

VOL. 1 | FALL 2018

CBP IN THE LOOP



Message from the Chair



Welcome to the first issue of our bi-annual UNC Cell Biology and Physiology *"In The Loop"* newsletter! Our goal is to keep you updated with noteworthy accomplishments from our faculty, students, postdocs, alumni, and staff. In this inaugural issue, we will reach back over the past year and share exciting plans for the future. It is our hope that you will find the content engaging, resourceful and inspiring. Collectively, we have a lot to be proud of, and much more to look forward to, as we strive to keep our CBP Department one of the top basic science research departments in the nation!

The UNC Department of Cell Biology and Physiology is nationally-recognized and ranked #2 in the country by the Blue Ridge Institute for Medical Research for our level of NIH funding in 2017! The Department comprises over 35 basic science laboratories dedicated to integrative research in areas related to cellular cytoskeleton, neuroscience, cardiovascular development and disease, cellular mechanisms of aging, and integrated cellular circuits and systems. Our flagship Curriculum in Cell Biology and Physiology Program offers an integrated training program for a diverse population of Ph.D. students and our department is home to a multitude of undergraduate, medical and clinical fellow trainees who are seeking avenues for intellectually-engaging research experiences. The Department of Cell Biology and Physiology has a strong commitment to fostering an environment of inclusion, diversity and wellness within the workplace, which lays the foundation for collaborative partnerships and creative exploration.

To our alumni, former colleagues and co-workers, I invite you to stay *"In The Loop"* by sharing with us your recent accomplishments, visiting our website www.med.unc.edu/cellbiophysio and following us on Twitter www.twitter.com/UNC_CBP! Your input, feedback and participation is welcome and appreciated!

A newsletter for the faculty, staff, alumni and friends of UNC Cell Biology and Physiology



UNC

SCHOOL OF MEDICINE

Department of Cell Biology and Physiology

DEPARTMENT MISSION

The Department of Cell Biology and Physiology follows the guiding principles of our School of Medicine: to be nationally recognized for excellence in our discipline by leading, teaching, and caring.

- **Leading:** to conduct cutting-edge, innovative research that advances the discipline of cell biology and physiology, with an emphasis on topics that contribute to the improvement of human health
- **Teaching:** to provide a rigorous and competitive educational experience for a diverse population of graduate and professional trainees which enables them to succeed in their future careers
- **Caring:** to serve the people of North Carolina, the United States, and the international community, by excelling in our research and education missions which advance the discipline of cell biology and physiology

Please visit our Make A Gift website to give:

<https://www.med.unc.edu/cellbiophysio/make-a-gift/funding-opportunities>

Current opportunities to support the Department of Cell Biology and Physiology:

CELL BIOLOGY AND PHYSIOLOGY GIFT TRUST

This fund is a general fund to help support invited experts, informative speakers, and events that foster collaboration, professional development, and scientific growth.

MAREN TRUST FOR GRADUATE STUDENTS

The Thomas P. Maren Graduate Student Fund is intended to provide CBP Curriculum graduate students with opportunities to learn new skills and gain experience with emerging technologies.

CELL BIOLOGY AND PHYSIOLOGY POST-DOC FUND

This fund is intended to provide CBP postdoctoral trainees with funds to support travel expenses and registration fees for scientific conferences and specialized training opportunities or workshops.

Noteworthy Accomplishments



Dr. Ed Kernick received the highly-distinguished “Professor Award” at graduation May 2018. This award, selected by the senior class, is given in recognition of a faculty member who by his or her willingness, understanding and ability, has contributed the most to our student’s medical education.



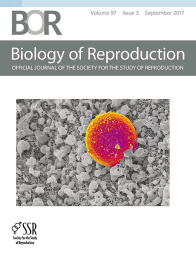
UNC SOM lands 16 departments in the top 25 for NIH Funding! The Department of Cell Biology and Physiology is the highest ranked at 2nd overall and holds the highest ranking amongst all departments in the SOM!



Graham Diering named 2017 Finalist for The Eppendorf and Science Prize for Neurobiology.



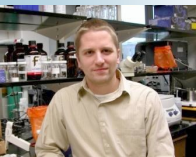
Mark Zylka elected as AAAS Fellow. Dr. Zylka has been recognized by the world’s largest general scientific society for his contributions to biological and medical sciences. Election as an AAAS Fellow is an honor bestowed upon AAAS members by their peers.



An article from the lab of Dr. Kathleen Caron titled “Adrenomedullin improves fertility and promotes pinopodes and cell junctions in the peri-implantation endometrium” is featured on the cover of the September 2017 issue of Biology of Reproduction. The cover image “Pinopode Eclipse”, depicts pinopodes, or uterodomes, which are plasma membrane extravasations of uterine luminal epithelial cells present during the window of implantation in rodents and humans and are thought to enable blastocyst attachment and invasion. Image courtesy of Brooke Matson and Kelsey Quinn.



Keith Burridge selected as a 2017 American Society for Cell Biology Fellow. The ASCB Fellows award recognizes ASCB members who have made outstanding contributions to the field of cell biology and to the community of cell biologists through their service to ASCB.



Ben Major received the 2017 ACCLAIM Leadership Program Award. The Academic Career Leadership Academy in Medicine (ACCLAIM) is a UNC School of Medicine one-year program, started in 2012, that provides leadership and career development opportunities to faculty members with an emphasis on those underrepresented in medicine.



Stephanie Gupton lab’s paper featured as a cover article for Molecular Biology of the Cell (September, 2017). The axon guidance cue netrin-1 and its receptor DCC promote axon branching in developing cortical neurons. In the study, they detail a novel molecular mechanism by which the brain-enriched E3 ubiquitin ligase TRIM9 orchestrates multimerization of DCC, requisite activation of FAK and Src family kinases, and increases in exocytic vesicle fusion, all during netrin-dependent neuronal morphogenesis.

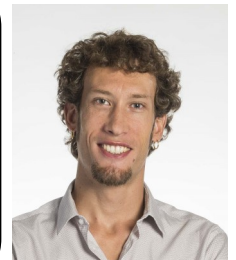
New Faculty



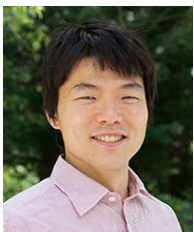
Sarah Cohen has developed state-of-the-art, super-resolution spectral imaging technologies to simultaneously label and track the position of 6 different cellular organelles in real time. In doing so, she has characterized a new cell organelle called a lipid droplet. In her future work, she hopes to use these techniques to address how lipid droplets from glia and astrocytes can be used to transfer lipids to neurons. This is an important question because neurons cannot synthesize their own lipids, but yet are dependent on huge amounts of lipids to extend lengthy neuronal processes and regulate membrane turnover at synaptic terminals.

“The Department of Cell Biology and Physiology at UNC has been extremely welcoming. I am consistently overwhelmed by the support and generosity of my colleagues” -Sarah Cohen, PhD

Graham Diering is a neurobiologist and biochemist focused on understanding the different mechanisms that neurons use to sleep. In one process, neurons change their synapses to accommodate the formation of memories. In another simultaneous process, synaptic plasticity supports the conservation of neuronal metabolism and “recharging” — which is critically important for cognition and behavior. Graham uses sophisticated biochemistry and genetic animal model behavior studies to map the neuronal circuits and molecular pathways that underlie these different types of sleep. His work has very important implications for sleep disorders, particularly those related to neurodevelopmental disorders with aberrant sleep, such as Reth syndrome and Autism spectrum disorders.



“Joining the Department of Cell Biology and Physiology and the research community at UNC, has been a dream come true” - Graham Diering, PhD



Toshihide Hige is focused on understanding the mechanisms of how animals show different behavioral responses to the same sensory input depending on their past experience or current context at the levels of synaptic, neural circuit and behavior. His lab uses fruit fly, *Drosophila melanogaster*, as a model organism. They employ multiple physiological techniques including in vivo whole-cell patch-clamp recording, two-photon calcium imaging, and behavior assays. Previously, they demonstrated the long-term synaptic plasticity that underlies associative olfactory learning in this system. They ask how these synaptic changes are integrated and ultimately alter the animal’s action selection as well as address the molecular basis of synaptic plasticity by using genetic tools.

“I am thrilled to be a member of CBP. My office and lab are located in the Genome Sciences Building, but I am looking forward to a lot of scientific interactions with both Biology and CBP” - Toshihide Hige, PhD

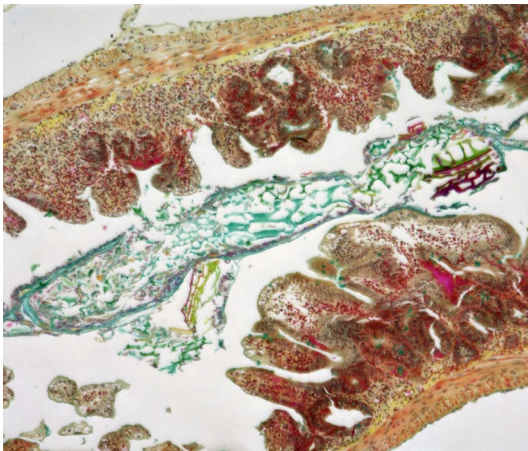
Michelle Itano is a PhD graduate of our Department and has served as Director of the Neuroscience Center Microscopy Core for much of the past year. Her exceptional talents and service-minded attitude have brought about remarkable growth and success to the Core. In her new position, she will continue to serve as the Neuroscience Microscopy Core Director, while also providing valuable advising to our HIC Steering Committee and participating in the teaching and education of our trainees in microscopy techniques.



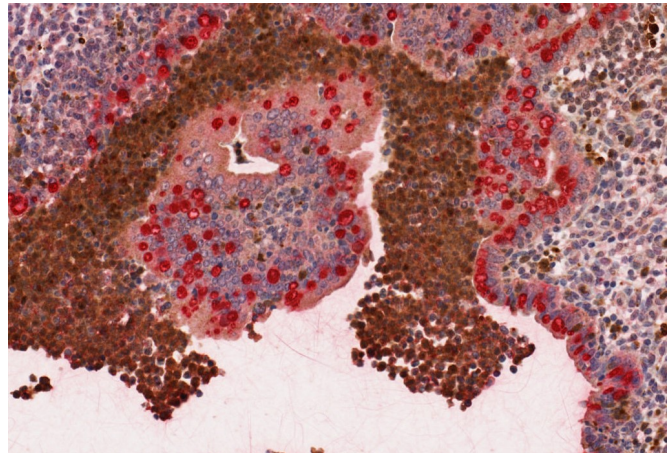
“I’m very excited for the opportunity for further engagement with the CBP community and for setting up new collaborations with colleagues to help advance their research through imaging” - Michelle Itano, PhD

UNC Histology Research Core

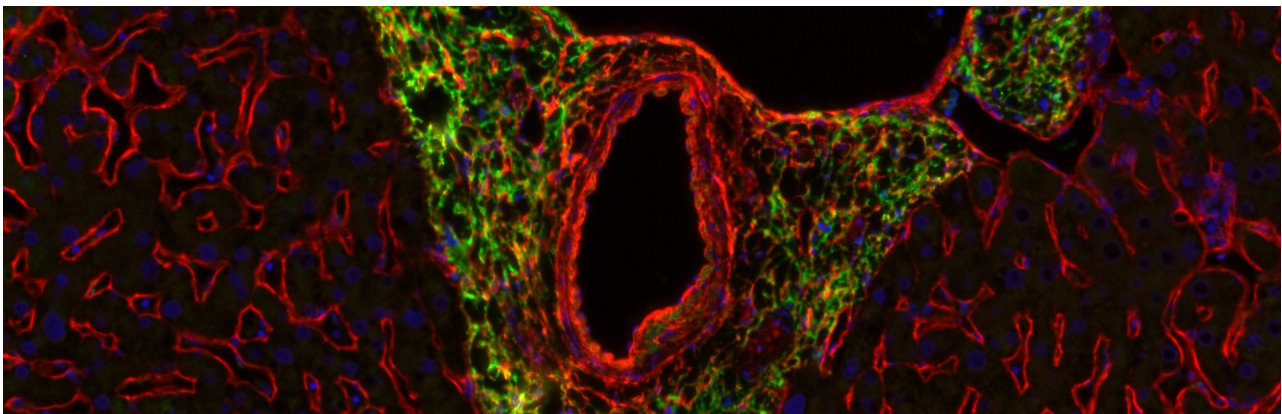
The **Histology Research Core**, housed in the Glaxo Research Building, continues to serve the histology needs of the CBP community and beyond. We take pride in providing top quality paraffin and frozen sectioning and staining, and both fluorescent and chromogenic single- and multi-label immunohistochemistry. Furthermore, we are excited to announce we are acquiring the tools and training to perform in situ hybridization using RNAscope and BaseScope technology, a feature which will be offered to our customers this summer! Our lab also houses an extensive slide catalogue for our customer's use as positive and negative controls, provides access to HIER for antigen retrieval in conjunction with our IHC/IF services, and offers the CryoJane Tape Transfer system to improve morphology in frozen sectioning. We offer all our services at competitive rates and a quick turn-around time — typically within 2 weeks of sample submission — and are here to talk with you at any stage in the research process about your specific research aims and the best way to achieve the results you need. Contact us anytime at (919) 966-1202 or email Ashley Ezzell at jezzell@email.unc.edu



Phloxine-Tartrazine Alcian Blue stain for Paneth cell expression in the intestine



Double-labeling of chlamydia and PMN cells in the genital tract using chromogenic IHC



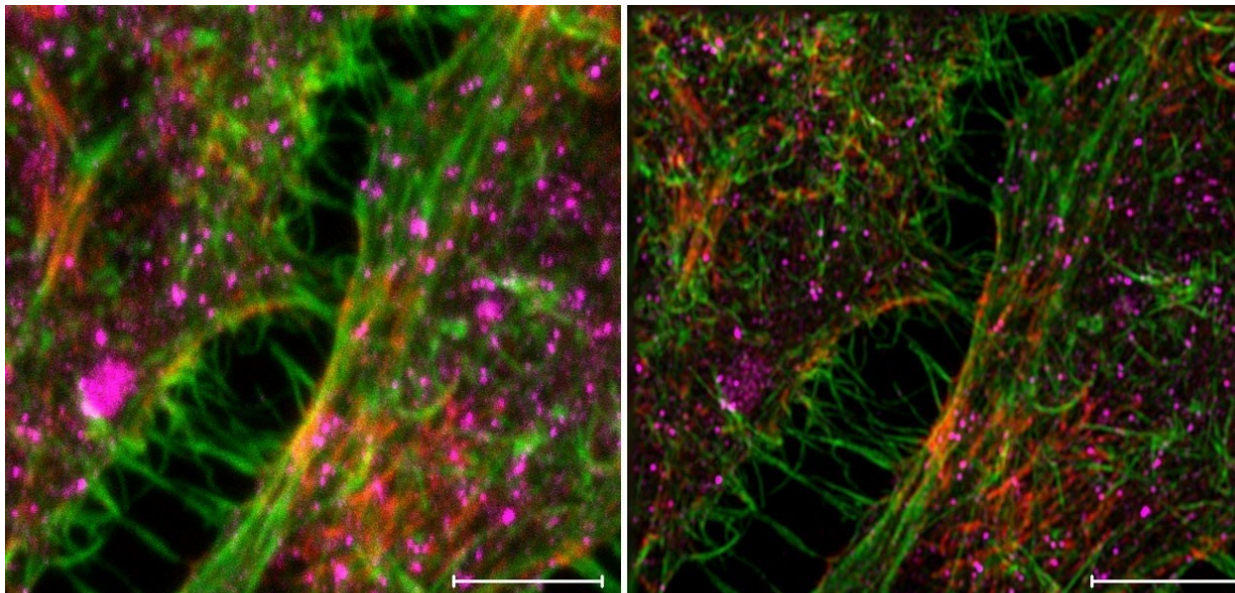
Double-labeling of Collagen IV and Factor IX expression in the liver using fluorescent IHC

UNC Hooker Imaging Core

The Hooker Imaging Core (HIC) is an open core providing a broad range of light microscopy techniques, analyses and consultation for UNC researchers. The core is located in Taylor Hall near Lineberger and the MBRB and includes several confocal and widefield microscopes in addition to systems for high content screening and long-term live cell imaging. The core also provides users a full tissue culture suite including incubators, hood and refrigerator. Training and other assistance is provided by the core managers. After training, users will independently perform their experimental research with consultation available from the director as needed.

Available Instruments

Leading the instrument lineup are four confocal microscopes including the flagship confocal, a **Zeiss 880**, the latest model with superb image quality coupled with extraordinary sensitivity and a user-friendly interface. This inverted microscope is also equipped with the Airy scan and fast Airy scan options giving super resolution performance when required. The figure below compares a conventional confocal image (left panel) with an Airy scan image showing improved resolution (right panel). The instrument has an on-stage environmental chamber to support live-cell imaging. Confocal imaging is available at a large number of excitation wavelengths ranging from violet (405 nm) to far red (633 nm). This instrument is available at a rate of \$31.36/h.



Confocal image (left) compared to Airyscan (right). HeLa cells. Sample: Courtesy of S. Traikov, BIOTEC, TU Dresden, Germany. <https://www.zeiss.com>

A Zeiss 800 upright confocal microscope is available for fixed samples and wet specimens such as whole Zebrafish at a rate of \$31.36/hr. An **Olympus FV1000** confocal microscope, completely suitable for fixed and live cell specimens, is now available *at a reduced rate of \$16.80/hr.*

Four widefield microscopes are equipped to provide color and low light level imaging with acquisition speeds of up to 30 frames per second. Applications include ratio imaging for calcium concentration and automated multi-time, multi-position, multi-wavelength, z-stack acquisition of fluorescence images, and tiling of multiple images to create a large field of view. One of the widefield microscopes is the fluorescence-equipped Leica dissecting scope for macroscopic specimens. These instruments are available at a rate of \$14.52/hr.

The HIC now has instruments to monitor the behavior of large numbers of cells over time. An **Olympus VivaView** microscope is capable of multi-dish monitoring of cell behavior over extended periods in response to environmental influences such as drugs or other stimuli and is available at \$10.00/hr.

In addition, the HIC now features high content screening with the **GE IN Cell 2200**. The IN Cell is a fast and sensitive wide field imaging system that can be fine-tuned to meet the needs of specific high content imaging workflows. The system is equipped with filters to produce fluorescence images using fluorophores emitting from the blue to far red along with companion transmitted light images. In addition, there is environmental control for time lapse imaging. The IN Cell can accommodate slides or multiwell plates with up to 1536 wells and is available at \$14.52/hr.

Other Services

The HIC provides computer workstations equipped with software for off-line processing of acquired images including both commercial (Nikon Elements, Volocity, Imaris and Matlab) and open source (ImageJ, CellProfiler, etc.) analysis software. *Image recording, processing and analysis support* is available.

The HIC now has the capability to assist users in the development of computational models on the Virtual Cell platform which is a unique software platform designed to model cell biological processes. The Virtual Cell is open-source software which was created and is now developed and maintained in the Center for Cell Analysis and Modeling at the University of Connecticut Health Center. The computational model can integrate a variety of molecular mechanisms including reaction kinetics, diffusion, flow, membrane transport, lateral membrane diffusion and electrophysiology, and can associate these mechanisms with geometries derived from experimental microscope images. The computational model also can be based on purely theoretical assumptions and help to evaluate hypotheses and to predict behavior of complex, highly non-linear systems. The figure below schematically describes the types of computational models the Virtual Cell can support. *Consultation on employing these models is now available in the HIC.* The figure shows the types of models that the Virtual Cell can accommodate.

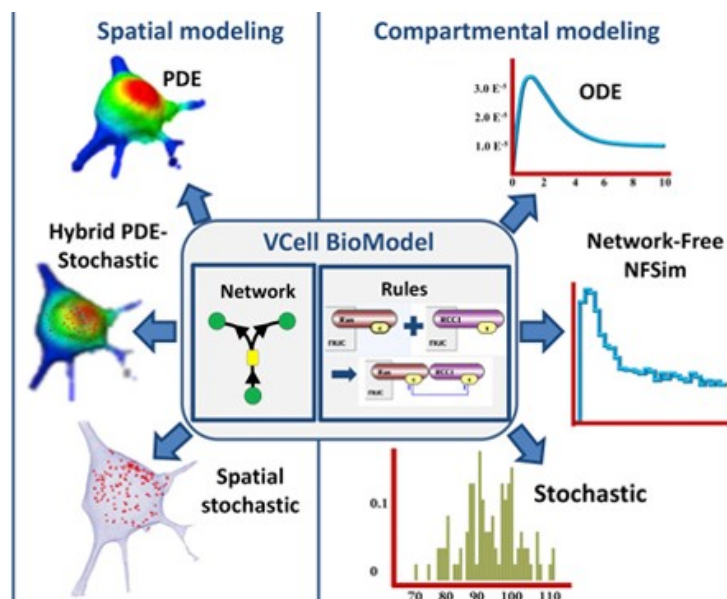


Image credit: Blinov, M.L., et al. (2017). Doi:<http://dx.doi.org/10.1016/j.bpj.2017.08.022>

HIC Staff

The Core Operations Director is **Robert Currin**.

The Electron Microscopy Core Faculty Advisor and Director is **Dr. Joe Costello**, Professor of Cell Biology and Physiology.

The Core Faculty Advisor is **Dr. Ken Jacobson**, Kenan Professor of Cell Biology and Physiology.



GRADUATE STUDENT CORNER



The CBP Curriculum is so excited to WELCOME 9 new graduate students!!

From left to right (front row): Ian Windham, Karina Kinghorn, Natalie Harris, Natalie Tanke, Molly Plehaty, Abby Cleveland, Laura McCormick. (Back row) Stephen Serafin and Sam Honeycutt

“I am very excited to have found my home in the CBP department. The faculty and students are so welcoming and collaborative, and there are so many unique and exciting research projects to learn from. The flexible curriculum and respect for student opinion allow me to thrive as a scientist, and I look forward to sharing my scientific journey with everyone in CBP”

-Karina Kinghorn (Vicki Bautch Lab)

The Cell Biology & Physiology (CBP) Ph.D. Curriculum finished its 3rd year as a completely consolidated Ph.D. program. Most of the kinks have been worked out and the Curriculum is running smoothly (knock on wood!). Our new entering class this year is 9 students, to bring the total number of graduate students to 28. There are currently 72 faculty members representing 15 campus departments in the CBP Curriculum, containing 30 members with primary appointments in the Department of Cell Biology & Physiology. This balance of faculty both within and outside the Department reflects solid growth of the program into a true campus-wide Curriculum. Four of the nine new students joining the Curriculum this year are joining labs with primary appointments outside the CBP Department. We thank faculty for their support of the Curriculum and hope you will continue recommending incoming students to take our fall classes CBPH850 (Advanced Cell Biology) and/or CBPH852 (Experimental Physiology). These are excellent classes with high marks from the students.

Our students continue to do well with recognition and awards. At the 20th Annual Graduate Student Recognition Celebration in April, our students were represented as awardees in almost

every category. Fabio Urbina (Gupton lab) was inducted into Sigma Xi, the scientific research honor society. Carlos Patiño Descovich (Williams lab) was inducted into the Frank Porter Graham honor society. Brooke Matson (Caron lab) won a highly competitive Impact Award. Yitong Li’s (Burrige lab) poster was recognized as a Research and Policy Expo honoree. Victoria Bartsch (Zylka lab), Marquet Minor (Snider lab), Rachel Battaglia (Snider lab), and Brooke Matson (Caron lab) were recognized for external funding awards (NIH, NSF and private foundation). In addition, Temperance Rowell and Fabio Urbina served on the Student Federation Cabinet and were featured throughout the formal program.

Several students have been selected for various training grant positions including Danielle Berlin (Bautch lab), Zayna King (Bear lab), John Pawlak (Caron lab), and Melissa Plooster (Brennwald/Gupton labs). For the upcoming year John Pawlak was awarded a dissertation completion fellowship and Amanda Smith (Ostrowski lab) and Natalie Nielsen (Caron lab) have been awarded external NIH funding.

CBP Curriculum Executive Student Committee

In response to the high demand for department social events, Karel Alcedo, Rachel Battaglia, Yitong Li, Kshitij Sharma, and Vicki Bartsch came together and formed the Cell Biology and Physiology Executive Student Committee in August 2017. Since its establishment, the five of us have been actively putting out programs to increase departmental bonding. We organized several off-campus social nights to encourage casual mingling among current students as well as potential future students. As a team, we often brainstorm ideas that will make the CBP community a more mutually supportive and intimately connected family. We noticed that senior graduate students almost rarely got any formal celebration from the department after they successfully defended their thesis. Being in the PhD program ourselves, we understand how much it takes to thrive in graduate school and we believe that an achievement as big as a successful PhD thesis defense deserves recognition. Hence, we proposed to allocate part of our current funds for purchasing graduation gifts for our newly minted Doctors, an idea well-received from the department. The gifts are hopefully very useful for the next

chapter of our graduates' professional pursuit and will remind them of the good time they spent at UNC with the CBP family. For all the incoming students, we are currently working on a new Big-Little mentoring buddy program. Each new student will be paired with an experienced current student who is willing to guide and mentor the junior student. Another major achievement of the CBP Executive Student Committee this year is the monthly Happy Hour tradition we started. Held in MBRB on the third Friday of each month, Happy Hour is an on-campus social event where scientists mingle over snacks and beers. The success of Happy Hour is the results of joint efforts between the CBP Executive Student Committee and the department. The tremendous support we have received from our Department Chair Kathleen Caron, our DGS Jay Brenman, administrative staff Janice Warfford and Vicki Morgan, and faculty in the department is critical for the success of Happy Hour as well as all other programs we put forward. We are very glad to witness our hard work strengthening the bond among faculty and students in the department and fostering a supportive network in the CBP family.

2017-2018 CBP Graduates



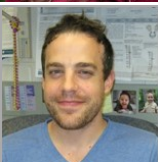
Brooke Matson, PhD
November 2, 2017: *"Molecular Regulators of Embryo Implantation and Pregnancy"*
Mentor: Dr. Kathleen Caron



Erica Cloer, PhD
November 9, 2017: *"Molecular mechanisms of patient-derived KEAP1 superbinder mutants"*
Mentor: Dr. Ben Major



Bailey Zwarycz, PhD
December 15, 2017: *"Extrinsic regulation of intestinal stem cell proliferation and differentiation by niche components"*
Mentor: Dr. Scott Magness



David Graham, PhD
December 21, 2017: *"Enucleated cells reveal differential roles of the nucleus in cell migration, polarity and mechanotransduction"*
Mentors: Drs. Jim Bear and Keith Burridge



Kelly Orgel, PhD
January 30, 2018: *"Advances in treatments and animal models of peanut allergy"*
Mentor: Dr. Wesley Burks



Temperance Rowell, PhD
April 6, 2018: *"Proof in the Pudding: Flavor-Dependent Effects of E-cigarettes on Lung Epithelial Toxicity and Ca²⁺ Signaling"*
Mentor: Rob Tarran, PhD

Professional Development Resources

Scientific Editing and Writing



Scientific Editing and Writing: Do you have a grant or manuscript that could use some polishing? Could you use some help compiling your data into a compelling research narrative? Erika Wittchen provides editing and writing services, FREE of charge for CBP Faculty and Trainees. From basic proofreading, to substantive editing aimed to improve organization, flow, clarity, and readability, the goal of this service is to increase the chance your research will get funded and published.

Contact Erika Wittchen: Erika_wittchen@med.unc.edu to discuss potential projects.

Science Careers Seminar Series

To help inform our trainees and faculty mentors about the breadth of careers that are available to scientists trained for the biomedical work force, the Department of Cell Biology and Physiology has expanded the current research seminar schedule to include our new Science Career Seminar series. The goal is to provide information about career paths that exist beyond – or in parallel to – the faculty research track. In the Science Career Seminar Series, speakers are invited from a variety of careers, such as industry, private foundations, teaching, scientific writing and publishing, or public policy, to name a few. Seminars are followed by small-group workshops for students and postdocs to directly interact with the speakers. This year, our first, welcomed Dr. Dee Silverthorn from the University of Texas to speak about teaching careers, and Dr. Aaron Mercer, an industry scientist from Novo Nordisk Research Center in Seattle who emphasized science communication. The coming year will bring us Dr. Ruth Gimeno from Eli Lilly, Dr. Brian Fiske from the Michael J. Fox Foundation, and Dr. Tammy R. L. Collins from the National Institute of Environmental Health Sciences (NIEHS). Please check our Seminar schedule and join us for these engaging lectures!



Organization & Professional Development

Faculty and staff are invited to register for and attend organization and professional development courses offered by the UNC Office of Human Resources Organization and Professional Development team. Upcoming courses, webinars, and other resources include:

Effective Communication Webinar: Thursday, October 25, 2018: 2:00pm-3:00pm

Effective Decision Making: Tuesday, November 6, 2018: 8:30am—12:30pm

NCTraCS R-Writing Groups: <https://unc.live/2EE7zKa>

Career Navigation (Office of Faculty Affairs), APT Cheat Sheets: <https://unc.live/2yprkQ9>

Tuition Waiver Program

Employees with the University of North Carolina at Chapel Hill are eligible to receive a tuition waiver for three courses per academic year. See the [Tuition Waiver Program Site](#) for information.

Upcoming Meetings



**SOCIETY for
NEUROSCIENCE**

*Advancing the Understanding of
the Brain and Nervous System*



November 3-7 | San Diego, CA



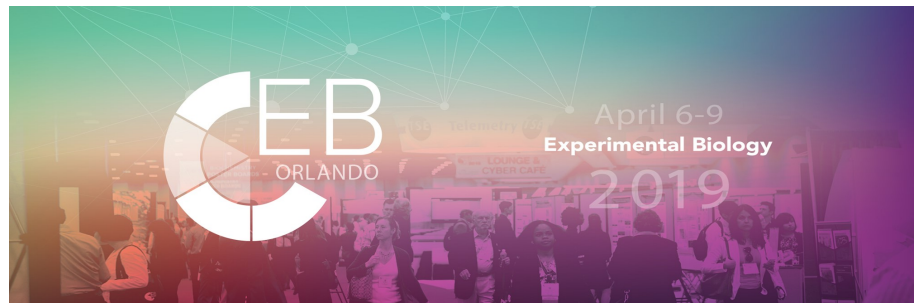
ASCB | EMBO 2018 meeting

San Diego, CA • December 8-12



**ANNUAL
MEETING
2019 || ATLANTA**

March 29 - April 3



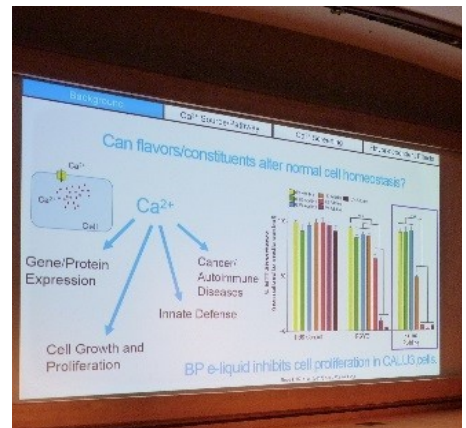
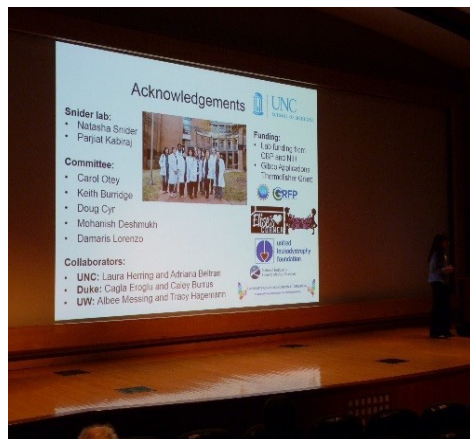
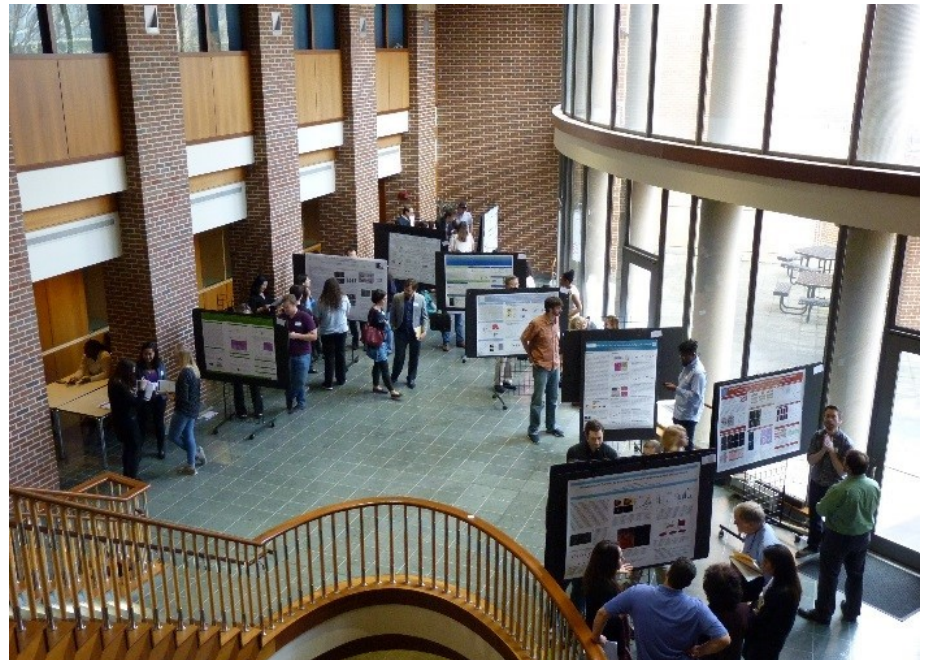
Science and Comradery

Cell Biology and Physiology held their Annual Research Day on February 22, 2018. **Dr. Dylan Burnette** was this year's keynote speaker. Dr. Burnette is an Assistant Professor in the Department of Cell Biology at Vanderbilt University School of Medicine. He presented the opening lecture entitled "Using studies on cell motility and cell division as pathways to becoming a cardiovascular cell biologist". The morning continued with talks presented by Postdoctoral Research Associate, Reema Davis; Graduate Students, Rachel Battaglia and Temperance Rowell; and Professor Jim Bear.

After a buffet lunch, a poster session was held on the 2nd Floor of MBRB. 24 posters were set up throughout the atrium with graduate students and postdocs presenting their impressive research.

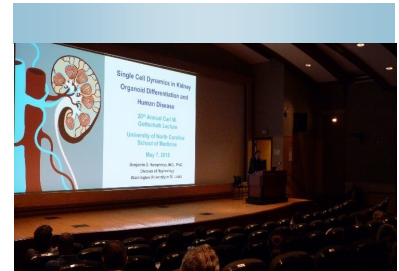
Following the poster session, everyone regrouped to listen to faculty talks. Faculty presenters included, Graham Diering, Amy Gladfelter, Toshihide Hige, Ben Philpot, Li Qian and Sarah Cohen.

CBP Annual Research Day



20th Annual Gottschalk Lecture

Cell Biology and Physiology and the UNC Kidney Center hosted the 20th Annual Gottschalk Lecture on Monday, May 7th. Dr. Gerald Hladik, MD, Chief of the Division of Nephrology and Hypertension, opened the event with a warm welcome for Dr. Benjamin Humphreys. The 2018 Gottschalk Lecturer, **Dr. Benjamin Humphreys**, is the Chief of the Division of Nephrology and the Joseph Friedman Associate Professor of Renal Diseases in Medicine at Washington University School of Medicine. Dr. Humphreys' lecture titled *"Single Cell Dynamics in Kidney Organoid Differentiation and Human Disease"* encompassed the essence of Dr. Gottschalk's work in Nephrology. Following the lecture, a reception was held in the basement lobby of MBRB.



"The science of today is the technology of tomorrow" - Edward Teller

2017 CBP Holiday Party

The 2017 CBP Holiday Party was held on Friday, December 8th at The Carolina Club. Many members of our CBP Department and Curriculum enjoyed a lovely evening surrounded by friends, family and colleagues. The UNC Mascot, RJ, even made a special appearance. The kids and kids-at-heart enjoyed spending time playing games and taking pics with RJ.



2018 Publications

A biophysical modelling platform of the cochlear nucleus and other auditory circuits: From channels to networks. Manis PB, Campagnola L. *Hear Res.* 2018 Mar;360:76-91. doi: 10.1016/j.heares.2017.12.017. Epub 2017 Dec 28. PMID: 29331233

A Computational Synaptic Antibody Characterization Tool for Array Tomography. Simhal AK, Gong B, Trimmer JS, Weinberg RJ, Smith SJ, Sapiro G, Micheva KD. *Front Neuroanat.* 2018 Jul 17;12:51. doi: 10.3389/fnana.2018.00051. eCollection 2018. PMID: 30065633

A deep neural network to assess spontaneous pain from mouse facial expressions. Tuttle AH, Molinaro MJ, Jethwa JF, Sotocinal SG, Prieto JC, Styner MA, Mogil JS, Zylka MJ. *Mol Pain.* 2018 Jan-Dec;14:1744806918763658. doi: 10.1177/1744806918763658. PMID: 29546805

A functional splice variant associated with decreased asthma risk abolishes the ability of gasdermin B to induce epithelial cell pyroptosis. Panganiban RA, Sun M, Dahlin A, Park HR, Kan M, Himes BE, Mitchel JA, Iribarren C, Jorgenson E, Randell SH, Israel E, Tantisira K, Shore S, Park JA, Weiss ST, Wu AC, Lu Q. *J Allergy Clin Immunol.* 2018 Jan 9. pii: S0091-6749(18)30023-X. doi: 10.1016/j.jaci.2017.11.040. [Epub ahead of print] PMID: 29330013

A Mutation in the Borcs7 Subunit of the Lysosome Regulatory BORC Complex Results in Motor Deficits and Dystrophic Axonopathy in Mice. Snouwaert JN, Church RJ, Jania L, Nguyen M, Wheeler ML, Saintsing A, Mieczkowski P, Manuel de Villena FP, Armao D, Moy SS, Lorenzo DN, Koller BH. *Cell Rep.* 2018 Jul 31;24(5):1254-1265. doi: 10.1016/j.celrep.2018.06.118. PMID: 30067980

A novel method for determining sex in late term gestational mice based on the external genitalia. Murdaugh LB, Mendoza-Romero HN, Fish EW, Parnell SE. *PLoS One.* 2018 Apr 4;13(4):e0194767. doi: 10.1371/journal.pone.0194767. eCollection 2018. PMID: 29617407

A novel PDE9 inhibitor WYQ-C36D ameliorates corticosterone-induced neurotoxicity and depression-like behaviors by cGMP-CREB-related signaling. Huang XF, Jiang WT, Liu L, Song FC, Zhu X, Shi GL, Ding SM, Ke HM, Wang W, O'Donnell JM, Zhang HT, Luo HB, Wan YQ, Song GQ, Xu Y. *CNS Neurosci Ther.* 2018 May 2. doi: 10.1111/cns.12864. [Epub ahead of print] PMID: 29722134

A Rnd3/p190RhoGAP pathway regulates RhoA activity in Idiopathic Pulmonary Fibrosis fibroblasts. Monaghan-Benson E, Wittchen ES, Doerschuk CM, BurrIDGE K. *Mol Biol Cell.* 2018 Jul

11:mbcE17110642. doi: 10.1091/mbc.E17-11-0642. [Epub ahead of print] PMID: 29995590

A Tale of Three Surgeries: Management of a Massive Recurrent Mycotic Aortic Pseudoaneurysm. Henley MD, Farber MA, Ikonomidis JS, Kolarczyk LM, Teeter EG, Barrick BP, Caranasos TG, Martinelli SM. *J Cardiothorac Vasc Anesth.* 2018 Feb;32(1):550-557. doi: 10.1053/j.jvca.2017.08.042. Epub 2017 Aug 26. No abstract available. PMID: 29126684

Abnormal coherence and sleep composition in children with Angelman syndrome: a retrospective EEG study. den Bakker H, Sidorov MS, Fan Z, Lee DJ, Bird LM, Chu CJ, Philpot BD. *Mol Autism.* 2018 Apr 27;9:32. doi: 10.1186/s13229-018-0214-8. eCollection 2018. PMID: 29719672

Accurate quantification of brown adipose tissue mass by xenon-enhanced computed tomography. Branca RT, McCallister A, Yuan H, Aghajanian A, Faber JE, Weimer N, Buchanan R, Floyd CS, Antonacci M, Zhang L, Burant A. *Proc Natl Acad Sci USA.* 2018 Jan 2; 115(1): 174-179. doi: 10.1073/pnas.1714431115. Epub 2017 Dec 18. PMID: 29255046

Actin dynamics and function. Gupton SL, Campellone KG. *Mol Biol Cell.* 2018 Mar 15;29(6):696-697. doi: 10.1091/mbc.E18-01-0010. No abstract available. PMID: 29535179

Acute engagement of Gq-mediated signaling in the bed nucleus of the stria terminalis induces anxiety-like behavior. Mazzone CM, Pati D, Michaelides M, DiBerto J, Fox JH, Tipton G, Anderson C, Duffy K, McKlveen JM, Hardaway JA, Magness ST, Falls WA, Hammack SE, McElligott ZA, Hurd YL, Kash TL. *Mol Psychiatry.* 2018 Jan;23(1):143-153. doi: 10.1038/mp.2016.218. Epub 2016 Dec 13. PMID: 27956747

Alterations in quadriceps muscle cellular and molecular properties in adults with moderate knee osteoarthritis. Noehren B, Kosmac K, Walton RG, Murach KA, Lyles MF, Loeser RF, Peterson CA, Messier SP. *Osteoarthritis Cartilage.* 2018 May 23. pii: S1063-4584(18)31278-0. doi: 10.1016/j.joca.2018.05.011. [Epub ahead of print] PMID: 29800621

Amyloid by Design: Intrinsic Regulation of Microbial Amyloid Assembly. Deshmukh M, Evans ML, Chapman MR. *J Mol Biol.* 2018 Jul 12. pii: S0022-2836(18)30757-5. doi: 10.1016/j.jmb.2018.07.007. [Epub ahead of print] Review. PMID: 30017921

An image-based small-molecule screen identifies vimentin as a pharmacologically relevant target of simvastatin in cancer cells. Trogden KP, Battaglia RA, Kabiraj P, Madden VJ,

Herrmann H, Snider NT. *FASEB J.* 2018 May;32(5):2841-2854. doi: 10.1096/fj.201700663R. Epub 2018 Jan 18. PMID: 29401610

Androgens and endometrium: new lessons from the corpus luteum via the adrenal cortex? Young SL. *Fertil Steril.* 2018 Apr;109(4):623-624. doi: 10.1016/j.fertnstert.2018.01.027. No abstract available. PMID: 29653715

Arousal dependent modulation of thalamo-cortical functional interaction. Stitt I, Zhou ZC, Radtke-Schuller S, Fröhlich F. *Nat Commun.* 2018 Jun 25;9(1):2455. doi: 10.1038/s41467-018-04785-6. PMID: 29941957

Bioengineered Systems and Designer Matrices That Recapitulate the Intestinal Stem Cell Niche. Wang Y, Kim R, Hinman SS, Zwarycz B, Magness ST, Allbritton NL. *Cell Mol Gastroenterol Hepatol.* 2018 Jan 17;5(3):440-453.e1. doi: 10.1016/j.jcmgh.2018.01.008. eCollection 2018 Mar. Review. PMID: 29675459

Causative Effects of Genetically Determined High Maternal/Fetal Endothelin-1 on Preeclampsia-Like Conditions in Mice. Li F, Kakoki M, Smid M, Boggess K, Wilder J, Hiller S, Bounajim C, Parnell SE, Sulik KK, Smithies O, Maeda-Smithies N. *Hypertension.* 2018 May;71(5):894-903. doi: 10.1161/HYPERTENSIONAHA.117.10849. Epub 2018 Apr 2. PMID: 29610266

Cellular Cyborgs: On the Precipice of a Drug Delivery Revolution. Ding S, O'Banion CP, Welfare JG, Lawrence DS. *Cell Chem Biol.* 2018 Jun 21;25(6):648-658. doi: 10.1016/j.chembiol.2018.03.003. Epub 2018 Apr 5. Review. PMID: 29628434

CFTR modulator therotyping: Current status, gaps and future directions. Clancy JP, Cotton CU, Donaldson SH, Solomon GM, VanDevanter DR, Boyle MP, Gentsch M, Nick JA, Illek B, Wallenburg JC, Sorscher EJ, Amaral MD, Beekman JM, Naren AP, Bridges RJ, Thomas PJ, Cutting G, Rowe S, Durmowicz AG, Mense M, Boeck KD, Skach W, Penland C, Joseloff E, Bihler H, Mahoney J, Borowitz D, Tuggle KL. *J Cyst Fibros.* 2018 Jun 19. pii: S1569-1993(18)30585-X. doi: 10.1016/j.jcf.2018.05.004. [Epub ahead of print] Review. PMID: 29934203

Chronic E-Cigarette Exposure Alters the Human Bronchial Epithelial Proteome. Ghosh A, Coakley RC, Mascenik T, Rowell TR, Davis ES, Rogers K, Webster MJ, Dang H, Herring LE, Sassano MF, Livraghi-Butrico A, Van Buren SK, Graves LM, Herman MA, Randell SH, Alexis NE, Tarran R. *Am J Respir Crit Care Med.* 2018 Jul 1;198(1):67-76. doi: 10.1164/rccm.201710-2033OC. PMID: 29481290

Cigarette smoke modifies and inactivates SPLUNC1, leading to airway dehydration. Moore PJ, Reidel B, Ghosh A, Sesma J, Kesimer M, Tarran R. *FASEB J.* 2018 Jun 11:fj201800345R. doi:

10.1096/fj.201800345R. [Epub ahead of print] PMID: 29890087

Combined Face-Brain Morphology and Associated Neurocognitive Correlates in Fetal Alcohol Spectrum Disorders. Suttie M, Wozniak JR, Parnell SE, Wetherill L, Mattson SN, Sowell ER, Kan E, Riley EP, Jones KL, Coles C, Foroud T, Hammond P; CIFASD. *Alcohol Clin Exp Res.* 2018 Jun 23. doi: 10.1111/acer.13820. [Epub ahead of print] PMID: 29935097

Common Pathophysiology in Multiple Mouse Models of Pitt-Hopkins Syndrome. Thaxton C, Kloth AD, Clark EP, Moy SS, Chitwood RA, Philpot BD. *J Neurosci.* 2018 Jan 24;38(4):918-936. doi: 10.1523/JNEUROSCI.1305-17.2017. Epub 2017 Dec 8. PMID: 29222403

Competitive Kinase Enrichment Proteomics Reveals that Abemaciclib Inhibits GSK3 β and Activates WNT Signaling. Cousins EM, Goldfarb D, Yan F, Roques J, Darr D, Johnson GL, Major MB. *Mol Cancer Res.* 2018 Feb;16(2):333-344. doi: 10.1158/1541-7786.MCR-17-0468. Epub 2017 Nov 13. PMID: 29133594

Coronin 1C promotes triple-negative breast cancer invasiveness through regulation of MT1-MMP traffic and invadopodia function. Castagnino A, Castro-Castro A, Irondelle M, Guichard A, Lodillinsky C, Fuhrmann L, Vacher S, Agüera-González S, Zagryazhskaya-Masson A, Romao M, El Kesrouani C, Noegel AA, Dubois T, Raposo G, Bear JE, Clemen CS, Vincent-Salomon A, Bièche I, Chavrier P. *Oncogene.* 2018 Jul 31. doi: 10.1038/s41388-018-0422-x. [Epub ahead of print] PMID: 30065298

Correction: Molecular Subtypes in Head and Neck Cancer Exhibit Distinct Patterns of Chromosomal Gain and Loss of Canonical Cancer Genes. Walter V, Yin X, Wilkerson MD, Cabanski CR, Zhao N, Du Y, Ang MK, Hayward MC, Salazar AH, Hoadley KA, Fritchie K, Sailey CJ, Weissler MC, Shockley WW, Zannation AM, Hackman T, Thorne LB, Funkhouser WD, Muldrew KL, Olshan AF, Randell SH, Wright FA, Shores CG, Hayes DN. *PLoS One.* 2018 Mar 15;13(3):e0194674. doi: 10.1371/journal.pone.0194674. eCollection 2018. PMID: 29543916

CrossTalk proposal: mucosal acidification drives early progressive lung disease in cystic fibrosis. Figueira MF, Webster MJ, Tarran R. *J Physiol.* 2018 Jul 17. doi: 10.1113/JP275425. [Epub ahead of print] No abstract available. PMID: 30014571

Deciphering the Role of Lipid Droplets in Cardiovascular Disease: A Report From the 2017 National Heart, Lung, and Blood Institute Workshop. Goldberg IJ, Reue K, Abumrad NA, Bickel PE, Cohen S, Fisher EA, Galis ZS, Granneman JG, Lewandowski ED, Murphy R, Olive M, Schaffer JE, Schwartz-Longacre L, Shulman GI, Walther TC, Chen J. *Circulation.* 2018 Jul 17;138(3):305-315. doi: 10.1161/CIRCULATIONAHA.118.033704. Review. PMID: 30012703

- Development of Arrayed Colonic Organoids for Screening of Secretagogues Associated with Enterotoxins. Gunasekara DB, DiSalvo M, Wang Y, Nguyen DL, Reed MI, Speer J, Sims CE, Magness ST, Allbritton NL. *Anal Chem*. 2018 Feb 6;90(3):1941-1950. doi: 10.1021/acs.analchem.7b04032. Epub 2018 Jan 12. PMID: 29281259
- Dynamic Cellular Integration Drives Functional Assembly of the Heart's Pacemaker Complex. Bressan M, Henley T, Louie JD, Liu G, Christodoulou D, Bai X, Taylor J, Seidman CE, Seidman JG, Mikawa T. *Cell Rep*. 2018 May 22;23(8):2283-2291. doi: 10.1016/j.celrep.2018.04.075. PMID: 29791840
- Effect of intensive diet and exercise on self-efficacy in overweight and obese adults with knee osteoarthritis: The IDEA randomized clinical trial. Mihalko SL, Cox P, Beavers DP, Miller GD, Nicklas BJ, Lyles M, Hunter DJ, Eckstein F, Guermazi A, Loser RF, DeVita P, Messier SP. *Transl Behav Med*. 2018 Apr 4. doi: 10.1093/tbm/iby037. PMID: 29635402
- Effects of histone methyltransferase inhibition in endometriosis. Colón-Caraballo M, Torres-Reverón A, Soto-Vargas JL, Young SL, Lessey B, Mendoza A, Urrutia R, Flores I. *Biol Reprod*. 2018 Aug 1;99(2):293-307. doi: 10.1093/biolre/i0y030. PMID: 29408993
- Efficient and accurate extraction of in vivo calcium signals from microendoscopic video data. Zhou P, Resendez SL, Rodriguez-Romaguera J, Jimenez JC, Neufeld SQ, Giovannucci A, Friedrich J, Pnevmatikakis EA, Stuber GD, Hen R, Kheirbek MA, Sabatini BL, Kass RE, Paninski L. *Elife*. 2018 Feb 22;7. pii: e28728. doi: 10.7554/eLife.28728. PMID: 29469809
- Elevated levels of adrenomedullin in eutopic endometrium and plasma from women with endometriosis. Matson BC, Quinn KE, Lessey BA, Young SL, Caron KM. *Fertil Steril*. 2018 Jun;109(6):1072-1078. doi: 10.1016/j.fertnstert.2018.02.004. Epub 2018 Jun 2. PMID: 29871794
- Elevated Wall Tension Initiates Interleukin-6 Expression and Abdominal Aortic Dilation. Akerman AW, Stroud RE, Barrs RW, Grespin RT, McDonald LT, LaRue RAC, Mukherjee R, Ikonomidis JS, Jones JA, Ruddy JM. *Ann Vasc Surg*. 2018 Jan;46:193-204. doi: 10.1016/j.avsg.2017.10.001. Epub 2017 Oct 26. PMID: 29107003
- Emerging roles of atypical chemokine receptor 3 (ACKR3) in normal development and physiology. Quinn KE, Mackie DI, Caron KM. *Cytokine*. 2018 Sep;109:17-23. doi: 10.1016/j.cyto.2018.02.024. PMID: 29903572
- Enhanced Operant Extinction and Prefrontal Excitability in a Mouse Model of Angelman Syndrome. Sidorov MS, Judson MC, Kim H, Rougie M, Ferrer AI, Nikolova VD, Riddick NV, Moy SS, Philpot BD. *J Neurosci*. 2018 Mar 14;38(11):2671-2682. doi: 10.1523/JNEUROSCI.2828-17.2018. PMID: 29431654
- Enucleated cells reveal differential roles of the nucleus in cell migration, polarity, and mechanotransduction. Graham DM, Andersen T, Sharek L, Uzer G, Rothenberg K, Hoffman BD, Rubin J, Balland M, Bear JE, Burridge K. *J Cell Biol*. 2018 Mar 5;217(3):895-914. doi: 10.1083/jcb.201706097. Epub 2018 Jan 19. PMID: 29351995
- Evaluation of a SPLUNC1-derived peptide for the treatment of cystic fibrosis lung disease. Terryah ST, Fellner RC, Ahmad S, Moore PJ, Reidel B, Sesma JI, Kim CS, Garland AL, Scott DW, Sabater JR, Carpenter J, Randell SH, Kesimer M, Abraham WM, Arendshorst WJ, Tarran R. *Am J Physiol Lung Cell Mol Physiol*. 2018 Jan 1; 314(1): L192-L205. doi: 10.1152/ajplung.00546.2016. PMID: 28982737
- Evaluation of e-liquid toxicity using an open-source high-throughput screening assay. Sassano MF, Davis ES, Keating JE, Zorn BT, Kochar TK, Wolfgang MC, Glish GL, Tarran R. *PLoS Biol*. 2018 Mar 27;16(3):e2003904. doi: 10.1371/journal.pbio.2003904. eCollection 2018 Mar. PMID: 29584716
- Expression of p16INK4a is a biomarker of chondrocyte aging but does not cause osteoarthritis. Diekman BO, Sessions GA, Collins JA, Knecht AK, Strum SL, Mitin NK, Carlson CS, Loser RF, Sharpless NE. *Aging Cell*. 2018 May 9:e12771. doi: 10.1111/acel.12771. [Epub ahead of print] PMID: 29744983
- Factor XIIIa-expressing inflammatory monocytes promote lung squamous cancer through fibrin cross-linking. Porrello A, Leslie PL, Harrison EB, Gorentla BK, Kattula S, Ghosh SK, Azam SH, Holtzhausen A, Chao YL, Hayward MC, Waugh TA, Bae S, Godfrey V, Randell SH, Oderup C, Makowski L, Weiss J, Wilkerson MD, Hayes DN, Earp HS, Baldwin AS, Wolberg AS, Pecot CV. *Nat Commun*. 2018 May 18;9(1):1988. doi: 10.1038/s41467-018-04355-w. PMID: 29777108
- Game-changing restraint of Ros-damaged phenylalanine, upon tumor metastasis. Gueron G, Anselmino N, Chiarella P, Ortiz EG, Lage Vickers S, Paez AV, Giudice J, Contin MD, Leonardi D, Jaworski F, Manzano V, Strazza A, Montagna DR, Labanca E, Cotignola J, D Accorso N, Woloszynska-Read A, Navone N, Meiss RP, Ruggiero R, Vazquez E. *Cell Death Dis*. 2018 Feb 2;9(2):140. doi: 10.1038/s41419-017-0147-8. PMID: 29396431
- Genetic and Environmental Contributions to Variation in the Posterior Communicating Collaterals of the Circle of Willis. Faber JE, Zhang H, Rzechorzek W, Dai KZ, Summers BT, Blazek C, Hedges SJ. *Transl Stroke Res*. 2018 Mar 27. doi: 10.1007/s12975-018-0626-y. [Epub ahead of print] PMID: 29589286
- Geophagic earths consumed by women in western Kenya contain dangerous levels of lead, arsenic, and iron. Miller JD, Collins SM, Omotayo M, Martin SL, Dickin KL, Young SL. *Am J Hum Biol*. 2018 May 3:e23130. doi: 10.1002/ajhb.23130. PMID: 29722093

- Guidelines on experimental methods to assess mitochondrial dysfunction in cellular models of neurodegenerative diseases. Connolly NMC, Theurey P, Adam-Vizi V, Bazan NG, Bernardi P, Bolaños JP, Culmsee C, Dawson VL, Deshmukh M, Duchen MR, Düssmann H, Fiskum G, Galindo MF, Hardingham GE, Hardwick JM, Jakobsons MB, Jonas EA, Jordán J, Lipton SA, Manfredi G, Mattson MP, McLaughlin B, Methner A, Murphy AN, Murphy MP, Nicholls DG, Polster BM, Pozzan T, Rizzuto R, Satrustegui J, Slack RS, Swanson RA, Swerdlow RH, Will Y, Ying Z, Joselin A, Gioran A, Moreira Pinho C, Watters O, Salvucci M, Llorente-Folch I, Park DS, Bano D, Ankarcrona M, Pizzo P, Prehn JHM. *Cell Death Differ.* 2018 Mar;25(3):542-572. doi: 10.1038/s41418-017-0020-4. Epub 2017 Dec 11. Review. PMID: 29229998
- High-density EEG characterization of brain responses to auditory rhythmic stimuli during wakefulness and NREM sleep. Lustenberger C, Patel YA, Alagapan S, Page JM, Price B, Boyle MR, Fröhlich F. *Neuroimage.* 2018 Apr 1;169:57-68. doi: 10.1016/j.neuroimage.2017.12.007. Epub 2017 Dec 6. PMID: 29217404
- How alternative splicing affects membrane-trafficking dynamics. Blue RE, Curry EG, Engels NM, Lee EY, Giudice J. *J Cell Sci.* 2018 May 16;131(10). pii: jcs216465. doi: 10.1242/jcs.216465. Review. PMID: 29769303
- Identification of long-lived synaptic proteins by proteomic analysis of synaptosome protein turnover. Heo S, Diering GH, Na CH, Nirujogi RS, Bachman JL, Pandey A, Haganir RL. *Proc Natl Acad Sci U S A.* 2018 Apr 17;115(16):E3827-E3836. doi: 10.1073/pnas.1720956115. PMID: 29610302
- Inhibiting intimal hyperplasia in prosthetic vascular grafts via immobilized all-trans retinoic acid. Gregory EK, Webb A, Vercammen JM, Kelly ME, Akar B, van Lith R, Bahnson EM, Jiang W, Ameer GA, Kibbe MR. *J Control Release.* 2018 Mar 28;274:69-80. doi: 10.1016/j.jconrel.2018.01.020. Epub 2018 Jan 31. PMID: 29391231
- Insights on Localized and Systemic Delivery of Redox-Based Therapeutics. Buglak NE, Batrakova EV, Mota R, Bahnson ESM. *Oxid Med Cell Longev.* 2018 Feb 14;2018:2468457. doi: 10.1155/2018/2468457. eCollection 2018. Review. PMID: 29636836
- Integrated phosphorescence-based photonic biosensor (iPOB) for monitoring oxygen levels in 3D cell culture systems. Rivera KR, Pozdin VA, Young AT, Erb PD, Wisniewski NA, Magness ST, Daniele M. *Biosens Bioelectron.* 2018 Jul 21. pii: S0956-5663(18)30537-2. doi: 10.1016/j.bios.2018.07.035. PMID: 30060990
- Intentional Weight Loss for Overweight and Obese Knee Osteoarthritis Patients: Is More Better? Messier SP, Resnik AE, Beavers DP, Mihalko SL, Miller GD, Nicklas BJ, DeVita P, Hunter DJ, Lyles MF, Eckstein F, Guermazi A, Loeser RF. *Arthritis Care Res (Hoboken).* 2018 Jun 18. doi: 10.1002/acr.23608. [Epub ahead of print] PMID: 29911741
- Interacting organelles. Cohen S, Valm AM, Lippincott-Schwartz J. *Curr Opin Cell Biol.* 2018 Jul 2;53:84-91. doi: 10.1016/j.jceb.2018.06.003. [Epub ahead of print] Review. PMID: 30006038
- Intrinsic Rhythmicity Predicts Synchronization-Continuation Entrainment Performance. McPherson T, Berger D, Alagapan S, Fröhlich F. *Sci Rep.* 2018 Aug 6;8(1):11782. doi: 10.1038/s41598-018-29267-z. PMID: 30082734
- Ion Channel Modulators in Cystic Fibrosis. Gentsch M, Mall MA. *Chest.* 2018 Aug;154(2):383-393. doi: 10.1016/j.chest.2018.04.036. Epub 2018 May 8. Review. PMID: 29750923
- Is osteoarthritis one disease or a collection of many? Devez LA, Loeser RF. *Rheumatology (Oxford).* 2018 May 1;57(suppl_4):iv34-iv42. doi: 10.1093/rheumatology/kex417. Review. PMID: 29267932
- The Role of Palladin in Podocytes. Artelt N, Ludwig TA, Rogge H, Kavvas P, Siegerist F, Blumenthal A, van den Brandt J, Otey CA, Bang ML, Amann K, Chadjichristos CE, Chatziantoniou C, Endlich K, Endlich N. *J Am Soc Nephrol.* 2018 Jun;29(6):1662-1678. doi: 10.1681/ASN.2017091039. Epub 2018 May 2. PMID: 29720549
- LARG GEF and ARHGAP18 orchestrate RhoA activity to control mesenchymal stem cell lineage. Thompson WR, Yen SS, Uzer G, Xie Z, Sen B, Styner M, Burrridge K, Rubin J. *Bone.* 2018 Feb;107:172-180. doi: 10.1016/j.bone.2017.12.001. Epub 2017 Dec 5. PMID: 29208526
- Large SOD1 aggregates, unlike trimeric SOD1, do not impact cell viability in a model of amyotrophic lateral sclerosis. Zhu C, Beck MV, Griffith JD, Deshmukh M, Dokholyan NV. *Proc Natl Acad Sci U S A.* 2018 May 1;115(18):4661-4665. doi: 10.1073/pnas.1800187115. Epub 2018 Apr 16. PMID: 29666246
- Lipid Droplets as Organelles. Cohen S. *Int Rev Cell Mol Biol.* 2018;337:83-110. doi: 10.1016/bs.ircmb.2017.12.007. Epub 2018 Feb 12. PMID: 29551163
- Loss of β Epithelial Sodium Channel Function in Meibomian Glands Produces Pseudohypaldosteronism 1-Like Ocular Disease in Mice. Yu D, Saini Y, Chen G, Ghio AJ, Dang H, Burns KA, Wang Y, Davis RM, Randell SH, Esther CR Jr, Paulsen F, Boucher RC. *Am J Pathol.* 2018 Jan;188(1):95-110. doi: 10.1016/j.ajpath.2017.09.016. Epub 2017 Oct 26. PMID: 29107074

- Mammalian TRIM67 Functions in Brain Development and Behavior. Boyer NP, Monkiewicz C, Menon S, Moy SS, Gupton SL. *eNeuro*. 2018 Jun 14;5(3). pii: ENEURO.0186-18.2018. doi: 10.1523/ENEURO.0186-18.2018. eCollection 2018 May-Jun. PMID: 29911180
- Metabolic mapping of downstream network activity following CNO-induced activation of hM3Dq in BNST VGAT neurons. Mazzone CM, Pati D, Michaelides M, DiBerto J, Fox JH, Tipton G, Anderson C, Duffy K, McKlveen JM, Hardaway JA, Magness ST, Falls WA, Hammack SE, McElligott ZA, Hurd YL, Kash TL. *Mol Psychiatry*. 2018 Jan;23(1):1. doi: 10.1038/mp.2017.253. No abstract available. PMID: 29296027
- Mice use robust and common strategies to discriminate natural scenes. Yu Y, Hira R, Stirman JN, Yu W, Smith IT, Smith SL. *Sci Rep*. 2018 Jan 22;8(1):1379. doi: 10.1038/s41598-017-19108-w. PMID: 29358739
- MIN1PIPE: A Miniscope 1-Photon-Based Calcium Imaging Signal Extraction Pipeline. Lu J, Li C, Singh-Alvarado J, Zhou ZC, Fröhlich F, Mooney R, Wang F. *Cell Rep*. 2018 Jun 19;23(12):3673-3684. doi: 10.1016/j.celrep.2018.05.062. PMID: 29925007
- Molecular characterization of gene regulatory networks in primary human tracheal and bronchial epithelial cells. Gillen AE, Yang R, Cotton CU, Perez A, Randell SH, Leir SH, Harris A. *J Cyst Fibros*. 2018 Feb 17. pii: S1569-1993(18)30012-2. doi: 10.1016/j.jcf.2018.01.009. [Epub ahead of print] PMID: 29459038
- Molecular mechanisms of cell death: recommendations of the Nomenclature Committee on Cell Death 2018. Galluzzi L, Vitale I, Aaronson SA, Abrams JM, Adam D, Agostinis P, Alnemri ES, Altucci L, Amelio I, Andrews DW, Annicchiarico-Petruzzelli M, Antonov AV, Arama E, Baehrecke EH, Barlev NA, Bazan NG, Bernassola F, Bertrand MJM, Bianchi K, Blagosklonny MV, Blomgren K, Borner C, Boya P, Brenner C, Campanella M, Candi E, Carmona-Gutierrez D, Cecconi F, Chan FK, Chandel NS, Cheng EH, Chipuk JE, Cidlowski JA, Ciechanover A, Cohen GM, Conrad M, Cubillos-Ruiz JR, Czabotar PE, D'Angiolella V, Dawson TM, Dawson VL, De Laurenzi V, De Maria R, Debatin KM, DeBerardinis RJ, Deshmukh M, Di Daniele N, Di Virgilio F, Dixit VM, Dixon SJ, Duckett CS, Dynlacht BD, El-Deiry WS, Elrod JW, Fimia GM, Fulda S, García-Sáez AJ, Garg AD, Garrido C, Gavathiotis E, Golstein P, Gottlieb E, Green DR, Greene LA, Gronemeyer H, Gross A, Hajnoczky G, Hardwick JM, Harris IS, Hengartner MO, Hetz C, Ichijo H, Jäättelä M, Joseph B, Jost PJ, Juin PP, Kaiser WJ, Karin M, Kaufmann T, Kepp O, Kimchi A, Kitsis RN, Klionsky DJ, Knight RA, Kumar S, Lee SW, Lemasters JJ, Levine B, Linkermann A, Lipton SA, Lockshin RA, López-Otín C, Lowe SW, Luedde T, Lugli E, MacFarlane M, Madeo F, Malewicz M, Malorni W, Manic G, Marine JC, Martin SJ, Martinou JC, Medema JP, Mehlen P, Meier P, Melino S, Miao EA, Molkentin JD, Moll UM, Muñoz-Pinedo C, Nagata S, Nuñez G, Oberst A, Oren M, Overholtzer M, Pagano M, Panaretakis T, Pasparakis M, Penninger JM, Pereira DM, Pervaiz S, Peter ME, Piacentini M, Pinton P, Prehn JHM, Puthalakath H, Rabinovich GA, Rehm M, Rizzuto R, Rodrigues CMP, Rubinsztein DC, Rudel T, Ryan KM, Sayan E, Scorrano L, Shao F, Shi Y, Silke J, Simon HU, Sistigu A, Stockwell BR, Strasser A, Szabadkai G, Tait SWG, Tang D, Tavernarakis N, Thorburn A, Tsujimoto Y, Turk B, Vanden Berghe T, Vandenberghe P, Vander Heiden MG, Villunger A, Virgin HW, Vousden KH, Vucic D, Wagner EF, Walczak H, Wallach D, Wang Y, Wells JA, Wood W, Yuan J, Zakeri Z, Zhivotovsky B, Zitvogel L, Melino G, Kroemer G. *Cell Death Differ*. 2018 Mar;25(3):486-541. doi: 10.1038/s41418-017-0012-4. Epub 2018 Jan 23. Review. PMID: 29362479
- Monoclonal Antibodies Reveal Dynamic Plasticity Between Lgr5 - and Bmi1-Expressing Intestinal Cell Populations. Smith NR, Swain JR, Davies PS, Gallagher AC, Parappilly MS, Beach CZ, Streeter PR, Williamson IA, Magness ST, Wong MH. *Cell Mol Gastroenterol Hepatol*. 2018 Mar 10;6(1):79-96. doi: 10.1016/j.jcmgh.2018.02.007. eCollection 2018. PMID: 29928673
- mTORC2 Activity Disrupts Lysosome Acidification in Systemic Lupus Erythematosus by Impairing Caspase-1 Cleavage of Rab39a. Monteith AJ, Vincent HA, Kang S, Li P, Claiborne TM, Rajfur Z, Jacobson K, Moorman NJ, Vilen BJ. *J Immunol*. 2018 Jul 15; 201(2): 371-382. doi: 10.4049/jimmunol.1701712. PMID: 29866702
- Mucin Production and Hydration Responses to Mucopurulent Materials in Normal versus Cystic Fibrosis Airway Epithelia. Abdullah LH, Coakley R, Webster MJ, Zhu Y, Tarran R, Radicioni G, Kesimer M, Boucher RC, Davis CW, Ribeiro CMP. *Am J Respir Crit Care Med*. 2018 Feb 15;197(4):481-491. doi: 10.1164/rccm.201706-1139OC. PMID: 29099608
- Multispectral Live-Cell Imaging. Cohen S, Valm AM, Lippincott-Schwartz J. *Curr Protoc Cell Biol*. 2018 Jun;79(1):e46. doi: 10.1002/cpcb.46. Epub 2018 May 14. PMID: 29924484
- Nephron progenitor cell commitment: Striking the right balance. O'Brien LL. *Semin Cell Dev Biol*. 2018 Jul 30. pii: S1084-9521(17)30421-4. doi: 10.1016/j.semcdb.2018.07.017. Review. PMID: 30030141
- Neuronal cell adhesion molecule (NrcAM) is expressed by sensory cells in the cochlea and is necessary for proper cochlear innervation and sensory domain patterning during development. Harley RJ, Murdy JP, Wang Z, Kelly MC, Ropp TF, Park SH, Maness PF, Manis PB, Coate TM. *Dev Dyn*. 2018 Mar 14. doi: 10.1002/dvdy.24629. [Epub ahead of print] PMID: 29536590
- Non-linear transfer characteristics of stimulation and recording hardware account for spurious low-frequency artifacts during amplitude modulated transcranial alternating current stimulation (AM-tACS). Kasten FH, Negahbani E, Fröhlich F, Herrmann CS. *Neuroimage*. 2018 Oct 1;179:134-143. doi: 10.1016/j.neuroimage.2018.05.068. Epub 2018 May 31. PMID: 29860086

- Nonsteroidal Anti-Inflammatory Drug-Induced Leaky Gut Modeled Using Polarized Monolayers of Primary Human Intestinal Epithelial Cells. Bhatt AP, Gunasekara DB, Speer J, Reed MI, Peña AN, Midkiff BR, Magness ST, Bultman SJ, Allbritton NL, Redinbo MR. *ACS Infect Dis.* 2018 Jan 12;4(1):46-52. doi: 10.1021/acsinfectdis.7b00139. PMID: 29094594
- Optical Electrophysiology in the Developing Heart. Thomas K, Goudy J, Henley T, Bressan M. *J Cardiovasc Dev Dis.* 2018 May 11;5(2). pii: E28. doi: 10.3390/jcdd5020028. Review. PMID: 29751595
- Organoid Cultures for Assessing Intestinal Epithelial Differentiation and Function in Response to Type-2 Inflammation. Zwarycz B, Gracz AD, Magness ST. *Methods Mol Biol.* 2018;1799:397-417. doi: 10.1007/978-1-4939-7896-0_29. PMID: 29956167
- Osteoarthritis induced by destabilization of the medial meniscus is reduced in germ-free mice. Ulici V, Kelley KL, Azcarate-Peril MA, Cleveland RJ, Sartor RB, Schwartz TA, Loeser RF. *Osteoarthritis Cartilage.* 2018 Aug;26(8):1098-1109. doi: 10.1016/j.joca.2018.05.016. Epub 2018 May 30. PMID: 29857156
- Palladin Compensates for the Arp2/3 Complex and Supports Actin Structures during Listeria Infections. Dhanda AS, Vogl AW, Albraiki SE, Otey CA, Beck MR, Guttman JA. *MBio.* 2018 Apr 10;9(2). pii: e02259-17. doi: 10.1128/mBio.02259-17. PMID: 29636431
- Paper Spray Mass Spectrometry for High-Throughput Quantification of Nicotine and Cotinine. Keating JE, Minges JT, Randall SH, Glish GL. *Anal Methods.* 2018;10(1):46-50. doi: 10.1039/C7AY02204B. Epub 2017 Nov 28. PMID: 29568335
- Perineuronal Net Protein Neurocan Inhibits NCAM/EphA3 Repellent Signaling in GABAergic Interneurons. Sullivan CS, Gotthard I, Wyatt EV, Bongu S, Mohan V, Weinberg RJ, Maness PF. *Sci Rep.* 2018 Apr 18;8(1):6143. doi: 10.1038/s41598-018-24272-8. PMID: 29670169
- Phasic Dopamine Signals in the Nucleus Accumbens that Cause Active Avoidance Require Endocannabinoid Mobilization in the Midbrain. Wenzel JM, Oleson EB, Gove WN, Cole AB, Gyawali U, Dantrassy HM, Bluett RJ, Dryanovski DI, Stuber GD, Deisseroth K, Mathur BN, Patel S, Lupica CR, Cheer JF. *Curr Biol.* 2018 Apr 16. pii: S0960-9822(18)30366-X. doi: 10.1016/j.cub.2018.03.037. [Epub ahead of print] PMID: 29681476
- Phf8 histone demethylase deficiency causes cognitive impairments through the mTOR pathway. Chen X, Wang S, Zhou Y, Han Y, Li S, Xu Q, Xu L, Zhu Z, Deng Y, Yu L, Song L, Chen AP, Song J, Takahashi E, He G, He L, Li W, Chen CD. *Nat Commun.* 2018 Jan 9;9(1):114. doi: 10.1038/s41467-017-02531-y. PMID: 29317619
- PLCB3 Loss-of-function Reduces P. aeruginosa-dependent IL-8 Release in Cystic Fibrosis. Rimessi A, Bezzeri V, Salvatori F, Tamarinini A, Nigro F, Dechecchi MC, Santangelo A, Prandini P, Munari S, Provezza L, Garreau de Loubresse N, Muller J, Ribeiro CMP, Lippi G, Gambari R, Pinton P, Cabrini G. *Am J Respir Cell Mol Biol.* 2018 Apr 18. doi: 10.1165/rcmb.2017-0267OC. [Epub ahead of print] PMID: 29668297
- Ponatinib Shows Potent Antitumor Activity in Small Cell Carcinoma of the Ovary Hypercalcemic Type (SCCOHT) through Multikinase Inhibition. Lang JD, Hendricks WPD, Orlando KA, Yin H, Kiefer J, Ramos P, Sharma R, Pirrotte P, Raupach EA, Sereduk C, Tang N, Liang WS, Washington M, Facista SJ, Zismann VL, Cousins EM, Major MB, Wang Y, Karnezis AN, Sekulic A, Hass R, Vanderhyden BC, Nair P, Weissman BE, Huntsman DG, Trent JM. *Clin Cancer Res.* 2018 Apr 15;24(8):1932-1943. doi: 10.1158/1078-0432.CCR-17-1928. Epub 2018 Feb 9. PMID: 29440177
- Primary ciliary dyskinesia: keep it on your radar. Rosenfeld M, Ostrowski LE, Zariwala MA. *Thorax.* 2018 Feb;73(2):101-102. doi: 10.1136/thoraxjnl-2017-210776. Epub 2017 Nov 13. No abstract available. PMID: 29133352
- Randomized trial of transcranial alternating current stimulation for treatment of auditory hallucinations in schizophrenia. Melvin JM, Alagapan S, Lustenberger C, Lugo CE, Alexander ML, Gilmore JH, Jarskog LF, Fröhlich F. *Eur Psychiatry.* 2018 Jun;51:25-33. doi: 10.1016/j.eurpsy.2018.01.004. Epub 2018 Mar 11. PMID: 29533819
- RBPJ mediates uterine repair in the mouse and is reduced in women with recurrent pregnancy loss. Strug MR, Su RW, Kim TH, Mauriello A, Ticconi C, Lessey BA, Young SL, Lim JM, Jeong JW, Fazleabas AT. *FASEB J.* 2018 May;32(5):2452-2466. doi: 10.1096/fj.201701032R. Epub 2018 Jan 8. PMID: 29242273
- Rebuttal from Miriam F. Figueira, Megan J. Webster and Robert Tarran. Figueira MF, Webster MJ, Tarran R. *J Physiol.* 2018 Jul 17. doi: 10.1113/JP276146. [Epub ahead of print] No abstract available. PMID: 30014480
- Recent progress in translational cystic fibrosis research using precision medicine strategies. Cholon DM, Gentsch M. *J Cyst Fibros.* 2018 Mar;17(2S):S52-S60. doi: 10.1016/j.jcf.2017.09.005. Epub 2017 Oct 4. Review. PMID: 28986017
- Recruitment of 7SL RNA to assembling HIV-1 virus-like particles. Itano MS, Arnion H, Wolin SL, Simon SM. *Traffic.* 2018 Jan;19(1):36-43. doi: 10.1111/tra.12536. Epub 2017 Dec 1. PMID: 29044909
- Revisiting Netrin-1: One Who Guides (Axons). Boyer NP, Gup-ton SL. *Front Cell Neurosci.* 2018 Jul 31;12:221. doi: 10.3389/fncel.2018.00221. eCollection 2018. Review. PMID: 30108487

- Single-cell analysis of early progenitor cells that build coronary arteries. Su T, Stanley G, Sinha R, D'Amato G, Das S, Rhee S, Chang AH, Poduri A, Raffrey B, Dinh TT, Roper WA, Li G, Quinn KE, Caron KM, Wu S, Miquerol L, Butcher EC, Weissman I, Quake S, Red-Horse K. *Nature*. 2018 Jul;559(7714):356-362. doi: 10.1038/s41586-018-0288-7. Epub 2018 Jul 4. PMID: 29973725
- Social Isolation Co-opts Fear and Aggression Circuits. Rodriguez-Romaguera J, Stuber GD. *Cell*. 2018 May 17;173(5):1071-1072. doi: 10.1016/j.cell.2018.04.031. PMID: 29775590
- SOX4 Promotes ATOH1-independent Intestinal Secretory Differentiation Toward Tuft and Enteroendocrine Fates. Gracz AD, Samsa LA, Fordham MJ, Trotier DC, Zwarycz B, Lo YH, Bao K, Starmer J, Raab JR, Shroyer NF, Reinhardt RL, Magness ST. *Gastroenterology*. 2018 Jul 25. pii: S0016-5085(18)34811-X. doi: 10.1053/j.gastro.2018.07.023. [Epub ahead of print] PMID: 30055169
- Spatiotemporal organization of exocytosis emerges during neuronal shape change. Urbina FL, Gomez SM, Gupton SL. *J Cell Biol*. 2018 Mar 5;217(3):1113-1128. doi: 10.1083/jcb.201709064. Epub 2018 Jan 19. PMID: 29351997
- SPLUNC1 is an allosteric modulator of the epithelial sodium channel. Kim CS, Ahmad S, Wu T, Walton WG, Redinbo MR, Tarran R. *FASEB J*. 2018 Jan 8:fj201701126R. doi: 10.1096/fj.201701126R. [Epub ahead of print] PMID: 29295861
- Sternotomy extra-anatomic bypass for stent-graft extension. Ikonomidis JS. *J Thorac Cardiovasc Surg*. 2018 Mar;155(3):913-914. doi: 10.1016/j.jtcvs.2017.10.091. Epub 2017 Dec 15. No abstract available. PMID: 29249494
- Suppression of TGF β -mediated conversion of endothelial cells and fibroblasts into cancer associated (myo)fibroblasts via HDAC inhibition. Kim DJ, Dunleavy JM, Xiao L, Ollila DW, Troester MA, Otey CA, Li W, Barker TH, Dudley AC. *Br J Cancer*. 2018 Apr 26. doi: 10.1038/s41416-018-0072-3. [Epub ahead of print] PMID: 29695769
- Targeted therapy of esophageal squamous cell carcinoma: the NRF2 signaling pathway as target. Ma S, Paiboonrungruan C, Yan T, Williams KP, Major MB, Chen XL. *Ann N Y Acad Sci*. 2018 May 11. doi: 10.1111/nyas.13681. [Epub ahead of print] Review. PMID: 29752726
- Targeting aging for disease modification in osteoarthritis. Collins JA, Diekman BO, Loeser RF. *Curr Opin Rheumatol*. 2018 Jan;30(1):101-107. doi: 10.1097/BOR.0000000000000456. Review. PMID: 28957964
- Targeting alpha-band oscillations in a cortical model with amplitude-modulated high-frequency transcranial electric stimulation. Negahbani E, Kasten FH, Herrmann CS, Fröhlich F. *Neuroimage*. 2018 Jun;173:3-12. doi: 10.1016/j.neuroimage.2018.02.005. Epub 2018 Feb 7. PMID: 29427848
- Temporal Regulation of Dendritic Spines Through NrCAM-Semaphorin3F Receptor Signaling in Developing Cortical Pyramidal Neurons. Mohan V, Sullivan CS, Guo J, Wade SD, Majumder S, Agarwal A, Anton ES, Temple BS, Maness PF. *Cereb Cortex*. 2018 Feb 3. doi: 10.1093/cercor/bhy004. [Epub ahead of print] PMID: 29415226
- The American Association for Thoracic Surgery consensus guidelines on bicuspid aortic valve-related aortopathy: Executive summary. Borger MA, Fedak PWM, Stephens EH, Gleason TG, Girdauskas E, Ikonomidis JS, Khojnehzad A, Siu SC, Verma S, Hope MD, Cameron DE, Hammer DF, Coselli JS, Moon MR, Sundt TM, Barker AJ, Markl M, Della Corte A, Michelena HI, Elefteriades JA. *J Thorac Cardiovasc Surg*. 2018 Aug;156(2):473-480. doi: 10.1016/j.jtcvs.2017.10.161. PMID: 30011756
- The American Association for Thoracic Surgery consensus guidelines on bicuspid aortic valve-related aortopathy: Full online-only version. Borger MA, Fedak PWM, Stephens EH, Gleason TG, Girdauskas E, Ikonomidis JS, Khojnehzad A, Siu SC, Verma S, Hope MD, Cameron DE, Hammer DF, Coselli JS, Moon MR, Sundt TM, Barker AJ, Markl M, Della Corte A, Michelena HI, Elefteriades JA. *J Thorac Cardiovasc Surg*. 2018 Aug;156(2):e41-e74. doi: 10.1016/j.jtcvs.2018.02.115. PMID: 30011777
- The contributions of Dr. Kathleen K. Sulik to fetal alcohol spectrum disorders research and prevention. Parnell SE, Riley EP, Warren KR, Mitchell KT, Charness ME. *Alcohol*. 2018 Jun;69:15-24. doi: 10.1016/j.alcohol.2017.10.008. Epub 2018 Mar 20. Review. PMID: 29571046
- The effects of intranasal oxytocin on reward circuitry responses in children with autism spectrum disorder. Greene RK, Spanos M, Alderman C, Walsh E, Bizzell J, Mosner MG, Kinard JL, Stuber GD, Chandrasekhar T, Politte LC, Sikich L, Dichter GS. *J Neurodev Disord*. 2018 Mar 27;10(1):12. doi: 10.1186/s11689-018-9228-y. PMID: 29587625
- The enduring impact of neurulation stage alcohol exposure: A combined behavioral and structural neuroimaging study in adult male and female C57BL/6J mice. Fish EW, Wiczorek LA, Rumble A, Suttie M, Moy SS, Hammond P, Parnell SE. *Behav Brain Res*. 2018 Feb 15;338:173-184. doi: 10.1016/j.bbr.2017.10.020. Epub 2017 Oct 28. PMID: 29107713
- The enteric microbiota regulates jejunal Paneth cell number and function without impacting intestinal stem cells. Schoenborn AA, von Furstenberg RJ, Valsaraj S, Hussain FS, Stein M, Shanahan MT, Henning SJ, Gulati AS. *Gut Microbes*. 2018 Jun 8:1-14. doi: 10.1080/19490976.2018.1474321. [Epub ahead of print] PMID: 29883265

The epithelial sodium channel (ENaC) as a therapeutic target for cystic fibrosis lung disease. Moore PJ, Tarran R. *Expert Opin Ther Targets*. 2018 Aug; 22(8): 687-701. doi: 10.1080/14728222.2018.1501361. . PMID: 30028216

The N terminus of α -ENaC mediates ENaC cleavage and activation by furin. Kota P, Gentsch M, Dang YL, Boucher RC, Stutts MJ. *J Gen Physiol*. 2018 Aug 6;150(8):1179-1187. doi: 10.1085/jgp.201711860. Epub 2018 Jul 6. PMID: 29980634

The neuroprotective and antidepressant-like effects of Hcyb1, a novel selective PDE2 inhibitor. Liu L, Zheng J, Huang XF, Zhu X, Ding SM, Ke HM, O'Donnell JM, Zhang HT, Song GQ, Xu Y. *CNS Neurosci Ther*. 2018 Jul;24(7):652-660. doi: 10.1111/cns.12863. Epub 2018 Apr 27. PMID: 29704309

The sweet side of vimentin. Snider NT, Ku NO, Omary MB. *Elife*. 2018 Mar 7;7. pii: e35336. doi: 10.7554/eLife.35336. PMID: 29513215

The Temporal Dynamics of Arc Expression Regulate Cognitive Flexibility. Wall MJ, Collins DR, Chery SL, Allen ZD, Pastuzyn ED, George AJ, Nikolova VD, Moy SS, Philpot BD, Shepherd JD, Müller J, Ehlers MD, Mabb AM, Corrêa SAL. *Neuron*. 2018 Jun 27;98(6):1124-1132.e7. doi: 10.1016/j.neuron.2018.05.012. Epub 2018 May 31. PMID: 29861284

The tomosyn homologue, Sro7, is a direct effector of the Rab GTPase, Sec4, in post-Golgi vesicle tethering. Rossi G, Watson K, Kennedy W, Brennwald P. *Mol Biol Cell*. 2018 Jun 15;29(12):1476-1486. doi: 10.1091/mbc.E18-02-0138. Epub 2018 Apr 18. PMID: 29668350

Theta Oscillations Organize Spiking Activity in Higher-Order Visual Thalamus during Sustained Attention. Yu C, Li Y, Stitt IM, Zhou ZC, Sellers KK, Frohlich F. *eNeuro*. 2018 Apr 3;5(1). pii: ENEURO.0384-17.2018. doi: 10.1523/ENEURO.0384-17.2018. eCollection 2018 Jan-Feb. PMID: 29619407

Thymosin α -1 does not correct F508del-CFTR in cystic fibrosis airway epithelia. Tomati V, Caci E, Ferrera L, Pesce E, Sondo E, Cholon DM, Quinney NL, Boyles SE, Armirotti A, Ravazzolo R, Galiotta LJ, Gentsch M, Pedemonte N. *JCI Insight*. 2018 Feb 8;3(3). pii: 98699. doi: 10.1172/jci.insight.98699. [Epub ahead of print] PMID: 29415893

Time between anterior cruciate ligament injury and reconstruction and cartilage metabolism six-months following reconstruction. Davis HC, Spang JT, Loeser RF, Larsson S, Ulici V, Troy Blackburn J, Creighton RA, Kamath GM, Jordan JM, Marshall SW, Pietrosimone B. *Knee*. 2018 Mar;25(2):296-305. doi: 10.1016/j.knee.2018.01.009. Epub 2018 Mar 7. PMID: 29525545

Toward a conceptual framework for early brain and behavior development in autism. Piven J, Elison JT, Zylka MJ. *Mol Psychi-*

atry. 2018 Jan;23(1):165. doi: 10.1038/mp.2017.212. Epub 2017 Oct 17.

Transcriptional regulatory control of mammalian nephron progenitors revealed by multi-factor cistromic analysis and genetic studies. O'Brien LL, Guo Q, Bahrami-Samani E, Park JS, Hasso SM, Lee YJ, Fang A, Kim AD, Guo J, Hong TM, Peterson KA, Lozano S, Raviram R, Ren B, Fogelgren B, Smith AD, Valouev A, McMahon AP. *PLoS Genet*. 2018 Jan 29;14(1):e1007181. doi: 10.1371/journal.pgen.1007181. eCollection 2018 Jan. PMID: 29377931

What can tiny mushrooms in fruit flies tell us about learning and memory? Hige T. *Neurosci Res*. 2018 Apr;129:8-16. doi: 10.1016/j.neures.2017.05.002. Epub 2017 May 5. Review. PMID: 28483586



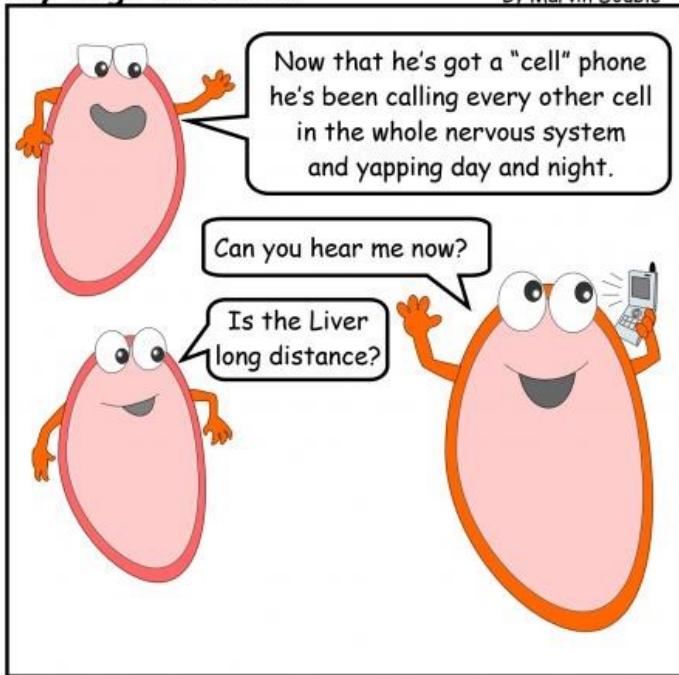
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