Honors and Awards

Dr. Darren Hoffman
D1 Teacher of the Year Award
Selected by the first year Dental Students.

Dr. Masataka Kawai
Editor’s Choice Award for 2019 Papers
for
“Functional significance of HCM mutants of tropomyosin, V95A and D175N, studied with in vitro motility assays.”
The editor was Yoshie Harada, PhD, and Biophysics and Physicobiology is the official Journal of Japanese Biophysics Society.

Dr. Marc Pizzimenti
John P. Long Teaching Award in the Basic Sciences
(Finalist) Faculty of the Year, College of Medicine, The University of Iowa, Voted by First Year Medical and PA Students.

Dr. Nathan Swailes
M1 Teacher of the Year Award
Selected by College of Medicine Students.

Dr. Sam Young
Distinguished Scholar Award
Distinguished scholars receive an investment of $200,000/year to support their research program and drive innovative research to expand the extramural funding base of the CCOM by increasing extramural grant support to increase the capacity and scope of existing institutes or centers.
Appointments & Special Recognition

**Dr. Xingshen Sun**
- Appointment as Research Assistant Professor, 1 June 2020

**Dr. Ling Yang**
- Promotion to Associate Professor, 1 July 2020

**Dr. Sam Young**
- Invited to be a Reviewing Editor for *Journal of Physiology*

Special Presentations & Seminars

**Dr. Martine Dunnwald**
- Presented in **“Virtual anatomy lounge”**
  [https://amasan.informz.net/informzdataservice/onlineversion/pub/bWFpbGluZ0luc3RhbmNIgWQ9Nzg3ODI2MA==](https://amasan.informz.net/informzdataservice/onlineversion/pub/bWFpbGluZ0luc3RhbmNIgWQ9Nzg3ODI2MA==)  
  Virtual Annual Experimental Biology Meeting week (April 2020)

  - Profiled in **“What do you do to survive during the pandemic”**
    [https://www.anatomy.org/AAA/Membership/Profiles/At-Home-with-Martine-Dunnwald.aspx](https://www.anatomy.org/AAA/Membership/Profiles/At-Home-with-Martine-Dunnwald.aspx)

- Presented virtually at the annual meeting of the society for Investigative Dermatology in May.
  **“ARHGAP29 regulates keratinocyte migration in vitro but not in vivo.”**
  Reeb, T; Stein, A; Rhea, L; Wessels, D; Soll, D; Dunnwald, M.  
  [https://doi.org/10.1016/j.jid.2020.03.846](https://doi.org/10.1016/j.jid.2020.03.846)
Dr. Martine Dunnwald (continued)

- Spencer Halberg (undergraduate in Dr. Sander lab working with Martine Dunnwald) was selected to be finalist in the undergraduate oral presentation competition at the Summer Biomechanics, Bioengineering and Biotransport Conference, held virtually in June.
  
  “Interferon regulatory factor 6 affects keratinocyte mechanobiology.”
  Halberg, SA; Antiguas, A; Preston, AJ; Dunnwald, M; Sander, EA.
  Summer Biomechanics, Bioengineering and Biotransport Conference, Vail, CO (June 2020)

Dr. Marc Pizzimenti

- “Developing Medical Students as Future Educators Through a Teaching Distinction Track”
  Experimental Biology: American Physiological Society
  FASEB 34:1-1, April 2020; doi:10.1096/fasebj.2020.34.s1.05624
  Pizzimenti, MA; Bernat, CK; Ruden, B; and Pettit JE.
  Selected for Webinar Presentation (26 May 2020)

- “Building Relationships: Anatomy for Peripheral Nerve Blocks”
  Regional Anesthesia Study Center of Iowa (RASCI, UIHC, Iowa City
  Pizzimenti, MA
  Zoom Presentation (6 June 2020)

- “Navigating a Transition to Teaching in the Anatomical Sciences”
  AAA Filling the Gap: Teaching Anatomy as a Non-Anatomist
  Pizzimenti, MA
  Webinar (12 August 2020)

Dr. Tom Rutkowski

- “TCA cycle activity links lipid catabolism to ER protein folding: A novel bidirectional pathway of interorganellar communication”
  Dan Diego Scripps/Sanford Burnham ER stress club, 11 August 2020.
Special Presentations & Seminars

Dr. Ziying Yan
- “The Development of Recombinant Adeno-Associated Virus/Human Bocavirus Vector Production System”
  PepTalk 2020’s, Cambridge Healthtech Institute, San Diego, CA, 20 January 2020

New Grant Awards

Dr. John Engelhardt
Title: Center for Gene Therapy of Cystic Fibrosis
Sponsor: NIH/NIDDK
Grant/Contract #: 2 P30 DK054759-21
Total Award All Five Years: $5,793,745

Title: Molecular Therapies for Cystic Fibrosis Lung Disease
Sponsor: NIH/NHLB
Grant/Contract #: 1P01HL152960-01
Project Period: 9/1/2020 – 8/31/2025
PI Animal Models Core – Total Award All Five Years: $1,426,271
PI Project 3 - Total Award All Five Years: $2,432,563

Dr. Tom Rutkowski
Title: Regulation of ER Homeostasis by TCA Cycle Activity: Mechanisms and Consequences
Sponsor: NIGMS
Grant/Contract #: 2R01GM115424 (Competing Renewal)
Project Period: 7/2020 – 6/2024
Total Award All Years: $1,902,500
New Grant Awards

**Dr. Tina Tootle**
- **Title:** Functions and Regulation of Nuclear Actin
- **Sponsor:** NSF-MCB/EPSCoR
- **Grant/Contract #:** 15276801
- **Project Period:** 7/1/2020 – 6/30/2023
- **Total Award All Years:** $900,000

**Dr. Zying Yan**
- **Title:** Viral and Host Determinants of Parvovirus Replication
- **Sponsor:** NIH/Subcontract University of Kansas Medical Center Research Institute, Inc.
- **Grant/Contract #:** ZAQ00030
- **Project Period:** 1/27/2020 – 12/31/2024
- **Total Award All Years:** $193,125

- **Title:** Mechanisms underlying the transduction polarity of AAV in polarized human
- **Sponsor:** NIH/Subcontract University of Kansas Medical Center Research Institute, Inc.
- **Grant/Contract #:** ZAQ00040
- **Project Period:** 2/13/2020 – 1/31/2022
- **Total Award All Years:** $127,463

**Dr. Ling Yang**
- **Title:** Iowa Aging Pilot Grant
- **Sponsor:** UIHC/CCOM
- **Grant/Contract #:** 53380638
- **Project Period:** 7/1/2020 – 6/30/2022
- **Total Award All Years:** $75,000 for year one and $75,000 for year two contingent on progress

**Dr. Sam Young**
- **Title:** Regulation of Synaptic Vesicle Dynamics in the Auditory System
- **Sponsor:** NIH
- **Grant/Contract #:** 11283200 (Renewal)
- **Project Period:** 5/1/2019 – 5/31/2025
- **Total Award All Years:** $1,931,250
**Dr. Rob Cornell**

“Genome-wide Analyses Identify a Novel Risk Locus for Nonsyndromic Cleft Palate.”

“Analysis of zebrafish periderm enhancers facilitates identification of a regulatory variant near human KRT8/18.”

“Functional Characterization of a Novel IRF6 Frameshift Mutation from a Van Der Woude Syndrome Family.”

**Dr. Martine Dunnwald**

“Interferon Regulatory Factor 6 is required for proper wound healing in vivo.”
Rhea, L; Canady, FJ; Li, M; Reeb, T; Canady, JW; Kacmarynski, DSF; Avvari, R; Biggs, LC; Dunnwald, M. *Dev Dyn* Nov 14, 2019 doi: [10.1002/dvdy.134](10.1002/dvdy.134) PMID 31724286

“Non-random distribution of deleterious mutations in the DNA and protein-binding domains of IRF6 are associated with Van der Woude syndrome.”
Alade, AA; Buxo-Martinez, CJ; Mossey, PA; Gowans, LJJ; Eshete, MA; Adeyemo, WL; Naicker, T; Awotoye, WA; Adeleke, C; Bush, T; Torano, AM; Bello, CA; Soto, M; Soto, M; Ledesma, R; Marquez, M; Cordero, JF; Lopez-Del Valle, LM; Salcedo, MI; Debs, N; Li, M; Petrin, A; Olotu, J; Aldous, C; Olutayo, J; Ogunlewe, MO; Abate, F; Hailu, T; Muhammed, I; Gravem, P; Deribew, M; Gesses, M; Hassan, M; Pape, J; Adeniyan, OA; Obiri-Yeboah, S; Arthur, FKN; Oti, AA; Olatosi, O; Miller, SE; Donkor, P; Dunnwald, M; Marazita, ML; Adeyemo, AA; Murray, JC; Butali, A. *Mol Genet Genomic Med*, (8):e1355, 2020 doi: [10.1002/mgg3.1355](10.1002/mgg3.1355) PMCID: PMC7434609
Dr. Adam Dupuy

“A genetic screen to identify gain- and loss-of-function modifications that enhance T-cell infiltration into tumors.”

“Functional Genomic Screening Independently Identifies CUL3 as a Mediator of Vemurafenib Resistance via Src-Rac1 Signaling Axis.”

Dr. John Engelhardt

“Derivation of induced pluripotent stem cells from ferret somatic cells.”

“Regenerative Metaplastic Clones in COPD Lung Drive Inflammation and Fibrosis.”

“A Tribute to Barrie J. Carter.”

“Viral Vectors, Animal Models, and Cellular Targets for Gene Therapy of Cystic Fibrosis Lung Disease.”

“Cellular Cleavage and Polyadenylation Specificity Factor 6 (CPSF6) Mediates Nuclear Import of Human Bocavirus 1 NP1 Protein and Modulates Viral Capsid Protein Expression.”
Dr. John Engelhardt (continued)
“In Situ Analysis Reveals That CFTR Is Expressed in Only a Small Minority of beta-Cells in Normal Adult Human Pancreas.”

Dr. C. Andrew Frank
“Homeostatic control of Drosophila neuromuscular junction function.”

Dr. Darren Hoffmann
“Benefits of a multi-institutional, hybrid approach to teaching course design for graduate students, post-doctoral scholars, and leaders.”

“Gross Anatomy During the Pandemic: Cadaver dissection is essential as a learning tool (white paper).”

Dr. Xiaoming Liu
“Modulation of Wnt/beta-catenin signaling in IL-17A-mediated macrophage polarization of RAW264.7 cells.”

Dr. Marc Pizzimenti
“Changes in ipsilesional hand motor function differ after unilateral injury to frontal versus frontoparietal cortices in Macaca mulatta.”
**Dr. Tom Rutkowski**

“NAPDH and Glutathione Redox Link TCA Cycle Activity to Endoplasmic Reticulum Homeostasis.”

**Dr. Tina Tootle**

“Nuclear architecture as an intrinsic regulator of Drosophila female germline stem cell maintenance.”

“Cardiac injury modulates critical components of prostaglandin E2 signaling during zebrafish heart regeneration.”

“Prostaglandins regulate invasive, collective border cell migration.”

“Fascin regulates protrusions and delamination to mediate invasive, collective cell migration in vivo.”

**Dr. Ziying Yan**

“Cellular Cleavage and Polyadenylation Specificity Factor 6 (CPSF6) Mediates Nuclear Import of Human Bocavirus 1 NP1 Protein and Modulates Viral Capsid Protein Expression.”

“Viral Vectors, Animal Models, and Cellular Targets for Gene Therapy of Cystic Fibrosis Lung Disease.”
Dr. Ziying Yan (continued)

“Establishment of a Recombinant AAV2/HBoV1 Vector Production System in Insect Cells.”

“Human Bocavirus 1 Infection of Well-Differentiated Human Airway Epithelium.”

Dr. Ling Yang

“The unfolded protein response regulates hepatic autophagy by sXBP1-mediated activation of TFEB.”

“A putative long noncoding RNA-encoded micropeptide maintains cellular homeostasis in pancreatic beta cells.”

Dr. Samuel Young

“Using Sox2 to alleviate the hallmarks of age-related hearing loss.”

“Presynaptic development is controlled by the core active zone proteins CAST/ELKS.”
Additional Announcements

- The first cohort of MCA students graduated (virtually) on 16 May 2020.
- The new cohort of 5 MCA students began their course of study in August 2020. See all of the current MCA students on the ACB website.

Please share news of your activities with Stephanie Johnson 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 and social media.