



REGIONAL MEETING

Anatomy Across Scales: From Molecules to Organisms

October 7 - 8, 2022
The University of Iowa
Iowa City, IA

Friday October 7

Location – Old Capitol Building
Senate Chamber Room, 2nd floor

Session 1 – Education Across Scales

Chair - Willow Schanz, University of Iowa

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| 12:30 - 12:45 pm | Opening Remarks
Martine Dunnwald, University of Iowa |
| 1:00 - 1:30 pm | Local Community Engagement to Overcome Barriers to Higher Education
Theresa Ho, PhD
Instructor; Director of Microbiology and Immunology Diversity, Equity, and Inclusion; Department of Microbiology and Immunology, University of Iowa, Carver College of Medicine |
| 1:30 - 1:45 pm | Comparison of Gross Anatomy Retention Between Virtual and Cadaveric Learning during COVID-19
Lucas Steele, University of Kentucky |
| 1:45 - 2:00 pm | Mapping the Human Body at Single-Cell Resolution: Developing the Human Reference Atlas
Heidi Schlehlein, Indiana University |
| 2:00 - 4:30 pm | Poster session and coffee break |
| 2:00 – 3:00 pm | Even posters #'s |
| 3:00 - 4:00 pm | Odd posters #'s |

Poster #	Title and First Author
1	Deciphering the Tissue Specific Roles of Arhgap29 During Palatogenesis Emily Adelizzi, University of Iowa
2	Two-stage Analysis of Suggestive Genome-wide Signals Identified Novel Loci for Non-syndromic Orofacial Clefts in the African Population Azeez Alade, Iowa Institute for Oral Health Research
3	IRF6 Modulates Endosomal Function through a Nontranscriptional Mechanism Angelo Antiguas, University of Iowa
4	Frontal Sinus Morphology: Variation Among US-Based Populations Patricia Avent, Des Moines University
5	Ferret Lung Anatomy: Preliminary Tracheobronchial Branching Model and Measurements Using μCT Nora Bensellam, University of Iowa
6	The Use of 3D Printed Arterial Models for Neuroanatomical Laboratory Education Michael Corigliano, University of Colorado Anschutz Medical Campus
7	Dopamine D1 Agonists as a Pharmaceutical Target for Delaying Micropore Closure Timeframes across Diverse Skin Types Valeria Cota, University of Iowa
8	Nuclear Actin is a Critical Regulator of Drosophila Germline Stem Cell Maintenance Nicole Green, University of Iowa
9	Investigating the in vitro Role of MEMO1 in an Ameloblast Cell Line Amelia Hurley-Novatny, University of Iowa
10	The Influence of SUMOylation on Transcriptional Regulation by ETV1 in Breast Cancer Zhijie Li, University of Iowa
11	TFAP2 Paralogs Operate in a Frontonasal Dysplasia-Related Alx1/3/4 Gene Regulatory Module Timothy Nguyen, University of Iowa
12	The Perspective of a Sub-Saharan African Cleft Cohort on the Disclosure of Secondary Findings from Genetic Research Abimbola Oladayo, University of Iowa

- 13 Identification of a Novel Role for the Protein PRMT5 in Oral and Skin Epithelial Development**
Nicole Recka, University of Iowa
- 14 A Survey of Anatomy Educators Reveals Trends in Embryology Training and Curricula in US Medical Schools**
Willow Schanz, University of Iowa
- 15 A new cranium of *Stigiochelys estesi* (Testudines, Baenidae) from the Judith River Formation reveals the inner ear and neuroanatomy of Campanian baenids**
Heather Smith, Midwestern University
- 16 Interaction of *Rbbp4* with B-catenin/*FoxM1* Pathways Regulating Embryonic Neural Progenitor Proliferation**
Michelle Thayer, Iowa State University

Session 2 – Cell Biology and Morphogenesis

Chairs - Nicole Recka, University of Iowa and Riley Leonard, University of Iowa

- 4:30 - 5:00 pm **Lung Epithelial Stems Cells and Regeneration**
Tom Lynch, PhD
Department of Surgery, University of Iowa, Carver College of Medicine
- 5:00 - 5:15 pm **Deciphering the Endothelial Cell Role of *MEMO1* during Craniofacial Development**
Samantha Wuebker, University of Iowa
- 5:15 - 5:30 pm **Adipose Triglyceride Lipase Promotes Prostaglandin-Dependent Actin Remodeling by Regulating Substrate Release from Lipid Droplets**
Michelle Giedt, University of Iowa
- 5:30 - 5:45 pm **Size Matters: Growth Control of the Wing**
Andrew Liu, Northwestern University
- 5:45 - 6:00 pm **Targeting DNA Replication Stress in Ewing Sarcoma Tumors**
Emma Croushore, University of Iowa

6:15 - 8:30 pm Reception at Natural History Museum
Macbride Hall, 17 N Clinton St

Saturday October 8

Location: Medical Education and Research Facility (MERF)
375 Newton Road
Room 2117 (2nd Floor)

7:30 - 8:30 am **Breakfast**

Session 3 – Form and Function

Chairs - Ben Calvert, University of Iowa and Colin Kenny, University of Iowa

8:30 - 9:00 am **Phylogeny and Historical Biogeography of Crocodyliforms**
Christopher A. Brochu
Professor, Department of Earth & Environmental Sciences, University of Iowa

9:00 - 9:15 am **Deeper look into the submergence reflex of the American Alligator (*Alligator mississippiensis*)**
Bruce Young, Kirksville College of Osteopathic Medicine

9:15 - 9:30 am **Variations of Spinous and Transverse Process Length in the Human Lumbar Spine**
David Fauosne, Oakland University

9:30 - 9:45 am **3D Musculoskeletal Imaging and Biomechanics in Vertebrate Evolution**
Casey Holliday, University of Missouri - Columbia

9:45 - 10:00 am **Sex-based Differences in the Sciatic Nerve and Piriformis Muscle Relationship: A Cadaveric Study**
Charlie Marchese, Kansas City University of Medicine and Biosciences

10:00 - 10:15 am **Break**

10:15 am - 12:30 pm Discussion rooms (concurrent)

10:15 - 11:15 am Session 1
11:15 - 11:30 am Break/room change
11:30 - 12:30 am Session 2

Discussion Room Topics:

1. Teaching Across Academics

Sophie Joly, PharmD, PhD, Kirkwood Community College
Charvann K. Bailey, PhD, Grinnell College
Ray Fagenbaum, PhD, Health and Human Physiology, University of Iowa

2. Scientific Communications

Bahri Karacay, PhD, Integrated DNA Technologies (IDT)

Jason Organ, PhD, Indiana University School of Medicine and Incoming Editor in Chief,
Anatomical Sciences Education

3. Publishing

Heather F. Smith, PhD, Midwestern University and Editor-in-Chief, *The Anatomical Record*

Tina Tootle, PhD, University of Iowa Carver College of Medicine and Associate Editor of
Genetics: Cellular Genetics

4. Non-Academic Careers

Andrea Vyas, PhD, IDT

Christine (Chris) M Blaumueller, PhD, University of Iowa, Carver College of Medicine

12:30 - 1:30 pm **Lunch (EMRB café)**

Session 4 and Award Ceremony – From Molecules to Human Disease

1:30 - 2:00 pm **R-loops Lead to Irreparable Breaks in *C. elegans* meiosis**

Sarit Smolikove, PhD

Associate Professor, University of Iowa

2:00 - 2:30 pm **Wound Repair and Tissue Regeneration**

Rachel Smith-Bolton

Associate Professor, University of Illinois at Urbana-Champaign, Cell &
Developmental Biology

2:30 - 3:00 pm **Huntington's Disease and Human Brain Evolution**

Peggy Nopoulos, MD

Chair of Department of Psychiatry, University of Iowa

3:00 - 3:15 pm

Awards

*Poster and Oral Presentation Awards Sponsored by The Anatomical Record
and Developmental Dynamics*