

upstategrad update

transforming students from consumers of knowledge into producers of knowledge

december 2016

ALTERNATIVE FACTS

As scientists, we try to keep the high moral ground. We need to be honest, straightforward and objective with our experimental data and the facts that we use to support our research. We try to instill this in our students and postdocs through example, coursework, and discussions of data. Our integrity is one of the most important attributes of any scientist and of science as a whole. However, the credibility of science and scientists has come into question. This has come under fire recently on many fronts.

The first revolves around issues associated with reproducibility in science. The finding that innumerable, highly cited cancer papers appear to be irreproducible is quite disturbing. Differing reports have instigated the NIH to fund ideas to directly look at how we can make science more reproducible. In addition, big data has penetrated all of our research and difficulty handling it has become palpable. I have seen many a presentation where the practice of P-hacking has become the norm. P-hacking is the use of multiple statistical tests on a dataset to identify the one that gives you the answer you are looking to get. Hopefully, we all see the problem in that practice, yet it continues. In addition, there has been the trend to deny significant data as false despite its high quality and reproducibility. We see this in the debate on global warming and evolution. Clearly, there are significant scientific

breakthroughs that go against generally believed dogma, but they use established evidence to break new ground. The most recent attack that has curled the hair on the back of my neck is the term, "alternative facts." It is an Orwellian phrase that threatens science to its core. Science is clearly the fabric of our modern society. This phrase questions whether we actually live in reality or in some alternative universe of the likes of the Matrix. It also raises the point, that if science is unreliable and unbelievable, why fund it at all.

We must all work to ensure that our data is the best it can be and we must fight those who fail to understand the value and the significance of the discoveries that science really does make. Science has brought us the incredible technology we have in the world around us. Cancer is more often cured and HIV is a chronic disease instead of a horrible demise. CRISPR is revolutionizing genetics and genome sequencing is revolutionizing medicine. Our integrity is our most important attribute and we must continue to embrace it and what is right.

– **Mark E. Schmitt, PhD**

Dean, College of Graduate Studies
schmittm@upstate.edu

Cilia In Vertebrate Left-Right Patterning.

DASGUPTA A, AMACK JD.

Philos Trans R Soc Lond B Biol Sci. 2016 Dec 19;371(1710)

Plasmodium Chabaudi Infection Induces Aid Expression In Transitional And Marginal Zone B Cells.

WILMORE JR, Maue AC, ROCHFORD R.

Immun Inflamm Dis. 2016 Nov 28;4(4):497-505

Structure of Nanodisc Reconstituted Vacuolar ATPase Proton Channel: Definition of the Interaction of Rotor and Stator and Implications for Enzyme Regulation by Reversible Dissociation.

STAM NJ, WILKENS S.

J Biol Chem. 2016 Dec 13;. [Epub ahead of print]

Genetics of Schizophrenia: Historical Insights and Prevailing Evidence.

van de Leemput J, **HESS JL, GLATT SJ**, Tsuang MT.

Adv Genet. 2016;96:99-141.

Traumatic Brain Injury: Current Treatment Strategies and Future Endeavors.

Galgano M, Toshkezi G, Qiu X, **RUSSELL T**, Chin L, **ZHAO LR.**

Cell Transplant. 2016 Nov 22;. [Epub ahead of print]

Stromal Interaction Molecule 1 (STIM1) Regulates ATP-Sensitive Potassium (KATP) and Store-Operated Ca²⁺ Channels in MIN6 β -Cells.

Leech CA, Kopp RF, **NELSON HA**, Nandi J, **ROE MW.**

J Biol Chem. 2016 Dec 21;. [Epub ahead of print]

Stat3 Mutations Are Not Sufficient To Induce Large Granular Lymphocytic Leukaemia In Mice.

DUTTA A, Yan D, Hutchison RE, **MOHI G.**

Br J Haematol. 2016 Dec 26;. [Epub ahead of print]

Untangling Ciliary Access And Enrichment Of Two Rhodopsin-Like Receptors Using Quantitative Fluorescence Microscopy Reveals Cell-Specific Sorting Pathways.

GENEVA II, TAN HY, CALVERT PD.

Mol Biol Cell. 2016 Dec 14. pii: mbc.E16-07-0549.

Activation of the Mechanistic Target of Rapamycin in SLE: Explosion of Evidence in the Last Five Years.

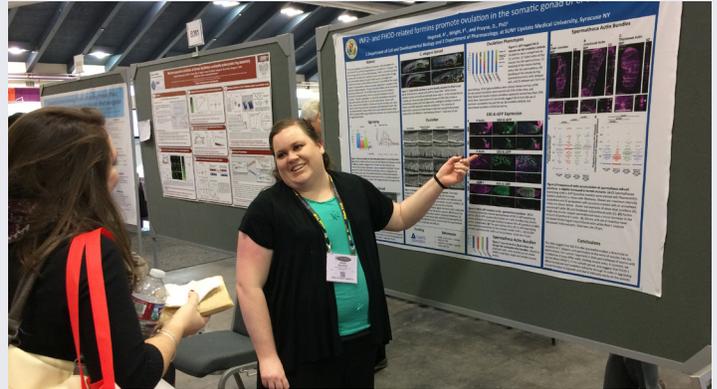
OAKS Z, WINANS T, HUANG N, Banki K, **PERL A.**

Curr Rheumatol Rep. 2016 Dec;18(12):73. Review.

presentations



Six PhD students in Anatomy & Cell Biology attended the American Society for Cell Biology held in San Francisco, California from December 3rd - 7th.



SARAH BARGER presented a poster titled "Class I myosins coordinate actin remodeling during Fc receptor-mediated phagocytosis."

ERICA COLICINO presented a poster titled "PLK1 spatial synchronization and activity during mitosis."

ANUSHREE GULVADY presented a poster titled "Hic-5 Regulation of Invadopodia Rosette Formation and Organization."

ANNA HEGSTED presented a poster titled "INF2- and FHOD-related formins promote ovulation in the somatic gonad of *C. elegans*."

ERIC MILLER presented a poster titled "An Alternative Splice Isoform of the Formin FMNL1 Contributes to Cancer Cell Adhesion and Migration Independent of the Actin-Binding Ability of the FH2 Domain."

LINDSAY RATHBUN gave an oral presentation and a presented a poster, both titled "The role of division orientation in embryonic patterning."



AVIK DUTTA, a PhD student in Pharmacology, presented at the American Society of Hematology Meeting & Exposition in San Diego, California from December 3rd - 6th. Avik received an Achievement Award for his abstract titled "Expression of HMGA2 Cooperates with Jak2V617F in the Development of Myelofibrosis." The award helped support Avik's travel to the conference.

student successes & accomplishments



ANDREW JACOB, a PhD student in Anatomy & Cell Biology, successfully defended his dissertation last month. Andrew's dissertation co-advisors are Dr. Jeffrey Amack and Dr. Christopher Turner. **Congratulations, Andrew!**



YAXIN LIU, a PhD student in Biochemistry & Molecular Biology, successfully defended her dissertation last month. Yaxin's dissertation advisor is Dr. Xin Jie Chen. **Congratulations, Yaxin!**

MARIA CAMARGO, a PhD student in Biochemistry & Molecular Biology, successfully defended her dissertation last month. Maria's dissertation advisor is Dr. Frank Middleton. **Congratulations, Maria!**

PATRICK FAUGHNAN, a PhD student in Pharmacology, successfully passed his qualifying exam last month. Pat's dissertation advisor is Dr. Golam Mohi. **Congratulations, Pat!**

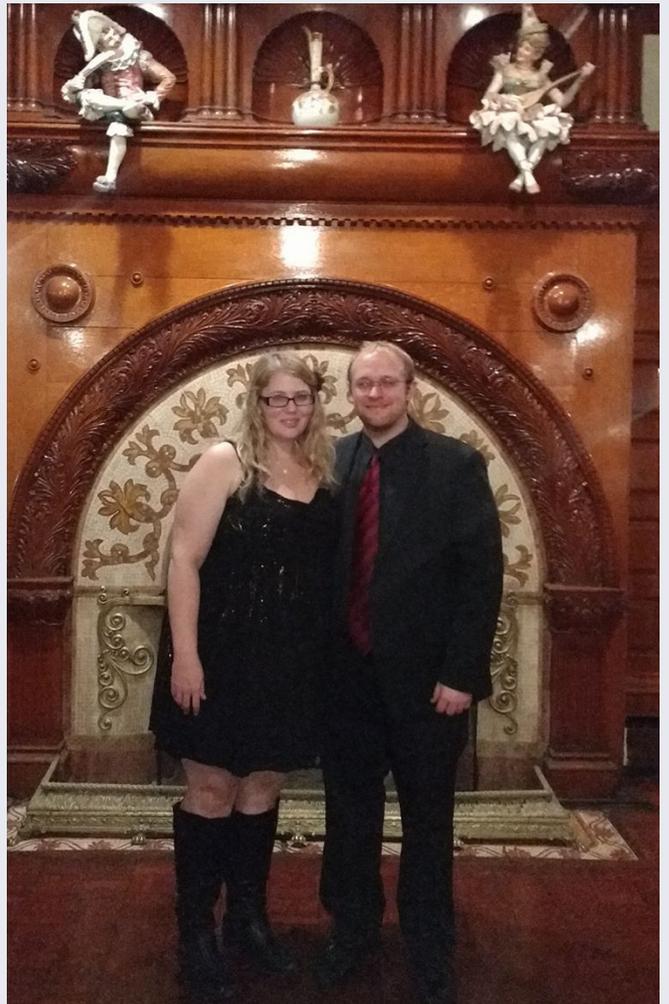
RACHEL SAGER, a PhD student in Neuroscience, successfully passed her qualifying exam last month. Rachel's dissertation advisor is Dr. Huaiyu Hu. **Congratulations, Rachel!**

from our alumni & students



LISI HAMILTON, PHD, and her husband Bill announced the birth of their daughter: Ada Dianne Hamilton, born in August. Ada is pictured above with her older sister, Maisie, now two years old. Lisi is currently an adjunct faculty at Utica College and at Onondaga Community College, where she is teaching Anatomy & Physiology. Lisi earned her PhD in Anatomy & Cell Biology in 2016. Her dissertation advisor was Dr. Scott Blystone.

Alumni ... DROP BY OUR WEBSITE & let us know how you're doing!



GEOFF EILL, a PhD student in Neuroscience, proposed to **LIZ SNYDER**, a PhD student in Microbiology & Immunology, under a Christmas Tree in Downtown Skaneateles last month on their two-year anniversary. The two celebrated their anniversary and new engagement at Belhurst Castle in Geneva.

Congrats to the happy couple!

IS THERE SOMETHING WE MISSED??

Email Jennifer Brennan at brennanj@upstate.edu to get it included in the next issue!

upcoming events & save the dates

CAREER DEVELOPMENT

Wednesday, February 1, 2017 | 12:00 - 1:00 PM | Weiskotten 3113

FOSTERING COMMUNITY & SERVICE: VOLUNTEER OPPORTUNITIES

Simone Seward (Director, Center for Civic Engagement)

Our mission at Upstate is to "improve the health of the communities we serve through education, biomedical research and health care." At the core of this mission is the dedication to better the Syracuse area through service using the skills and knowledge we've been given. Simone Seward, MPH, will join us for an informal discussion about how you can get involved and what volunteer opportunities are available to you. This is a great opportunity to give back and gain valuable experience outside of the lab.

DISTINGUISHED ALUMNI LECTURE

Tuesday, February 7, 2017

The Distinguished Alumni Lecture will be Tuesday, February 7, 2017 at 11:00 AM in Weiskotten Hall 2231, hosted by the Graduate Student Association, with help from the College of Graduate Studies. This year's speaker is Georgia Tomaras, PhD. Dr. Tomaras is Professor of Surgery, Immunology, and Molecular Genetics and Microbiology at Duke University Medical Center. She will be presenting: "HIV-1 Immune Correlates of Protection." Dr. Tomaras earned her PhD from the Microbiology & Immunology Program in 1998. Her thesis advisor was Dr. Steven Taffet.

CAREER DEVELOPMENT

Wednesday, February 15, 2017 | 12:00 - 1:30 PM | Library 222C

REFERENCE MANAGEMENT SOFTWARE 101: MENDELEY, REFWORKS, ENDNOTE & PAPERS

Mark Schmitt (Dean, College of Graduate Studies)

Chris Morley (Interim Chair, Public Health and Preventative Medicine)

Harsh Patel (PhD Candidate, Pharmacology)

Virginia Young (Sr. Assistant Librarian of Health Sciences Library)

If you haven't used reference management software before, this hands-on workshop is a must-attend! Learn how to use reference management software to help collect and organize publications and citations - this will be a lifesaver as you start working on a grant or paper. We'll include a brief overview and tutorial on four different programs, so by the end of the session you'll be able to choose (and use) the one you like best.

BEYOND THE DOCTORATE RESEARCH DAY

Wednesday, March 1, 2017

The Research Day will include oral presentations by our postdocs, fellows, and residents and a keynote presentation by Rainer Gruessner, MD, FACS, FICS, Professor of Surgery and Division Chief of Transplant Services at Upstate. A poster session and reception will immediately follow.

ABSTRACTS ARE NOW BEING ACCEPTED THROUGH 2/13

Participating postdocs will be eligible to win an iPad Air 2 for either the best oral presentation or the best poster presentation. More information available here: www.upstate.edu/postdoc/postdoc_life/events.php

STUDENT RESEARCH DAY

Wednesday, April 26, 2017

The Student Research Day, which highlights research from students in all four colleges at Upstate Medical University will be held Wednesday, April 26, 2017.

ABSTRACTS ARE NOW BEING ACCEPTED!

All poster presenters for the Student Research Day receive one free poster print courtesy of Upstate Medical Photography (certain conditions and deadlines apply, details are on the abstract submission form and in your confirmation email after submission).

One student from each college will be selected to give a ten-minute oral presentation, with five minutes for Q&A. In order to have your abstract considered for an oral presentation, you must submit your abstract by the priority deadline below.

To submit an abstract, visit: www.upstate.edu/grad/students/srday-form.php

Priority Deadline: Wednesday, February 22nd at 12:00 Noon.

All Abstracts Due: Wednesday, March 29, 2017 at 12:00 Noon.



AFTERNOON TEA:

Every Wednesday at 3:00

First Wednesday of the month, tea is at the NRB 3708 (call 6-7753), all others in WH 3120.

IS THERE SOMETHING WE MISSED??

Email Jennifer Brennan at brennanj@upstate.edu to get it included in the next issue!