



DEPARTMENT OF
ANATOMY & CELL BIOLOGY
Points of Interest

January 2019

Honors and Awards

Ms. Nicole Green

Nicole Green, postdoctoral fellow in the Tootle Lab, received a 2nd Place Talk Award at the Midwest Drosophila Research Conference in November, 2018.

Ms. Emily Fox

Emily Fox, Genetic Graduate Student in the Tootle Lab, received the Best Poster Award at the Midwest Drosophila Research Conference in November, 2018.

Special Presentations/Seminars

Dr. John Engelhardt

“Insights from Modeling Cystic Fibrosis Related Diabetes in the Ferret,” presented at the annual Cystic Fibrosis/ Diabetes Workshop in Seattle, WA, in January 2019.

Dr. Masataka Kawai

Seminar: December 24, 2018. “Structure and function of muscle cells 肌细胞的结构和功能” at Soochow University, Suzhou, China. Seminar was given in English with simultaneous Chinese translation.

Recognition

Mr. Daniel Kelsch

Successfully defended his PhD on Oct. 22 entitled: "Defining the nuclear localization and functions of actin in *Drosophila* oogenesis." He will be starting a postdoctoral fellowship in the laboratory of Dr. Steve Farber, Dept. of Embryology, Carnegie Institution for Science in March.

Dr. Masataka Kawai

Paper on Nebulin (*J Gen Physiol* 150:1510-1522, 2018) has been on JGP Science News: <http://jgp.rupress.org/content/150/11/1463>

"A molecular model on actin-myosin interaction," has been printed on the front cover of *J Muscle Res Cell Motil* 38:421-435, 2017 (e-publication in 2018, but paper publication dated in 2017, because of back issues).

New Grant Awards

Mr. Zeyuan Zhang

Title: "Establish the role of impairment of the adaptive unfolded protein response in defective hepatic autophagy in obesity

Sponsor: AHA

Grant/Contract #: 19PRE34380258

Project Period: 01/01/19 – 12/31/20

Total Award All Years: \$53,688.00

News Relating to Projects

The following papers were published by faculty in our department from October until present. If you have an article that has been published, but it is not listed here, please submit it to Cindy Cobb in the main office for inclusion in the next newsletter.

New Publications

Dr. Botond Banfi

Tona R, Chen W, Nakano Y, Reyes LD, Petralia RS, Wang YX, Starost MF, Wafa TT, Morell RJ, Cravedi KD, Hoffmann J, Miyoshi T, Munasinghe JP, Fitzgerald TS, Chudasama Y, Omori K, Pierpaoli C, Banfi B, Dong L, Belyantseva IA, Friedman TB. 2019. "The phenotypic landscape of a Tbc1d24 mutant mouse includes convulsive seizures resembling human early infantile epileptic encephalopathy." *Hum Mol Genet*,

Epub date: 2019/01/03, PMID: 30602030

Website: <https://www.ncbi.nlm.nih.gov/pubmed/30602030>

DOI: <http://dx.doi.org/10.1093/hmg/ddy445>

Dr. Darren Hoffmann

Hoffmann DS, Dancing D, Rosenbaum M. "Massage and Medicine: An interprofessional approach to learning musculoskeletal anatomy and enhancing personal wellness." 2019. *Academic Medicine*. Will be published online in February, 2019.

Tootle TL, Hoffmann DS, Allen A, Spracklen A, Groen C, Kelpsch D. (Accepted) "Mini-course based undergraduate research experience: Impact on student understanding of STEM research and interest in STEM programs." *Journal of College Science Teaching*.

Dr. Sam Young

Lubbert M, Goral RO, Keine C, Thomas C, Guerrero-Given D, Putzke T, Satterfield R, Kamasawa N, Young SM, Jr. 2018. "CaV2.1 alpha1 Subunit Expression Regulates Presynaptic CaV2.1 Abundance and Synaptic Strength at a Central Synapse."

Epub Date: 2018/12/14

DOI: <http://dx.doi.org/10.1016/j.neuron.2018.11.028>

Website: <https://www.ncbi.nlm.nih.gov/pubmed/30545599>

Ostrovskaya OI, Orlandi C., Fajardo-Serrano A, Young SM., Jr, Lujan R, Martemyanov, KA. 2018. "Inhibitory Signaling to Ion Channels in Hippocampal Neurons Is Differentially Regulated by Alternative Macromolecular Complexes of RGS7."

J Neurosci, 38(46):10002-10015

DOI: <http://dx.doi.org/10.1523/JNEUROSCI.1378-18.2018>

PMID: PMC6234300

Website: <https://www.ncbi.nlm.nih.gov/pubmed/30315127>

Dr. Tina Tootle

Tootle TL, Hoffmann D, Allen A, Spracklen A, Groen C, Kelpsch D. (Accepted) "Mini-course based undergraduate research experience: Impact on student understanding of STEM research and interest in STEM programs." *Journal of College Science Teaching*.

New Publications

Dr. Ziyang Yan

Zou W, Xiong M, Deng X, Engelhardt JF, Yan Z, Qiu J. 2019. "A Comprehensive RNA-seq Analysis of Human Bocavirus 1 Transcripts in Infected Human Airway Epithelium." *Viruses*, 11(1):pii: E33.

DOI: <http://dx.doi.org/10.3390/v11010033> PMID: 30621044

Website: <https://www.ncbi.nlm.nih.gov/pubmed/30621044>

Yan Z, Zou W, Feng Z, Shen W, Park SY, Deng X, Qiu J, Engelhardt JF. 2018. "Establishment of a High Yield rAAV/HBoV Vector Production System Independent of Bocavirus Non-structural Proteins." *Hum Gene Ther*, [Epub ahead of print]

DOI: <http://dx.doi.org/10.1089/hum.2018.173> PMID: 30398383

Website: <https://www.ncbi.nlm.nih.gov/pubmed/30398383>

Wang Z, Cheng F, Engelhardt JF, Yan Z, Qiu J. 2018. "Development of a Novel Recombinant Adeno-Associated Virus Production System Using Human Bocavirus 1 Helper Genes." *Mol Ther Methods Clin Dev*, 11:40-51

DOI: <http://dx.doi.org/10.1016/j.omtm.2018.09.005>

PMCID: PMC6205362

Website: <https://www.ncbi.nlm.nih.gov/pubmed/30397626>

Dr. Xiaoming Liu

Nair AR, Agbor LN, Mukohda M, Liu X, Hu C, Wu J, Sigmund CD. 2018. "Interference With Endothelial PPAR (Peroxisome Proliferator-Activated Receptor)-gamma Causes Accelerated Cerebral Vascular Dysfunction in Response to Endogenous Renin-Angiotensin System Activation." *Hypertension*, 72(5):1227-1235.

PMCID: PMC6209120

DOI: <http://dx.doi.org/10.1161/HYPERTENSIONAHA.118.11857>

Website: <https://www.ncbi.nlm.nih.gov/pubmed/30354810>

Dr. John Engelhardt

Zou W, Xiong M, Deng X, Engelhardt JF, Yan Z, Qiu J. 2019. "A Comprehensive RNA-seq Analysis of Human Bocavirus 1 Transcripts in Infected Human Airway Epithelium." *Viruses*, 11(1):pii: E33.

DOI: <http://dx.doi.org/10.3390/v11010033> PMID: 30621044

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PMCID: PMC6205362

Website: <https://www.ncbi.nlm.nih.gov/pubmed/30397626>

New Publications

Dr. Rob Cornell

Butali A, Mossey, PA, Adeyemo WL, Eshete MA, Gowans LJJ, Busch TD, Jain D, Yu W, Huan L, Laurie CA, Laurie CC, Nelson S, Li M, Sanchez-Lara PA, Magee WP 3rd, Magee KS, Auslander A, Brindopke F, Kay DM, Caggana M, Romitti PA, Mills JL, Audu R, Onwuamah C, Oseni GO, Owais A, James O, Olaitan PB, Aregbesola BS, Braimah RO, Oginni FO, Oladele AO, Bello SA, Rhodes J, Shiang R, Donkor P, Obiri-Yeboah S, Arthur FKN, Twumasi P, Agbenorku P, Plange-Rhule G, Oti AA, Ogunlewe OM, Oladega AA, Adekunle AA, Erinoso AO, Adamson OO, Elufowoju AA, Ayelomi OI, Hailu T, Hailu A, Demissie Y, Derebew M, Eliason S, Romero-Bustillous M, Lo C, Park J, Desai S, Mohammed M, Abate F, Abdur-Rahman LO, Anand D, Saadi I, Oladugba AV, Lachke SA, Amendt BA, Rotimi CN, Marazita ML, Cornell RA, Murray JC, Adeyemo AA. 2018. "Genomic analyses in African populations identify novel risk loci for cleft palate." Hum Mol Genet,

DOI: <http://dx.doi.org/10.1093/hmg/ddy402>

PMID: 30452639

Website: <https://www.ncbi.nlm.nih.gov/pubmed/30452639>

Dr. Brad Amendt

Butali A, Mossey, PA, Adeyemo WL, Eshete MA, Gowans LJJ, Busch TD, Jain D, Yu W, Huan L, Laurie CA, Laurie CC, Nelson S, Li M, Sanchez-Lara PA, Magee WP 3rd, Magee KS, Auslander A, Brindopke F, Kay DM, Caggana M, Romitti PA, Mills JL, Audu R, Onwuamah C, Oseni GO, Owais A, James O, Olaitan PB, Aregbesola BS, Braimah RO, Oginni FO, Oladele AO, Bello SA, Rhodes J, Shiang R, Donkor P, Obiri-Yeboah S, Arthur FKN, Twumasi P, Agbenorku P, Plange-Rhule G, Oti AA, Ogunlewe OM, Oladega AA, Adekunle AA, Erinoso AO, Adamson OO, Elufowoju AA, Ayelomi OI, Hailu T, Hailu A, Demissie Y, Derebew M, Eliason S, Romero-Bustillous M, Lo C, Park J, Desai S, Mohammed M, Abate F, Abdur-Rahman LO, Anand D, Saadi I, Oladugba AV, Lachke SA, Amendt BA, Rotimi CN, Marazita ML, Cornell RA, Murray JC, Adeyemo AA. 2018. "Genomic analyses in African populations identify novel risk loci for cleft palate." Hum Mol Genet,

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