

Sheraton Centre Toronto Hotel

123 Queen St W • Toronto, ON • Canada



ANATOMY CONNECTED

2024 MARCH 22 - 25
TORONTO, ON

**Advances in Science,
Research, & Education**



AMERICAN
ASSOCIATION FOR
ANATOMY

Don't miss a thing! Stay up to date with the Anatomy Connected 24 mobile app.

Available in the Apple App Store and the Google Play Store. Download the eventScribe app and search for the Anatomy Connected 24 event.



Contents

| | |
|---------------------------|----|
| Friday, March 22 | 3 |
| Saturday, March 23..... | 4 |
| Sunday, March 24 | 8 |
| Monday, March 25..... | 14 |
| Governance Meetings | 18 |
| Poster Sessions | 19 |
| Exhibitors | 20 |
| Floorplan..... | 20 |

FRIDAY, MARCH 22

2:00 pm – 5:00 pm

Provincial South

From Theory to Practice – The Basics of Qualitative Research for Anatomy Education

Speakers:

- **Valerie O'Loughlin** and **Stacey Dunham** (Indiana University School of Medicine – Bloomington)
- **Stefanie Attardi** (Oakland University William Beaumont School of Medicine)
- **Jason Wasserman** (Oakland University William Beaumont School of Medicine)

Pre-registration required.

2:00 pm – 5:00 pm

Simcoe/Dufferin

The Future of Anatomical Visualization: Collaborative Digital Morphology with 3D Slicer and SlicerMorph

Speakers:

- **Rachel Roston** (Seattle Children's Research Institute)
- **Murat Maga** (University of Washington, Seattle Children's Research Institute)

Pre-registration required.

2:00 pm – 5:00 pm

Off-site at the University of Toronto

A Tour of Anatomical Representation Throughout History: Materials, Methods and Visualization

Organized by: **Danielle Bentley** (University of Toronto) and **Judi Laprade** (University of Toronto)

Transportation is not provided. The University of Toronto is 1.4 miles away; attendees can walk, take public transit, or ride-share.

Pre-registration required.

6:00 pm – 7:00 pm

Grand East

Plenary Speaker: Kurt Schwenk, University of Connecticut



Sticking, Cupping and Grasping: Using High-speed Macro-videography to Visualize the Morphology and Mechanics of Lingual Prey Capture in Lizards

7:00 pm – 8:30 pm

Dominion Ballroom

Welcome Reception: Hosted by President Martine Dunnwald

Sponsored by **WILEY**

Your conference badge is your ticket!

Be sure to visit Anatomy Central (near Registration) during exhibit hours.

- Lean more about membership, awards, and all AAA has to offer!
- Talk with representatives from the Ambassador Committee
- Release your inner artist— Design and create your own Anatomy Button



Special recognition and gratitude goes to the following committees and award competition judges for their hard work in planning a fantastic program:

Program Committee • Educational Affairs Committee
Professional Development Committee • Committee for Early Career Anatomists

8:30 am – 10:00 am

Grand West

Leveraging Generative AI for Science Communication*Chair:* **Patrick Parra Pennefather** (University of British Columbia)

- **Patrick Parra Pennefather** (University of British Columbia/Centre for Digital Media) Using Gen AI Safely and Privately: Knowledge Management using Retrieval Augmented Generation
- **Michael Hickman** (Barrow Neurological Institute) Navigating AI in Medical Illustration: Some Considerations
- **Sean Jeon** (The Hive) Leveraging AI in Anatomy Education

8:30 am – 10:00 am

Grand Centre

Quantitative Proteomics Analysis of Dynamic Anatomical Systems*Chairs:* **Irfan Saadi** (University of Kansas Medical Center) and **Michael Washburn** (University of Kansas Medical Center)

- **Rebekah Gundry** (University of Nebraska Medical Center) Quantitative Proteomics in Heart Development and Disease
- **Jeffrey Savas** (Northwestern University Feinberg School of Medicine) Synaptopathies and Proteinopathies in the Mammalian Nervous System
- **Michael Washburn** (University of Kansas Medical Center) Quantitative Proteomic Analysis of Human Disease Systems

8:30 am – 10:00 am

Grand East

Transdisciplinary Sights – Visualizing Anatomy across Fields to Better Student, Patient, and Industry Outcomes*Co-sponsored by the Committee for Early-Career Anatomists (CECA)**Chair:* **Andrew Ferriby** (The George Washington University)

- **Yasmeen Mezil** (McMaster University) (Visual) Arts and Anatomy: Fostering the Importance of Observation and Creativity in the Anatomy Lab
- **Charys M. Martin** (University of Western Ontario Schulich School of Medicine and Dentistry) Visualization of Anatomical and Pathological Specimens in a Large Group Setting: A Transdisciplinary and Collaborative Approach to Case-based Integration
- **Victoria A. Roach** (University of Washington) Visualizing Human Anatomy through Robotic Human Analogues: Leveraging Expertise in Surgery, Engineering and Anatomical Education to Enhance Clinical Skill Acquisition

10:00 am – 10:30 am

Sheraton Hall

Networking Break and Exhibits

City Hall

Buddy Participant Meet Up

10:30 am – 12:00 pm

Provincial Ballroom

Ethics Platform Session*Chair:* **Tamara Franz-Ondendaal** (Mount Saint Vincent University)

- **Amanda Collins** (University of Massachusetts Chan Medical School) Ethical Osteological Procurement: The UMass Collaborative
- **Hailey Wilkinson** (University of Colorado Anschutz Medical Campus) Building an Ethical Bone Collection: The Skeletonization and Neutralization of Formalin Embalmed Human Donors After Anatomy Course Dissection
- **Katherine Chang** (Boston University) Manual Segmentation of a Human Embryo from Legacy Collection

- **Sabrina Woods** (Indiana University School of Medicine-Indianapolis) Origins, Storage, and Handling: A Study of Human Skeletal Remains at US Medical Schools
- **R. Claire Aland** (The University of Queensland) Ethical Audits of Supply Chains: Application to Creating, Distributing and Using Histology Slides and Images in Teaching

10:30 am – 12:00 pm

Grand West

Design Thinking and Visual Communication through the Lens of the Medical Illustrator*Co-sponsored by the Association of Medical Illustrators (AMI)**Chair:* **Jill Gregory** (Icahn School of Medicine at Mount Sinai)

- **Christopher M. Smith** (American Museum of Natural History) The Medical Illustrator's Toolkit Drives New Approaches to Anatomical Research
- **Joy Qu** and **Lesia Szyca** (University Health Network) Crafting Clarity: How to Tell Complex Surgical Stories
- **Shehryar (Shay) Saharan** and **Naomi Robson** (University of Toronto) Beyond the Books: Exploring the Potential of Design, Interactivity, and Learner-centered Thinking in Anatomical Education

10:30 am – 12:00 pm

Grand Centre

Mechanisms Regulating Alveologenesis, the Final Stage of Lung Development*Chair:* **H. Joseph Yost** (University of Utah)

- **Parviz Minoo** (USC Hastings Center for Pulmonary Research) Heterogeneity of Alveolar Epithelial Cells during Alveologenesis and What it Means for Pathogenesis of BPD

- **Anne Karina Perl** (Cincinnati Children's Hospital Medical Center) Exploring Myo and Matrix Fibroblast Function and its Implications for BPD
- **David M. Ornitz** (Washington University School of Medicine, St. Louis) Identification of Alveolar Mesenchymal Cells and Their Regulation by FGF18

10:30 am – 12:00 pm

Grand East

Education Platform Session #1*Chair:* **Jennifer Dennis** (Kansas Health Science Center-Kansas College of Osteopathic Medicine)

- **Jeremy Grachan** (Rutgers New Jersey Medical School) Teaching Teen Titans: Integrating Superheroes into Anatomy Education for Middle- and High-School Students in Outreach Programs Aimed at Increasing Diversity in STEM
- **Dolgor Baatar** (Kaiser Permanente Bernard J Tyson School of Medicine) Evaluating the Effectiveness and Reception of a 3D Scan-Based Video Tutorial on Human Lower Limb Anatomy
- **Kristjan Thompson** (Mercer University School of Medicine) Using ChatGPT as a Primary Resource for Gross Anatomy Objectives in Medical Education: Faculty versus Student Perception
- **Andréa Queiroz** (São Paulo State University (UNESP)) Conservation of Dog Viscera Aiming for Clinical and Surgical Training – Use of Vacuum and Pickling Salt
- **Jason Peeler** (University of Manitoba) A Survey of the Musculoskeletal Anatomy Learning Environment Within Nationally Accredited Allied Health Programs in Canada
- **Alan Detton** (Columbia University Medical Center) Essential Anatomy for Professional Health Disciplines from the Perspective of Anatomists

Continues on next page.

SATURDAY, MARCH 23

12:00 pm – 1:30 pm

Lunch Break

12:15 pm – 1:15 pm

City Hall

Networking Lunch & Learn — Sharing Your Science: Developing an “Elevator Pitch” for Your Research

Presenter: Rachel Menegez (University of North Texas Health Science Center)

Identifying the core message and impact of your research can be difficult! In this session, participants will work through a series of short exercises to help them develop a focused and engaging description (an “elevator pitch”) of their research that can serve as the starting point for a larger conversation. We will focus on prioritizing a central theme of participants’ research programs that engages the audience and connects to the bigger picture.

Box lunch available to the first 60 attendees. First come, first served.

12:15 pm – 12:45 pm

Sheraton Hall A

Sponsored Session – Enhancing Anatomy Learning with 3D Models

Sponsored by  Wolters Kluwer

Speaker: Debbie Schmidt, MS, MSHAPI, Course Development Specialist

This session will explore how 3D models can complement traditional teaching tools in anatomy labs, helping students connect textbook diagrams to the human form. We will showcase the products offered by Wolters Kluwer, including Lippincott Connect Courseware with BioDigital 3D Anatomy Tours, BioDigital Human, and BioDigital XR. These tools provide interactive and immersive learning experiences for students, while giving instructors the ability to monitor progress, provide feedback, and gain insights into student learning. Join us to discover how these tools can offer flexibility and impact for your instruction.

1:30 pm – 2:00 pm

Grand West

Annual Business Meeting

All AAA Members are encouraged to attend.

2:15 pm – 3:45 pm

Provincial Ballroom

Neurobiology Award Hybrid Symposium

C.J. Herrick Award in Neuroanatomy Lecture featuring 2024 Early-Career Investigator Award Recipient Christa Baker

Chair: Kevin Flaherty (University of Missouri)

- **Christa Baker** (North Carolina State University)
Linking Structure and Function in the Auditory System of *Drosophila*
- **Andrew Iwaniuk** (University of Lethbridge)
Artificial Selection Drives Changes in the Brain Anatomy of Pigeons: A Quantitative Comparison Across Breeds
- **Madlen Lang** (University of Toronto Scarborough)
Visualizing Hypotheses in Primate Brain Evolution Through the Use of 3D Geometric Morphometrics
- **Mridhula Muthukumar** (Case Western Reserve University School of Medicine)
Characterization of the Internal Anatomy of the Human Dorsal Root Ganglia
- **Alpen Ortug** (Massachusetts General Hospital, Harvard Medical School)
Imaging the Developing Brain Pathways in the Early Second Trimester of the Human Fetal Brain Using Ultra-High-Field (14T) Diffusion-weighted MRI



SATURDAY, MARCH 23

2:15 pm – 3:45 pm

Grand West

How Far Would You Go for the Perfect Picture?

Chairs: Claudia Krebs (University of British Columbia) and **Kathryn Gretsinger** (University of British Columbia)

- **Sabine Hildebrandt** (Boston Children’s Hospital/Harvard Medical School)
Anatomy in Nazi Germany and the Pernkopf Atlas: How the Past Shines a Light on the Present and Leads to Change in the Practice of a Publisher
- **Claudia Krebs** (University of British Columbia)
The Past Is Present: The Impact of Historical Anatomy Illustrations on Current Visualizations: Travel with Caution
- **Jon Cornwall** (Otago Medical School)
Anatomists, Ethics, and Safeguarding the Future Anatomical Image

2:15 pm – 3:45 pm

Grand Centre

Mechanobiology in Organ Development and Regeneration

Chair: Jimmy Hu (UCLA School of Dentistry)

- **Scott Holley** (Yale University)
The Biomechanics and Biophysics of Early Spinal Column Development
- **Megan Killian** (University of Michigan)
Mechanobiology and Regeneration of Tough Interfacial Tissues
- **Camilla Teng** (UCSF)
Cellular Drivers of Upper Lip Fusion
- **Jimmy Hu** (UCLA School of Dentistry)
Shaping the Developing Tooth and Mandible via Biomechanical Regulation

2:15 pm – 3:45 pm

Grand East

Embracing AI in Anatomy Education

Co-sponsored by the Anatomical Sciences Education Journal (ASE)

Chair: Claire Smith (Brighton and Sussex Medical School)

- **Claire Smith** (Brighton and Sussex Medical School)
Strength: What Does AI do Now to Help Anatomy Education, or to Help You?
- **Bruce Wainman** (McMaster University)
Weakness: What are Your Biggest Fears about Adopting AI in Teaching?
- **Adam Wilson** (Rush University)
Opportunities: What Could AI do in the Future to Help Anatomy Education?
- **Michelle Lazarus** (Monash University)
Threat: What is the Biggest Challenge to Adopting AI in Your Educational Activities?

4:00 pm – 5:00 pm

Grand East

Keynote Speaker: Drew Berry

Walter and Eliza Hall Institute of Medical Research

Anatomy of an Enzyme in Action



5:00 pm – 7:00 pm

Sheraton Hall

Posters and Exhibits

7:00 pm – 9:00 pm

Provincial Ballroom

Screening of Documentary: My Dead Body

Moderated by Thomas Champney, Sabine Hildebrandt, and Jon Cornwall

The film will be followed by a Q&A session with Dr. Claire Smith from Brighton and Sussex Medical School.

SUNDAY, MARCH 24

7:30 am – 8:15 am

City Hall

We're All Ears! Coffee and Conversation with President Martine Dunnwald and President-Elect Anne Burrows

Join us for this listening session to share ideas and discuss areas of interest to help shape the association's future strategic work. How can we bring greater value to you as a member? What's on your mind related to the association?

8:30 am – 10:00 am

Provincial Ballroom

Pain's Intricacies: Unveiling Mechanisms and Emotional Ties

Chairs: **Caio Sarmiento** (California State University, Fresno) and **Rebecca L. Pratt** (Oakland University William Beaumont School of Medicine)

- **Mary F. Barbe** (Temple University)
Contributions of Chronic Inflammation and Tissue Fibrosis to Musculoskeletal Dysfunction and Pain
- **Serge Marchand** (Université de Sherbrooke)
Biomarkers in Diverse Populations Experiencing Pain
- **Allan I. Basbaum** (University of California, San Francisco)
Visualizing Spinal Cord Neurons in Awake, Behaving Mice

8:30 am – 10:00 am

Grand West

Emerging Role of Cell Transdifferentiation and Reprogramming during Craniofacial Development and Diseases

Chair: **Yan Jing** (Texas A & M School of Dentistry)

- **Ralph Marcucio** (University of California, San Francisco)
Metaplasia in the Skeleton: Historical Context and Molecular Mechanisms of Chondrocyte to Osteoblast Transformation

- **Zhengyi Chen** (Harvard Medical School)
Reprogramming by Drug-Like Molecules in Hair Cell Regeneration in the Mature Inner Ear
- **Yan Jing** (Texas A&M School of Dentistry)
Direct Cell Transdifferentiation from Tendon to Bone in TMJ Growth and Repair

8:30 am – 10:00 am

Grand Centre

Mouse Models Platform Session

Chair: **Rebecca M. Green** (University of Pittsburgh)

- **Cassandra White** (Joan C. Edwards School of Medicine)
Langman Graduate Student Platform Presentation Award Finalist
Excess Dietary Fat Accelerates Bone Elongation in Vitro Similar to in Vivo Models
- **Shruti Kumar** (McGill University)
Requirement of Sf3b4 During Axial and Craniofacial Development in Mouse Embryos
- **Emily Durham** (Children's Hospital of Philadelphia)
Loss of TBCK Alters Bone Cell Homeostasis and Craniofacial Form
- **Kathy Svoboda** (Texas A&M School of Dentistry)
Tracing Gli1 Expression During Murine Postnatal Eye Development Labels Anterior Eye Structures and Hair Follicles in Eye Lids
- **Jean Young Kim** (Loma Linda University)
Identification of an LHX9-Associated Cis-Regulatory Module with Species-Specific Activity in Limbs Coincident with Differential Murine and Chicken LHX9 Expression
- **Raluca Urjan** (University of Western Ontario)
Exploring Depressive-like Behaviors and Metabolic Impairment in Mice Following Prenatal Ethanol Exposure and Sub-chronic Unpredictable Mild Juvenile Stress

SUNDAY, MARCH 24

8:30 am – 10:00 am

Grand East

Education Platform Session #2

Chair: **Varna Taranikanti** (Oakland University William Beaumont School of Medicine)

- **Cameron Jeter** (Kansas College of Osteopathic Medicine)
Holoneuro: Visualization in Neuroanatomy Education
- **Danielle Brewer-Deluce** (McMaster University)
Human vs Pig: Mechanical and Subjective Evaluation of Tissue Properties for Porcine Surrogate Use in Surgical Skills Training
- **Angelique Dueñas** (Northwestern University Feinberg School of Medicine)
A Modernized Practical for Modern Anatomy Education: Evaluation of a Constructively Aligned, Novel Anatomy Assessment
- **Nathan Tullos** (University of Mississippi Medical Center)
Comparison of WIDAR Application with Manual Photogrammetry Method of Creating 3D Models of Cadaveric Hearts
- **Eduardo Muscogliati** (Hull-York Medical School)
A Framework to High-Quality Educational Anatomy Video Production
- **George Holan** (Rutgers New Jersey Medical School)
Using an Escape Room Activity to Teach Head and Neck Anatomy to Dental Students

10:00 am – 10:30 am

Sheraton Hall

Networking Break and Exhibits

10:30 am – 12:00 pm

Provincial Ballroom

Visualizing the #BirdAgenda: Integrating Novel Imaging Modalities into Avian Functional Morphology

Co-sponsored by The Anatomical Record

Chair: **Emma R. Schachner** (University of Florida)

- **Emma R. Schachner** (University of Florida)
Visualizing the Impact of Pulmonary Diverticula on Flight in Hawks and Other Soaring Birds
- **Emily Lessner** (Denver Museum of Nature and Science)
Diversity and Evolution of the Avian Trigeminal Sensory System as Revealed by Contrast-Enhanced CT-Imaging
- **Chris Griffin** (Yale University)
Using Novel Embryonic Imaging Methods to Characterize the Developmental Mechanisms Underlying the Evolution of the Avian Pelvis

10:30 am – 12:00 pm

Grand West

The Art of Failing in Anatomy

Chair: **Ellen Robertson** (Randolph-Macon College)

- **Erin Marie Williams-Hatala** (Chatham University)
No Scientist is an Island
- **David Morton** (University of Utah)
The Noted Failures of the Noted Anatomist
- **Martine Dunnwald** (University of Iowa)
The Trials and Tribulations of the President

Follow us on Twitter
@anatomyorg and use the
hashtag **#anatomy24**

Continues on next page.

SUNDAY, MARCH 24

10:30 am – 12:00 pm

Grand Centre

Visualizing Craniofacial Development: From Genomic Regulation to Morphology

Co-sponsored by the Society for Craniofacial Genetics and Developmental Biology (SCGDB)

Chair: **Matthew Harris** (Harvard Medical School; Boston Children's Hospital)

- **Kory Evans** (Rice University) Function Drives the Integration and Modularity of the Fish Skull at Different Evolutionary Scales
- **Samantha Brugmann** (Cincinnati Children's Hospital) Visualizing Molecular and Morphological Ciliopathic Phenotypes
- **Benedikt Hallgrímsson** (University of Calgary) Morphometrics and the Muddle in the Middle: New Approaches to Understanding Genotype-Phenotype Maps for Craniofacial Variation

10:30 am – 12:00 pm

Grand East

Seeing the Embryo in Education and Society

Chairs: **Jason Mussell** (Louisiana State University Health Sciences Center – New Orleans) and **Barbie Klein** (University of California, San Francisco)

- **Jennifer Dennis** (Kansas Health Science Center-Kansas College of Osteopathic Medicine) Convergent Extension: Transitioning Embryology Content and Resources to Better Align with Increasing Ethical Considerations
- **Rachel Feltman** (New York Institute of Technology College of Osteopathic Medicine) Errors of Omission or Commission: Is Abortion Legislation Intentionally Misleading?

- **Craig A. Ford** (St. Norbert College) Seeing the Embryo Differently: A Better Way for Christians to Talk about Life

12:00 pm – 1:30 pm

Lunch Break

12:15 pm – 1:15 pm

City Hall

Networking Lunch & Learn — Work Smarter, Not Harder: Time Management Strategies for the Overwhelmed

Chairs: **Kristy Cheung** (University of Toronto), **Jennifer Eastwood** (Rush University), **Kimberly Latacha** (University of Nebraska Medical Center)

Time management is an essential skill in both our personal and academic life. Although we all have 24 hours in a day, managing numerous roles at work while keeping our other pursuits in harmony can seem elusive. The purpose of this Lunch and Learn session is to share practical solutions to time-management challenges and learn new strategies to make our time count. This interactive session includes guided table discussions and a panel of "time management experts" in different stages of academic careers, including graduate school, early career, and senior-level faculty roles.

Box lunch available to the first 60 attendees. First come, first served.

**Quiet Room
VIP Room (Concourse Floor)**

Saturday and Sunday
8:00 am – 7:00 pm

The Quiet Room is intended as a quiet, calm space where attendees can get away to work or relax. **The quiet room is not for conversations or meetings.**

SUNDAY, MARCH 24

12:15 pm – 1:15 pm

Sheraton Hall A

Sponsored Session – The VH Dissector: Clinically Relevant Sectional Anatomy

Sponsored by  **toltech**
Touch of Life Technologies

Speaker: **Laura Weinkle, MS**, Director of Customer Success, Toltech

How can sectional anatomy and virtual cadavers facilitate anatomy comprehension? Join us as we explore how the VH Dissector platform supports deeper anatomical learning. We will specifically highlight interactive cross-sectional applications for radiology education and demonstrate utilization for training of ultrasound scanning skills.

1:30 pm – 3:00 pm

Provincial Ballroom

Cell Biology Award Symposium

R.R. Bensley Award in Cell Biology Lecture featuring 2024 Early-Career Investigator Award Recipient Monther Abu-Remaileh

Chair: **Irena Rebalka** (McMaster University)



- **Monther Abu-Remaileh** (Stanford University) Neurodegeneration: Intra-Lysosomal Lipid Metabolism in the Driver's Seat
- **Caroline Halmi** (University of Maryland) Elucidating the Role of N-cadherin During Trigeminal Gangliogenesis
- **Lorena Maili** (Stowers Institute for Medical Research) Ribosome Biogenesis Is Essential for Craniofacial Cartilage and Bone Development
- **Jared Hill** (University of Iowa) RalGPS2 Activates RalA for Primary Ciliogenesis in Epithelial Cells
- **Radhika Atit** (Case Western Reserve University) Walk This Way: Role of Mesenchyme Wnts in Calvarial Bone Morphogenesis and Expansion

1:30 pm – 3:00 pm

Grand West

New Insights into Neurogenesis Development, Health and Disease

Co-sponsored by *Developmental Dynamics*

Chair: **Paul Trainor** (Stowers Institute for Medical Research)

- **Genevieve Bernard** (McGill University) Neurogenesis and Disease – Bedside to Bench and Bench to Bedside
- **Angelo Iulianella** (Dalhousie University) Making Brains: Cytoskeletal Mechanisms in the Neuroanatomical Organization of the Mammalian Forebrain
- **Loran Atnip** (Missouri Southern State University) Exploring the Origin of Catecholaminergic Fibers in Orbital Cranial Nerves
- **Thanasup Gonmanee** (Mahidol University) Neuroregenerative Potential of Isolated Mitochondria from Human Dental Pulp Stem Cells in an MPP+-induced Cellular Model of Parkinson's Disease

1:30 pm – 3:00 pm

Grand Centre

Using Advanced 3D Imaging Modalities to Unlock Secrets of the Ancient, Developmental, and Adult Morphogenesis

Chairs: **Paul Kulesa** (University of Notre Dame) and **Timothy C. Cox** (University of Missouri – Kansas City)

- **Hillary Maddin** (Carleton University) Using Micro-CT to Examine the Cranial Anatomy of Fossil Specimens
- **Mei Zhen** (Lunenfeld-Tanenbaum Research Institute) Connectomes Across Development using Serial Section EM of Progressive Postnatal Stages of Development
- **Stefan H. Geyer** (Medical University of Vienna) Morphogenesis using High-resolution Episcopic Microscopy

Continues on next page.

SUNDAY, MARCH 24

1:30 pm – 3:00 pm

Grand East

Invisible Bodies: The Sex and Gender Diversity that Textbooks Don't Show*Chairs:* **Sacha Sides** (University of Florida) and **Ann Zumwalt** (Boston University)

- **Kelsey Lewis** (University of Buffalo)
Mini Masterclass: Reframing Sex in Light of Development
- **Ayden Scheim** (Drexel University)
Un-erasure to Promote Trans, Non-binary, and Intersex People's Health
- **Theodore C. Smith** (Touro University California)
More Than A Picture: Ethical and Effective Integration of Underrepresented Bodies in Anatomical Education

3:00 pm – 3:30 pm

Sheraton Hall

Networking Break and Exhibits

3:30 pm – 5:00 pm

Provincial Ballroom

Jaws & Teeth Platform Session*Chair:* **Callum Ross** (University of Chicago)

- **Craig Albertson** (University of Massachusetts)
Foraging-induced Craniofacial Plasticity Is Associated with an Early, Robust, and Dynamic Transcriptional Response
- **Eric Snively** (Oklahoma State University)
New Method of Meshless Structural Mechanics Tests Feeding Limits in Tyrannosaurus Rex, and Vice Versa
- **Emma Cooney** (University of Missouri)
Ontogeny of the Virginia Opossum Temporomandibular Joint and Implications for Mammalian Cranial Evolution
- **Sacha Sides** (University of Florida)
Tooth Be, or Not Tooth Be: A New Analysis of the Deciduous Dentition in the Aye-aye
- **Julia Boughner** (University of Saskatchewan, College of Medicine)
Dental Development in the White-handed Gibbon (*Hylobates Lar Carpenteri*)

- **Alec Wilken** (University of Chicago)
Exploring the Role of Ridges in the Mammal Jaw: Towards a New Paradigm of Mandible Function

3:30 pm – 5:00 pm

Grand West

Master Class – Visualizing and Building the Musculoskeletal System*Co-sponsored by Developmental Dynamics, The Anatomical Record and Anatomical Sciences Education*

- **Leonard Shapiro** (University of Cape Town, South Africa)
Transforming Musculoskeletal Anatomy Learning with Haptic Surface Painting
- **Adam Hartstone-Rose** (North Carolina State University)
Frontiers in Myological Visualization
- **Natasha Chang** (McGill University)
Muscle Stem Cell Function in Tissue Homeostasis and Disease

3:30 pm – 5:00 pm

Grand Centre

Imaging Developmental Processes: A New Frontier for Congenital Disorders*Chair:* **D'Juan Farmer** (University of California, Los Angeles)

- **Mary Baylies** (Sloan Kettering Institution)
Imaging Muscle Development and Use in *Drosophila*
- **D'Juan Farmer** (University of California, Los Angeles)
Visualization of Calvaria Morphogenesis and Fusion in Zebrafish
- **Sevan Hopyan** (The Hospital for Sick Children)
Imaging Morphogenetic Movements as a Function of Mesodermal Stiffness

SUNDAY, MARCH 24

3:30 pm – 5:00 pm

Grand East

Education Platform Session #3*Chair:* **Kristina Lisk** (University of Toronto)

- **Jason Luong** (Columbia University College of Dental Medicine)
Exploring AI Readiness in Medical Education: A Global Survey
- **Isha Suri** (The Corps for Research of Instructional and Perceptual Technologies (CRIPT))
Educational Research Platform Presentation Award Finalist
Do You Feel What I Feel?
- **Kayla Vieno** (University of Western Ontario)
Educational Research Platform Presentation Award Finalist
Approaches For, and Outcomes Of, Anatomical Variation in Gross Anatomy Courses Across Degree Programs: A Scoping Review
- **Alexandra Chavez** (California State University, Fresno)
Educational Research Platform Presentation Award Finalist
Decoding DPT Anatomy Education Trends in the U.S. a Journey into Student Satisfaction, Innovative Teaching, and the Power of Cadaver-Virtual Fusion
- **Samantha Nacci** (University of Toronto)
Educational Research Platform Presentation Award Finalist
Using Vocational Expectations to Directly Inform the Creation of an Embryology Curriculum for Pathologists' Assistants
- **Chelsea Lohman** (University of Colorado School of Medicine)
Benefits of Autopsy-based Prosection for Gross Anatomy Labs in a Clinically Integrated Medical Curriculum

5:00 pm – 7:00 pm

Sheraton Hall

Posters and Exhibits

7:00 pm – 9:00 pm

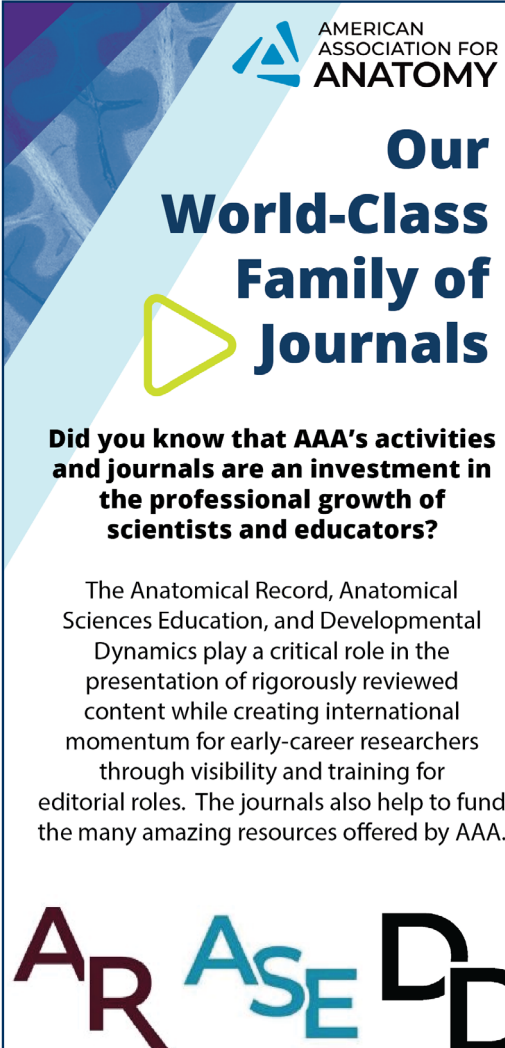
City Hall

Trivia Night*Hosted by Ambassador Committee member, Krista Rompolski*

Join us for an evening of fun and friendly competition. Rounds will be themed: Physiology, history, geography, music, pop culture.

Teams consist of no more than 5 members and should be comprised of people you know and don't know – make some connections!

Prizes will be given to the top team.



AMERICAN ASSOCIATION FOR ANATOMY

Our World-Class Family of Journals

Did you know that AAA's activities and journals are an investment in the professional growth of scientists and educators?

The Anatomical Record, Anatomical Sciences Education, and Developmental Dynamics play a critical role in the presentation of rigorously reviewed content while creating international momentum for early-career researchers through visibility and training for editorial roles. The journals also help to fund the many amazing resources offered by AAA.

AR ASE DD

MONDAY, MARCH 25

8:30 am – 10:00 am

Provincial Ballroom

Reconsent in Whole Body Donation: Ethical and Practical Considerations in Support of Emerging Clinical and Educational Technologies

Chairs: **Laura Johnson** (University of Texas Health – San Antonio) and **Brandi Schmitt** (University of California)

- **Tom Farsides** (University of Sussex) Facilitating Posthumous Autonomy may be Better than Embalming Decaying Consent for Ensuring Ethically Appropriate Anatomical Practice
- **Angela McArthur** (University of Minnesota Medical School) The University of Minnesota's Experience with the Re-consent Process
- **Lisa Ikemoto** (University of California, Davis) Issues of Social Justice and Regulatory Aspects of Consent and Post-Mortem Reconsent

8:30 am – 10:00 am

Grand West

21st Century Myology: New Insights from Multiscale Visualization of Skeletal Muscle Morphology

Chair: **Casey Holliday** (University of Missouri – Columbia)

- **Brian Glancy** (NHLBI and NIAMS, NIH) Sustaining Power: Building Energy Networks in Striated Muscles
- **Andrea Taylor** (Touro University) Immunohistochemistry Reveals Remarkable Diversity of Myosin Heavy Chain Expression in Primate Chewing Muscles
- **Casey Holliday** (University of Missouri) 3D Muscle Architecture and its Applications in Comparative Functional Morphology

8:30 am – 10:00 am

Grand Centre

Imaging Platform Session

Chair: **Smart I. Mbagwu** (Nnamdi Azikiwe University)

- **Rachel Roston** (Seattle Children's Research Institute) Sorting Signal from Noise: Simulating 3D Morphology with SlicerMorph and Advanced Normalization Tools (ANTs)
- **Courtney Miller** (University of North Texas Health Science Center) *Langman Graduate Student Platform Presentation Award Finalist* Pre-weaning Craniofacial Development in Mice with OI
- **Cassidy Fu** (Western University) *Langman Graduate Student Platform Presentation Award Finalist* Statistical Shape Modelling to Differentiate the Symptomatic and Asymptomatic Hip in Bilateral Cam FAI
- **Charlotte Jones-Whitehead** (Western University) Evaluation of a Novel Denervation Technique to Relieve Lower Back Pain: A Cadaveric Feasibility Pilot Study
- **Jackson Radler** (Penn State College of Medicine) Pathophysiology After Spinal Cord Injury Is Nonuniform Along the Gastrointestinal Tract
- **Olivia Chung** (McMaster University) We've Got Your Back: Quantifying the Sublaminar Ridge with CT Scan Reconstructions



CALL FOR REGIONAL MEETING PROPOSALS

Apply today to host a AAA Regional Meeting at your institution!

Deadline for proposals is April 30, 2024

anatomy.org/regional

AMERICAN ASSOCIATION FOR ANATOMY

Learn More

MONDAY, MARCH 25

8:30 am – 10:00 am

Grand East

Failing Forward: Unexpected Learning from Failures in Curriculum Design and Education Research

Chair: **Danielle Bentley** (University of Toronto)

- **Coral Murrant** (University of Guelph) Classroom-level Perspectives in Failing-Forward in Education Research: Understanding My Classroom Through Trial and Error and Data Collection
- **Stephen Magliocchetti** and **Andre Williams** (Queen's University) Student-level Perspectives on Failing-Forward in Education Research: Exploring the Value of Failing in Human Cadaveric Dissection Courses
- **William (Bill) Ju** (University of Toronto) Program-level Perspectives on Failing-Forward in Education Research

10:15 am – 12:15 am

Sheraton Hall

Posters and Exhibits

12:15 pm – 1:30 pm

Lunch Break

12:15 pm – 1:15 pm

City Hall

Networking Lunch & Learn: @theTable – Please Join Us

Presenter: **Maureen Helgren** (Quinnipiac University) and **Katherine Grevelding** (Quinnipiac University)

This anatomy-based Lunch & Learn is designed to address a critical missing link in interprofessional (IP) healthcare education: authentic socialization. @theTable is an extracurricular, longitudinal series of IP events combining the sharing of a meal before or after a prompted anatomy-based peer learning activity surrounding a table (e.g., dissection table, SECTRA table, treatment table). Facilitating relationship building with

trust as a central theme is an essential skill for team-based person-centered care. Initiating @theTable with foundational anatomy provides an early opportunity for students to learn about each other's roles by understanding the unique focus of anatomical knowledge within their respective disciplines.

Box lunch available to the first 60 attendees. First come, first served.

1:30 pm – 3:00 pm

Provincial Ballroom

Developmental Biology Award Symposium

H.W. Mossman Award in Developmental Biology Lecture featuring 2024 Early-Career Investigator Award Recipient Erica Hutchins



Chair: **Kristin Artinger** (University of Minnesota)

- **Erica Hutchins** (University of California at San Francisco) Should I Stay or Should I Go? How RNA Transience Drives Neural Crest Development during Craniofacial Morphogenesis
- **Frederick Foster** (Pennsylvania State University) *Postdoctoral Platform Presentation Award Finalist* Developmental Dynamics of Meckel's Cartilage and the Dentary in Mice
- **Tooba Husain** (Arkansas College of Osteopathic Medicine) *Langman Graduate Student Platform Presentation Award Finalist* Cranial Sutural Morphology in Mice with Osteogenesis Imperfecta
- **Cassandra Millet-Boureima** (Research Institute of the McGill University Health Centre) Tmed2 Role in Craniofacial Development
- **Alex Flores** (Case Western Reserve University) Too Close for Comfort: Role of Fibronectin Matrix in Suture Development and Disease

Continues on next page.

MONDAY, MARCH 25

1:30 pm – 3:00 pm

Grand West

Nervous Service – Peripheral Nervous System Influences Nearby Tissues in Development, Disease, and Repair

Chairs: **Caroline Halmi** (University of Maryland) and **Alyssa Moore** (University of Western Ontario)

- **Yosuke Mukouyama** (National Heart, Lung, and Blood Institute)
Neuro-Vascular Interactions in Development and Diseases
- **Freda Miller** (University of British Columbia)
Peripheral Nerves and the Control of Mammalian Tissue Regeneration
- **Elizabeth Engle** (Harvard Medical School)
Cranial Nerve Development Gone Askew in Humans and Mice

1:30 pm – 3:00 pm

Grand Centre

Cranial Anatomy Platform Session

Chair: **Matthew Vickaryous** (University of Guelph)

- **Todd Green** (New York Institute of Technology College of Osteopathic Medicine at Arkansas State University)
Does microCT Imaging Support the Functional Role of Cassowary Cranial Casques as Vocal Resonators?
- **Amy Lagorio** (University of Missouri)
New Applications of 3D Musculoskeletal Modeling Methods: Looking Inside the Heads of Anolis
- **Joy Reidenberg** (Icahn School of Medicine at Mount Sinai)
Search for the Vomeronasal Organ in Baleen Whales
- **Anne Burrows** (Duquesne University)
Divergent Facial Muscle Physiology in Ancient and Contemporary Dog Breeds
- **Christopher M. Smith** (American Museum of Natural History)
Postdoctoral Platform Presentation Award Finalist
Functional and Spatial Constraints in the Mammalian Vestibular System

- **Talia Lowi-Merri** (New York Institute of Technology)
Postdoctoral Platform Presentation Award Finalist
Ecomorphological Diversification in Avian Brain Shape Evolution

1:30 pm – 3:00 pm

Grand East

Trauma-Informed Anatomy: How to Support Students Through Dissection

Chairs: **Elizabeth Agosto** (Indiana University School of Medicine) and **Jessica Byram** (Indiana University School of Medicine)

- **Elizabeth Agosto** (Indiana University School of Medicine)
Disrupted Learning: Student Experiences in the Anatomy Lab
- **Avi Kopstick** (Texas Tech University Health Sciences Center El Paso)
Introduction to Trauma-Informed Care
- **Sarah Finke** (Indiana University School of Medicine)
Practical Approaches to Trauma-Informed Educational Practices

3:30 pm – 5:00 pm

Provincial Ballroom

Morphological Sciences Award Symposium

W.M. Cobb Award in Morphological Sciences Lecture featuring 2024 Early-Career Investigator Award Recipient Thomas Stewart

Chair: **Akinobu Watanabe** (New York Institute of Technology)

- **Thomas Stewart** (Penn State University)
How to be a Fish out of Water: The Origin of Blinking and Walking in Early Tetrapods
- **Cassandra Turcotte** (NYIT Anatomy)
Postdoctoral Platform Presentation Award Finalist
The Aging of Whole Bone Trabecular Architecture Across Appendicular Joints in the Rhesus Macaque (*Macaca Mulatta*)



MONDAY, MARCH 25

- **Clint Collins** (California State University – Sacramento)
How Do Ankle Extensor Muscles Match Locomotor Behavior in Rodents?
- **Nathan Thompson** (New York Institute of Technology College of Osteopathic Medicine)
Three-dimensional Forelimb Kinematics of Chimpanzee Vertical Tree Climbing
- **Jayc Sedlmayr** (University of Tennessee Health Sciences)
The Evolution of Hominin Bipedalism Is Not What You Think: The Relation of “the Iliopsoas” to the Diversity of Proximal Femoral Morphology

3:30 pm – 5:00 pm

Grand West

The Emerging Role of Nerves in Regulation of Growth and Regeneration

Chair: **Samantha Payne** (University of Guelph)

- **Samantha Payne** (University of Guelph)
Investigating the Role of Neurons in Scar Formation using in vitro Co-culture Models
- **Mayumi Ito Suzuki** (New York University Grossman School of Medicine)
Skin Appendage Regeneration and Wound Healing
- **James Monaghan** (Northeastern University)
The Critical Role of Nerves in Regenerating Axolotl Limbs

3:30 pm – 5:00 pm

Grand Centre

Education Platform Session #4

Chair: **Derek Harmon** (The Ohio State University College of Medicine)

- **Gianluca Del Rossi** (Creighton University)
Can the Implementation of an Anatomy Drawing Activity Promote the Retention and Translation of Knowledge Among Students in a Clinical Health Professions Program?
- **Erin Fillmore** (Warwick Medical School)
Visualising What Is Hidden: Understanding the Impact of a Novel Integrated Medical Imaging Curriculum

- **Ethan Snow** (South Dakota State University)
Impacts on Student Metacognition from Teaching Human Anatomy via Augmented Reality and Cadaver Prosection
- **Maria Cárdenas** (Universidad de los Andes, Colombia)
Use of 3D Printing for Anatomical Understanding of Congenital Heart Disease in an Embryology Course: A Pedagogical Intervention Trial
- **Alexander Macnow** (Thomas Jefferson University)
Addressing Color Vision Deficiency in Anatomy and Pathology Education: Development of an Institutional Accessibility Manual
- **Ashley Walker** (University of Florida)
Reigniting the Sparks of Anatomy: Implementing Anatomy Workshops During Clerkship Rotations

5:15 pm – 5:45 pm

Provincial Ballroom

Henry Gray Scientific Award Lecture

Ralph Marcucio (University of California, San Francisco)



5:45 pm – 6:15 pm

Provincial Ballroom

Henry Gray Distinguished Educator Award Lecture

Joy Reidenberg (Icahn School of Medicine at Mount Sinai)



6:15 pm – 6:30 pm

Provincial Ballroom

A.J. Ladman Exemplary Service Award Lecture

Kem Rogers (Western University)



7:30 pm – 9:30 pm

Grand East

Closing Awards Ceremony Dinner

Pre-purchased tickets only.

Governance Meetings *Invitation Only

THURSDAY, MARCH 21

Board of Directors Meeting*
1:00 pm – 5:05 pm • Simcoe/Dufferin Room (2nd Floor)

FRIDAY, MARCH 22

Board of Directors Meeting*
8:30 am – 4:30 pm • City Hall Room

SATURDAY, MARCH 23

Committee Chairs Meeting*
7:30 am – 8:30 am • Norfolk Room

Committee for Early-Career Anatomists Meeting*
12:15 pm – 1:15 pm • Peel Room

Educational Affairs Committee Meeting*
12:15 pm – 1:15 pm • Norfolk Room

Ethics Committee Meeting*
12:15 pm – 1:15 pm • Oxford Room

SUNDAY, MARCH 24

ASE Editorial Board Meeting*
7:00 am – 8:30 am • Norfolk Room

Committee for Early-Career Anatomists Meeting*
12:15 pm – 1:15 pm • Peel Room

Ambassador Committee Meeting*
12:15 pm – 1:15 pm • Norfolk Room

Diversity, Equity, and Inclusion Committee Meeting*
12:15 pm – 1:15 pm • Carleton Room

Publications Committee Meeting*
12:15 pm – 1:15 pm • Oxford Room

MONDAY, MARCH 25

Professional Development Committee Meeting*
7:15 am – 8:15 am • Norfolk Room

Committee for Early-Career Anatomists Meeting*
12:15 pm – 1:15 pm • Peel Room

Human Body Donation Committee Meeting*
12:15 pm – 1:15 pm • Norfolk Room

Scientific Affairs Committee Meeting*
12:15 pm – 1:15 pm • Carleton Room



Follow us on Twitter
@anatomyorg and use the hashtag **#anatomy24**

Poster Sessions

Take time to visit the posters and exhibitors in Sheraton Hall.

Virtual posters are also available in the online program and app. Go to the app for a detailed list of all the posters, including abstracts, poster numbers, authors, and titles. AAA has separate poster presentation times for odd and even posters.

Odd poster #s: first hour • Even poster #s: second hour

SATURDAY, MARCH 23

Display Hours: 10:00 am – 7:00 pm
Presentation Time: 5:00 pm – 7:00 pm

Odd poster #s: 5:00 pm – 6:00 pm
Even poster #s: 6:00 pm – 7:00 pm

- Abdomen Case & Anatomical Studies
- Anatomy Education: Teaching Methods & Innovations
- Anatomy Lab Practice
- Gastrointestinal
- Injury Repair and Regeneration
- Neurobiology
- Outreach
- Pelvis Case & Anatomical Studies
- Thorax Case & Anatomical Studies
- Urogenital

SUNDAY, MARCH 24

Display Hours: 10:00 am – 7:00 pm
Presentation Time: 5:00 pm – 7:00 pm

Odd poster #s: 5:00 pm – 6:00 pm
Even poster #s: 6:00 pm – 7:00 pm

- Anatomy Education
- Anatomy Education: Undergraduate Education
- Animal Models
- Cardiovascular
- Imaging
- Lower Limb Case & Anatomical Studies

MONDAY, MARCH 25

Display Hours: 8:00 am – 12:30 pm
Presentation Time: 10:15 am – 12:15 pm

Odd poster #s: 10:15 am – 11:15 am
Even poster #s: 11:15 am – 12:15 pm

- Anatomy Education: Assessment, Curriculum & Mentoring
- Anatomy Education: Clinical Based Approaches
- Anatomy Education: Technology-Assisted Learning
- Bones, Cartilage & Teeth
- Developmental Biology
- Ethics
- Evolution and Comparative Anatomy
- Head/Neck Case & Anatomical Studies
- Neural Crest, Placodes and Craniofacial Development



SAVE THE DATE!

SciComm Bootcamp

 June 20-21, 2024
 Rockville, Maryland




Exhibitors

Thank you to our exhibitors for supporting AAA. Be sure to visit with them during the following dates/times.

SATURDAY, MARCH 23

10:00 am–7:00 pm

10:00 am–10:30 am

Networking Break and Exhibits

3:30 pm–4:00 pm

Networking Break and Exhibits

5:00 pm–7:00 pm

Poster Sessions and Exhibits

SUNDAY, MARCH 24

10:00 am–7:00 pm

10:00 am–10:30 am

Networking Break and Exhibits

3:00 pm–3:30 pm

Networking Break and Exhibits

5:00 pm–7:00 pm

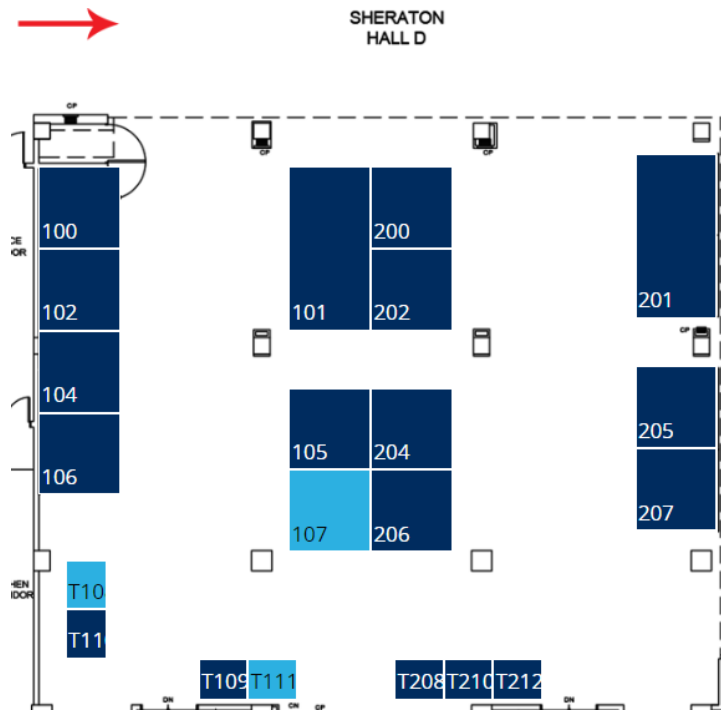
Poster Sessions and Exhibits

MONDAY, MARCH 25

10:00 am–12:30 pm

10:00 am–12:30 pm

Poster Sessions and Exhibits



EXHIBITOR LIST BY BOOTH

Booths

| | |
|---------------------------------------|-----|
| Wolters Kluwer | 100 |
| Touch of Life Technologies | 101 |
| Case Western Reserve University | 102 |
| MAI | 104 |
| Primal Pictures | 105 |
| Candent..... | 106 |
| Elsevier | 200 |
| Anatomage, Inc | 201 |
| Avatar Medical..... | 202 |
| Visible Body | 204 |

| | |
|---------------------------------|-----|
| Green Solutions Group LLC | 205 |
| 3D Organon | 206 |
| Anatomic Excellence LLC | 207 |

Tabletops

| | |
|-------------------------------------|------|
| Mopec | T109 |
| Kenhub | T110 |
| The Anatomical Record | T208 |
| Developmental Dynamics | T210 |
| Anatomical Sciences Education | T212 |

Exhibitor Descriptions

(Alphabetical list)

3D Organon

Booth #206

3D Organon stands as a premier medical and healthcare education platform, offering an unparalleled learning experience across virtual reality, desktop, tablet, and mobile devices. With life-like models, immersive environments, and a vast multilingual knowledge base, it transforms medical education into globally applicable knowledge.

Anatomage, Inc.

Booth #201



Anatomage is a medical company, driving innovation through advanced solutions in hospitals and educational institutions. Our digital cadaver table, the Anatomage Table, allows a hands-on approach to learning the human body through unique visualization options, dissection tools, and quiz mode features, making it a strong asset to any anatomy class.

Anatomic Excellence LLC

Booth #207



Anatomic Excellence, LLC is the exclusive, full range agent for von Hagens Plastinated Tissue Specimens in the USA, Canada & Caribbean.

We work with our customers to help them establish a collection of ethically procured and prepared specimens that meet the anatomical needs of your program and enhance student learning.

Anatomical Sciences Education

Table #T212

ASE is a peer-reviewed international journal for the exchange of ideas, opinions, and research in anatomy education covering undergraduate to post-graduate levels. Submissions on research, technology, ethics, teaching, assessments, and innovation in anatomy education are welcomed.

Thank You to Our Sponsors



Avatar Medical**Booth #202**

Simple, scalable, and real-time XR avatars from patient images, redefining surgical consultations and simplifying planning.

Candent**Booth #106**

Since 1971, Candent has been a premier provider of human anatomical, dental, healthcare models, specializing in models and simulators for educational use across North America. With over 50 years of experience, we cater to universities and medical institutions, enhancing healthcare education with detailed, realistic anatomical simulations.

Case Western Reserve University**Booth #102**

At Case Western Reserve University, we are focused on transforming the way students learn human anatomy. Our flagship product is the HoloAnatomy® Software Suite learning platform, which uses interactive, three-dimensional holograms to reveal the intricacies of human anatomy. With this application, students are learning faster and retaining information 44% longer.

Developmental Dynamics**Table #T210**

Developmental Dynamics is an official publication of the American Association for Anatomy. Edited by internationally renowned scientists, this peer reviewed journal provides an international forum for publishing novel discoveries, using any model system, that advances our understanding of development, morphology, form and function, evolution, disease, stem cells, repair, and regeneration.

Elsevier**Booth #200**

Every day, research and health professionals dedicate themselves to improving outcomes for communities, patients and society at large. Elsevier is committed to quality and innovation to improve the value we deliver to researchers, research leaders, healthcare professionals and educators in an open, inclusive and collaborative manner.

Green Solutions Group LLC**Booth #205**

To our knowledge, Green Solutions Group is the only company in the world to offer non-toxic products for tissue preservation that enhance the teaching and learning experience in medical education and surgical training.

Kenhub**Table #T110**

Kenhub is an innovative online platform founded in 2012 with a vision to revolutionize anatomy education. Driven by a global team of passionate individuals and scientific experts, Kenhub offers a unique learning experience, rich with video tutorials, quizzes, articles, and high-quality atlas images, expediting the learning process for users worldwide.

MAI**Booth #104**

Since 2016, MAI has been on a mission to create a metaverse of medical education. We pioneered course-based, immersive learning for the human body in a virtual world, and today, we help individuals and organizations connect and revolutionize how they teach, learn, and share medical knowledge.

Mopec**Table #T109**

Mopec is empowering pathology and anatomy professionals with the leading platform of products and solutions for the advancement of diagnostic accuracy, safety, research, education, and the treatment of disease.

Primal Pictures**Booth #105**

Primal Pictures offers the most complete, detailed and medically accurate model of human anatomy for healthcare students, educators, practitioners, researchers and industry. Our visually stunning Anatomy.tv offers market-leading, web-based, 3D software solutions and mobile apps — widely adopted and used in over 1,500 academic and clinical institutions in 150+ countries.

The Anatomical Record**Table #T208**

The Anatomical Record publishes new discoveries in the morphological aspects of molecular, cellular, systems, and evolutionary biology. The journal focuses on major new findings in the anatomical consequences of gene disruption, activation, or over expression upon cell, tissue, or organ architecture and the importance of descriptive studies in contemporary research.

Touch of Life Technologies**Booth #101**

Learning anatomy isn't easy. But with Toltech's comprehensive, immersive platform that features true-to-life visualizations and expert-level support, anatomy education becomes more accessible, impactful, and effective.

Visible Body**Booth #204**

Visible Body's 3D biology and AR human anatomy and physiology platforms improve in-class and online education outcomes while making learning anatomy easy and fun. Visible Body's Courseware platform integrates with LMS and allows instructors to assign and customize auto-graded labs and homework, 3D models, and flashcards.

Wolters Kluwer**Booth #100**

Wolters Kluwer Health is a leading global provider of information and point of care solutions for the healthcare industry. Our solutions are designed to help professionals build clinical competency and improve practice so that healthcare organizations can succeed in value-based care delivery models. Product solutions include Lippincott®, Ovid®, and UpToDate®.



Your work deserves recognition.

AAA offers over \$650,000 in awards, grants and scholarships.



Upcoming awards deadline
April 16 – Apply today!

Save the Date



**ANATOMY
CONNECTED**
2025 MARCH 28-31
PORTLAND, OR

**Advances in Science,
Research, & Education**



AMERICAN
ASSOCIATION FOR
ANATOMY