing Sexually Transmitted Infections
Emmanuel Ho, *University of Waterloo*

Next Generation 3D-Printed Intravaginal Ring for Non-Hormonal Contraception
Sarah Anne Howard, *UNC Chapel Hill*

An Experimental Suite for RNA-based EMT Targeting in Breast Cancer
Gabriele Loiudice, *LMU*

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Controlling peptide/siRNA nanocomplex functionality via enzyme-cleavable and non-cleavable linkers to improve siRNA delivery
Kharimat Alatise, *Clemson University*

Inherently therapeutic fucoidan-based nanoparticles: from combination immunotherapy and advanced cell delivery to translational nanomedicine
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A Nanocomposite Dynamic Covalent Crosslinked Hydrogel Loaded with Fusidic Acid for Treating Antibiotic-Resistant Infected Wounds
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Snezana Dordevic, *Prince Felipe Research Institute*

Design and Development of Novel Liposome Encapsulated Anticancer Peptides Targeting Solid Tumours
Andile Faya, *University of KwaZulu-Natal*

Tumor tissue biomarkers for cancer nanomedicine patient stratification
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Ionizable lipid nanoparticles encapsulating DNA barcodes for accelerated delivery screening to the brain
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Alaa Zam, *School of Cancer & Pharmaceutical Sciences, King's College London*

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Pacome Andele, *Ca' Foscari University, Centro di Riferimento Oncologico IRCCS*

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Marco Block, *Boehringer Ingelheim Pharma GmbH & Co. KG Germany*

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Nuran Caz, *BIOMED, UHasselt*

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Alessandro Grattoni, *Houston Methodist Hospital*

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Elena Lagreca, *Italian Institute of Technology*

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Wildan Khairi Muhtadi, *Queen's University Belfast, Sekolah Tinggi Ilmu Farmasi Riau*

1142: Turning up the heat on pancreatic cancer
Kara Vine-Perrow, *University of Wollongong*

Manufacturing Science and Technology

462: Scale-up production and microfluidic formulation of a modular micelle platform technology for cancer therapy
Quim Peña, *Institute for Experimental Molecular Imaging, RWTH Aachen University*

455: Additive manufacturing of SmartEx QD 100 designed oral 3D printlets containing isoniazid for immediate gastric release by selective laser sintering (SLS)
Tukaram Karanwad, *National Institute of Pharmaceutical Education and Research, Guwahati, Changsari, Assam, India. 781101.*

500: Microfluidic Formulation of Peptide-Loaded SLNs for Oral Delivery: Addressing Challenges in Biobarrier Crossing
Stefano Salmaso, *University of Padova*

820: Micromixer design: effect of step height, channel cross-sectional shape, and channel geometry on nanoparticle descriptors
Tommaso Tedeschini, *Italian Institute of Technology*

Nanomedicine and Nanoscale Delivery (NND - FG)

478: Poly(2-ethyl-2-oxazoline) (POx) as poly(ethylene glycol) (PEG)-lipid substitute for lipid nanoparticle formulations
Franziska Adermann, *Friedrich Schiller University Jena*

496: A simple and versatile approach for streamlining granular hydrogel fabrication for drug delivery
Angeliki Andrianopoulou, *University of Illinois at Chicago*

527: Molecular dynamics simulation to design polymers in drug delivery: polymer micelles and novel polymer coatings for lipid nanoparticles
Alex Bunker, *University of Helsinki*

229: Poorly soluble immunomodulatory Imide Drugs (IMiDs) formulated as nanosuspensions as an effective strategy for neurodegenerative disorders. An in vitro/in vivo evaluation.
Luca Casula, *University of Cagliari*

933: Manganese-based metal-organic frameworks for oral antibody delivery in inflammatory bowel disease treatment
Cheng Chen, *Louvain Drug Research Institute, UCLouvain*

546: Nanocarriers-Mediated Modulation of Mechanosensitive Pro-Fibrotic Pathway in Myocardium
Enrica Chiesa, *University of Pavia*

404: Development of a once-a-month formulation of semaglutide from an innovative injectable and biodegradable hydrogel
Emmanuel Dauty, *Adocia*

405: Novel nanohydrogel based on a conjugate between sericin and hyaluronic acid
Piera Di Martino, *University "G. d'Annunzio" of Chieti and Pescara*

409: Yttrium-90-doped biocompatible metal-organic frameworks for low-dose rate internal radiation therapy
Mikhail Durymanov, *Lomonosov Moscow State University*

586: Polymer theranostics with multiple stimuli-based activations

Tomáš Etrych, *Institure of macromolecular chemistry*

359: Extracellular vesicles: a new era in cancer drug delivery
Mariangela Garofalo, *University of Padua*

412: RAVIOLI: A Hyaluronic Acid-Based Platform for the Treatment of post-traumatic Osteoarthritis
Antonietta Greco, *University of Milano Bicocca, Istituto Italiano di Tecnologioa*

271: Innovative cationic lipids for RNA delivery: Unlocking new extra-hepatic horizons with tailored 4-lipid and 5-lipid LNP Formulations
Claire Gueguen, *Polyplus*

627: Nanocarrier Design for Enhanced Batimastat Delivery in Glioblastoma
Miguel Horta, *i3S - Instituto de Investigação e Inovação em Saúde, Faculty of Medicine of University of Porto*

125: Designing nanomedicine libraries via custom 3D-printed microfluidic platforms for applications in hematological malignancies
Shiva Khorshid, *Institute for Experimental Molecular Imaging, University of Urbino*

662: Development and Nano-formulation of Enzyme-sensitive Self-immolative Anticancer Prodrugs
Alexandra Knops, *Institute for Experimental Molecular Imaging*

1206: Biodegradable Polyphosphoester Micelles Act as Both Background-free 31P Magnetic Resonance Imaging Agents and Drug Nanocarriers
Olga Koshkina, *Phos4nova B.V.*

669: Controlling the protein corona of siRNA nanocarriers to reach undruggable oncoproteins: the KRAS case
Philipp Lapuhs, *University of Santiago de Compostela, Center for Research in Molecular Medicine and Chronic Doseases (CiMUS), Universidade de Santiago de Compostela, Santiago de Compostela, Spain*

691: Polymalic acid-based nanoconjugate passing blood-brain barrier and targeting extracellular matrix laminin-411 modulates brain immune system to inhibit glioblastoma growth
Alexander Ljubimov, *Cedars-Sinai Medical Center, University of California Los Angeles*

294: Mannosylated polycations for therapeutic nucleic acid delivery in cancer vaccination
Francesca Mastrotto, *University of Padova*

724: Formulation of Ciprofloxacin-Loaded Albumin Nanoparticles via a Two-Phase Experiment Design for Potential UTI Treatment
Javier Morales, *University of Chile*

726: Myeloid Cell-nanospy System Rebalance the Immunosuppressive State of HCC Pre-metastatic Niche to Inhibit Metastasis
WeiWei Mu, *Shandong University, Ghent University*

727: Development and optimization of lipid nanoparticles for delivery of mRNA therapeutics
Paula Muresan, *CureVac SE*

740: Addressing metabolic switch and limited tumor accumulation in glioblastoma antiangiogenic therapy using multidrug polymeric nanoparticles
Catarina Pacheco, *Institute for Research and Innovation in Health*

339: A mitochondria-targeted polypeptide-based nanoconjugate for breast cancer treatment
Camilla Pegoraro, *Polymer Therapeutics Lab., CIPF*

181: Pre-formation loading of extracellular vesicles with exogenous molecules by photoporation
Jana Ramon, *Universiteit Gent*

806: Advancing Gene Delivery via Polymer Nanoparticle Reproducibility
Kenneth Sims, *Battelle Memorial Institute*

821: Sweetosome: An easy and scalable approach to produce sugar-decorated liposomes by microfluidics
Mattia Tiboni, *University of Urbino Carlo Bo*

827: Hybrid calcium phosphate nanoplatform for cancer immunotherapy via active targeting
Vasiliki Tsikourkitoudi, *Karolinska Institutet*

787: Lipid nanoparticles for pulmonary delivery of mRNA
Sams Sadat, *Cytiva*

1147: Polymeric nanocomplexes for controlled delivery of interleukin-1 receptor antagonist (IL-1Ra) for the treatment of type 1 diabetes mellitus
Shubham Salunkhe, *Birla Institute of Technology and Science, Pilani (BITS Pilani), Pilani Campus*

1228: Hydrophobic Ion Pairing as a novel approach to co-axial electrospraying of peptide-PLGA particles
Corinna Schlosser, *UCL*

1256: High-yielding secretion and loading of small Extracellular Vesicles through Microfluidic approaches.
Simona Silvestri, *Department of Chemical, Materials and Production Engineering, DICMaPI, Naples, Interdisciplinary Research Center on Biomaterials, CRIB, Naples; Istituto Italiano di Tecnologia, IIT, Naples – Italy*

391: Potent B and T cell Responses Provoked by Enzyme-Degradable Nanovesicles
Bi Wang, *Institute for Experimental Molecular Imaging, Faculty of Medicine, RWTH Aachen University*

Ocular Delivery (OcD - FG)

886: Optimizing Injectable in situ Forming Implants for Sustained Release of Ophthalmic Therapeutics
Valerie Eta, *ReBio Technologies*

890: Resistance of topical Ophthalmic Drug Products in the novel in vitro OphthalMimic device
Tais Gratieri, *University of Brasilia*

1176: Novel acetazolamide-loaded nanostructured lipid carriers for ocular applications
María Formica, *Unidad de Investigación y Desarrollo en Tecnología Farmacéutica (UNITEFA), CONICET and Departamento de Farmacia, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Ciudad Universitaria*

299: A novel co-encapsulated mRNA-DNA LNP formulation for targeted delivery of ABCA4 to photoreceptors in Stargardt disease
Sandeep Nema, *SalioGen Therapeutics*

Oral Delivery (OrD - FG)

921: Targeting IBD, optimizing diffusion and cellular interaction with a stimulus-responsive approach
Andreia S. Barros, *Instituto de Investigação e Inovação em Saúde, i3S*

1202: Do gut biomolecules change the characteristics of surface-functionalized PLGA nanoparticles?
Arlene McDowell, *University of Otago*

1225: Learning from microorganism survival strategy: Microbial melanin bioinspired nanomaterials for inflammatory disease.
Jinwon Park, *Seoul National University*

1012: Oral delivery of edible-products derived nanovehicles based on selecting physiological absorption pathway
Yaxian Zheng, *The Third People's Hospital of Chengdu, Southwest Jiaotong University*

Skin and Mucosal Delivery (SMD - FG)

1150: One-stop precise diagnostic platform for in-situ detection of early-stage melanoma
Alfonso Nieto Arguello, *University of Montreal*

1036: Boosting lung accumulation of gallium with inhalable nano-embedded microparticles
Gabriella Costabile, *University of Naples "Federico II"*

953: Lipoic acid-mediated oral drug delivery system utilizing changes on cell surface thiol expression for the treatment of diabetes and inflammation
Yuan Huang, *Sichuan University*

1071: Critical quality attributes enhance understanding of skin sensory perceptions
Yousuf Mohammed, *The University of Queensland*

736: Cell selective lipid nanoparticle for skin fibrosis treatment
Md Nurunnabi, *University of Texas at El Paso*

1087: Delivery of an ACE inhibitor antihypertensive drug, ramipril, across the skin barrier using dissolvable polymer-based microarray patches
Dina Rahmawanty, *Queen's University Belfast, Universitas Lambung Mangkurat*

1109: Dry and Temperature Stable mRNA Vaccine presentation
Carolin Thiele-Suess, *CureVac SE*

1112: A multi-stage pulmonary drug delivery system based on pollen grains
Lorena Valverde-Fraga, *Center for Research in Molecular Medicine and Chronic Diseases (CiMUS), University of Santiago de Compostela*

Women's Health for Everyone's Health

1125: Hypotonic, gel-forming delivery system for vaginal drug administration
Kimberly Bockley, *Johns Hopkins, Johns Hopkins University School of Medicine*

1131: Extracellular Vesicles from Cervicovaginal Microbes Induce Immune Responses in Endometrial Cells
Andrea Joseph, *Icahn School of Medicine at Mount Sinai*

1139: Extended-Release Tri-layer Multipurpose Technology (MPT) Films for Vaginal Delivery of Anti-HIV and Contraceptive Drug Combination
Sravan Kumar Patel, *University of Pittsburgh, Magee-Womens Research Institute*

Artificial Intelligence and Predictive Models in Pharmaceutical Technologies

101: A Multi-Functional Strategy Based on Curcumin-Loaded Oil and Core-Starch Shell Tested in an Inflamed Gut-on-Chip with Microbiota
Raffaele Crispino, *Italian Institute of Technology*

102: Demonstrating the excipient effect in vitro for pre-clinical formulation analysis
Karl Box, *Pion Inc.*

103: Biomolecule effect on preclinical injectable formulation analysis in vitro
Karl Box, *Pion Inc.*

104: Translation-on-chip: Reprogramming PDAC stroma by targeting coagulation to improve drug delivery
Bumsoo Han, *University of Illinois Urbana-Champaign, Purdue University*

105: In Vitro Hepatotoxicity Screening Utilizing Hepatocytes Seeded in a 3D Microfiber-Based Scaffold
Navneet Kaur, *FAMU-FSU College of engineering*

106: Establishment of a 3D Multi-layered In Vitro Model of Inflammatory Bowel Disease
Claudia Martins, *University of Porto*

107: Development of 3D reconstructed oral equivalent and ex vivo skin models for pharmaceutical applications
Aurélie Marchès, *Biofilms Research Center for Biointerfaces (BRC), Malmö University*

108: Cellular responses to permeation enhancers in an advanced 3D co-culture model
Rebekka Trenkle, *University of Copenhagen*

110: Ex vivo model to investigate regional differences in intestinal absorption and biotransformation of 5-ASA
Xiaoxiao Wang, *University of Geneva*

111: Specific identification of PD-1/PD-L1 molecular interaction and anti-PD-L1 antibody inhibition at the single-molecule level
Yonghui Zhang, *iNANO, Aarhus University*

112: Development of a novel in vitro cell model for biological evaluation of nanofiber mats
Anze Zidar, *University of Ljubljana, Faculty of Pharmacy*

113: Microfluidics, automation, and artificial intelligence for lipid nanoparticle design and production
Khair Alhareth, *Université Paris Cité, CNRS, INSERM*

114: Leveraging Artificial Intelligence for Advancements in Pharmaceutical Research.
Saad Alshahrani, *Prince Sattam University*

115: Computational simulations to predict the mirtazapine drug release kinetics from bentonite.
Ana Borrego-Sánchez, *University of Valencia*

116: Predicting the impact of differences in suppository formulations and in vitro dissolution methods on rectal drug pharmacokinetics using PBPK modelling
Yuri Dancik, *Certara UK Ltd, Simcyp Division*

117: An attempt of predicting printability of filaments using machine learning technique.
Marija Duranovic, *Institute for Medicines and Medical Devices of Montenegro*

118: Leveraging artificial intelligence to streamline the development of liposomal drug delivery systems
Remo Eugster, *University of Bern*

119: Influence of Hormonal Fluctuations on Efficacy of Dual-Therapeutic Agent 3D-Printed Scaffolds to Treat Bacterial Vaginosis
Bassam Fotouh, *University of Louisville*

120: AI-Driven Histomorphological Evaluation of Excipient Impact on Intestinal Tissue
Joanne Heade, *Copenhagen University*

122: Uncovering the Interleukin-12 Pharmacokinetic Desensitization Mechanism and Its Consequences with Mathematical Modeling
Oleg Igoshin, *Rice University*

123: Accounting for colon absorption in physiologically based biopharmaceutics modeling of extended-release formulations
Harshad Jadhav, *KU Leuven, AstraZeneca R&D*

124: Do physiologically relevant inputs improve drug absorption predictions in physiologically based biopharmaceutics modeling?
Harshad Jadhav, *KU Leuven, AstraZeneca R&D*

127: Computer-driven formulation development of ginsenoside Rh2 ternary solid dispersion
Tianshu Lu, *University of Macau*

128: Cheminformatic and Virtual Screening by Employing Machine Learning
Long Chiau Ming, *Sunway University, Universiti Brunei Darussalam*

129: MicrofluidicNP: A machine-learning platform for the microfluidic formulation development of nanomedicines
Thomas Moore, *Università degli Studi di Napoli Federico II, Istituto Italiano di Tecnologia*

130: Dynamic exploration and therapeutic assessment of andrographolide soya lecithin complex self-assembled nanoparticles against neuroblastoma
Atul Mourya, *National Institute of Pharmaceutical Education and Research-Hyderabad*

131: Exploiting Machine learning technology to correlate mean size and zeta potential values of nanocarriers with drug targeting efficiency to the brain after intranasal administration.
Teresa Musumeci, *University of Catania*

133: Machine Learning to Predict Effectiveness of Inorganic Nanoparticles in Preclinical Cancer Research
Daniel Reker, *Duke University, Duke University School of Medicine*

134: PK/PD modelling to advance the preclinical development of a novel polymer prodrug in oncology
Anne Rodallec, *COMPO/SMARTc CRCM AMU*

135: Supramolecular delivery systems for polyphenols: prediction of in vivo diffusion and permeability
Maddalena Sguizzato, *University of Ferrara*

137: Demonstration of Virtual Bioequivalence (VBE) between Misoprostol Vaginal Rings Using Mechanistic Vaginal Absorption & Metabolism model (MechVAM) within Simcyp Simulator
Kanika Thakur, *Certara*

138: Metformin-releasing contact lenses: predicting their in vivo efficacy using a physiology-based mathematical model
Nadia Toffoletto, *Instituto Universitario Egas Moniz*

139: Autoencoders to characterise and quantify variability in porcine skin
Andrew Watson, *University of Bath*

140: Machine Learning-Driven Development of Indole-3-Aldehyde Derivative Therapeutic Systems
Paulina Anna Wojtylo, *University of Perugia*

Bioengineering (FG)

141: Impact of endothelial cell abnormalities and shear stress on nanoparticle responses in a dynamic vessel-on-a-chip model
Yasmin Abdelkader, *University of Toronto, Unity Health Toronto*

142: In-Body Networks of Tissue Interfacing Robotic Therapeutics for the Next Generation of Human Health
Alex Abramson, *Georgia Tech, Emory University*

143: Peptide/polysaccharide-based films loaded with non-antibiotic clay nanohybrids for chronic skin wounds management
Carola Aguzzi, *University of Granada*

144: Dually Targeted Bioinspired Nanovesicle Delays Advanced Prostate Cancer Tumour Growth In Vivo
Wafa Al-Jamal, *Queen's University Beflast*

145: D-Peptide/Antibody Conjugates for Optimized HIV Treatment
Lindsay Allen, *University of Utah*

147: Collagen and gelatin-based injectable hydrogels as potential drug delivery system for wound healing applications
Francesca Basso, *Italian Institute of Technology, University of Genova*

148: Biologically Relevant In-Vitro Analysis of Nanoparticle Functionality
Hulya Bayraktutan, *University of Cambridge*

149: Osmotic shock as a mean to enhance the cell uptake of (nano)cargos
Nina Bono, *Politecnico di Milano*

150: Phospholipid coated porous particles as dry powder formulation for treating tuberculosis
Jesus Campos Pacheco, *Malmö University, Biofilms – Research Center for Biointerfaces (BRCB)*

151: Nano-hydroxyapatite enriched cryogels for bone regeneration
Vito Carriero, *Sapienza University of Rome*

152: Engineered cell particle hybrid spheroids for treatment of sepsis-induced liver injury
Dinesh Chaudhary, *Sungkyunkwan University*

153: Photodynamic and Phagocytosis-mediated therapy in KRAS-mutated Pancreatic cancer with EGFR inhibiting antibody-photosensitizer conjugate
Soomin Cho, *The Catholic University of Korea*

154: Nanocarriers for GDF-5 sustained release enhanced Tenogenesis of human Tendon Stem Cells in Bioplotted 3D ColMA environment
Giacomo Cortella, *University of Salerno*

155: Optimization of a Novel Trispecific Antibody Targeting NK Cells, TROP-2 Expressing Tumors, and Utilizing IL-15/IL-15 Receptor Alpha Fusion Protein: Saftey and Efficacy Study in the Mouse NSCLC Model
Alireza Daneshvar, *Tehran University of Medical Sciences, Oncology, Hematology, Cell Therapy Research Center, Shariati Hospital*

156: Synthesis of Highly Tunable Gelatin Methacryoyl with Very Low Gelation Temperature for Scaffolds Preparation
Laura Di Muzio, *Sapienza, University of Rome*

157: Biocompatible polymer@nanoMOFs with Efficient Coating and Flexible Composition as very versatile Nano-Carriers
Mengli DING, *Institut des Sciences Moléculaires d'Orsay, Université Paris-Saclay*

158: Fabrication of Microneedles for Plant Virus-Based Gene Delivery for Melanoma Immunomodulation Combined with Photothermal Therapy
Khalil Elbadri, *University of Helsinki*

159: Immune nanoghosts for advanced cancer therapy
Sunnatullo Fazliev, *Max Planck Institute for Medical Research*

160: Stretching-based cell stimulation for enhancing non-viral gene delivery in vitro
Flaminia Fruzzetti, *Politecnico di Milano*

161: SMART Approach: Harnessing Liposomal Nanocellulose for NIR-Light Driven On-Demand Drug Delivery
Puja Gangurde, *University of Helsinki*

162: The Anti-inflammatory Potential of Drug-free Amphiphilic Cyclodextrin Nanocarriers
Stefanie Gier, *Goethe University*

163: Theoretical and experimental characterization of mucus, an important barrier for pulmonary delivery
Mario Grassi, *University of Trieste*

164: Tumor specific activation of PEGylated antibody halts immune-related adverse events in checkpoint blockade therapy
Minji Ha, *Sungkyunkwan University*

165: Stretchable wearable bioelectronic systems for eye-care with smart contact lenses
Sanghoon Hong, *Pohang University of Science and Technology (POSTECH)*

167: Protein delivery into cells and liposomes through peptide-tagged cyclization
Young-Pil Kim, *Hanyang University*

168: Soft and sticky electroceutical patch for sutureless nerve repair and neuroregenerative therapy
Kyoungryong Kim, *Department of Intelligent Precision Healthcare Convergence, Sungkyunkwan University, Suwon, Korea (the Republic of)*

169: Injectable In-situ Hydrogel with Superoxide Dismutase Activity for Facilitated Bone Regeneration
Min Ji Kim, *Seoul National University*

170: Strain-programmed adhesive patch for accelerated photodynamic wound healing
Seong-Jong Kim, *Pohang University of Science and Technology*

171: Biomimetic chitosan-based secondary nano-emulsions (NEsoSomes) for endothelial cell targeting.
Elena Lagreca, *Italian institute of Technology*

173: Biodynamers: Harnessing Dynamic Peptides for Controlled Drug Delivery
Sangeun Lee, *Saarland University*

174: Bacterial Co-expression of Stimuli-Responsive Triblock Copolypeptides and Tyrosinase for Surface Adhesion
JaeHee Lee, *Hanyang University*

175: Self-Healing and Self-Adhesive Hydrogels of Elastin-Based Triblock Copolypeptides with Stimuli-Responsiveness
Dong Woo Lim, *Hanyang University*

176: Engineering Novel Antibody-Drug Conjugates with Dual Payloads to Improve the Incidence of Drug Resistance in Oncology.
Bonnie Long, *University of Utah*

177: Extracellular Vesicles as promising nanobiovectors for intracellular protein delivery using lipid-polymer anchorage
Antonin Marquant, *Institut Charles Gerhardt Montpellier*

178: Preliminary insights into automated manufacturing of cell therapies by robotics
Alice Melocchi, *Multiply Labs, Inc., Università degli Studi di Milano*

179: Surface-engineering of umbilical cord blood derived mesenchymal stem cells with rapamycin-loaded microspheres for enhanced lung targeting in treatment of idiopathic pulmonary fibrosis
Junhyeung Park, *Sungkyunkwan University*

180: µMESH-enabled local delivery of temozolomide and plasmid-loaded nanoparticles targeting anti-drug resistance in brain tumors
Cristiano Pesce, *Italian Institute of Technology, University of Padua*

183: Designing functional biomimetic nanoparticles for the capture of pathogens: targeting SARS-CoV-2 with coated polymeric nanoparticles and hybrid liposomes
Mariana Salomao, *Federal University of Goias*

184: Skin inspired strain dissipation structure for sutureless nerve repair in rodents and nonhuman primates
Duhwan Seong, *Sungkyunkwan University (SKKU)*

185: Bicompartmental Nanofibers of Coiled-Coil Forming Peptide and Elastin-Based Block Copolypeptides for Controlled Drug Release
Shahzaib Shahid, *Hanyang University*

186: Delivery of multiple growth factors and spheroids for engineering 3D osteochondral tissue.
Heungsoo Shin, *Hanyang University*

187: Chitosan-Promoted Precision: Safeguarding Islet Transplants with a Targeted Drug Delivery System to Counteract IBMIR
Manju Shrestha, *Sungkyunkwan University*

188: 3D Bioprinted Poloxamer/Alginate Hydrogel Scaffolds with Neomycin Sulfate for Wound Healing
Joseph Tanfani, *Saint Joseph's University*

189: Assessment of Glutathione-Conjugated Hydrogels for Eradication of Biofilms and Biofouling control
Jay Teamer, *University of Illinois Chicago*

191: A pluripotential neutrophil-mimic nanovehicle modulates immune microenvironment with targeted drug delivery for augmented antitumor chemotherapy
Jiahe Wu, *Zhejiang University*

193: Lactococcus lactis-driven bioengineered selenium nanostructures in pancreatic cancer therapy
Wei Zhang, *Shenzhen University General Hospital*

194: In situ injectable hydrogels sequentially release drugs to accelerate treatment of periodontitis
Changhai Zhou, *Sichuan University*

Delivery Technologies for Sustainable Agriculture, Aquaculture, and Farming

196: Development of a slow-release formulation for the rare sugar 7-deoxy-seduheptulose as a new bioherbicide
Celina Beermann, *University of Applied Sciences and Arts Bielefeld*

197: Sodium ion channel blocker loaded thermal in-situ gelling injectable hydrogel for chronic neuropathic pain treatment
Cristina Casadidio, *Univerisity of Camerino*

198: A vegan process to obtain peptides from beans and hibiscus by bromelain hydrolysis
Hesson Chung, *Korea Institute of Science and Technology*

199: Exploring the physicochemical and in vitro properties of bee pollen-based new green extracts for application in pharmaceutical and cosmetic formulations
Camilla Elena Di Bella, *University "G.d'Annunzio" Chieti-Pescara, Recusol srl*

204: The use of pistachio (Pistacia vera. L., Bronte) hulls by-product for the formulation of green micelles for novel cosmetic products
Maria Gigliobianco, *University of Camerino*

205: Formulation and Characterization of Ifosfamide-Loaded Bovine Serum Albumin Hydrogel for Anticancer Therapy.
Gagan Kaushal, *Thomas Jefferson University*

207: Eggshells - a novel excipient to improve the solubility of poorly water-soluble compounds
Cornelia M. Keck, *Philipps-Universität Marburg*

208: Powerful tools for precise engineering of viatelTM Diblock nanoparticle size: polymer and solvent structure
Cory Mahnen, *Ashland*

209: Importance of β cyclodextrin substitution level and type for solubilization and stabilization of poorly soluble APIs in parenteral dosage forms
Cory Mahnen, *Ashland*

210: Nanocapsules-Mediated Delivery of Semiochemicals for Precision Pest Management in Bark Beetle Infestations
Anna Mazzetto, *Friedrich-Schiller-Universität*

211: Orodispersible dosage forms loaded with β-galactosidase for the treatment of lactose intolerance
Chiara Meazzini, *Università degli Studi di Milano*

212: An Innovative Biobased Medical Textile Obtained from Agri-Food Waste
Gianni Pecorini, *University of Pavia*

214: Manufacturing and Digestion Simulation of High-Load Beads Incorporating Schizochytrium Oil via Prilling Technology
Maria Rosaria Sellitto, *University of Salerno*

215: Development of a novel formulation for biotechnical pest management of the brown marmorated stink bug, Halyomorpha halys, using slow-release capsules
Tessa Strümpfler, *Hochschule Bielefeld*

216: Self-Immolative Tunable Amphiphilic Platforms for Targeted Drug Delivery
Gianluca Ulivi, *University of Geneva*

217: Chondrogenic differentiation of mesenchymal stem cells in polymeric beads with controlled release of cells
Thierry Vandamme, *University de Strasbourg, INSERM*

220: Electrospinning of bioactive-loaded nanofibers for the treatment of epilepsy
Amal Abdulghani, *UCL*

221: Near-IR-Triggered Quantum Dots Stimulate Electric Nerve Therapy
Ravit Abel, *Technion israel institute of technology, Technion*

222: Nanoparticle Intravenous Distributed Enzyme Replacement Therapy (NanoDIVERT)
Noah Arnold, *Clemson University*

223: Unveiling glioblastoma post-surgical microenvironment dynamics to tailor drug delivery strategies for recurrence inhibition
Chiara Bastiancich, *Aix-Marseille University, University of Turin*

224: Re-evaluation and Validation of hCMEC/d3 Cells as an In Vitro Blood-Brain Barrier Model for Studying HIV-1 transcytosis.
Priyanshu Bharadwaj, *Université de Montréal, Université de Montréal*

225: Impact of physicochemical features of PAMAM dendrimers on their transcytosis ability on a validated human BBB model
Priyanshu Bharadwaj, *Université de Montréal, Université de Montréal*

226: Acute inflammation of the BBB: transcriptome analysis and impact on drug permeability – postulate versus facts
Priyanshu Bharadwaj, *Université de Montréal, Université de Montréal*

227: Nasal powder of chitosan-dimethyl fumarate-cyclodextrin intended for targeted delivery to the central nervous system
Eleonora Cama, *University of Pavia*

228: Hyaluronic acid-based nanoparticles for brain delivery of antibody NUsc1 targeting Aβ Oligomers as a therapeutic tool for Alzheimer's Disease.
Mariane Carraro, *University of Groningen*

230: Targeted drug delivery of antimicrobials
Riccardo D'Elia, *DSTL*

231: A novel approach for glioblastoma treatment: CBD and PTX co-loaded lipid nanocapsules. In vitro and in vivo studies.
Laura Gómez Lázaro, *Complutense University of Madrid, Aix Marseille University*

232: Preparation and micelle size evaluation of binary polymeric platforms for nasal delivery of Trichilia catigua
Maria Vitoria Gouveia Botan, *State University of Maringa*

233: Development and characterization of nanovesicles for nasal administration by conventional methods and molecular dynamics analysis
Lucia Grifoni, *University Of Florence*

234: Blood brain barrier-penetrating nanosystem as amyloid sweeper and neuroinflammation modulator for Alzheimer's disease therapy
Qianqian Huang, *West China School of Pharmacy, Sichuan University*

236: Lipid Nanoparticle-Mediated Gene Therapy Post Intranasal Administration
Shaked Kagan, *Technion*

237: Novel Approach in Nanoparticle-Mediated Drug Delivery to the Brain
Igor Khalin, *Normandy University, University Clinic Munich*

238: In Situ Administration of STING-Activating Hyaluronic Acid Conjugate Primes Anti-Glioblastoma Immune Response
Alessio Malfanti, *University of Padova, UCLouvain*

239: Intraneuronal trafficking of RNA-loaded Lipid Nanoparticles for the potential treatment of neurodevelopmental disorders
Stefania Mamberti, *Italian Institute of Technology*

240: Nanonized carbamazepine for nose-to-brain delivery
Teresa Musumeci, *University of Catania, University of Catania*

241: Development of drug-delivery-mediated neuromodulation model using focused ultrasound
Yu-Cheng Pei, *Chang Gung Memorial Hospital at Linkou*

242: In-Vitro Profiling and Molecular Dynamics Simulation of Berberine-loaded MCM-41 Mesoporous Silica Nanoparticles: Implications for Preventing Apoptotic Process
Anurag Singh, *Indian Institute of Technology (BHU)*

243: Synthesis of lactoferrin conjugated chitosan-g-m-PEG-NH2 layered Thymoquinone loaded hybrid nanovesicles for treatment of Glioblastoma Multiforme
Sagar Trivedi, *Department of Pharmaceutical Sciences, Rashtrasant Tukadoji Maharaj Nagpur University*

244: Biocompatible Dual Barrel Hyaluronic Acid Intranasal Hydrogels as Novel Strategy to Deliver Therapeutic Peptides to the Brain
Rifka Utami, *King's College London, Universitas Hasanuddin*

245: Nose-to-brain delivery of iminosugars to treat Parkinson's disease
Giulia Vanti, *University of Florence*

Gene Delivery and Gene Editing (GDGE – FG)

246: Understanding the impact of cationic polymer on the cytotoxicity and DNA transfection efficiency of lipopolyplexes
Giulia Anderluzzi, *University of Milan*

247: Supramolecular Oligocationic Polymeric Bioconjugates for Systemic Nucleic Acid Delivery
Joachim Arikibe, *University of Padua*

248: Lipid-functionalized Ionizable Polypeptides for mRNA Delivery
Nithiyaa Bala Krishnan, *Agency for Science, Technology and Research (A*STAR)*

249: Functional study of atrial natriuretic peptide conjugated spermine-acetalated dextran nanoparticles loaded with miRNA for heart tissue regeneration after myocardial infarction
Nithiyaa Bala Krishnan, *University Medical Center Groningen*

250: Decoration of siRNA-based lipid nanoparticles with PNVP and PNMVA polymers to circumvent PEG dilemma and immunogenicity
Manon Berger, *University of Liege*

251: Development of a Targeted Stimuli-Responsive Peptide System to Deliver Bioactive siRNA for Glioblastoma Multiforme Treatment
Jessie Boulos, *Clemson University*

253: "Green" Solid Lipid Nanoparticles by the fatty acids coacervation: a sustainable nanocarrier for gene-delivery
Annalisa Bozza, *University of Turin*

254: CN3 Research at UniTO in the framework of Precision Medicine: a focus on Multifunctional Synthetic Nanoplatforms for Targeted Delivery
Roberta Cavalli, *University of Turin*

256: Optimization of Nanoparticles for Enhanced siRNA Delivery: Comparative Investigation of Cationic Lipids
Ilaria Chiarugi, *University of Florence*

257: A nanoplatform for the delivery of antisense oligonucleotides (ASOs) to treat multi-drug resistant fungal infections
Ju Yeon Chung, *Korea Advanced Institute of Science and Technology*

258: Hybrid nanoparticles for targeted microRNA delivery to cardiomyocytes
Martina Coletto, *Politecnico di Torino*

259: Exploiting the potential of hybrid lipid polymer nanoparticles for delivery of RNA therapeutics to the lung
Gabriella Costabile, *University of Naples "Federico II"*

260: Development of novel ionizable lipid nanoparticles for enhanced siRNA delivery
Mittal Darji, *University of Connecticut*

261: Development of liquid crystalline nanoparticles for RNA delivery via intranasal route
Bryan Debiasi, *University of São Paulo*

262: Dopamine-Coated Calcium Phosphate Nanoparticles for pH Controlled Release of siRNA
Andrea del Valle, *Karolinska Institutet*

263: Bioinspired guanidinium-containing poly(methacrylamide) polymers for gene delivery with modified hydrophilic-lipophilic balance
Jan Egger, *Friedrich-Alexander-Universität Erlangen-Nürnberg*

265: Global protein expression after intravenous infusion of mRNA-lipid nanoparticles in swine
Francesca Ferraresso, *University of British Columbia, Versiti*

266: On the role of PEG-lipids in the development of Lipid Nanoparticles for siRNA delivery
Teresa Ferrillo, *University of Naples Federico II*

267: Ursodeoxycholic Acid in Polymer Nanoparticles for Gene Therapy in Ocular Cells
Thomas Foster, *Curtin University, Royal Perth Hospital*

268: Formulation optimization results in successful spray drying of lipid nanoparticles with functional mRNA delivery to the lungs.
Kristina Friis, *AstraZeneca*

269: Optimizing Encapsulation Efficiency and Cytocompatibility in mRNA-Lipid Nanoparticle Formulations for Targeted Drug Delivery
Simav Gildiz, *Rutgers University*

270: Lipid-based systems for the delivery of plasmid DNA
Antonella Grigoletto, *University of Padova*

272: Delivery of large plasmids to neuronal cells using cationic polymeric nanoparticles.
Cherry Gupta, *Battelle Memorial Institute*

273: Cationic amphiphilic drugs as a new tool in RNA formulation development
Christopher Hauß, *Goethe University Frankfurt a.M.*

275: Enhanced intracellular transfection of CRISPR/Cas9 using fusogenic nanoparticles
Jinmyoung Joo, *Ulsan National Institute of Science and Technology*

277: Optimization of mRNA structure for the enhancement of stability and translational activity
Eunbin Kim, *Ewha Womans University*

278: Development of Survivin mRNA loaded lipid nanoparticles for oral cancer Immunotherapy
Vandana Krishna, *Birla Institute of Technology and Science, Pilani – Hyderabad Campus*

281: Diffusive nanocarrier-mediated mRNA delivery to the brain
Philipp Lapuhs, *University of Santiago de Compostela*

282: Design and Optimization of the Transfection Efficiency of PEI/pDNA polyplexes using Design of Experiments (DoE)
Chiara Lazzarini, *Politecnico di Milano*

284: Development of mRNA structures and delivery systems for modulating immunogenicity
Kyuri Lee, *Gyeongsang National University*

288: Optimising the design of ionizable amino-polyester lipid nanoparticles for tissue selective mRNA delivery
Aida Lopez Espinar, *University College Cork*

289: An optimized lipid nanoparticle formulation for the delivery of microRNA-124 skews microglia toward a pro-resolutive phenotype
Zhanjun Ma, *Université Catholique de Louvain*

290: Pulmonary delivery of mRNA using peptide-based vector by nebulization
Cheng Ma, *The University of Hong Kong, University College London*

291: Intranasal mRNA Delivery via Ionizable Lipid-Modified PEGylated Solid Lipid Nanoparticles
Nipuni Maniyamgama, *National University of Singapore*

292: Engineered lipoplexes for miRNA restoration in leukemic T-Large Granular Lymphocytes
Lara Marcenta, *University of Padua*

293: Delivery of immunostimulatory viral proteins from gene-activated matrices for glioblastoma treatment.
Raquel Martinez-Campelo, *University of Santiago de Compostela*

295: siRNA Delivery via Cross-Linked Gelatine Microparticles for Bone Tissue Engineering
Franziska Mitrach, *University of Leipzig*

296: Multimodal and multiscale imaging of lipid nanoparticle-mediated RNA delivery
Jeffrey Momoh, *Institute for Experimental Molecular Imaging*

298: Acid degradable lipid nanoparticles efficiently deliver mRNA in vivo
Niren Murthy, *University of California at Berkeley, Innovative Genomics Institute*

300: In vitro testing of microneedles for transdermal vaccines.
Daniela Orefice, *University of Naples Federico II, Italian Institute of Technology*

301: Structure-Activity Relationship (SAR) between Ionizable Lipid Structure and Immune Cell Responses
Preeti Sharma, *Tel Aviv University*

302: Hyaluronic acid-Gold Nanoparticle/CRISPR Complexes for Targeted Gene Editing
Zhengyu Piao, *Pohang University of Science and Technology*

303: An oncolytic virus–T-cell chimera for cancer immunotherapy
Yuan Ping, *Zhejiang University*

304: Non-viral gene delivery at best through VibroFect technology
Giovanni Protopapa, *Politecnico di Milano*

305: Elevating non-viral transfection of cells through VibroFect technology
Giovanni Protopapa, *Politecnico di Milano*

306: Next-Generation surfactants with Tethered Cationic Headgroups as Gene Delivery Vectors
Venkatesh Ravula, *Institute for Stem Cell Science and Regenerative Medicine*

307: Optimization and Delivery of Endogenous mRNA UTRs using Lipid Nanoparticles to Control Exogenous Protein Expression in Platelets
Madelaine Robertson, *University of British Columbia, University of British Columbia*

309: Avidin Nucleic Acid NanoASsemblies (ANANAS) for targeted gene delivery: development of a multifunctional platform.
Elisa Schiavon, *Università di Padova*

310: Oral administration of mRNA-based nanomedicines for the treatment of inflammatory bowel diseases
Hanäé Guerin, *LAGEPP*

311: Synthesis of P-NIPAAmco-P-(1-vinylimidazole) and P-NIPAAm-co-P-(4-vinylpyridine) temperature and pH sensitive nanogels as novel gene delivery carriers.
Luis Sotelo Marmolejo, *Universidad Autónoma de Baja California*

312: Platforms for RNA therapeutics delivery: Fusogenic ANANAS-based system for targeted delivery of siRNA/miRNA
Martina Stocco, *Università degli Studi di Padova*

313: Organic solvent-free lipid nanoparticle enabling multiple gene delivery, CRISPR-Cas9 application and expression in primary monocytes
Michael Streiber, *Friedrich Schiller University Jena, Friedrich Schiller University Jena*

314: Hermes™ lipopolyplex nanoparticles confer enhanced stability over mRNA LNPs
Gozde Tezcan, *4Basebio*

315: Modulating mRNA transfection efficiency and cytotoxicity of lipoamino fatty acid xenopeptides by spacer and disulfide linkage effects
Sophie , *LMU Munich*

316: Triazine lipids as novel gene delivery vehicles with enhanced mRNA transgene expression
Vincent Venditto, *University of Kentucky*

317: Hybrid extracellular vesicles for efficient loading and functional delivery of mRNA
Xiaoqin Wang, *AstraZeneca*

318: NMR-dynamic monitoring of sheddable coatings from the lipid nanoparticle surface
Xiaoqin Wang, *Institute of Pharmacy and Food Chemistry, Julius-Maximilians-University Würzburg, Germany*

319: Polymeric Micelle Delivery of Cas9 Ribonucleoprotein for HEK293-GFP Gene Knockdown
Lucian Williams, *Clemson University*

320: Ionizable lipids made by facile synthesis for effective delivery of mRNA vaccine
Yi Yan Yang, *Bioprocessing Technology Institute (BTI), Agency for Science, Technology and Research (A*STAR)*

321: Hermes™ lipopolyplex nanoparticles for linear hpDNA™ delivery
Emily Young, *4basebio*

323: Adeno-associated virus-mediated reactivation of tumor suppressor PTEN enhances antitumor immunity
Yongshun Zhang, *Sichuan University*

Global Health and Special Populations

325: Antimicrobial coatings based on quaternary ammonium organosilane compound
Martina Fronduti, *University of Camerino*

326: Synthesis and characterization of silane-chitosan for advanced antimicrobial surface coatings for industrial and biomedical applications
Martina Fronduti, *University of Camerino*

327: Development of a Thermostable Microneedle Patch for Human Papillomavirus Vaccination
Chao-yi Lu, *Georgia Tech and Emory University*

328: Poly(lactic-co-glycolic acid) Nanoparticles for the Sustained Delivery of a Novel Fusion Protein as a Tuberculosis Vaccine
Sara Maloney Norcross, *RTI International*

329: Biodegradable nanoconjugates for precision lung delivery of anti-tuberculosis drug
Van Nguyen, *Institut Galien Paris-Saclay*

Imaging in Drug Delivery

330: Aggregation Induced Emission Based Method to Evaluate Drug Penetration and Delivery in 3D Tumor Spheroids
Maytal Avrashami, *Technion*

331: Development of Gadolinium-conjugated ultrasmall gold nanoparticles for breast cancer imaging
Adilet Beishenaliev, *Universiti Malaya*

332: Zinc phthalocyanine-initiated poly-L-glutamate-based nanocarriers with theranostic properties for glioblastoma multiforme treatment
Amina Benaicha Fernández, *Centro de Investigación Príncipe Felipe*

334: A Multimodal Theranostic Agent with Enhanced Cerenkov Luminescence Imaging
Natalie Boykoff, *The Graduate Center CUNY, MSKCC*

335: Design of PFCE Encapsulated Nanoparticles for FMRI application based on PLGA and its derivatives
Roberta Censi, *University of Camerino*

336: Exploring the potential of engineered nanocarriers on host directed therapy against tuberculosis.
Axelle Grandé, *Univ. Lille, CNRS, INSERM, CHU Lille, Institut Pasteur de Lille, U1019-UMR 9017-CIIL-Center for Infection and Immunity of Lille*

337: Characterization of a bone metastatic prostate cancer model and validation as a platform for nanomedicine evaluation
Antoni Serrano Martí., *University of Duisburg-Essen*

338: Microfluidic controllable preparation of iodine-131-labeled microspheres for radioembolization therapy of liver tumors
Qingrong Jiang, *Sichuan University*

341: Development of Theranostic Polymeric Micelles for Image-Guided Cancer Nanotherapy
Alec Wang, *RWTH Aachen University Hospital*

Immuno Delivery (ID – FG)

342: mRNA galsome optimization for prophylactic vaccination against Mycobacterium Tuberculosis
Ilke Aernout, *Ghent Research Group on Nanomedicines, Chent Unversity*

343: Targeted Photoimmunotherapy using Antibody Photosensitizer Conjugate for KRAS mutant Colorectal Cancer
Minji Ahn, *The Catholic University of Korea, eNBiaR incorporation*

344: Chemo-immunotherapy with nanoliposomal epacadostat and docetaxel combination as a potent therapeutic approach against melanoma
Hoda Alavizadeh, *School of Pharmacy, Mashhad University of Medical Sciences*

345: mRNA lipid nanoparticle formulations for macrophage engineering: advancing immunotherapies for the treatment of lung diseases
Raneem Aldaqqa, *Virginia Commonwealth University, Virginia Commonwealth University*

346: An apolipoprotein nanoparticle platform for mRNA delivery to myeloid cells and their progenitors
Tom Anbergen, *Radboud University Medical Center*

347: Trojan horse silk fibroin nanoparticles loaded with a recall antigen for redirecting immunity against glioblastoma
Elia Bari, *University of Piemonte Orientale*

348: Engineered hybrid nanoparticles for co-delivery of antigens and immune adjuvants to the respiratory mucosa
Susy Brusco, *University of Naples "Federico II"*

350: IL-12 DELIVERY TO THE TUMOR MICROENVIRONMENT USING PH-RESPONSIVE POLYMERIC NANOPARTICLES
Chen Chen, *Universuty of Twente*

351: Durable and effective STING activation for post-surgical cancer immunotherapy through a hydrogel based in-situ vaccination
Sheng Liang Cheng, *National Tsing Hua University*

352: Itaconate-based nanoparticles alter macrophage polarization to improve the treatment of inflammatory diseases.
Andrea Cottingham, *University of Maryland, Baltimore*

355: Impact of nanoparticle size on trafficking, biodistribution, and immune cell association in lymph nodes after subcutaneous injection in mice
Muhammad Farooq, *Monash University*

356: Immunomodulatory corticosteroid-loaded micelles as robust sepsis treatment.
François Fay, *Institut Galien Paris-Saclay*

357: A unique immunization method to induce antibodies: intravenous administration of PEGylated exosomes with splenic uptake
Mako Fukumoto, *Institute of Biomedical Sciences, Tokushima University*

358: Graphene oxide nanosheets as 2D transporters for cancer immunotherapeutics
Gloria Garcia Ortega, *Nanomedicine Lab, Catalan Institute of Nanoscience and Nanotechnology (ICN2), CSIC and BIST*

361: Antigen/adjuvant-free liposome induces adjuvant effects for enhancing cancer immunotherapy
Qianqian Guo, *Shanghai General Hospital Affiliated to Shanghai Jiao Tong University School of Medicine*

362: Rerouting aNPs to specific immune cells using a modular apoA1 fusion protein platform
Ayla Hokke, *University of Technology Eindhoven*

363: Stabilization of mRNA Vaccines by Utilizing Drying Technologies.
Vusala Ibrahimova, *CureVac SE*

364: Evaluation of metformin encapsulated rod-shaped iron(III) carboxylate nanoMOFs as antibacterial immunotherapy
Aime Fabius Irabin, *South Dakota State University*

365: Optimizing mRNA Delivery: Impact of Diverse LNPs Formulations on Cytokine Secretion in Human Peripheral Blood Mononuclear Cells (PBMCs)
Germán Islan, *UNIVERSITÄTSMEDIZIN der Johannes Gutenberg-Universität Mainz*

366: Spatiotemporal Delivery and Activation of Immunomodulatory Nanobody Conjugates for Cancer Immunotherapy
Blaise Kimmel, *The Ohio State University, Vanderbilt University*

367: Local Immunoprotection of Transplanted Islets using a Drug-loaded, 3D-printed Scaffold
Taylor Lansberry, *University of Florida*

368: Hydrogel-Based In-Situ Vaccination for STING Activation and Antitumor Response in Gastrointestinal Malignancies
Hsin Mei Lee, *National Tsing Hua University*

369: EXPLORING mRNA LIPID NANOPARTICLES FOR THE IN SITU GENERATION OF CAR-Ms
Ine Lentacker, *Ghent University*

370: Ferritin-cluster-armed CAR T cell confers strong therapeutic efficacy against diverse refractory leukemia types
Feng Li, *Institute of Process Engineering, Chinese Academy of Science*

372: Flame-made calcium phosphate nanoparticles as potential vaccine adjuvants
Anshika Maheshwari, *Karolinska Institutet*

375: Liposomal nor-NOHA: A Promising Strategy for Targeted Cancer Immunotherapy
Elena Markova, *UiT The Arctic University of Norway*

377: A Localized Hydrogel Implant Carrying Bile Acid-derived Anticancer Amphiphile and TLR-7/8 Agonist Inhibits Tumor Progression
Devashish Mehta, *Amity Institute of Biotechnology*

378: Anionic phospholipids impart tunable adjuvant activity to mRNA lipid nanoparticles
Jilian Melamed, *University of Pennsylvania*

379: Intestinal mononuclear phagocytes facilitate macromolecular transport across the intestinal epithelium
Olivia Müllertz, *BioMed X institute*

380: Glioblastoma (GBM) targeting effective photo-immunotherapy concomitant drug
Yuhyeon Na, *eNBiaR inc.*

381: pH-Responsive Macromolecular Strategies for Enhancing Immunotherapy Responses
Lutz Nuhn, *Julius-Maximilians-Universität Würzburg*

382: Dissolving microneedle array patches to deliver mesoporous silica nanoparticles for allergen-specific immunotherapy
Juan Paris, *Instituto de Investigación Biomédica de Málaga y Plataforma en Nanomedicina-IBIMA Plataforma BIONAND*

384: PEG-Crosslinked Vinyl Azlactone Hydrogels with Tunable Architecture for Sequential Release of Multiple Immunomodulating Drugs
Emily Rasmussen, *University of Mississippi*

385: Design of Low-Density Granulocyte-Targeting Nanoparticles: A Potential New Approach for the Management of Systemic Lupus Erythematosus
Nastaran Rezaei, *University of Montreal*

386: Screening of liposome features for immunomodulation
Anne Rodallec, *COMPO/SMARTc CRCM AMU*

387: Impact of Composition on Uptake of Complex Coacervates by Macrophages for Topical Drug Delivery Applications
Hanieh Safari, *Sharif University of Technology*

388: Forging the Path to Advanced Therapy: Development of an Off-the-Shelf Cell-Free Therapy for Future Treatment of Immune-Mediated Inflammatory Diseases
Edorta Santos-Vizcaino, *University of the Basque Country (UPV/EHU)*

389: Self-Assembled Protein Nanoparticles as a Vaccine Platform for Neoantigen-Specific CD4+ T Cell Activation in Melanoma Immunotherapy
Lee Seojung, *Korea Advanced Institute of Science and Technology (KAIST), Korea Advanced Institute of Science and Technology (KAIST)*

390: Nanovaccines in Action: Innovative multifunctional polymeric nanocapsules as a strategy in needle-free vaccine delivery
Rayen Valdivia-Olivares, *Pontificia Universidad Católica de Chile, Pontificia Universidad Católica de Chile*

392: Engineering polylactic acid microspheres for delivering biopharmaceuticals
Wei Wei, *Institute of Process Engineering, Chinese Academy of Sciences*

393: Cationic pickering emulsion inducing mucosal immunity via peripheral injection
Zhiqiang Xie, *Sichuan University*

394: Development of a novel human TNF-alpha vaccine formulation: Immunization with inactivated human TNF-alpha variant to induce anti-TNF-alpha antibodies
Haruka Yamamoto, *Institute of Biomedical Sciences, Tokushima University*

Long-Acting Drug Delivery Formulations

395: A novel thermal analysis-based approach for quantitative determination of THEDES in THEDES/polymer mixtures
Magdy Abdelquader, *Queen's University Belfast, Faculty of Pharmacy, Tanta University*

396: Antibiotic-Loaded 3D-Printed Implantable Devices: A Prophylactic Measure against Post-Surgical Infections
Masoud Adhami, *Queen's University Belfast*

397: A new generation of bola-amphiphiles as key components of sustained-release drug delivery systems
Edouard Badarau, *University of Bordeaux*

398: Understanding the Influence of PLGA Residual Content on In Vitro performance of Risperidone Microsphere
Saurabh Bhorkade, *University of Connecticut*

399: 3D-Printing of Subcutaneous Implantable Drug Delivery Systems with Patient-Tailored Long-Term Release Profiles
Bianca Brandl, *RCPE GmbH, University of Graz*

400: Development of hybrid hydrogel based on waterborne polyurethane and hyaluronic acid as bioresponsive platform for locoregional anticancer drugs delivery
Francesco Cancilla, *University of Palermo*

401: Highly tunable release of proteins from crosslinked PEG hydrogels
Hunter Chen, *Regeneron Pharmaceuticals*

402: Effects of Drug-to-Excipient Ratio in Release Kinetics of Antiretrovirals in a Long-Acting Biodegradable Subcutaneous Implant.
Daniela Cruz, *RTI International*

403: In-vivo near zero-order release kinetics of a 3-month long-acting silica biodegradable injectable depot of Cyanocobalamin
Frederic Dargelas, *DelSiTech*

406: A biorelevant analytical toolbox to enable developability assessment of thermosensitive drug delivery systems for biologics
Mauro Di Stefano, *CSL Behring*

407: Subdermal long-acting islatravir nanofluidic implant achieves viral load reduction in SHIV-infected non-human primates
Nicola Di Trani, *Houston Methodist Research Institute*

408: Determination of total API content in polymeric sustained release formulations by CHN elemental analysis.
Peter Dijkshoorn, *InnoCore Pharmaceuticals*

410: Modification of mesenchymal stromal cells with silibinin-loaded PLGA nanoparticles improves their therapeutic efficacy for cutaneous wound repair
Mikhail Durymanov, *Lomonosov Moscow State University*

411: Injectable Hyaluronic Acid Microparticles for Sustained Lubrication and Cartilage Protection in Osteoarthritis
Agnese Fragassi, *Istituto Italiano di tecnologia*

413: Development Of Core-Shell Structure Electrospun Fibers from Emulsions
Meliha Gunes, *Ege University*

414: Matrix Metalloproteinase-Responsive Delivery of PEGylated Fibroblast Growth Factor 2
Marcus Gutmann, *University of Wuerzburg*

415: Effect of Drug Physiochemical Properties on Long-Acting Release for Injectable, Reversible Male Contraception
Sarah Anne Howard, *UNC Chapel Hill*

416: HPMA-based polymer diblock structures for drug delivery
Michaela Hrochová, *Institute of Macromolecular Chemistry, Institute of Experimental Medicine*

417: Sirolimus loaded polymeric micro/nano particles coated long acting stent: Profiling in vitro release
Sarika Jadhav, *Institute of Chemical Technology, Matunga, Mumbai*

420: Codelivery of STING Agonist & Manganese from Injectable PLGA Implants for Enhanced Cancer Immunotherapy
Swetha Kodamasimham, *University of Michigan, Bristol Myers Squibb*

421: The role of lipid oxidation pathway in reactive oxygen species-mediated cargo release from liposomes
Olga Lem, *Tampere University*

422: Design of a long-acting vasodilator nanomedicine for inhalation in pulmonary arterial hypertension
Giuditta Leone, *Université Catholique de Louvain*

424: Combination Therapies Using a New Controlled Delivery Technology BEPO® in Melanoma Treatment in Mice
Fang Liu, *Medincell*

425: Formulation Insights into Long-Acting Hormonal Contraceptives for Advancing Generic Drug Development
Nileshkumar Malavia, *University of Connecticut*

426: Characterization of the end phase degradation of PLGA, PLGA/PLA implants as biodegradable drug delivery systems
Dalila Miele, *AbbVie, USC*

427: Development of an implantable sustained-release device
Takumi Mitsuoka, *TERUMO CORPORATION*

428: Design of experiments (DoE) approach to optimize supercritical fluid extraction of emulsion (SFEE) process for preparation of peptide-loaded sustained-release PLGA microsphere
Heejun Park, *Duksung Women's University*

429: Evaluation of minipig injection sites for subcutaneous administration of in situ forming depot formulations
Charlotte Peloso, *MedinCell S.A.*

430: Melt-cast Microneedle Patches for Long-acting Contraceptive Delivery
Mikayla Rahman, *Georgia Institute of Technology*

432: Investigating the impact of risperidone CQAs on the in vitro release of in situ forming implants
Mckenzie Roy, *The University of Connecticut*

433: Protein nanosheets for prolonged and localized display of therapeutic proteins in tumor microenvironment.
Ishmamul Sadab, *Georgia Institute of Technology*

434: Viscoelastic injectable hydrogel loaded with hydrophobic and hydrophilic drugs for combinatorial cancer therapy.
Lakshmi Sathi Devi, *University of Camerino*

435: Immiscible-Compatible TSPU/PLLA Polymer Films as Drug-Eluting Delivery Systems
Deborah Shalev, *Azrieli College of Engineering Jerusalem, Hebrew University of Jerusalem*

436: Characterizing the antimalarial profile of decoquinate and initial development of drug nanocrystals towards increasing its biopharmaceutical properties
Caroline Sousa, *Queen's University Belfast, Instituto Gonçalo Moniz - FIOCRUZ*

438: Polymer excipient analyses: A critical consideration in the development of generic long acting injectables
Maksim Zhelezniakov, *Corbion Biomaterials*

439: PEGylated elastase-inhibiting single-domain antibody fragment for the local treatment of inflammatory lung diseases
Rita Vanbever, *Université Catholique de Louvain*

440: Development of Pluronic/carboxymethyl chitosan based thermosensitive gel for antigen sustained release in future immunological treatments
Lucia Vizzoni, *University of Siena, University of Pisa*

441: Controlled release of vaccines from a hydrophobic liquid polymer depot induces long-lasting antigen-specific humoral and cellular immune responses
Chun Wang, *University of Minnesota*

442: Prodrug hydrogel-based scaffold vaccine for cancer immunotherapy
Feihu Wang, *Shanghai Jiao Tong University*

443: Formulation and Characterization of Composition-equivalent Exenatide-PLGA Microspheres prepared by Coacervation
Cameron White, *University of Michigan*

Manufacturing and Process Scale-Up

444: Evaluation of different fluid bed settings for manufacturing of ethyl cellulose-coated pellets by powder-layering
Matteo Cerea, *Università degli Studi di Milano*

446: Scale-up of the spray drying of an oil in water emulsion
Giada Diana, *University of Piemonte Orientale*

447: AI-based autonomous optimization platform for microfluidic manufacturing nano-DDS
Kim Dong-Pyo, *POSTECH*

449: Bioprinting of amoxicillin-loaded hydrogels targeting paediatrics: A feasibility study
Costanza Fratini, *University of Urbino Carlo Bo*

450: Leveraging drum filling flexibility to scale up a film-coating process
Caterina Funaro, *IMA S.p.A.*

451: Unlocking trehalose as a lyoprotectant for medical grade, thin graphene oxide nanosheet suspensions
Gloria Garcia Ortega, *Nanomedicine Lab, Catalan Institute of Nanoscience and Nanotechnology (ICN2), CSIC and BIST*

452: Quality by Design Principles to Optimize and Validate 3D-printed Emulsion Gel Tablets with Specific Quality Attributes
Lidia Habtemikael, *Uppsala University*

453: Quality by Design considerations in the manufacture of Lipid Nanoparticles
Dai Hayward, *Micropore Technologies Ltd*

454: Customizable self-microemulsifying rectal suppositories by semisolid extrusion 3D printing
Su young Jin, *Kyungpook National University*

456: Enabling personalized medication via model-based process control and formulation design
Andreas Kottlan, *Research Center Pharmaceutical Engineering GmbH*

457: Green Chemistry Extraction of Psilocybin and Psilocin from Psychedelic Mushrooms Utilising Supercritical Carbon Dioxide
Luke Lanham, *University of Queensland*

458: Cryo- and Lyo-Preservation Strategies for Long-Term Stabilization of PEGylated HPMA-based Polymeric Micelles
Rahaf Mihyar, *Institute for Experimental Molecular Imaging, RWTH Aachen University Clinic*

459: Quality by Design as a systematic approach to support the development of new products from design to commercialization
Caitlin Pieneman, *Corbion Biomaterials*

460: Feasibility of Aerosol Jet Printing for Pharmaceutical Applications
Kruga Owodeha-Ashaka, *South East Technological University*

461: Energy Consumption And Product Stability For Pilot Scale Drying Of A Probiotic
James Oxley, *Southwest Research Institute*

463: Capsule micro-dosing – an advanced technology to accelerate drug development and time-to-market
Klaus Pollinger, *Aenova Group*

464: Platform Development & Scale-up of Spray Drying Process for Sustained Release Formulations of Protein Therapeutics
Bindhu Rayaprolu, *Regeneron Pharmaceuticals*

465: Hot melt extrusion, a promising technology for oral thin film manufacturing and process scale-up
Mathieu Reuther, *AdhexPharma*

466: Establishment of a flexible top-down manufacturing line for nano-pharmaceuticals
Christina Glader, *University of Graz*

468: Sterile filling of highly concentrated protein-based formulations:Identification of key process parameters to overcome propensity for filling needle clogging
Giuseppina Salzano, *ThermoFisher Scientific*

469: Production of liposomes by microfluidics: the impact of post-manufacturing dilution on drug encapsulation and lipid loss
Michele Schlich, *University of Cagliari*

470: Quality by Design approach to assess the lyo robustness of a synthetic peptide mimetic of Hepcidin.
Fabio Selis, *Patheon, ThermoFisher group*

471: Manufacturing Nano Albumin Bound Nanoparticles Using Scalable High Shear Processing Technology
Yang Su, *Microfluidics International Corporation*

472: Optimisation of the production of ketoprofen nanosuspensions using a continuous flow millireactor
Xin Yi Teoh, *University College London*

473: Optimization of a Process for the Lipid Nano-Emulsion Production in an Impingement Jet Mixer
Christina Glader, *Research Center Pharmaceutical Engineering GmbH*

Nanomedicine and Nanoscale Delivery (NND – FG)

474: Bioavailability enhancement of sinapic acid-loaded nanostructured lipid carriers via intranasal delivery for the treatment of Alzheimer's disease
Prabakaran A, *National Institute of Pharmaceutical Education and Research Guwahati*

475: Box behnken design assisted fabrication of TPGS-enriched core-shell nanoparticles of Ribociclib to effectively outwit the HR-positive breast cancer
Mayur Aalhate, *National Institute of Pharmaceutical Education and Research, Hyderabad, India*

476: Light- and radiotherapy controlled cargo release from oxidation-responsive liposomes
Ahmed Abdelhamid, *INSERM*

477: From cold to hot: Nano-immunotherapy guiding effective anti-tumor response against PDAC
Rita Acúrcio, *Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, University of Lisbon*

479: Design and development of novel combinatorial drug loaded nano-formulation for the treatment of ischemic stroke
Mohammad Adil, *Jamia Hamdard*

480: Hybrisomes: Membrane protein-functionalized liposomes as a potential advanced drug delivery nanoplatform
Diego Aguilar, *UMC Utrecht*

481: DESIGN AND FABRICATION OF 3-D PRINTED MICRONEEDLE DECORATED PATCHES
Shadaan Ahmad, *jamia hamdarda*

482: NOVEL NANOMEDICINE STRATEGY TO TARGET METASTASIS ASSOCIATED FIBROBLASTS IN LUNG METASTASIS
Ahmed Ahmed, *University of Twente*

483: Enhancing Cisplatin Sensitivity in Head and Neck Cancer Cells Through Nanodelivery of a Novel ERCC1/XPF Inhibitor
Ahmed Ahmed, *University of Alberta, Assiut University*

484: Boron-loaded bio-vesicles for BNCT of glioblastoma
Giorgia Ailuno, *University of Genoa*

485: PAMAM dendrimer-induced cardiac dysfunction following ischemia-reperfusion injury can be ameliorated by adjunct use of an Angiotensin II type 1 receptor antagonist
Saghir Akhtar, *Qatar University*

487: Althaea officinalis loaded ethosome nanogel for enhanced sunscreen efficacy: A novel nanocarrier for advanced UV protection
Ahmed Alalaiwe, *Prince Sattam Bin Abdulaziz University*

488: Advancing Liposomal Drug Delivery to Improve Targeting and Stability in Breast Cancer Treatments
Hakam Alaqabani, *University of Strathclyde, Al-Zaytoonah University of Jordan*

489: Development of Diphenyl carbonate-crosslinked Cyclodextrin based Nanosponges for Oral Delivery of Baricitinib: Formulation, Characterization and Pharmacokinetic studies
Mohammed Aldawsari, *Prince Sattam Bin Abdulaziz University*

490: Development and evaluation of β-cyclodextrin based nanosponges of lansoprazole for prevention of ulcerative colitis in rats
Mohammed Aldawsari, *Prince Sattam Bin Abdulaziz University*

491: Nano Particle-Based Generation of CAR-T Cells to Target Senescent Cells
Meshkat Dinarvand, *Affiliation*

492: QbD and Microwave-assisted Green Silver Nanoparticles loaded with Cassia tora Extract for Psoriasis Management
Abdullah S. Alshetaili, *Institute of Biomedical Sciences, Tokushima University*

493: Protein-bound cisplatin may increase therapeutic index for cisplatin by reducing its adverse effects
Nana Cristina Amorim Matsuo, *Institute of Biomedical Sciences, Tokushima University*

494: Lipid-polymer hybrid nanoparticles as new actively targeted drug delivery systems
Ilaria Andreana, *University of Turin*

497: Lipid self-assembling nanoparticles for the development of novel mRNA-based vaccines
Alessia Angelillo, *University of Naples Federico II, Via D. Montesano*

498: Functionalization of antioxidant Cerium Oxide Nanoparticles with DNase I for improving ischemic stroke treatment
Md Nasir ARAFATH, *Université Paris Cité*

499: Dextrin-based nanosponges to enhance the oral bioavailability of apomorphine
Monica Argenziano, *University of Turin*

502: Nanoemulsions enhance the efficacy of anti-biofilm peptides against non-typeable Haemophilus influenzae.
Eva Arroyo-Urea, *Medicinal Chemistry Institute-CSIC*

503: Polymeric nanocarriers for intranasal delivery of cannabidiol in neurodevelopmental disorders
Rania Awwad, *Technion Israel Institute of Technology*

504: Exploring the role of the carbohydrate shell on cellular uptake, biodegradation, and intracellular trafficking of iron-carbohydrate complexes in macrophages: a clue to understand how the physicochemical characteristics impact the nano-bio interface
Nilda Vanesa Ayala Nunez, *Swiss Federal Laboratories for Materials Science and Technology (Empa)*

505: Berberine-Loaded Niosome Formulations: Targeted Delivery and Evaluation of Anti-Fibrotic Effects in Pulmonary Fibrosis
Yalçin Çelik Aydin, *Ege University*

506: Hydrophobic ion pairing-based polymeric micelle formulation of doxorubicin and telmisartan for cancer combination therapy
Armin Azadkhah Shalmani, *The Institute for Experimental Molecular Imaging (ExMI)*

507: Vitamin D-loaded Nanoemulsions as differentiation promoters for the treatment of leukemia
Ghalia Baba, *King Abdulaziz University*

508: A breakthrough in light-controlled cargo release systems based on the smallest photosensitive trigger discovered to date: the diazirine moiety
Edouard Badarau, *University of Bordeaux*

509: Self-assembling nano-aluminum vaccines for co-delivery of antigens and immunostimulatory molecules to elicit a potent cellular immune response
Shuting Bai, *Sichuan University, Sichuan University*

510: Investigation of the anticancer cisplatin/sodium hyaluronate nanocomplex by rheological, thermal and spectroscopical analyses
Sabrina Banella, *University Of Ferrara*

511: Adjuvant effect of Calcium Peroxide nanoparticles in controlling oral biofilms
Neha Bankar, *Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Saarland University*

513: Personalized Nanomedicine for Osteosarcoma
Orr Bar Natan, *Technion*

514: Silk fibroin nanoparticles loaded with iron oxide for locoregional cancer therapy: biodistribution evaluation in a murine model
Elia Bari, *University of Piemonte Orientale*

515: Exploiting blood-brain barrier permeability to deliver therapeutics to the ageing in vivo brain: Use of lipid nanoparticles.
Jessica Bates, *Nottingham Trent University, University of Nottingham*

517: Studies of liquid-crystalline nanoparticles interactions with Langmuir monolayers and 2D cell culture.
Maria Vitória Bentley, *Virginia Commonwealth University, Virginia Commonwealth University*

518: ANANAS-ACE2 as a new nanotool to counteract SARS-CoV-2 infection
Simone Bernardotto, *University of Padova*

519: Vaginal nanosuspension treatment in a murine model of cervical insufficiency.
Marina Better, *Johns Hopkins University School of Medicine*

521: Cisplatin encapsulating liposomes: physicochemical characterization of nanosystems for lung cancer treatment.
Valeria Bincoletto, *University of Turin*

522: Design and In Vitro Evaluation of Rapamycin-Loaded Polyethylene oxide-Polycaprolactone-α-Tocopheryl Succinate Micelles
Ziyad Binkhathlan, *King Saud University*

523: Designing of an innovative poly(caprolactone) electrospun microfibers patch with integrated Doxycycline-loaded poly(lactic-co-glycolic acid) nanoparticles for abdominal aortic aneurysm local treatment.
Carles Bofill Bonet, *IQS*

524: Polymeric micelles for nose-to-brain delivery of crizotinib-heptamethine cyanine dye conjugate in the treatment of glioblastoma multiforme
Harpinder Brar, *The University of Auckland*

525: Albumin Nanoparticles for Intra-Articular Delivery of Celecoxib to treat Osteoarthritis (OA).
David Brayden, *University College Dublin, University College Dublin*

526: Optimisation of Polymersomes Synthesis by Microfluidics Using Design of Experiments
Asma Buanz, *University of Greenwich*

528: Novel lipidic nanoparticles functionalized with RGD peptide as innovative treatment to increase drug delivery against breast cancer
Renato Burgos Ravanal, *Pontificia Universidad Católica de Chile*

529: Two Novel Approaches for Enhanced Skin Antisepsis: Application of Nanocapsules and UV light
Loris Busch, *Center of Experimental and Applied Cutaneous Physiology*

530: A pioneering approach to gene therapy by a novel inhalable formulation based on lipid-polymer hybrid systems for pulmonary delivery of siRNA
Gennara Cavallaro, *University of Palermo*

531: Peptide nanofibers alleviate endothelial cell-mediated lymphocyte dysfunction
Ying Cai, *Shanghai Institute of Materia Medica, Chinese Academy of Sciences*

532: Gambogic acid-loaded nanowire networks aggravated calcium-mediated cell death in bone cancer
Lulu Cai, *Sichuan Provincial People's Hospital, University of Electronic Science and Technology of China*

534: Understanding cell targeting with hyaluronic acid
Matilde Campolungo, *Istituto Italiano di Tecnologia, The Open University Affiliated Research Centre at IIT (ARC@IIT)*

535: Porous carrier demonstrating efficient dual micro-nano pulmonary delivery of clofazimine against tuberculosis
Jesus Campos Pacheco, *Malmö University, Biofilms – Research Center for Biointerfaces (BRCB)*

537: Initiating Neuroregeneration with Gold-Complexed PEG-PDMAEMA Polyplexes
Cristina Casadidio, *University of Camerino*

538: Physical PEGylation of siRNA for the Local Treatment of Corneal Morbidities
Lisa Casagrande, *University of Padova*

539: Inhalable nanoparticles delivering peptidomimetic/ antibiotic combinations for local treatment of CF lung infections
Andrea Casale, *University of Campania "Luigi Vanvitelli"*

540: Continuous production of polymeric nanoparticles made of hyaluronic acid and polyarginine for aerosolized anticancer drug delivery
Giuseppina Catania, *Université Claude Bernard Lyon 1*

541: Nano-in-nanofiber dressings for spatio-temporal delivery of drugs in chronic wound healing
Ovidio Catanzano, *National Research Council*

543: Polymeric Micelles Facilitate Melittin Delivery and Enhance Efficacy in Triple-Negative Breast Cancer Cells: Apitherapy as a Novel Key for Effective Treatment of TNBC
Berrin Chatzi Memet, *Erciyes University*

547: Preconditioned tumor derived exosome as the therapeutic cancer vaccine
Sohyun Cho, *Sungkyunkwan University*

548: Optimizing the Spatial Distribution of CpG adjuvants Using DNA Origami for Enhanced Cancer Vaccine Efficacy
Youngjin Choi, *Korea Institute of Science and Technology (KIST)*

549: Advanced glycopolymers as effective inhibitors of galectins
Petr Chytil, *Institute of Macromolecular Chemistry, Czech Academy of Sciences*

550: Alternative approaches for the treatment of colorectal cancer based on 5-Fluorouracil
Mariana Coelho, *Research Institute for Medicines, iMed.ULisboa, Faculty of Pharmacy, Universidade de Lisboa, Lisboa, Portugal*

551: Engineering polypeptide-based platforms for efficient crossing of biological barriers and regenerative outcomes
Inmaculada Conejos-Sanchez, *Centro de Investigación Príncipe Felipe, IISCIII*

552: Quality-by-design optimisation of nanoemulsions for lipophilic vitamin delivery
Ana Sara Cordeiro, *De Montfort University*

553: Solvent-free nanoencapsulation of xanthone-based compounds with antiviral activity
Ana Sara Cordeiro, *De Montfort University*

554: DUAL-LOADED HYBRID NANOPARTICLES FOR VULVOVAGINAL CANDIDIASIS TREATMENT: FROM DEVELOPMENT TO IN VIVO APPLICATION
Gabriela Corrêa Carvalho, *São Paulo State University, University Medical Center Groningen*

555: Nanotechnological approaches for a diagnostic use of manganese
Rita Cortesi, *Ferrara University*

556: Inhalable powdered formulations carrying Iloprost for treating cystic fibrosis lung hyper-inflammation
Emanuela Craparo, *University of Palermo*

557: Combining siRNA and gefitinib in one nanoparticle: formulation and manufacturing
Mikolaj Czajkowski, *Poznan University of Medical Sciences*

558: Tumor microenvironment-inspired differentially polarized macrophages-derived biomimetic nanovesicles as novel drug delivery system against colorectal cancer
Anna De Rossi, *University of Padova*

559r: Development of a library of Poly (glycerol adipate) (PGA) based polymeric nanoplatforms for delivery of chemotherapeutics to tumors
Pasquale D'Anna, *University of Naples Federico II*

560: Peptide vaccine delivery using synthetic bacteria spores
Domenico D'Atri, *NIH*

561: Gentamicin-loaded Niosomes as a promising intravesical approach to treat Intracellular Urinary Tract Infections (UTIs)
Eleonora D'Intino, *Sapienza University of Rome*

563: Effect of processing parameters on preparation of nanostructured lipid carriers containing tristearin and passion fruit oil: particle size, polydispersity, and Zeta potential
Maria Dano, *State University of Maringa*

564: The versatility of the host molecules cucurbit[n]uril and derivatives as a drug delivery vehicle
Anthony Day, *University of New South Wales*

565: Design and physicochemical characterization of potential nanocarriers formed by lung surfactants for inhalation therapy.
Ilaria De Cristofaro, *University of Naples "Federico II"*

566: Hybrid spheroids: Combination of nanomedicines and 3D culture to improve mesenchymal stem cell survival in vivo
Floriane Debuisson, *UCLouvain*

567: Microfluidics-based formulations with DOTAP or DOTMA for mRNA-GFP delivery
Giovanna Della Porta, *University of Salerno*

568: Hybrid Nanoparticles for Intranasal delivery of Dimethyl Fumarate
Sara Demartis, *University of Sassari, Queen's University UK*

569: Influence of pH on different apoferritin concentrations: evaluation of integrity and morphology by electrophoresis and transmission electron microscopy
Isabella Demonari, *University of São Paulo*

570: Biomimetic nanosystem boosting pyroptosis by mitochondria autophagy blockage for enhanced anti-cancer immune response
Yudi Deng, *Key Laboratory of Drug-Targeting and Drug Delivery System of the Education Ministry and Sichuan Province, West China School of Pharmacy, Sichuan University*

571: The Nanoprimer: A significant opportunity to boost the efficacy of nanomedicines.
Julie Devallière, *Curadigm*

572: Can the physicochemical characteristics of iron-carbohydrate nanoparticles inform their biodistribution profile?
Reinaldo Digigow, *CSL Vifor*

573: Remote Loaded MOG Peptide-PLGA Nanoparticles Reverse Disease Progression in a Mouse Model of MS
Corrine Din, *University of Michigan*

574: Investigation of drug-loaded core-shell UiO66 nanoMOFs using asymmetric flow field-flow fractionation
Mengli DING, *Institut des Sciences Moléculaires d'Orsay, Université Paris-Saclay*

575: Room Temperature Synthesis of MIL100 (Fe) NanoMOFs for Drug Delivery Applications
Mengli DING, *Institut des Sciences Moléculaires d'Orsay, Université Paris-Saclay*

577: F127/TPGS Micelles Co-Deliver Paclitaxel and Regorafenib to Target Triple-Negative Breast Cancer
Farid Dorkoosh, *Tehran University of Medical Sciences*

578: Synthesis and Evaluation of a Novel Star-hyperbranched Bio Polyurethane: Comparative Drug Release Study for Insulin Delivery via Nanosphere and Film Implant
Farid Dorkoosh, *Tehran University of Medical Sciences*

579: Preparation and evaluation of polymeric nanoparticles conjugated to anti-PSMA nanobody for targeted drug delivery to prostate cancer
Farid Dorkoosh, *Tehran University of Medical Sciences*

580: Preparation and Characterization of Finasteride Nanomicelles as a Follicular Drug Delivery System for Treatment of Androgenetic Alopecia.
Farid Dorkoosh, *Tehran University of Medical Sciences*

582: Iron-based nanoMOFs with encapsulated photosensitizer: accumulation in Chlamydia trachomatis inclusions and antimicrobial effects
Mikhail Durymanov, *Lomonosov Moscow State University*

583: LNP critical design features: how to gain fundamental understanding and control while keeping characterization fast and simple
Sara Elsafy, *Institute of Experimental Molecular Imaging*

584: Enhancing Cancer Therapy Precision: Liposomal Nanocarriers for Controlled Drug Release under Ionizing Radiation
Samuel España, *Consejo Superior de Investigaciones Científicas, Universidad Complutense de Madrid*

585: Microfluidic assembled fucose decorated liposomes: a strategy to target colorectal cancer and to augment the efficacy of antitumor therapy
Manar Essa, *Università degli Studi di Urbino Carlo Bo*

587: Direct Osmotic Pressure Measurements in Remotely Controlled Implantable Drug Delivery Devices to Investigate in Vitro and in Vivo Diffusion Correlation.
Ilaria Facchi, *Houston Methodist*

588: Optimization of metal-organic frameworks for the delivery of phytochemicals in pancreatic cancer therapy
Yibao Fan, *International Association for Diagnosis and Treatment of Cancer, Shenzhen University General Hospital*

589: Effect of charge on lipid nanoparticle cellular uptake and intracellular RNA delivery
Heba Fayyaz, *Groningen Research Institute of Pharmacy*

590: Nisin Z-stabilized clofazimine citrate nanoparticles with enhanced anti-MRSA efficacy
Mateo Flores Naranjo, *University of Limerick*

591: Reactive Oxygen Species (ROS)-Responsive Coacervation for Enhancing Messenger RNA (mRNA) Delivery
Jessica Larsen, *Clemson University*

592: Understanding the Effect of Lipid Composition on the Physiochemical Properties and Transfection Efficiency of Lipid Nanoparticles
Jade Forrester, *University of Strathclyde*

593: Swarms of nucleic acid-loaded nanomotors for enhanced transfection in 2D and 3D cell cultures
Juan Fraire, *Institute for Bioengineering of Catalonia (IBEC)*

594: A dual action cancer targeted hybrid solid lipid nanoparticles of phytoconstituent for breast cancer treatment with antioxidant effect for sustain release in NOD SKID mice.
Shilpa Gajbhiye, *MET's Institute of Pharmacy, Bhujbal Knowledge City, Nasik*

595: Brain targeted drug delivery system for brain disease treatment
Huile Gao, *Sichuan University*

596: Screening of polysaccharide nanoparticles for RNAi therapeutics towards cardiac ischemic injury
Han Gao, *University of Helsinki, University Medical Center Groningen, University of Groningen*

597: Versatile and scalable nanotechnology platform for addressing personalized medicine
Jenifer García Fernández, *Health Research Institute of Santiago de Compostela (IDIS)*

598: Design of graphene oxide-based nanoconstructs with clinical TLR7/8 agonist molecules for cancer immunomodulation
Gloria Garcia Ortega, *Nanomedicine Lab, Catalan Institute of Nanoscience and Nanotechnology (ICN2), CSIC and BIST*

600: Formulating LNP for mRNA delivery: a Quality by Design approach
Giorgia Gerolimetto, *University of Würzburg*

601: Enhanced personalized cancer vaccine using ATP-antigen-bearing PLGA microparticle as potential dendritic cell recruiter
Seyedeh Farrokhroo Ghahari Kermani, *Sungkyunkwan University*

602: Enhancing Anticancer Therapy through cMET Receptor-Targeting Nanocarriers with Stimuli-Responsive Properties
Alessia Giglio, *IUSS Pavia - University of Pavia*

603: Targeting Inflammation with Carvacrol-Loaded PLGA Nanoparticles
Maria Gigliobianco, *University of Camerino*

604: Evaluation of transfection capacity of chitosan nanoparticles containing DNA in HEK cells
Amanda Gimenez, *Faculty of Pharmaceutical Sciences of Ribeirao Preto, University of São Paulo*

605: Sterically Shielded Cell Penetrating Peptides as Universal Tool for Active Nanoparticle Targeting
Achim Goepferich, *University of Regensburg*

607: K+-Responsive Mesoporous Nanoparticles with Charge Reversal and Gating Effect for Eliminate Intracellular Bacteria via Target-Controlled Delivery of Antibiotics
Jue-Ying Gong, *Sichuan University*

608: Enzyme-Powered Nanomotors for Enhanced siRNA Delivery in Bladder Cancer Therapy
Ainhoa González Caelles, *IBEC*

609: Use of nanoparticles to combat resistant biofilm-forming bacteria
Ana Gonzalez Paredes, *Institute of Medicinal Chemistry-CSIC*

610: Solid lipid nanoparticles encapsulating a benzoxanthene derivative modulate angiogenic parameters and inflammation in VEGF-stimulated angiogenesis in a model of human blood-brain barrier
Giuliana Greco, *University of Catania*

611: Development of cannabidiol loaded micelles for oral delivery by using Quality by Design approach
Lucia Grifoni, *University Of Florence*

612: Effects of different excipients on the preservation of various bacterial species in nanofibers during electrospinning and storage
Nina Grilc, *Faculty of Pharmacy, University of Ljubljana*

613: Lipid nanoparticle-based vaccine protects against SARS-CoV-2 variants
Pedro Guimaraes, *Federal University of Minas Gerais*

615: A Membrane-Cloaked Hollow Nanosystem with Hypoxia Relief and Nucleus Targeting for Potentate Immunotherapy
Shiyan Guo, *Shanghai Institute of Materia Medica, Chinese Academy of Sciences*

616: Poly(organo)phosphazene nanocomplexes for cmRNA immunotherapy.
Sara Gutierrez, *University of Santiago de Compostela, Institute of health Research of Santiago (IDIS)*

617: Sustainable Reactive Oxygen Species Supplier via Injectable Hydrogel Microspheres for Thermal Cancer Ablation
Huijie Han, *University of Medical Center Groningen*

618: Iodolium based ultra-stabilizers for meta-synergistic drug combination nanoparticles
Yuval Harris, *the Technion*

619: Development of advanced drug loaded nano-lipid carrier-based gel for targeted delivery of 5-flurouracil and cannabidiol against non-melanoma skin cancer
Nazeer Hasan, *Jamia Hamdard*

620: Personalizing liposome formulations down to the cellular level
Tacio Hayasaki, *UFG*

621: Synthesis of a smart pH sensitive micelle containing hyaluronic acid-curcumin bioconjugate against colorectal cancer
Niloufar Hazrati, *Mashhad University of medical sciences*

622: High-density lipoprotein nanoparticles spontaneously target to damaged renal tubules and alleviate renal fibrosis by remodeling the fibrotic niches
Shanshan He, *Sichuan University*

623: Investigating the stereochemistry-related propensity for interdigitation in synthetic monomycoloyl glycerol analogs with molecular dynamics simulations and machine learning
Suvi Heinonen, *University of Helsinki*

624: Lipid nanopaticles targeting the blood brain barrier for peptide delivery to glioblastoma
Pablo Hervella, *Health Research Institute of Santiago de Compostela*

625: AntiCOVID MOFs: unconventional nanoweapon
Tania Hidalgo, *IMDEA Energy*

626: Tuning cell membrane fluidity to optimize nanoparticle internalization via an EDTA-lipid-mediated strategy
Tiffany Ho, *University of Toronto*

628: Pseudoboehmite nanoparticles for metformin release
Antonio Hortencio Munhoz, *U.P.Mackenzie*

629: Structural rearrangement of lipo-cyclic peptide and antigen induced potent opsonic activity against Group A Streptococcus
Wenbin Huang, *The University of Queensland*

630: Sustainable formulation techniques for sonosensitive nanoparticles for drug delivery
Sandra Hübner, *Friedrich-Alexander-Universität Erlangen-Nürnberg*

631: Studying a crossflow membrane micromixing technology on high-throughput production of mRNA lipid nanoparticles
Muattaz Hussain, *University of Strathclyde*

632: Influence of formulation on production and efficacy of LNPs
Muattaz Hussain, *University of Strathclyde*

633: Formulation and Characterization of siRNA loaded Bio-adhesive Hyaluronic acid coated Polymersomes
Shams Hussein, *School of Pharmacy, UCL, Faculty of Pharmacy, Alexandria University*

634: COATSOME® SS Series: Biodegradable Lipid nanoparticles for Gene Therapy and Vaccines with Room Temperature Stability
Takanori Inaba, *NOF EUROPE GmbH*

635: Nanolipid-based strategies for improving the pulmonary delivery of aldehyde dehydrogenase inhibitors in lung cancer
Maria Irujo, *Advanced Biodesign*

636: Developing a novel controlled release implant to enhance the radiation sensitivity of localised prostate cancer
Rayhanul Islam, *Queens University Belfast*

637: Functionalized hybrid lipid-PLGA particles as efficient targeting delivery systems
Jana Ismail, *Friedrich-Schiller-University Jena*

638: Metal-Ion Zeolitic Frameworks: A New Frontier in Chemodynamic Therapy.
Viktoriya Ivasiv, *University of Minho, Adolphe Merkle Institute*

640: Development of a stable inhalable dry powder formulation containing extracellular vesicles for the treatment of COPD
Evalyne Jansen, *University of Groningen*

641: Design of buffers to reduce temperature-induced protein aggregation
Aimee Jeluk, *University of Nottingham*

642: Bionic nanoparticles delivery of dihydroartemisinin against ischemic stroke
Zhonghua Ji, *Zhejiang Pharmaceutical College*

643: Development of Icariin Loaded DSPE-PEG2000/DPPC Micelles for Pulmonary Delivery
Chengwei Jiang, *University College London*

644: Curvature-facilitated Extravasation and Penetration of Nanoparticles for Enhanced Drug Delivery against Elevated Interstitial Fluid Pressure
Xiaohe Jiang, *Shanghai Institute of Materia Medica, Chinese Academy of Sciences, University of Chinese Academy of Sciences*

645: Integrated tumor microenvironment-responsive lipopeptide nanoparticles block the rapid metabolism of ATRA through delivery of siCYP26A1
Rongrong Jin, *Sichuan University*

646: β-sheet forming polymeric peptidomimetics as molecular stents in LPS microenvironments as antibiotics delivery adjuvants
Mohamed Kamal, *Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), Saarland University*

647: The Bone Regenerative Potential of Various Quercetin Lipid nano-formulations loaded in Biodegradable Calcium Phosphate Cement Scaffolds
Nermeen KamalElDin, *College of Pharmacy,AASTMT*

648: Engineering narrow band gap nanotherapeutics for multimodal treatments of colon cancer
Manoj Kandel, *National Tsing Hua University*

649: Combined Gemcitabine and Rapamycin Polymeric Thermogel for Treating Metastatic Pancreatic Cancer
SuJeong Kang, *Chungbuk National University*

650: The development of quinone methide releasing nano sensitizer for enhanced sonodynamic therapy
Heegun Kang, *Sungkyunkwan University*

651: Mesenchymal Stem Cell-Derived Extracellular Vesicles Mimetics for Enhanced Bone Healing and Regeneration
Antoine Karoichan, *McGill University, Shriners Hospital for Children*

652: The Limiting Role of Lung Surfactant in LNP Delivery to the Lower Airway
Katie Doran, *University Health Network*

653: Targeting Brain Injury after Intracerebral Haemorraghe with Lipid Nanoparticles
Satinderdeep Kaur, *Nottingham Trent University*

654: Formulation, Optimization, Characterization, and In-Silico Evaluation of Nanostructured Lipid Carriers (NLC) Loaded with RV and KI, individually and in combination, for Alzheimer's Disease (AD) Treatment
SAIF AHMAD KHAN, *School of Pharmaceutical Education and Research, Jamia Hamdard*

655: pH-Modulating Theragnostic Liposome for Potentiated Anticancer Chemotherapy
Seohee Kim, *The Catholic University of Korea, The Catholic university of Korea*

656: Overcoming the Protein Corona Barriers for Targeted Nanotherapeutics
Anthony Kim, *University of Maryland*

657: Fabrication of biconcave-shaped microcapsules using layer-by-layer technique for carrying nanoparticles
Chang Hyun Kim, *University of North Texas Health Science Center*

658: Enhanced Systemic Biodistribution and Anti-inflammatory Responses in Treating Rheumatoid Arthritis with Fine-Tuned Liposomal Membrane Elasticity-Mediated Lipid/Polymer Hybrid Liposomes
Dahwun Kim, *Sungkyunkwan University*

659: Magnetically assisted delivery of stem cell-derived nanovesicles toward injured central nervous system
Han Young Kim, *The Catholic University of Korea*

660: Macrophage-membrane coated multi-functional nanoparticles for combination cancer immunotherapy
Sangjin Kim, *Hanyang University*

661: Formulation and characterization of targeted PEG-lipid-PLGA hybrid nanoparticles
Lea Klepsch, *Friedrich-Schiller-University Jena*

663: Hydrophilic polymer systems delivering protoporphyrin IX precursors for photodynamic therapy
Kevin Kotalík, *Institute of Macromolecular Chemistry CAS*

666: Biodegradable Porous Silicon materials for Imaging
Tushar Kumeria, *University of New South Wales*

670: An upconversion photocatalyst with peroxidase-like activity for enhanced chemodynamic therapy
Xuan Thien Le, *Sungkyunkwan University*

671: To Bind or Not to Bind: Bimodal brush-functionalized nanoparticles selective to receptor surface density
Jeanne Leblond Chain, *National Institute of Health and Medical Research*

672: A local water molecular-heating strategy for NIR long-lifetime imaging-guided photothermal therapy
Joonseok Lee, *Hanyang University*

673: Hyaluronate-Black Phosphorus-Upconversion Nanoparticles Complex for Non-Invasive Theranosis of Skin Cancer
Gibum Lee, *POSTECH*

675: Phagocytosis-escaping inhalable microgels co-encapsulating PLGA and lipid nanoparticles for enhancing pulmonary fibrosis treatment
WooTak Lee, *Sungkyunkwan University*

677: Mannose-Integrated Nanoparticle Hitchhike Glucose Transporter 1 Recycling to Overcome Various Barriers of Oral Delivery for Alzheimer's Disease Therapy
Ting Lei, *Sichuan University*

678: Multifunctional nanoparticles target the Golgi apparatus of activated hepatic stellate cells to alleviate liver fibrosis
Yanping Li, *West China Hospital of Sichuan University*

679: Leveraging Chemotherapy-Induced PD-L1 Upregulation to Enhance Targeted PD-L1 Degradation using Nanoparticle-Based Targeting Chimeras
Yuai Li, *Sichuan University*

680: Dual-Targeted Mitochondrial Regulation of Hepatocytes and Kupffer Cells for Liver Fibrosis Treatment
Qiuyi Li, *Sichuan University*

681: Thermodynamic Insights into the Enhanced Stability and Anti-dilution Properties of Solid Micellar-size Nanoparticles
Jessica Li, *University of the Pacific, Thomas J. Long School of Pharmacy*

682: What does the emptiness of lipid nanoparticles mean for mRNA therapeutics?
Suiyang Liao, *The University of British Columbia*

684: Monocyte membrane-coated drug nanocrystals for targeted therapy of rheumatoid arthritis
Qing Lin, *Sichuan University*

686: Antimicrobial properties of AgNPs obtained via radiosynthesis
Wenbo LIU, *Institut de Sciences Moléculaires d'Orsay, UMR 8214 CNRS*

687: MPA capped CdTe quantum dots trigger inflammatory response through ROS/NRF2/p-ERK1/2 signaling pathway-mediated unobstructed macroautophagy in macrophages
Na Liu, *Hangzhou First People's Hospital, Southeast University*

689: Regulation of the transmucosal transport of drug based on the "surface hydrophobicity-ligand modification" crosstalk of delivery system
Xi Liu, *Key Laboratory of Drug-Targeting and Drug Delivery System (Ministry of Education), West China School of Pharmacy, Sichuan University*

692: Targeted Nanoformulation for Pancreatic Cancer: TME-Responsive Coating with ER Stress Inducer, MicroRNA, and Immunoadjuvant Delivery
Yu-Li Lo, *National Yang Ming Chiao Tung University*

694: Oxygen-generating manganese dioxide-coated gold nanorods for enhanced sonodynamic therapy of breast cancer
Yean Leng Loke, *Universiti Malaya*

695: P-LL37-PLGA nanoparticles for the treatment of chronic wounds
Chiara De Soricellis, *University of Lyon*

696: Photothermal oncotherapy allied to gold nanoparticles in the treatment of melanoma
Joana Margarida Delgado Lopes, *Research Institute for Medicines, iMed.ULisboa - Faculty of Pharmacy, Universidade de Lisboa*

698: Self-assembled Unfolded Protein Nanoparticles for Adjuvant-free Vaccination
Siyan Lyu, *Sungkyunkwan University*

699: Tuning liposome rigidity to modulate cellular uptake by cells
Xinyu Ma, *University of Groningen*

700: Nanoparticles-enabled tumor-associated macrophages polarization and phagocytosis restoration for enhanced cancer immunotherapy
Guilei Ma, *Institute of Biomedical Engineering, Peking Union Medical College & Chinese Academy of Medical Sciences*

701: Determining the Impact of the Ionisable Lipid in Lipid Nanoparticles on Critical Quality Attributes
Rebecca Macfarlane, *University of Strathclyde*

702: Intrinsic antibacterial activity of beta-cyclodextrins potentiates their effect as drug nanocarriers against tuberculosis
Arnaud Machelart, *Univ. Lille, CNRS, INSERM, CHU Lille, Institut Pasteur de Lille, U1019-UMR 9017-CIIL-Center for Infection and Immunity of Lille*

703: Synthetic Bacterial Spores for Cell-Specific mRNA Delivery
Federico Machinandiarena, *NIH/NCI*

704: Nano-Ghosts: Bypassing the BBB and affecting brain diseases
Marcelle Machluf, *Technion*

705: In situ thermogelling injectable formulations based on sulfobutylether-β-cyclodextrin for glioblastoma treatment
Greta Camilla Magnano, *Univeristy of Turin*

706: Development And Optimization of Luliconazole-Loaded Nano-Vesicular Systems: An Ex Vivo & In Vivo Study
Akanksha Mahajan, *Panjab University, University of Central Lancashire*

707: Targeting Cancer Stem Cells in Triple Negative Breast Cancer with Polymeric Nanoparticles
Oliwia Majchrzak, *University of Geneva*

708: MICROFLUIDIC MANUFACTURED NANOHYBRID SELF-ASSEMBLING PLATFORMS FOR PROTEIN DELIVERY
Lorenzo Mancini, *University of Perugia*

709: In Vivo Myocardial Retention of a Nanoparticle-loaded Hydrogel Formed In-situ
Antonio Martino, *Houston Methodist Research Institute, University of Houston*

710: Optimizing Pulmonary Delivery and Immunomodulation for Respiratory Diseases via Virus Transport-Inspired Nanoparticles
Yugo Martins, *University of Sao Paulo*

711: Development of Hydrophilic Polymer Nanoparticles for Subunit Influenza Vaccine Delivery
Rasim Masimov, *University of Saskatchewan*

712: Sugar-coated viruses for targeted cancer immunotherapy of hepatocellular carcinoma
Sara Mathlouthi, *University of Padua*

714: Passively Targeted siRNA Polyplex Micelles-Mediated Silencing of Signal Transduction and Activator of Transcription 1 Therapy Ameliorates Thioazetamide-induced Steatohepatitis and Fibrosis.
Klea Mehmetaj, *Jena University Hospital*

715: Virus-like particles and extracellular vesicles derived from Ebolavirus proteins: obtention and applicability
Rocío Mellid Carballal, *University of Santiago de Compostela, Center for Research in Molecular Medicine and Chronic Diseases*

717: Drug delivery via Nanocrystals: from mono to co-nanocrystals.
Nathalie Mignet, *Université Paris Cité*

718: Erythrocyte membrane-camouflaged nanoparticles for DNA delivery
Chiara Migone, *University of Pisa*

719: Silk fibroin nanoparticles embedded in mesenchymal stem cell extracellular vesicles as a carrier-in-carrier pulmonary drug delivery system
Angelo Modena, *University of Piemonte Orientale*

720: Leveraging Immunoliposomes-loaded Favipiravir As A Novel Therapeutic Approach Against SARS-CoV-2
Nur Dini Fatini Mohammad Faizal, *Faculty of Pharmacy, National University of Malaysia*

721: Unlocking Mefloquine's Hidden Potential: Targeting Hepatocellular Carcinoma Using Nanomedicine
Eman Mohammed, *The American University in Cairo, Alexandria University*

722: A β-cyclodextrin nanosponges gel formulation for a controlled and sustained in situ release of different anticancer agents against glioblastoma
Chiara Molinar, *University of Turin, Institute of Neurophysiophatology, INP UMR7051*

723: Gold-based hydrogel nanocomposites for light-induced drug delivery
Alessandro Molinelli, *Politecnico di Milano*

725: Cartilage-targeting liposomes for osteoarthritis therapy
Luca Morici, *University of Geneva*

728: Efficient chemically cross-linked NIR-responsive hydrogel with inherent antibacterial effect for mild photothermal therapy of infected wounds
Kiyan Musaie, *University Medical Center Groningen, University of Groningen, Netherlands*

730: New anti-cancer metal-based complexes: Enhancing their therapeutic potential using nanoliposomes
Íris Neto, *Research Institute for Medicines (iMed.ULisboa), Faculty of Pharmacy, Universidade de Lisboa*

731: How does the order in which reagents are added affect gold nanoparticles properties?
Mariana Neves Amaral, *Research Institute for Medicines (iMed. ULisboa), Faculty of Pharmacy, Universidade de Lisboa, Portugal*

732: Polydopamine Copolymers for Stable Drug Nanoprecipitation and Targeted Delivery.
Danna Niezni, *Technion*

733: Cellular dosing in in vitro assays with nanocarriers
Ines Nikolic, *University of Geneva, University of Belgrade*

734: Targeting Polymorphonuclear Neutrophils in ARDS: Novel Strategies for Nanoparticle-Mediated Demargination and Inflammation Resolution
Jia Nong, *University of Pennsylvania*

735: Antibody-loaded surface-crosslinked gelatin nanoparticles for the treatment of inflammatory bowel disease
Armin Novak, *Saarland University*

737: Assessment of novel peptide incorporated nanoparticles for atopic dermatitis treatment
Kyung Oh, *Chung-Ang University, Chung-Ang University*

738: Generation and Evaluation of Docetaxel Solid Drug Nanoparticles for Transdermal Drug Delivery
Katie Ollerton, *University of Liverpool*

739: Microneedles loaded with Treg exosomes for psoriasis treatment
Meitong Ou, *Chinese Academy of Medical Sciences and Peking Union Medical College*

741: Temozolomide-loaded liposomes for brain targeting and anti-glioblastoma use
Jessyca Paes Dutra, *School of Pharmaceutical Science, Universidade Estadual Paulista Júlio de Mesquita Filho*

742: Methyl Palmitate Nanoparticles as Nanodrug Adjuvants in Cancer Therapy
Roberto Palomba, *Italian Institute of Technology*

743: Biomimetic MCC950 loaded cerium layered double hydroxide nanocomposites for the potential treatment of diabetes
Huiwen Pang, *Australian Institute for Bioengineering and Nanotechnology (AIBN), The University of Queensland*

744: Dextran-coated albumin nanoparticles: Maximizing Bevacizumab's Impact on Colorectal Tumor
Cristina Pangua, *University of Navarra, Université catholique de Louvain*

745: Utilizing Bilosomes for Buccal Peptide Delivery
Eleftheria Pantazoglou, *DTU*

746: Plastic antibodies based on Molecularly Imprinted Polymers (MIPs) for SARS-CoV-2 inhibition: an alternative approach to address the challenge of emerging zoonoses
Ortensia Ilaria Parisi, *University of Calabria*

747: Photosensitizer complex with inorganic nanosheets for anticancer photodynamic therapy
Ki don Park, *The Catholic University of Korea, The Catholic University of Korea*

749: Enhanced anticancer efficacy of docetaxel through sialic acid-modified liposomes in tumor-associated macrophages
Jeong-Sook Park, *Chungnam National University*

750: Topical drug delivery to the inner ear via poly(lactic-co-glycolic acid) nanoparticles loaded in thermosensitive polymer gel
Jeong-Sook Park, *Chungnam National University*

751: pH-Responsive drug-antimicrobial polymer conjugates assembling into nanoparticles to target intracellular Staphylococcus aureus
Camilla Passi, *Saarland University*

752: OLEs-LPHNs for controlled anticancer nanotherapy
Francesco Patitucci, *University of Calabria*

753: A targeted aptamer delivery system for glioblastoma immunotherapy
Alexandra Rosie Paul, *King's College London*

754: Delivering immunotherapy drug combinations using liposome-polymer nanoparticles for cancer therapy
Radu Paun, *McGill University, Research Institute of the McGill University Health Centre*

755: Diethyldithiocarbamate-copper complex nanoparticles for breast cancer treatment
Linda Pecchielan, *University of Padova*

756: Targeted siRNA delivery to ACE2-expressing lung cells using mesenchymal stem cell-derived extracellular vesicles functionalized with recombinant receptor-binding domain of SARS-CoV-2 spike protein
Ching-An Peng, *University of Idaho*

757: Surface decoration of small-sized lipid nanocapsules with phytocannabinoids increases their passage across the brain endothelium
Alexandre Pérez-López, *Complutense University of Madrid*

758: FRET and 1H NMR as powerful analytical tools to study the in vitro fate of liposomal nanocarriers during interaction with the intestinal epithelium
Justus Peters, *Goethe-University Frankfurt*

759: Engineered redox-responsive nanovaccine to conduct synergistic chemodynamic and immunotherapy toward orthotopic hepatic tumor
Khang Pham, *School of Pharmacy, Sungkyunkwan University, Republic of Korea*

761: Biocompatible sustained release liposomes encapsulating dexamethasone or dexamethasone sodium phosphate to treat hearing loss
Geraldine Piel, *University of Liège*

762: siRNA therapy in cancer: Introducing innovative pBAE nanosystems for targeted oncoprotein suppression
Laura Pineiro-Alonso, *University of Santiago de Compostela*

763: ROS-responsive nanocarriers pave the way for angiogenic growth factor delivery in radiodermatitis treatment.
Elke Pirlet, *BIOMED, UHasselt*

764: Decorated nanogels as promising tools for spinal cord injury treatment
Fabio Pizzetti, *Politecnico di Milano*

765: Antimicrobial nanocarriers accumulate preferentially in infected cells.
Amine Pochet, *Univ. Lille, CNRS, INSERM, CHU Lille, Institut Pasteur de Lille, U1019-UMR 9017-CIIL-Center for Infection and Immunity of Lille, Lille, France*

766: Engineering polycations for intracellular nanodelivery of therapeutic proteins
Ilaria Porello, *Politecnico di Milano*

767: Comparing the Antimicrobial Efficiency of Natural, Synthetic, and Hybrid Nanoparticles against Planktonic and Biofilm-forming Pathogen Models
Leila Pourtalebijahromi, *Friedrich-Alexander-Universität Erlangen-Nürnberg*

768: Comparative cytotoxicity evaluation of Taxane (TX) and Flavonoid (FV), combination loaded in Nanostructured Lipid Carrier (NLC), with and without ligand (Tf) conjugation, against U87MG brain cancer cells: an in-vitro study
Zufika Qamar, *School of Pharmaceutical Education & Research (SPER), Jamia Hamdard*

769: Protein-precoated pH-responsive Nanosystem via Chemical Conjugation
Yijie Qiao, *School of Chemical Engineering, Australian Centre for NanoMedicine*

770: pH-sensitive nanomedicine with tailored dynamic covalent chemistry enables stepwise drug release in the glioblastoma microenvironment.
Sabina Quader, *Innovation Center of NanoMedicine (iCONM)*

771: Remodeling tumor immunosuppressive microenvironment by autophagy regulation in combination with phototherapy based on dissolving microneedles
Guilan Quan, *Jinan University*

773: Targeted Delivery and Apoptosis Induction of Palbociclib loaded ligand conjugated pH-responsive Hybrid Nanoparticles for the treatment of Breast Cancer
Naveen Rajana, *National institute of pharmaceutical education and research*

774: Improved LNPs Composition as Novel mRNA Delivery System for Inflammatory Bowel Diseases.
Riccardo Rampado, *Tel Aviv University, Tel Aviv University*

775: Polymeric Micelles: Connecting Physics to Physiology
Jacob Ramsey, *UNC Chapel Hill*

777: Polymersomes – a promising strategy to deliver protein drugs
Carlota Rangel Yagui, *Universidade de São Paulo, King's College London*

778: Targeted Peptide Stabilized Nanoemulsion Loaded with Frankincense Essential oil and Thymoquinone for Colon Cancer Therapy
Salman Rawas, *King Abdulaziz University, King Abdulaziz University*

779: Improved cytotoxicity and synergy of paclitaxel nanoparticles and stearoyl gemcitabine in pancreatic cancer models.
Joshua Reineke, *South Dakota State University*

780: Synergistic Enhancement of Sonodynamic Therapy with Low-Frequency Ultrasound and Zinc Phthalocyanine-Loaded Mesoporous Silica Nanoparticles
Tais Ribeiro, *University of São Paulo*

781: Development of peptide-guided Hybrid Lipid-Polymer Nanosystems for glioblastoma treatment
Antonella Rocchi, *University of L'Aquila*

782: Repurposing Hyaluronic Acid-Drug Conjugates for Local Chemo-Immunotherapy in Unresected Glioblastoma
Giulia Rodella, *UCLouvain*

784: Electrospun fibers to modulate the release of classic and innovative anti-inflammatory drugs.
Mariella Rosalia, *University of Pavia, University of Pavia*

788: Nanosilver particles against MRSA wound infections.
Maria Samara, *Karolinska Institutet*

790: A cost-effective miniaturised media milling approach for the preparation of drug nanocrystals
Martina Sangalli, *Queen's University Belfast*

791: Diazirine-conjugated phospholipids for the design of photosensitive liposomes
Lilian Saryeddine, *University of Bordeaux*

792: Hyaluronan/cyclodextrin-based nanoscale carrier systems for theranostics against cancer
Lakshmi Sathi Devi, *University of Camerino*

793: Inhalable nanostructured drug microparticles for viral uptake of SARS-CoV-2
Marc Schneider, *Saarland University*

794: Therapeutic strategy to reduce viral load during SARS-CoV-2 infection by nanoparticle-mediated phagocytosis
Stephanie Schubert, *Friedrich-Schiller-University Jena*

795: Hybrid Nanoparticles for Rapamycin Delivery: Repurposing Strategies in Rhabdomyosarcoma Treatment
Cinzia Scialabba, *University of Palermo*

796: ICOS-decorated nanosponges enhance the efficacy of gemcitabine in pancreatic cells
Anna Scomparin, *University of Turin*

797: Real-Time Label-free in vitro analysis of spherical nucleic acids for delivery of antisense TAU oligonucleoutides
Elena Scurti, *University of Helsinki*

798: Solvent-free preparation and characterization of hyaluronic acid-modified selenium nanoparticles for anti-BRAF siRNA controlled release
Luigia Serpico, *University Medical Center Groningen*

799: Effects of temperature on novel thermal-responsive PNIPAm-based and surface-modified liposomes
Nur Adania Shaibie, *National University of Malaysia*

801: Quillaja saponin decorated nanoparticles for cancer therapy
Maryam Shetab Boushehri, *University of Bonn*

802: Tailoring Nanoparticle Size: A Microfluidic Approach to Cubosome Formation
Bruno Silva, *Empa - Swiss Federal Laboratories For Materials Science and Technology*

803: Optimization and evaluation of the biocompatibility of mucoadhesive nanostructured lipid carriers (NLC) for nose-to-brain drug delivery
Ana Silva, *UCIBIO, University Fernando Pessoa*

804: Dual Approach for Colorectal cancer TME modeling and CEA-targeted cell therapy
Maria Silveira, *i3S- Institute for Research and Innovation in Health, ICBAS-Instituto de Ciências Biomédicas Abel Salazar*

805: Ultrasound-triggerable liposomes: a systematic evaluation of ultrasound-induced cargo release with sonosensitizers
Ignasi Simon, *TU Delft*

807: Metformin-mediated Immunosuppressive Microenvironment Remodeling in Combination with Chemotherapy via a Spatial-Specific Multi-Responsive Carrier-Free Self-assembled Nanoparticle
Yujun Song, *Sichuan University*

808: Quantifying Liposomal Adhesion on Breast Cancer Extracellular Matrix
Giacomo Spano, *UNTHSC*

809: tPA-Loaded Discoidal Polymeric Nanoconstructs as a safer strategy for stroke treatment
Raffaele Spanò, *Fondazione Istituto Italiano di Tecnologia*

810: Ultrasound-mediated nanobubbles with a Langmuir's multilayer polymeric shell as versatile drug delivery system
Roberta Stacchini, *Institute of Neurophysiopathology - INP, UMR7051, University of Turin*

811: Overcoming efflux-mediated multidrug resistance in Pseudomonas aeruginosa
Simon Su, *University of Otago, University of Otago*

813: Assessing the Therapeutic Effects of Cetuximab through Visualization of EGFR-Mediated Internalization and Degradation
Yejin Sung, *Korea Institute of Science and Technology, Yonsei University*

815: Controlled release of lysozyme using polyvinyl alcohol-based polymeric nanofibers generated by electrospinning
Kohei Tahara, *Gifu Pharmaceutical University*

816: Effect of anti-PEG IgM on the intramuscular vaccination and pharmacokinetics of mRNA/LNP
Haruka Takata, *Tokushima University*

817: Decorated drug nanocrystals as highly-loaded Trojan Horses for nose-to-brain delivery in cerebral malaria
Yushi Tao, *Queen's University Belfast*

818: Experimental Design for Development of Essential Oil Based Nanoemulsions Loaded with Dimethyl Fumarate for Intranasal Delivery to Treat Multiple Sclerosis'
Fahad Khan Tareen, *University of Pavia*

819: Urease-Powered Drug-Loaded PLGA Nanomotors as a New Approach for Bladder Cancer Therapy
Inés Tarrío, *IBEC*

822: Targeting myelopoiesis to prevent organ inflammation
Yohana Camila Toner, *Radboud University Medical Center, Icahn School of Medicine at Mount Sinai*

823: MMP-2 Responsive Transformable and Mitochondria-Targeted Nanomedicines for Breast Cancer and Brain Metastases with PROTAC-PDT Combination Therapy
Fan Tong, *Sichuan University*

824: MUC-1 Aptamer Functionalized- Magnetic Mesoporous Silica Nanoparticles Improved the Targeted Delivery of Sunitinib
Mitra Torabi, *Tabriz University of Medical Sciences*

825: Improving gene transfer: How anionic polymers and AI-based methods boost gene delivery
Anja Traeger, *Friedrich Schiller University Jena*

826: Designing a pH-responsive nano-drug delivery system to target lymph-nodes to enhance cancer therapy
Dan Zhao, *Monash*

827: Hybrid calcium phosphate nanoplatform for cancer immunotherapy via active targeting
Vasiliki Tsikourkitoudi, *Karolinska Institutet*

829: HPMA-based delivery systems with porphyrins for photodynamic therapy and tumour imaging
Alzbeta Turnovska, *Institute of Macromolecular Chemistry, CAS*

830: Inhalable porous particles as dual micro-nano carriers demonstrating efficient lung deliver of small and biologic molecules.
Sabrina Valetti, *Malmö University*

831: Effect of Iron Based Metal-Organic Frameworks on Mycobacteria Rough/ Smooth Morphologies.
Cindy Venegas Mata, *South Dakota State University*

834: Bergamot waxes as potential skin penetration enhancers
Paola Volonte, *Università di Milano*

835: Polymeric DNase-I nanozymes targeting neutrophil extracellular traps for the treatment of murine colitis
Chi Pin Wang, *Sungkyunkwan University*

836: One stone fourbirds: application of ginsenosides to prepare multifunctional liposomal delivery system for cancer therapy
Jian-Xin Wang, *Fudan university*

837: An anisotropic photocatalytic agent elicits robust photoimmunotherapy through plasmonic catalysis-mediated tumor microenvironment modulation
Nan Wang, *Key Laboratory of Clinical Cancer Pharmacology and Toxicology Research of Zhejiang Province, Affiliated Hangzhou First People's Hospital, School of Medicine, Westlake University*

838r: Amphotericin B nanocrystals-loaded microneedles as a minimally invasive treatment for leishmaniasis: Formulation development, ex vivo efficacy and pharmacokinetic performance
Jiawen Wang, *Queen's University Belfast*

839: Development of mannose receptor ligands as novel immune adjuvants
Jingwen Wang, *The University of Queensland*

840r: Dual-responsive nanoparticles with transformable shape and reversible charge for amplified chemo-photodynamic therapy of breast cancer
Jia Wenfeng, *Sichuan University*

841: Hematopoetic progenitor cell membranes-coated vesicles for targeted drug delivery to the bone marrow and inhibition of leukemogenesis
Honghui Wu, *Institute of Pharmaceutics, Zhejiang University, Jinhua Institute of Zhejiang University*

842: Counteracting Alzheimer's disease via normalizing neurovascular unit with a self-regulated multi-functional nano-modulator
Xue Xia, *Sichuan University*

843: The efficacy of a miR-25 inhibitor nucleic acid nano-polyplex in the treatment of hepatocellular carcinoma.
Li Xu, *the First Affiliated Hospital, Zhejiang University School of Medicine, NHC Key Laboratory of Combined Multi-organ Transplantation*

844: A multifunctional drug delivery system to enhances the therapy efficacy aginst melonoma
Yuan Xue, *Sichuan University*

845: Unveiling the Anti-Cancer Potency of Ferroptosis and Apoptosis-Inducing Agents Through a Targeted Co-Delivery System
Vivek Yadav, *National Institute of Pharmaceutical Education and Research, S.A.S. Nagar*

846: Investigating the impact of mesoporous silica particles as a drug delivery system on human macrophage cells
Tetiana Yalovenko, *Malmö University, Sweden, Biofilms Research Center for Biointerfaces (BRCB)*

847: Local delivery of nanoparticles loaded with a CSF1R antagonist depletes microglial cells and decreases inflammation in spinal cord injury
Jingjing Yang, *Louvain Drug Research Institute*

848: Controlled Biodistribution of Polymeric RNA Nanoparticles using RNA Nanotechnology
Kungjik Yang, *Yonsei University*

849: Macrophage-loaded doxorubicin liposomes are effective in the treatment of triple-negative breast cancer
Lan Yang, *Sichuan University*

850: Orientational transendothelial delivery of intact nanoliposomes mediated by Golgi apparatus
Kaiyun Yang, *The University of Auckland*

851: Anticipating A New Wave of HPMA-based Copolymer-drug Conjugates: Recent Progress and Perspectives in Cancer Therapy
Jane Yang, *University of Utah, University of Utah*

852: Ternary dual pH-sensitive nanoparticle improves triple negative breast cancer immunotherapy
Qi Yin, *Shanghai Institute of Materia Medica*

857: o-Carborane-entrapped polymeric Micelles for Proton Boron Capture Therapy
Guodong Zhang, *University of Texas MD Anderson Cancer Center*

858: Lipid-mediated protein corona regulation with increased Apo A-I recruitment for glioma targeting
Yiwei Zhang, *Sichuan University*

859: The dual-target nanoparticles with ROS sensitivity inhibit the hedgehog signaling and decrease oxidative stress in activated hepatic stellate cells to alleviate liver fibrosis
Jinhang Zhang, *Department of Pharmacy, Institute of Metabolic Diseases and Pharmacotherapy, West China Hospital, Sichuan University, Chengdu, Sichuan Province, China.*

861: Intelligent carrier-free nanoparticles for enhancing cascade photothermal therapy and personalized immunotherapy against triple-negative breast cancer
Linhua Zhang, *Institute of Biomedical Engineering, Chinese Academy of Medical Sciences & Peking Union Medical College*

862: Hyaluronic Acid-Coated Solid Lipid Nanoparticles Containing Dexamethasone Palmitate for Intra-Articular Administration to Treat Osteoarthritis
Jinxin Zhang, *University College Dublin, University College Dublin*

863: Replacing cholesterol with asiatic acid to prolong circulation and enhance anti-metastatic effects of non-PEGylated liposomes
Yicong Zhang, *Sichuan University*

864: Function-activity assessment of cyclic lipopeptide as a universal vaccine delivery platform
Jiahui Zhang, *The University of Queensland*

865: Effect of positive charge on liposome stability, uptake efficacy and impact on cells
Feng Zhao, *University of Groningen*

866: Kidney Targeted Nanoparticles Synchronizing CXCR4 Blockade and Mitochondrial Function Restoration for the Treatment of Renal Fibrosis
Minglu Zhou, *Sichuan University*

867: Supramolecular dendronized polyHPMA-cyclodextrin nanoconjugate as an efficient antitumor agent via inducing pyroptosis and disrupting lipid metabolism homeostasis
Jie Zhou, *West China Hospital, Sichuan university*

868: Tumor Microenvironment and NIR Responsive Drug-Loaded Yolk-shell Nanoparticles for Cancer Multimodal Therapy
Yuewen Zhu, *University Medical Center Groningen, University of Groningen*

Ocular Delivery (OcD – FG)

870: Solid Lipid Nanoparticles as a novel intravitreal approach in the treatment of Macular Degeneration
Giulia Accomasso, *University of Turin*

871: Ciprofloxacin ophthalmic in-situ gel based on a combination of two poloxamers
Myasar Al-kotaji, *Ninevah University*

872: Ocular drug delivery systems: ex vivo diffusion studies of hydroxytyrosol from an ocular insert.
Lucía Bernat-Just, *CEU Cardenal Herrera University*

873: Formulation and characterization of transfersomes for ocular drug delivery
Santosh Sahadu Bhujbal, *The University of Auckland*

874: Hyaluronic acid based films as potential ocular drug delivery platforms for treatment of glaucoma
Joshua Boateng, *University of Greenwich*

875: Design and optimization of acetazolamide nanoparticle-laden contact lens using statistical experimental design for controlled ocular drug delivery
Sai Hanuman Sagar Boddu, *Ajman University*

876: Latanoprost-Loaded Liposomes with Sodium Hyaluronate, Betaine and Leucine as Well-tolerated and Effective Topical Antiglaucoma Option
Marco Brugnera, *Innovation, Therapy and Pharmaceutical Development in Ophthalmology (InnOftal) Research Group, Universidad Complutense de Madrid (UCM), Department of Pharmaceutics and Food Technology, Faculty of Pharmacy, UCM; IdISSC*

877: Fabrication of Drug-eluting contact lenses using vat photo-polymerisation 3D printing
Asma Buanz, *University of Greenwich*

878: Ocular delivery of epalrestat using oleogels, micelles and niosomes
Angel Concheiro, *Universidade de Santiago de Compostela*

879: Triamcinolone acetonide-eluting contact lenses based on cyclodextrins to manage chronic retinal diseases
Carolina Costa, *Instituto Superior Técnico, Universidade de Lisboa, Egas Moniz School of Health & Science*

880: Nepafenac-eluting bandage contact lenses for macular edema prophylaxis after cataract surgery
Carolina Costa, *Instituto Superior Técnico, Universidade de Lisboa, Egas Moniz School of Health & Science*

881: Ocular Drug Delivery: Dissolving Microneedle Array Patches for Sustained Release in the Treatment of Glaucoma
Elliot Croft, *University of Liverpool*

882: Tacrolimus loaded nanostructured polymeric systems for dry eye treatment.
Armando da Silva Cunha Junior, *Universidade Federal de Minas Gerias - UFMG*

883: Towards A Long-Acting Hydrogel-Nanoparticle Depot for the Treatment of Primary Open-Angle Glaucoma
Mickael Dang, *University of Toronto*

884: Dynamically Cross-linked Degradable Mucoadhesive Microgels
Ridhdhi Dave, *McMaster University*

885: Characterization of enhanced lipid nanoparticle delivery to the retina after photodisruption of the inner limiting membrane
Kaat De Clerck, *Ghent University*

886: Optimizing Injectable in situ Forming Implants for Sustained Release of Ophthalmic Therapeutics
Valerie Eta, *ReBio Technologies*

887: Development of an Ex Vivo Model for Investigating Iontophoresis-Assisted Ophthalmic Drug Penetration
Gabriela Galvão, *Faculty of Pharmaceutical Sciences of Ribeirao Preto, University of São Paulo, University Paris- Saclay*

888: A Biorelevant in vitro Release Testing Method for Long-Acting Intraocular Injections
Meredith Garrett, *University of North Texas Health Science Center at Fort Worth, University of North Texas Health Science Center at Fort Worth*

889: Establishing correlations between lab-scale models in the development of ocular microneedles
Katie Glover, *Queen's University Belfast*

891: Influence of polysorbate 80 on adsorption of lysozyme onto drug particles in the context of protein corona in ocular fluids
Melitini Koutsoviti, *University of Copenhagen*

892: Soft contact lens materials containing poly(HEMA /TRIS) nanoparticles for drug delivery
Lina Liu, *McMaster University*

893: Loteprednol etabonate and ibuprofen-loaded nanoemulsions: valuable therapeutic option for patients with mild-to-moderate dry eye disease
Josip Ljubica, *University of Zagreb, Faculty of Pharmacy and Biochemistry*

895: Development of Drug Delivery Vehicle for Gene Silencing in the Posterior Segment of the Eye
Amber Monteiro, *McMaster University*

896: Nanofiber-Coated Intravitreal Device: A New Strategy for Age-Related Macular Degeneration (AMD) Treatment
Julia Neto, *Federal University of Minas Gerais*

897: Development and evaluation of hot-melt–extruded diquafosol tetrasodium formulations for ophthalmic inserts: A design of experiments approach
Ye Jin Park, *Kyungpook National University*

898: A peptide-sunitinib conjugate provides sustained retinal neuroprotection with topical administration
Jahnavi Pejavar, *Johns Hopkins University, Johns Hopkins University*

899: Encapsulation of antibacterial drugs in fusogenic liposomes for ophthalmic application.
Rosario Pignatello, *University of Catania, University of Catania*

900: Polysaccharide based polyplexes for ocular gene delivery: extracellular barriers.
Sergei Raik, *University of Helsinki*

901: Nano and conjugated photosensitizers for enhanced laser treatment of eye floaters by laser-induced nanobubbles
Pouria Ramezani, *UGent*

902: Peptide transporter targeted nanomicelles to improve corneal permeation of natamycin
Priyadarshini Sathe, *Birla Institute of Technology and Sciences, Pilani, Hyderabad Campus*

903: Tailored hydrogel for contact lenses with low friction and anti-inflammatory releasing ability
Diana Silva, *Centro de Química Estrutural (CQE), Institute of Molecular Sciences, Departamento de Engenharia Química, Instituto Superior Técnico, Universidade de Lisboa, CiiEM, Instituto Superior de Ciências da Saúde Egas Moniz, Campus Universitário, Quinta da Granja, Monte de Caparica*

904: Redox-Responsive Nanoparticle System for Tyrosine Kinase Inhibitor Delivery to Treat Retinal Conditions
Katelyn Swindle-Reilly, *The Ohio State University, The Ohio State University*

905: Preliminary ex vivo diffusion studies of ocular inserts containing α-lipoic acid in a β-cyclodextrin complex
Phuong Linh Ta, *University CEU Cardenal Herrera*

906: Antioxidant contact lenses for the prevention and treatment of diabetic ocular diseases
Nadia Toffoletto, *Instituto Universitario Egas Moniz*

907: Nanoparticle-based NAD-boosting drug delivery system for glaucoma treatment
Vasiliki Tsikourkitoudi, *Karolinska Institutet*

908: Pegylated DOPC liposomes enable multi day drug release of inhibitory cGMP analogue after intravitreal injection.
Eetu Valkama, *University of Eastern Finland*

909: Polymer-free HPβCD-electrospun implants loaded with fenofibrate could depress choroidal angiogenesis upon episcleral application
Lalitkumar K. Vora, *Queen's University*

910: Development of composite device of amorphous carbon-polymer material using porous material and its application evaluation
Yoshiko Yamazaki, *SEED Co., Ltd.*

911: Self-nanoemulsifying drug delivery systems (SNEDDS) as a platform for ocular delivery of curcumin in retinal diseases
Elide Zingale, *University of Catania, University of Catania*

Oral Delivery (OrD - FG)

913: Chitosan wafers containing emulsified curcumin for buccal delivery: physicochemical changes caused by incorporation of cellulose derivatives
Elina Sawa Akioka Ishikawa, *Universidade Estadual de Campinas*

915: Supramolecular eutectogels as new oral paediatric delivery systems with improved benznidazole bioavalability.
Beatrice Albertini, *University of Bologna*

916: The development of methotrexate-ambroxol solid dispersions to modulate their physiochemical characters as anti-cancer agents
Najla Altwaijry, *Princess Nourah bint Abdulrahman University*

917: Novel Co-Processed Excipients of Mannitol and Starch for Preparing Fast Dissolving Tablets of Paediatric Patients
Hamad Alyami, *Najran University*

918: Multi-function oral gene target delivery system for immunotherapy and diagnosis of hepatocellular carcinoma
Jeong Man An, *Hanyang University*

919: Microbiome-Sensitive Inulin-Lipid Hybrids for Colonic Drug Delivery
Amin Ariaee, *University of South Australia `*

920: Revealing the molecular origins of surfactant-dependent crystallinity in nanocrystal formulations
Lucas Attia, *MIT*

923: Relationship between drug lipophilicity and solubilization in simulated intestinal fluids.
Teodor Boyanov, *Sofia University*

924: Hydrophobic ion pair complexes of a GLP-1 peptide receptor agonist analogue designed to increase peptide permeability across the buccal epithelium.
David Brayden, *University College Dublin*

926: Design and Fabrication of Scored Tablets Using 3D Printing
Asma Buanz, *University of Greenwich*

927: Comparing the effect of adding Gelucire® 48/16 and Gelucire®50/13 in amorphous solid dispersion: a case-study with Ticagrelor
Philippe Caisse, *Gattefosse SAS*

928: Solid lipid systems for the controlled release of a highly soluble drug
Alessandro Candiani, *University of Piemonte Orientale*

929: Retrograded starch/pectin-based microparticles as a potential strategy for colon-specific delivery of polymeric nanoparticles containing bevacizumab
Suzana Carvalho, *Universidade Estadual Paulista Julio de Mesquita Filho*

930: Accelerating drug product development by utilising the benefits of a virtual pharma assistant
Thorsten Cech, *BASF SE*

931: Evaluating a small volume dissolution test to determine the taste masking capabilities of a film-coated drug product
Thorsten Cech, *BASF SE*

932: Evaluating potassium sodium tartrate as water-donator for wet granulation processes not requiring a subsequent drying step
Thorsten Cech, *BASF SE*

934: Development of oral controlled-release formulation for apremilast using osmotic drug delivery system
Myung Kwan Chun, *ODDSONBIO Co., Ltd.*

935: New Liporaxel formulations containing high concentration of paclitaxel with enhanced absorption after peroral administration
Hesson Chung, *Korea Institute of Science and Technology*

936: Effect of chitosan and its derivatives on the intestinal mucosal barrier
Cristiana Cunha, *Center for Biopharmaceuticals and Biobarriers in Drug Delivery*

937: Oral administration enhances liver uptake of GalNAc conjugated antisense oligonucleotides
Nigel Davies, *AstraZeneca*

938: Time lapse macro imaging for exploring the interrelationship between disintegration and dissolution behaviors of solid dosages
Li Deng, *Sichuan University*

939: Determining the utility of dendron-capped porous silicon nanoparticles for enabling oral delivery of challenging biological drugs
Stefanie Dietl, *Copenhagen University*

940: Engineered retrograded starch/pectin microparticles for colon-targeted liposomes delivery
Aline Dos Santos, *São Paulo State University - UNESP*

942: Optimizing Amorphous Multidrug Formulation Design through Excipient Selection: Insights from Supersaturation and Solution Chemistry
Mira El Sayed, *Uppsala University, Recipharm OT Chemistry*

943: Translatability of In Vitro and In Vivo Models to Evaluate Caprate as a Permeation Enhancer for Oral Peptide Delivery
Prosper Emeh, *Department of Pharmacy, Uppsala University, AstraZeneca*

944: Impact of HPC on tailored pore diffusion in inert Eudragit RS matrices made by vacuum compression molding
Johannes Frenzel, *University Bonn*

945: Ionic liquids improve interstitial absorption of macromolecules of lower molecular weights
Shoichiro Fukuda, *Institute of Biomedical Sciences, Tokushima University*

946: Heat application for enhanced intestinal peptide absorption – a proof-of-concept
Daniel Gao, *ETH Zurich*

947: From Fixed Dose Combinations to Flexible Combinations: The Potential of Modular Dosage Form Design for Individualized Multidrug Therapy
Rydvikha Govender, *AstraZeneca*

948: Exploiting the cGAS-STING pathway as a therapeutic target in inflammatory bowel disease treatment.
Léo Guilbaud, *UCLouvain*

949: Data mining-driven probiotic engineering augments ulcerative colitis treatment via synergistic homeostasis restoration in mice and non-human primates
Peilin Guo, *Institute of Process Engineering, Chinese Academy of Sciences*

950: Modulation of epithelial tight junctions by apical integrin-engaging DNA-scaffolded particles
M. Eva Hansen, *UC San Francisco, UC Berkeley*

951: Effect of mechanical forces in oral Drug delivery
Yu Hu, *Southern University of Science and Technology*

952: Enhancing Oral Bioavailability: Inkjet Printing of Nifedipine Nanocrystals onto Polymeric Substrates for Improved Drug Delivery
Mengyang Hu, *University College London*

954: Fast dissolving lactase-loaded microbeads, meeting child acceptability criteria
Marianna Ivone, *University of Bari*

955: Development of a fixed dose combination of ciprofloxacin and celecoxib as an Investigational drug for Amyotrophic Lateral Sclerosis (ALS) patients
Balasubramaniam Jagdish, *Recipharm*

956: Capsugel® Enprotect® capsules show promising performance and stability for Fecal Microbiota Transplant products stored at -80°C
Vincent Jannin, *Lonza Capsugel France SAS*

957: Dissolvable Microneedles for Oral Mucosal Drug Delivery
Xiao-Jie Ju, *Sichuan University*

958: 3D printing of personalised cardiovascular polypill with floating element
Yasir Karkar, *University of Sunderland*

959: Impact of temperature and time on interaction of gut mucus with drug surrogates
Anam Sajjad Khan, *Phillips University Marburg*

960: Proteins and endogenous bile components competitively adsorb on nanoparticles during "gut" corona formation
Shinji Kihara, *University of Copenhagen*

961: Design of oral gastro-retentive delivery tablet through adjustment of apparent density
Jeong Soo Kim, *Dong-A ST*

962: Enhanced oral efficacy of semaglutide via a colonic delivery system using organometallic phyllosilicate
Gyu Lin Kim, *Dongguk University, South Korea*

963v: Low viscosity HPCs in organic solvent-based spray-freeze-dried particles
Jan Kozak, *University of Bonn*

965: Optimization of Formulation Parameters and Chemical Interactions for Nutraceuticals Delivery: Nanocarriers Incorporating Anionic/Cationic Phospholipid and L-Arginine/ Vitamin C by Microfluidic Technology.
Erwin Lamparelli, *University of Salerno*

966: Development of sustained-release metformin hydrochloride gastroretentive drug delivery system through semisolid extrusion 3D printing
Eung Yeop Lee, *Kyungpook National University*

967: Discovery of ferroptosis inhibitor L190 as a drug candidate against ischemic stroke: Structural modification led to significant improvement in blood-brain barrier permeability
Linli Li, *Sichuan University*

969: Improving the solubility of tamoxifen, a grease ball molecule, using lipid-based formulation
Sonia Lombardo, *Seqens*

970: Amorphous solid dispersion of Palbociclib produced by HME to improve its solubility
Sonia Lombardo, *Seqens*

972: Tuning mucoadhesive properties of oral drug delivery systems using pectins
Anitta Lutta, *Technical University of Denmark, Statens Serum Institute*

973: In vitro and in vivo characterization of optimized SYLOID based solid dispersion of Neratinib maleate
Radhika Mahajan, *BITS Pilani Hyderabad campus*

974: Development and characterization of solid amphotericin B granules to enhance oral bioavailability
Jaylen Mans, *University of North Texas Health Science Center*

975: Silencing of TNFα in Inflammatory Bowel Disease Treatment through a dual-shielding strategy via bioadhesive beads
Valentina Marotti, *University of Louvain*

976: Development of biodegradable foils for in vivo oral drug delivery
Reece McCabe, *Technical University of Denmark*

977: Co-encapsulation of probiotics and mesalazine via spray-drying in colon-specific microparticles for ulcerative colitis treatment
Andréia Meneguin, *São Paulo State University (UNESP)*

978: Novel fabrication method of biodegradable microcontainers for oral drug delivery
Carmen Milian Guimera, *Technical University of Denmark*

979: Modification of mechanical properties of microcrystalline cellulose (MCC) by loading it with a plasticizer
Artūrs Paulausks, *Riga Stradins University*

980: Taste-Masked Pellets of Sodium Warfarin: Formulation Toward the Dose Personalization
Marta Berga, *Riga Stradins University*

981: Development and characterization of ternary solid dispersion of Ziprasidone hydrochloride for improving dissolution and key physicochemical properties.
Dhavalkumar Mori, *B K Mody Government Pharmacy College*

982: Development of Hydrophilic Matrix Polymers Using Polyvinyl Alcohol for Sustained Release Tablets
Toshifumi Morioka, *Mitsubishi Chemical Corporation*

983: Swellable and Microbially-Degradable HM Pectin Coatings for Oral Colon Drug Delivery
Saliha Moutaharrick, *Università degli Studi di Milano*

984: Downstream Processing of HPMCAS-based Amorphous Solid Dispersion (ASD) of Fenofibrate: From Hot-Melt Extrudate to Tablet
David Nakhla, *SE Tylose USA*

985: An effective approach for colitis treatment through ROS/pH-response delivery
Nhu-Nam Nguyen, *Sungkyunkwan university*

986: Combining SNAC and C10 in Oral Tablet Formulations for Gastric Peptide Delivery: a Preclinical and Clinical Study
Zhigao Niu, *Novo Nordisk*

987: Enteric delivery of salmon calcitonin using lipomer based oral mixed micelles: Computational-assisted prediction and In vivo evaluation
Anjali Pandya, *Institute of Chemical Technology, Queens University Belfast*

988: Application of Virtual Bioequivalence for Complex Formulation Optimization: Tofacitinib Case Study
Gaurangkumar Patel, *Certara UK Limited*

989: Design of Core Shell Lipid Polymer Hybrid Nanoparticles of Zanubrutinib for Bioavailability Enhancement
Mitali Patel, *Maliba Pharmacy College, Uka Tarsadia University*

990: Restoring Efficacy: Antimicrobial Peptide-Modified N-acetylcysteine-Chitosan Nanoparticles Counter Clinical Isolates of Mycobacterium tuberculosis
Fernando Pavan, *São Paulo State University*

991: Understanding the composition and dry granulation process parameters to develop amorphous solid-dispersion based immediate release tablets
Beatriz Pereira, *Astrazeneca*

992: Effect of HPC molecular weight on stability and supersaturation of glibenclamide formulations in biorelevant media
Vladimir Petkov, *Sofia University St. Kliment Ohridski*

993: Molecularly imprinted cyclodextrin nanosponges for the sustained delivery of L-DOPA: preliminary evidence from in vitro and in vivo studies
Elisa Prina, *Affiliation*

994: Modified release of Bupropion from 3D printed tablets with Braille patterns for visually impaired patients
Chrystalla Protopapa, *National and Kapodistrian University of Athens*

995: Modified release of 3D-printed melatonin tablets with Braille patterns designed for individuals with visual impairments
Chrystalla Protopapa, *National and Kapodistrian University of Athens*

996: Transforming liquid nanosuspensions into solid products for oral administration: a preliminary feasibility study
Erasmo Ragucci, *Università degli Studi di Milano*

997: Choline:decanoate ionic liquid shows remarkable potential for oral peptide delivery
Konstantinos Raptis, *University of Copenhagen*

999: Summary of Learnings Arising from the 2023 CRS Virtual Symposium: Oral Delivery of Peptides, Proteins, and Oligonucleotides
Manuel Sanchez-Felix, *Halozyme*

1000: Enhancing In Vitro Intestinal Models: Multi-Compartmental Organ-on-Chip Approach to Investigate Mucosal Pathogen Interactions
Silvia Scaglione, *National Research of Council, React4life*

1001: New High Molecular Weight HPC Enables Smaller Modified-Release Tablets for Improved Efficacy and Patient Compliance
Thomas Durig, *Ashland Specialty Ingredients*

1002: Evaluating the Versatility of Klucel™ Xtend HPC in Dual Active Allergy Relief Extended-Release Dosages
Thomas Durig, *Ashland Specialty Ingredients*

1003: Orally Administrable Solid Lipid Nanoparticles Loaded with Acalabrutinib (ACP) for Management of Hematological Malignancies.
Swagata Sinha, *BITS Pilani Hyderabad Campus*

1005: 3D printing of swelling-restricted floating systems for gastric retention
Marco Uboldi, *Università degli Studi di Milano*

1006: Anionic liposome formulation for oral delivery of thuricin CD, a potential antimicrobial peptide therapeutic
Camila Viera, *SSPC, the Science Foundation Ireland Research Centre for Pharmaceuticals, Bernal Institute, University of Limerick*

1007: Developing Self-nanoemulsifying Drug Delivery Systems (SNEDDSs) Comprising an Artemether-Lumefantrine Fixed-Dose Combination to Treat Malaria
Joe Viljoen, *NWU*

1010: Intestinal absorption of coenzyme Q10 from gum arabic stabilized formulations
Leqi Wang, *University of Geneva*

1011: Stabilization of self-pressurized gelatin capsules for oral delivery of biologics
Amy Wood-Yang, *Georgia Institute of Technology*

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1013: Polymeric microneedles for versatile drug delivery applications
Aiman Abu Ammar, *Azrieli College of Engineering Jerusalem*

1014: Zinc Oxide Nanoparticles Loaded into Dissolving Microneedles for the Treatment of Breast Cancer
Rania Hamed, *Al Zaytoonah University of Jordan*

1015: Next-Generation Microfluidic-Enabled Targeted Hybrid Liposomes for Wound Healing Therapeutics
Hakam Alaqabani, *University of Strathclyde, Al-Zaytoonah University of Jordan*

1017: Fenretinide dissolving microneedles: a novel and minimally invasive approach for breast cancer chemoprevention
Alexsandra Apolinário, *Queen's University Belfast*

1018: 3D printed skin delivery films: permeation/penetration behavior of two nanoencapsulated polyphenols
Ruy Beck, *Universidade Federal do Rio Grande do Sul*

1019: Self Assembled lipid-polymer conjugated nanoparticles derived hydrogel effectively ameliorate imiquimod-induced psoriatic lesions via reducing oxidative stress and pathogenic signaling
Lokesh Bhatt, *Bhanuben Nanavati college of Pharmacy*

1020: Association of mucoadhesive polymeric matrices and liposomes for buccal delivery of miconazole
Federica Bigucci, *University of Bologna*

1021: Enhanced naloxone delivery with a heated microneedle patch
Nicole Brogden, *University of Iowa*

1022: Effect of poloxamer 407 on physicochemical properties of microneedles for propolis delivery
Marcos Bruschi, *State University of Maringa*

1023: Maintaining storage stability and delivering transdermally stem cell-derived extracellular vesicles by using dissolving microneedles
Van Dat Bui, *Sungkyunkwan University*

1024: Delivery of Viable Probiotic to the Respiratory Tract as Powder for Inhalation
Francesca Buttini, *University of Parma*

1025: Biofunctional inorganic-based convergence nanocarrier for atopic dermatitis treatment
Min Ji Byun, *Sungkyunkwan University*

1026: Guiding Host Immunity Against Melanoma Brain Metastases with a Neoantigen Cancer Nanovaccine
Bárbara Carreira, *iMed.ULisboa - Faculty of Pharmacy - University of Lisbon*

1027: Strategic development and evaluation of microneedles for the ex vivo transdermal delivery of tizanidine in the management of muscle spasm
Yilin Cong, *Queen's University Belfast*

1028: Formulation and Screening of Ionic Liquid APIs for Transdermal Delivery
Kunal Dani, *Georgia Institute of Technology*

1029: Self-assembled brush-block copolymer-based nanoparticles enable tunable mucoadhesion/mucopenetration
Ridhdhi Dave, *McMaster University*

1030: Innovative Transfersome-Microneedle System for Controlled Rose Bengal Delivery in Cancer Therapy.
Sara Demartis, *University of Sassari, Queen's University Belfast*

1031: Preparation and evaluation of Deferoxamine loaded alginate/ chitosan hydrogel on diabetic wound.
Farid Dorkoosh, *Tehran university of medical sciences*

1032: Phytocompound-loaded ethosome to counteract environmental stressor skin damage
Elisabetta Esposito, *University of Ferrara*

1033: Dimethyl fumarate loaded ethosomal gel to counteract HSV-1 infections
Elisabetta Esposito, *University of Ferrara*

1034: Skin anti-aging carrageenan gel containing SNEDDS loaded with Sichuan pepper extract.
Francesca Caricchio, *University of Pisa*

1035: Delivering psychedelic drugs transdermally using microarray patches
Octavio Fandiño, *Queen's University Belfast*

1037: Evaluation of the anti-melanoma activity of thermoresponsive bioadhesive platform for topical quercetin release
Gabrielli Furlan, *State University of Maringa*

1038: Development of an In Vitro Release Test Method for Miconazole Nitrate (MN) Vaginal Suppositories
Priyanka Ghosh, *U.S. Food and Drug Administration*

1040: The palm-tastic promise of oil palm for dermal drug delivery
Choon Fu Goh, *Universiti Sains Malaysia*

1041: Development and characterisation of high-dose ropinirole hydrochloride reservoirs for sustained delivery via hydrogel-forming microneedles
Andrew Graham, *QUB*

1042: Development of antimicrobial scaffolds by the combination of 3D printing and nano-entrapement electropspraying techniques to fabricate PLA/ Mentha Pulegium essential oil and /or Beta-ionone nanoparticles coated wound dressings
Khaoula Sebbar, *Marmara University*

1044: A novel thermosensitive hydrogel coupled with quercetin inclusion compound promotes the healing of skin wound
Ying Hu, *Zhejiang Pharmaceutical University*

1045: Drug-free microneedles for abnormal scars
Daiana Ianev, *University of Pavia*

1046: Transdermal delivery of ceftazidime via hydrogel-forming microneedles combined with drug loaded reservoirs for the treatment of nosocomial infections caused by Pseudomonas aeruginosa
Subrin Jahan, *Queen's University Belfast*

1047: Microneedles for rapid and sustained co-delivery of acetaminophen and caffeine for migraine
Harsha Jain, *University of Iowa*

1048: Assessment of Microneedle Array Insertion into Skin using Raman Spectroscopy
Rezvan Jamaledin, *University of Bath*

1049: Novel Saccharomyces cerevisiae-loaded polyvinylpyrrolidone/silicone dioxide nanofiber for wound dressing using electrospinning method
Sung Giu Jin, *Dankook University*

1050: Evaluation of cyclosporine A and quercetin loaded nanostructured lipid carriers-based hydrogel as a treatment modality in a murine model of psoriasis
Ruchita Joshi, *Sunandan Divatia of Science, Narsee Monjee Institute of Management Studies University*

1051: Preclinical Evaluation of a High-Volume Auto-Injector (HVAI) for Subcutaneous Injection of a Biologic Drug with Recombinant Human Hyaluronidase (rHuPH20)
David Kang, *Halozyme Therapeutics*

1053: Exploring the Interrelationship Between Teriparatide Pharmacokinetics and the Dissolution Rate of Microneedle Formulation
Seulgi Kim, *Gachon University*

1054: Hyaluronated Lipid Nano Particles for mRNA Vaccines
Mungu Kim, *Postech*

1055: Alum Formulation as an Intradermal Adjuvant for Microneedle-Based Vaccination
Miju Kim, *Gachon University*

1056: Mucoadhesive spray freeze dried microparticles: impact of stabilizers on product quality attributes
Radha Kulkarni, *University of Connecticut, School of Pharmacy*

1057: Design and development of novel non-propellent foam-based formulation for effective burn related wound healing
Mohit Kumar, *Maharaja Ranjit Singh Punjab Technical University, Bathinda, Punjab*

1058: Investigating the Efficacy of Intradermal Immunization with VZV gE Vaccine Using Various Microneedle Types and Comparing Effectiveness with Intramuscular Injection
Daeun Lee, *Gachon University*

1059: Design of a novel delivery efficiency feedback system for biphasic dissolving microarray patches based on poly(lactic acid) and moisture-indicating silica
Huanhuan Li, *Queen's University Belfast*

1060: Dissolving microneedle system containing Ag nanoparticle-decorated silk fibroin microspheres and antibiotics for synergistic therapy of bacterial biofilm infection.
Yao Li, *Sichuan University*

1061: A novel insight into transdermal delivery of anti-Parkinson's agents: Dissolving microarray patch with enhanced rotigotine delivery in comparison to the conventional Neupro® patch
Yaocun Li, *Queen's University Belast*

1062: Adipocyte-targeting Oligopeptoplex-loaded Self-locking Microneedles for Anti-obesity Gene Therapy
Hanseok Lim, *Hanyang Univiersity*

1063: Microneedle Loaded with Cortex Dictamni Exosomes for Alleviating Atopic Dermatitis
Hangjuan Lin, *Ningbo Hospital of Traditional Chinese Medicine Affiliated to Zhejiang Chinese Medicine University*

1064: Transdermal Delivery of Bacteria-derived Extracellular Vesicles incorporated into Plant-based Microneedles capable of foster Cardiac Tissue Regeneration through the augment of M2-type Macrophages.
Maria Lobita, *UMCG*

1065: Development of an antiviral hydrogel-forming microneedle delivery system for hepatitis B treatment
Yidan Luo, *Queen's*

1067: Development of novel buccal films based on ibuprofen complexed with β-cyclodextrin as a pediadric dosage form
Greta Camilla Magnano, *Univeristy of Turin*

1068: Biomaterial-based delivery platforms for mesenchymal stromal cell (MSC) secretome-based therapies
Annalisa Martorana, *Fondazione Ri.MED*

1069: Is keratin spinnable with air?
Ana Matos, *Università degli studi di Urbino "Carlo Bo"*

1070: Cyanocobalamin-loaded Dissolving Microneedles for anti-inflammatory topical therapies: in vivo performance in delayed type hypersensitivity murine model
Ana Melero, *Universidad de Valencia*

1073: Low-cost generation of inhalable nitric oxide by controlled flow reduction of nitrite ions.
Hannah Naldrett, *University of Michigan*

1074: Fabrication of hydrogel-based microneedles for drug delivery
Line Hagner Nielsen, *Technical University of Denmark*

1075: A Comparison between Polycaprolactone Microfibers Containing Origanum vulgare Essential Oil and Carvacrol as a Potential Wound Dressing for Chronic Wounds
Carla Nomura, *Tecnologico de Monterrey*

1076: Production and characterization of microparticles-based microneedles for melasma treatment
Daniela Orefice, *Italian Institute of Technology, University of Naples Federico II*

1077: Thermosensitive hydrogel containing Curcumin-loaded nanomicelles for skin cancer treatment
Valentina Paganini, *University of Pisa*

1078: A trilayer microneedle patch for transdermal delivery of the peptide salmon calcitonin for osteoporosis therapy
Anjali Pandya, *Queens University Belfast, Institute of Chemical Technology*

1079: Particle-mediated transport of dissolved active agents into hair follicles
Anna Lena Klein, *Philipps-Universität Marburg*

1080: Design of new-generation nanoparticles for topical atopic dermatitis therapy
Isik Percin Demircelik, *Hacettepe University, Copenhagen University*

1082: Mechanistic PBPK dermal absorption model as a tool for topically applied formulations optimization
Sebastian Polak, *Certara UK, Jagiellonian University Medical College*

1083: Development and in-vitro evaluation of bupropion 3D-printed mucoadhesive buccal films
Chrystalla Protopapa, *National and Kapodistrian University of Athens*

1084: Rebalancing immune homeostasis through endogenous immune modulator prodrug-based nanomicelle microneedles for the alleviation of psoriatic inflammation
Guilan Quan, *Jinan University*

1085: Influence of lemongrass oil on the dermal penetration efficacy of lipophilic active pharmaceutical ingredients
Christian Raab, *Philipps-Universität Marburg*

1086: Utilizing Fluorescence Microscopy and Digital Image Processing to Predict Ocular Penetration of Active Compounds Ex Vivo: A Feasibility Study with Curcumin Formulations
Christian Raab, *Philipps-Universität Marburg*

1088: Development and Formulation of crocetin containing nanogel for the treatment of skin cancer
Devyani Rajput, *Dr. Harisingh Gour Vishwavidyalaya Sagar MP*

1089: Antibacterial electrospun wound dressing with flame-made Ag/SiO2 nanoparticles
Reshma Ramachandran, *Karolinska Institutet*

1092: Rheology as a Tool for Characterizing Topical Product Formulations: Impact of Solubilizer Variation on Stability and Structure
Manon Rossano, *Gattefossé*

1093: Microneedle Patch for Delivery of mRNA Vaccines and Therapeutics
Sophia Sakers, *Georgia Institute of Technology and Emory University School of Medicine*

1097: Effect of Molecular Weight and Hydrolysis Degree of PVA on PLGA-Based Nanoparticles Diffusion Across Lung Mucus and Bacteria Biofilm: Formulation Enhancement for the Delivery of Antimicrobial Peptides in Lung Infections
Pouria Savadi Someeh, *University of Campania "Luigi Vanvitelli"*

1098: Impact of concentration of propylene glycol on skin barrier function and the dermal penetration efficacy of active compounds
Soma Sengupta, *Philipps-Universität Marburg*

1099: Influence of dimethylsulfoxide on the size of artificial corneocytes over time
Soma Sengupta, *Philipps-Universität Marburg*

1100: Controlled release of Quercetin from self-assembled chitosan films reinforced with Silver nanoparticles-stabilized Pickering emulsions for full-thickness skin wound tissue regeneration
Garima Sharma, *Kangwon National University*

1101: Polyvinyl acrylate/casein dressings for cancer related wounds
Diana Silva, *Centro de Química Estrutural (CQE), Institute of Molecular Sciences, Departamento de Engenharia Química, Instituto Superior Técnico (IST), Universidade de Lisboa, CIIEM, Instituto Superior de Ciências da Saúde Egas Moniz, Campus Universitário, Quinta da Granja, Monte de Caparica*

1102: Associating poly(oxazoline)s with lipids to design nanoformulations for improved skin delivery
Laurianne Simon, *Montpellier University*

1103: Development and Evaluation of Controlled Release Responsive Antibiotic Delivery Systems
Kathleen Sircombe, *University of Otago, University of Otago*

1104: Optimisation of design towards an oscillating hollow MN device for transdermal insulin delivery in Type 1 diabetes mellitus
Fiona Smith, *University of Nottingham*

1105: High-throughput design and manufacture of microneedles for personalised intradermal drug delivery
Fiona Smith, *University of Nottingham*

1106: Personalized Transdermal Treatment via Inkjet-Printed Temporary Tattoos
Martin Spörk, *RCPE GmbH, Graz University of Technology*

1107: Investigating permeability characteristics of porcine esophageal mucosa: A viable ex vivo model for human buccal mucosa
Renugadevi Srinivasan, *Malmö University*

1108: B7-33 Loaded Electrospun Dressing for the Management of Hypertrophic Scars in Burn Injuries
Martina Tamburriello, *University of Pavia*

1110: Inhaled administration of Poly(beta aminoester) nanoparticles: a comprehensive analysis of mucus – NPs interaction. A. Torres-Coll*, S. Borrós and C. Fornaguera Grup d'Enginyeria de Materials (Gemat), Institut Químic de Sarrià (IQS), Universitat Ramon Llull (URL); Barcelona, Spain
Antoni Torres Coll, *INSTUTUT QUÍMIC DE SARRIÀ (IQS), UNIVERSITAT RAMÓN LULL (URL)*

1111: Mechanical analysis of binary polymeric systems based on tilapia collagen and poloxamer 407
Denise Uchida, *State University of Maringá*

1113: Enhancing Pharmacokinetics of Artemether-Lumefantrine using Dissolving Microneedle patches for optimized and potent antimalarial action against Plasmodium yoelii resistant in Murine Models
Fabiana Volpe-Zanutto, *Queens University Belfast, University of Campinas (UNICAMP)*

1114: Bimodal Coated-dissolving Microneedle for Extended Delivery of Dexamethasone and Diclofenac nanoparticles in Osteoarthritis Treatment
Lalitkumar K. Vora, *Queen's University*

1115: Development of mucoadhesive anesthetic system for application in pediatric dentistry
Ana Wada de Carvalho, *University of Sao Paulo*

1116: Transdermal administration of donepezil using microarray patches as a potential treatment for Alzheimer's disease
Zihao Wang, *Queen's University Belfast*

1117: Development and preparation of targeted liposomes for androgenetic alopecia
Wei Wang, *Hangzhou Third People' s Hospital*

1118: Walnut shells as novel carrier for improved dermal drug delivery of poorly soluble drugs
Lennart Westermann, *Philipps-Universität Marburg*

1119: Development of polyvinyl alcohol/organoclay-based dissolving microneedles as an efficient transdermal delivery system of semaglutide
ChangRim Woo, *Dongguk University*

1120: Intranasal delivery of low-dose anti-CD124 antibody enhances treatment of chronic rhinosinusitis with nasal polyps
Jiamin Wu, *UBC*

1121: PVA nanofibers with PEGylated liposomes for small intestinal mucosal delivery
Eriko Yamazoe, *Gifu Pharmaceutical University*

1122: Design and Evaluation of a Novel Dermal Delivery System Loaded with bioactive compounds in Spanlastics
Ahlam Zaid Alkilani , *Zarqa University*

1124: Thermoresponsive magnetic hydrogel for local thermal ablation treatment of rectal cancer
Yuming Zhang, *Uppsala University*

Women's Health for Everyone's Health

1126: 3D Printing of Intravaginal Rings Using Vat Photo-Polymerisation Technology
Asma Buanz, *University of Greenwich*

1127: Development of 3D printed implants intended for drug delivery for women's health applications
Asma Buanz, *University of Greenwich*

1128: 3D printed reservoir-like vaginal rings for antibiotic delivery
Arianna Chiappa, *Politecnico di Milano*

1129: Tenofovir alafenamide/elvitegravir inserts for on-demand topical HIV prevention in women
Gustavo Doncel, *Eastern Virginia Medical School*

1132: Assessing the Impact of Hormonal Therapy in Cardiac Repair in Female Rats Post-Myocardial Infarction
Antonio Martino, *Houston Methodist Research Institute*

1134: Biomarker-driven non-thermal plasma therapy for cervical cancer treatment
Gayong Shim, *Soongsil University*

1135: Vaginal administration of mucoadhesive 3D printed ovules for endometriosis treatment: drug repurposing and biorelevant assay development
Sarah Teworte, *University of Bern*

1136: In vitro and ex vivo study of dissolving microneedles for local treatment of vaginal fungal infections
Paarkavi Udayakumar, *Uppsala University*

1137: A Call to Action: Diverse Cancer Models in a Globalized World
Lucy Wang, *University of Toronto*

1138: The advantages of using engineered vaginal lactobacilli for evaluation of probiotic-loaded nanofibers
Špela Zupančič, *University of Ljubljana, Faculty of Pharmacy*

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Jan Rehwinkel, *University of Oxford*

1141: Dropping the needle: oligoarginine as a non-invasive drug delivery system
Stefana Duca, *University of Nottingham*

1143: Nystatin-Loaded Multilayer Electrospun Microfibers for Oral Candidiasis Treatment
Jocelyn Olivas Flores, *Universidad Autónoma de Baja California*

1144: Unlocking the Potential of DLP 3D Printing in CMC Hydrogel Development for Dermal Delivery
Rong Rong Ong, *Universiti Sains Malaysia*

1145: Towards Bioengineering: Optimization of a New Probucol-Bile Acid Delivery System for Inflammatory/Stress Conditions - Method Optimization and In-Vitro Study
Susbin Wagle, *Curtin University*

1148: Sustained release of poorly water-soluble peptide facilitated by cholesterol-modified hyaluronic acid nanogel salt-responsive gelation
Shogo Aso, *Asahi Kasei Corporation*

1149: Formulation and characterization of novel lipid nanoparticles for the delivery of splice-switching oligonucleotide
Miina Ojansivu, *Karolinska Institute*

1152: The Extended Potentiated Anti-Coagulant Effect of Novel Warfarin-α-Tocopherol–Chitosan Nanoparticles for Transdermal Delivery
Sarah Amer, *Faculty of Pharmacy, AASTMT*

1153: Antioxidant nanomedicine improves the innate immune response of bronchial epithelial cells to rhinovirus infection
Thomas Adams, *University of Newcastle, Hunter Medical Research Institute (HMRI)*

1154: Nanoparticles designed to respond to lysyl oxidase for influencing the immune environment within tumors
Jaiwoo Lee, *Seoul National University*

1155: Chitosan based nanoparticles for protein delivery: a pilot study
Setenay Özer-Önder, *Faculty of Pharmacy, Marmara University, Institution of Health Sciences, Marmara University*

1156: Extraction, isolation and development of phospholipids complex for improved solubility, antiasthmatic, and pharmacokinetic potential of curcuminoids
Anil Pethe, *Datta Meghe College of Pharmacy, DMIHER (DU), Wardha*

1157: Combining Immediate-Release and Controlled-Release Beads to form Sodium Oxybate Extended-Release drug product (LUMRYZ)
Jason Vaughn, *Avadel Pharmaceuticals*

1158: Multistage Microfluidic Chip for Synthesis and RSM Optimization of Chitosan-Coated Magnetic Nanoparticles in Cancer Treatment
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1159: Self-Assembled Micelles of Disulfide Bond-containing N-alkylated PEG and β-Cyclodextrin Inclusion: A Reactive Oxygen Species-Responsive Nanocarrier for Atherosclerosis
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1160: Formulation and optimization of methylene blue encapsulated liposomes using high-pressure homogenisation technique
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1161: Anti-PEG antibodies can activate complement and destabilize liposomes grafted with low levels of PEG
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1162: Manipulating Amphiphilicity in Synthetic Carbohydrate Scaffolds: Tailoring Vectors for Diverse Nucleic Acid Cargoes
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1163: Development and characterization of fixed-dose curcumin-hesperetin amorphous dispersions
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1164: Pulmonary administration of antibiotic nano-emulsion to treat gram-negative bacteria infections
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1166: Implications of Circulatory Protein Adhesion on LNP Pharmacokinetics
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1193: Development of Indocyanine-green loaded PLGA microspheres for long-term fluorescence marking of target tissues
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1194: FUJIFILM CDMO Activities Dedicated to Liposome Formulation. From the Predicted Character of the Liposomal Drug through in silico Simulation to GMP-Compliant Manufacturing
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1195: NanoPULSE: An Innovative Microfluidics-Based Active Mixer for Synthesizing Organic Nanoparticles, Providing Highly Controllable and Consistent Particle Characteristics across Scale-up Stages, from Low-Volume Screening to Large-Scale Production
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1196: Utility of edible plant-derived exosome-like nanovesicles as a novel delivery platform for the vaccine development.
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1197: Release and bioaccessibility of a BCS Class II compound formulated as immediate-release and extended-release oral dosage forms during transit through the TIM-1 dynamic gastrointestinal model.
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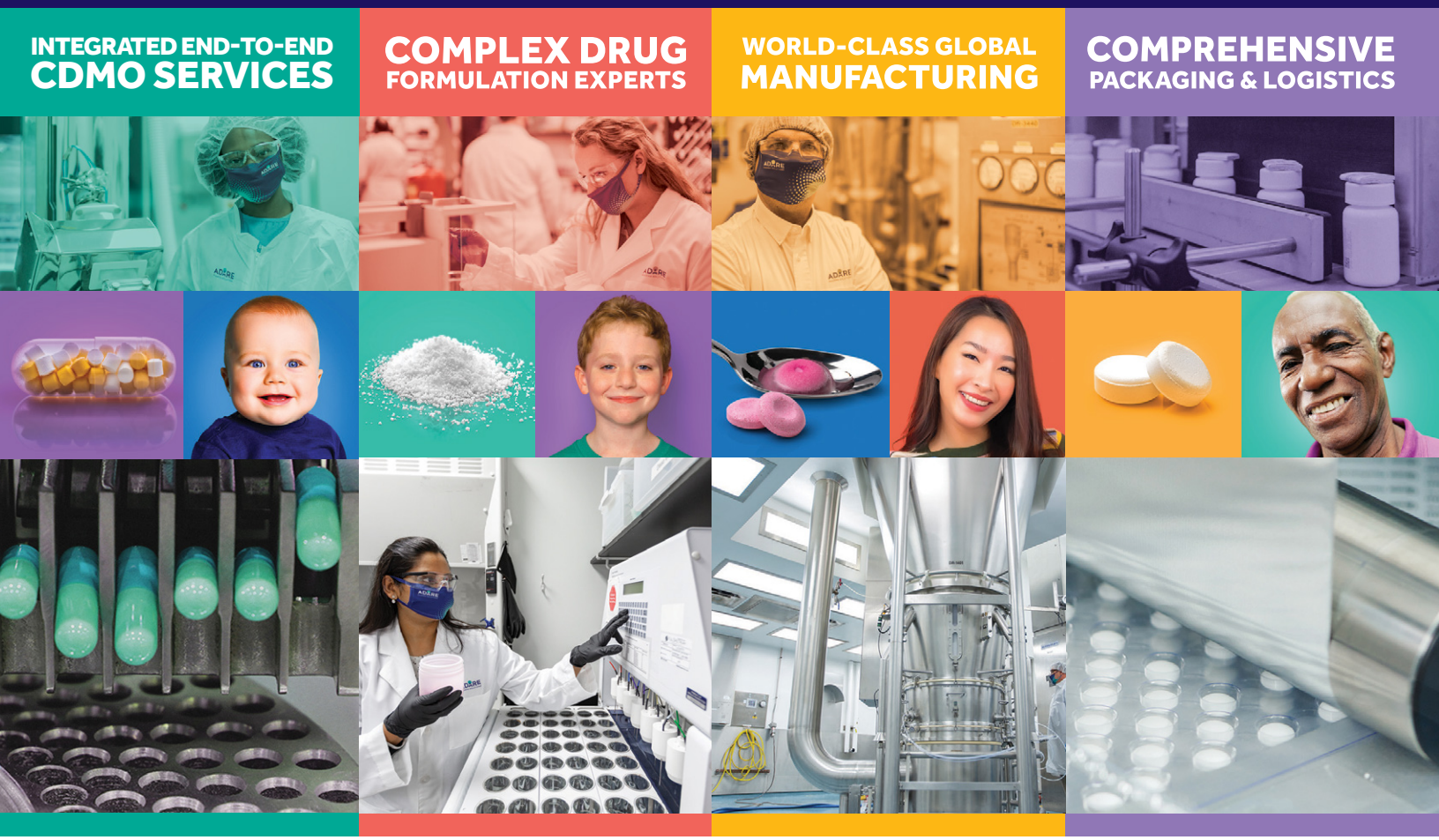
1272: Synthesis and characterization of novel lipolex loaded PLGA Microparticles (MPs) for posterior segment eye (PE) delivery.
Ayah Burhan, *Ocular Therapeutics Research Group, Pharmaceutical and Molecular Biotechnology Research Centre, SouthEast Technological University, X91 K0EK Waterford, Ireland, Waterford, Ireland*



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