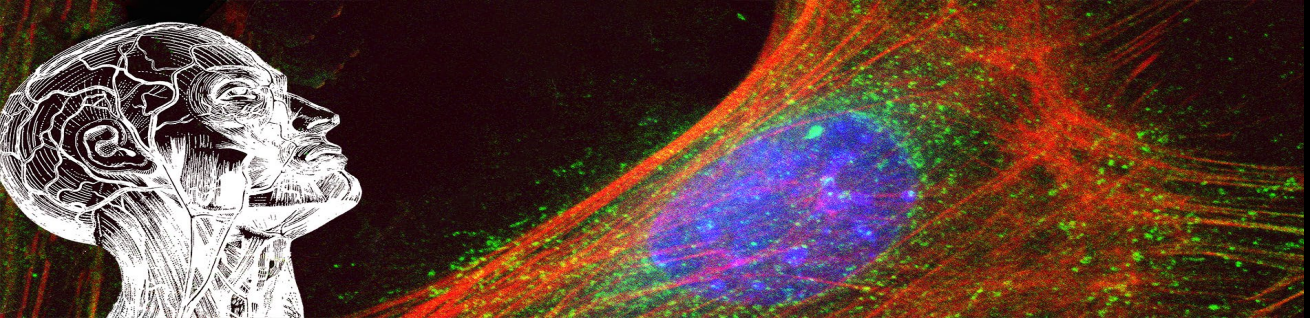


# POINTS OF INTEREST

## January-March 2024

## HONORS AND AWARDS

### Ashley Goll (Tootle Lab)

Ashley was awarded a Summer Fellowship through the University of Iowa Graduate College.

### Jianing Li (Young Lab)

The Journal of Physiology commissioned a perspective of Jianing's work and the importance of the finding's made in her paper "CaV2.1 α1 subunit motifs that control presynaptic CaV2.1 subtype abundance are distinct from CaV2.1 preference." This is a major accomplishment, as only a few papers that have made highly conceptual advances in the Journal have perspectives written on them.

**Read the perspective from Jianing's paper here:**
**https://physoc.onlinelibrary.wiley.com/doi/10.1113/JP286116**

### Timothy Nguyen (Van Otterloo Lab)

Tim was selected to give a poster presentation at the **GRS** 2024 *Craniofacial Morphogenesis and Regeneration* and oral presentation at the **GRC** 2024 *Craniofacial Morphogenesis and Regeneration* in Barcelona, Spain. May 24-31, 2024. "TFAP2 transcription factors reinforce the midfacial neural crest positional program."

Tim received the 2nd place award for the Max Smith Graduate/Postdoctoral Oral Presentation at the 71st Annual Meeting of the Iowa Selection of the AADOCR for his presentation "Tale of Two Faces: TFAP2 min Midface Development and Dysplasia."

**Dr. Erik Quiroz (Ryan Lab)**

Dr. Quiroz successfully defended his thesis "Mechanisms of Airway Multiciliated Cell Differentiation."

**Dr. Justin Sipla**

Dr. Sipla has been selected by the Council on Teaching to receive the 2024 President and Provost Award for Teaching Excellence. This highly competitive award represents the highest level of achievement in teaching given at the University of Iowa. Dr. Sipla will receive a stipend and be recognized at the end of the month for his accomplishment.

**Danielle Talbot (Tootle Lab)**

Dani was awarded the 2023-2024 Outstanding Teaching Award from the Council on Teaching. She will accept her award at the Council on Teaching Awards Reception & Ceremony on May 2, 2024.

Dani received a Ballard & Seashore Fellowship for the Fall 2024 Semester.

**Sam Wuebker (Van Otterloo Lab)**

Sam won the award for "Best Poster" at the Gordon Bones and Teeth Conference in Galveston, TX, January 2024.

**Dr. Ling Yang**

Dr. Yang was recognized for her paper "Defective hepatic autophagy in obesity promotes ER stress and causes insulin resistance" by the UI CCOM's Wall of Scholarship. The wall highlights papers that have been cited over 1,000 times by at least two of three academic citation indices.

**The following were recognized for reaching a milestone in their service to the ACB Department**

**10 Years**

**Dr. Bo Hu**

**20 Years**

**Dr. Botond Banfi**

**Dr. Yoko Nakano**

**25 Years**

**Brian Chapman**

## Other

### CBD Graduate Student Holiday Outing


CBD Graduate Students enjoyed their holiday outing at SpareMe.

## APPOINTMENTS & SPECIAL RECOGNITION

### Dr. Martine Dunnwald

Dr. Dunnwald has been appointed to be a member of the International Advisory Board of the International Federation of Associations of Anatomists.

Dr. Dunnwald completed the Building University of Iowa Leaders for Diversity (BUILD) program, and was awarded the BUILD Certificate and Broze Passport.

**Dr. John Engelhardt**

Dr. Engelhardt was elected to join the University of Iowa's Chapter of the National Academy of Inventors.

**Nicole Recka (Van Otterloo Lab)**

Nikki started an internship with the Scientific Editing and Research Communication Core.

Nikki was awarded to give a presentation at the Society for Investigative Dermatology Conference in Dallas, TX, in May.

**Dr. Alex Ruprecht (Emeritus)**

Dr. Ruprecht was invited to speak at the 2024 annual meeting of the American Academy or Oral and Maxillofacial Radiology in October.

**Dr. Ziying Yan**

Dr. Yan was elected to join the University of Iowa's Chapter of the National Academy of Inventors.

**Dr. Sam Young**

Dr. Young was appointed to serve as the Chair of Preclinical to Clinical Working Groups for the CACNA1A Foundation.

## ACB DEI COMMITTEE

**Friday Coffee and Cake 9:00-10:00 AM**

To continue building a strong ACB Community, Friday morning coffee and treats started in January. This weekly gathering continues to be an opportunity for all of us to know each other better and share life and science experiences.

**Meditation Room**

Daily blocks of time will be dedicated to meditation/prayer/quiet moments in the 1-430 conference room (11:30 AM – 1:00 PM and 2:00 PM - 3:30 PM until daylight saving).

**This is Us**

Interdisciplinary Graduate Student Tim Nguyen, and MCA student Sofia Ramirez shared their stories at another "This is Us" event. Look for an additional event later this spring.

## UPCOMING EVENTS

**April 19th and 20th**

The ACB Spring Retreat will take place on Friday, April 19, and Saturday, April 20 at the Graduate Hotel.

**May 1st**

The ACB Spring Awards Ceremony/reception will occur on Wednesday, May 1, at 3:00 PM in the MacEwen Conference Room (1-561 BSB.)

## SPECIAL PRESENTATIONS

**Dr. Martine Dunnwald**

"Tribes and Tribulations of the President," presented at the Annual meeting of the American Association for Anatomy, Toronto, Canada, March 2024.

**Dr. John Engelhardt**

"Functions of the Pulmonary Ionocyte in the Proximal Ferret Airways," presented at European Cystic Fibrosis Society Basic Science Conference, Valletta, Malta, March 2024.

**Jared Hill (Medical Student)**

"RalGPS2 Activates RalA for Primary Ciliogenesis in Renal Epithelial Cells," presented at the Annual meeting of the American Association for Anatomy, Toronto, Canada, March 2024.

**Dr. Darren Hoffmann**

Hoffmann DS and Diamond K. "Local and Cross-Network Teaching-as-Research Programs." Presented at CIRTL Spring Meeting. Pittsburg, PA, March 2024.

**Alec Marticoff (MCA Student, Mentored by Dr. Pizzimenti**

**Alec P. Marticoff,** Nora N. Bensellam, Thomas J. Lynch, **Kalpaj R. Parekh, John F. Engelhardt, Marc A. Pizzimenti**. "Normalized Ferret Tracheobronchial Branching Model Using µCT." Presented at Anatomy Connected, Toronto, Canada, 2024.

**Dr. Edward Tang (Engelhardt Lab)**

"rAAV2.5T Efficiently Mediated Transgene Delivery to Ferret Lungs with Durability at Least Five Months," presented at the Center for Gene Therapy Retreat, Iowa City, IA, February 2024.

**Dr. Sam Young**

Dr. Young gave a talk at the Herbert Wertheim UF Scripps Institute for Biomedical Innovation and Technology in Jupiter, Florida, in January of 2024.

Dr. Young presented in the Department of Pharmacology at the University of North Carolina-Chapel Hill in Chapel Hill, NC, in January of 2024.

Dr. Young recently presented at the Core2Core Symposium, Max Plank Institute for Natural Sciences, in Goettingen, Germany, in March of 2024.

**Dr. Tina Zhang (Engelhardt Lab)**

"MUC5B and MUC5AC are Both Required for Effective Airway Mucociliary Clearance in Ferret," presented at the Center for Gene Therapy Retreat, Iowa City, IA, February 2024.

## NEW GRANT AWARDS

**Emily Adelizzi (Dunnwald Lab)**

Emily received the T. Anne Cleary international dissertation research fellowship to support her travel and work at the Max Plan Institute(Münster, Germany) in the laboratory of Dr. Sara Wickström for two weeks.

**Dr. Andy Frank**

Title: Synaptic Defects Caused by Mitochondrial Complex 1 Dysfunction
Sponsor: NIH
Role: PI
Total Award: $1,250,000 direct costs, $657,035 indirect costs

**Dr. Ling Yang**

Title: Veterans Affairs
Sponsor: Junctophilin-2 Mediated Ca2+ Signaling in Brown Adipocyte Metabolic Regulation and Obesity
Role: Co-PI
Total Award: (including indirect costs) $1,099,080

Title: Regulation of Hepatic Fuel Fluxes by the Mitochondrial Dicarboxylate Carrier
Sponsor: NIH/NIDDK
Role: Co-PI
Total Award: (including indirect costs) $2,128,763

**Dr. Sam Young**

Title: Development of a Novel Viral Vector Gene Therapy Approach to treat CACNA1A Cerebellar Disorders
Sponsor: The Orphan Disease Center
Role: PI
Total Award: $67,029 direct costs, $6,703 indirect costs

## SUBMITTED GRANTS

**Brad Amendt**

Title: Post-Infarction Myocardial Remodeling by miR-200c Inhibition
Sponsor: NIH
Role: PI
Total Award: $2,172,457 direct costs, $1,156,606 indirect costs

Title: New Mouse Models for Craniosynostosis and Craniofacial Growth
Sponsor: NIH
Role: PI
Total Award: $1,715,019 direct costs, $933,799 indirect costs

**Martine Dunnwald**

Title: Arhgap29 in Orofacial Development
Sponsor: NIH
Role: PI
Total Award: $2,175,441 direct costs, $1,166,760 indirect costs

Title: Formation and Function of the Periderm
Sponsor: LEO Foundation
Role: PI
Total Award: $544,675.62 direct costs, $27,733,78 indirect costs

**Fang Lin**

Title: MCA Title: The Function of Transcription Factor Activator Protein 2 in Endoderm Pouch Formation
Sponsor: NSF
Role: PI
Total Award: $191,618 direct costs, $106,348 indirect costs

**Timothy Nguyen (Van Otterloo Lab)**

Title: “Exploiting frontonasal dysplasia programs to treat midfacial disorders”
Sponsor: University of Iowa Graduate and Professional Student Government
Role: PI
Total Award: $1,000

**Rob Piper**

Title: Does the Interaction of PMP22 with MPZ Play a Role in Peripheral Neuropathy Disease, CMT1A
Sponsor: NIH
Role: PI
Total Award: $275,000 direct costs, $152,625 indirect costs

**Amy Ryan**

Title: Generation of Ferret iPSC – Test Run with Ferret Cell Sample
Sponsor: US Department of the Interior, US Fish & Wildlife Service
Role: PI
Total Award: $26,040.46 direct costs, $2,604.05 indirect costs

Title: Stem Cell Exhaustion and Impaired Airway Regeneration
Sponsor: NIH
Role: PI
Total Award: $1,820,797 direct costs, $997,241 indirect costs

Title: Establishing the Role of Claudin-18 ion Mucociliary Differentiation, Airway Regeneration, and Development of Chronic Respiratory Diseases
Sponsor: University of California, San Diego
Role: PI
Total Award: $156,120.37 direct costs, $86,646.80 indirect costs

Title: Collaborative Research: ENG-BIOTECH: Engineering Biomedical Systems to Investigate Extracellular Matrix Regulation of Airway Basal Cell Stemness and Differentiation
Sponsor: NSF
Role: PI
Total Award: $97,226 direct costs, $46,750 indirect costs

**Thomas Rutkowski**

Title: Physiological ER Stress, the Unfolded Protein Response, and the Competing Needs of the Organelle, Organ, and Organism
Sponsor: NIH
Role: PI
Total Award: $1,800,002 direct costs, $963,642 indirect costs

**Ziying Yan**

Title: Identification of Cell-type Specific CFTR-mediated Ion Transport Function in Distal Airway Epithelia
Sponsor: University of North Carolina
Role: PI
Total Award: $782,919 direct costs, $434,520 indirect costs

Title: Molecular Mechanisms Underlying AAV Vector Transduction in Airway Epithelium
Sponsor: University of Kansas Medical Center Research Institute, Inc. (KUMC)
Role: PI
Total Award: $860,000 direct costs, $477,300 indirect costs

**Ling Yang**

Title: Role of Nitrosative Signaling in Thermogenic Adipose Tissue Aging
Sponsor: NIH
Role: PI
Total Award: $2,388,824 direct costs, $1,325,797 indirect costs

Title: Cellular Homeostasis of the Pituitary Gland in Obesity
Sponsor: NIH
Role: PI
Total Award: $2,169,837 direct costs, $1,169,760 indirect costs

**Feng Yuan**

Title: 1267026 Dissecting Pulmonary Ionocyte Subtypes and Their Functional Roles in Cystic Fibrosis
Sponsor: Cystic Fibrosis Research Institute
Role: PI
Total Award:$140,000 direct costs

# NEW PUBLICATIONS

**Dr. John Engelhardt**

Cutting, G.R., **Engelhardt, J.F.** and Zeitlin, P.L. (2024). Genetics and Pathophysiology of Cystic Fibrosis (Chapter 49) in *Kendig and Wilmott's Disorders of the Respiratory Tract in Children* (10th Edition) (edited by A. Bush, R. Deterding, A. Li, F. Ratjen, P. Sly, H.J. Zar and R.W. Wilmott). Elsevier.

**Dr. Emma Handler**

Moore, J.C., Husain, T.S., Huston, L.A., Steele, A.T., Organ, J.M., Gonzales, L.A., Menegaz, R.A. and **Handler, E.K.** (2024). Dental tissue changes in juvenile and adult mice with osteogenesis imperfecta. *The Anatomical Record*, *307*(3), pp.600-610.

Huston, L. A., Husain, T. S., Moore, J. C., Organ, J. M., Menegaz, R. A., **Handler, E. K.**, & Gonzales, L. A. (2024). Morphological variability in the inner ear of mice with osteogenesis imperfecta. *The Anatomical Record*, *307*(3), pp.592-599.

Husain, T.S., Moore, J.C., Huston, L.A., Miller, C.A., Steele, A.T., Gonzales, L.A., **Handler, E.K.**, Organ, J.M. and Menegaz, R.A. (2024). Neurocranial growth in the OIM mouse model of osteogenesis imperfecta. *The Anatomical Record*, *307*(3), pp.581-591.

**Salma Hassan (Arlene Drack Lab)**

**Hassan, S**., Hsu, Y., Thompson, J. M., Kalmanek, E., VandeLune, J. A., Stanley, S., & Drack, A. V. (2024). The dose-response relationship of subretinal gene therapy with rAAV2tYF-CB-h*RS1* in a mouse model of X-linked retinoschisis. *Frontiers in medicine*, *11*, 1304819. https://doi.org/10.3389/fmed.2024.1304819

**Dr. Darren Hoffmann**

Geyer PK, **Hoffmann DS**, Barr JY, Widmayer HA, **Blaumueller CM**. Granting Access: Development of a formal course to demystify and promote predoctoral fellowship applications for graduate students. PLoS One. (Accepted, in press).

**Dr. Marc Pizzimenti**

Maxwell, L., Nava, T., Norrish, A., Kobezda, T., **Pizzimenti, M**., Brassett, C., & Pasapula, C. (2024). Locking vs. non-locking plate fixation in comminuted talar neck fractures: a biomechanical study using cadaveric specimens. *Foot (Edinburgh, Scotland)*, *59*, 102084. Advance online publication. https://doi.org/10.1016/j.foot.2024.102084

**Dr. Sam Young**

**Li, J**., Veeraraghavan, P., & **Young, S. M., Jr** (2024). $Ca_V$ 2.1 $\alpha_1$ subunit motifs that control presynaptic $Ca_V$ 2.1 subtype abundance are distinct from $Ca_V$ 2.1 preference. *The Journal of physiology*, *602*(3), 485–506. https://doi.org/10.1113/JP284957

Kul, E., Okoroafor, U., Dougherty, A., Palkovic, L., Li, H., Valiño-Ramos, P., Aberman, L., & **Young, S. M., Jr** (2023). Development of Adenoviral vectors that transduce Purkinje cells and other cerebellar cell-types in the cerebellum of a humanized mouse model. *Molecular Therapy: Methods & Clinical Development.* https://doi.org/10.1016/j.omtm.2024.101243

***Please share news of your activities with Madison O'Leary for publication in the quarterly Points of Interest Newsletter. This information is circulated throughout the Department, as well as published on the ACB Department website***