

transforming students from consumers of knowledge into producers of knowledge

### THE BENEFITS OF AMBIGUITY

Over the last several years I have been involved in the rebuilding of the new Upstate medical school curriculum. Specifically, as course director of a now dissolved Molecular and Cellular Principals course and now as co-course director of a vertical 5-week Gl unit. Structurally, this was a great idea to incorporate Biochemistry, Anatomy, Cell Biology and Physiology into a single course that focuses on the gastrointestinal track. It was bolstered by having a fellow course director that was a GI physician that helped to infuse clinical relevance throughout.

Since this was our first time through this new course we decided to incorporate some new and innovative ideas. Many of these have been shown to help increase student learning and retention. What we didn't realize is that we didn't follow the prescriptive mold of the previous six units. We had four guizzes instead of one. We didn't tell students exactly how many points from each lecture would be on the exam. We used a slightly different organization on blackboard and we asked students to stay up on the material on a daily basis by incorporating a question of the day. After eight months of a homogenous curriculum this was not at all well received. We received numerous complaints during and after the course, but in the end most students learned to adapt. They learned to take the changes in stride and learn the material, hopefully, in a better way. As one student said to me in the last week, "I have hated this unit, but I am much better prepared for the exam on Friday."

Medicine, science and life, never follow a prescriptive formula. Teaching students to adapt to different learning styles, environments and innovative ideas is a critical competency for adult learning. We all must get out of our ruts and do different things. Indeed, incorporating some ambiguity may be an important path to creating a transformative education experience with the best outcomes.

- Mark E. Schmitt, PhD

Dean, College of Graduate Studies schmittm@upstate.edu

## publications

Yu X, **BLANDEN AR**, Tsang A, Zaman S, Liu Y, Gilleran J, Bencivenga AF, Kimball SD, **LOH SN**, Carpizo DR.

Thiosemicarbazones Functioning as Zinc Metallochaperones to Reactivate Mutant p53.

Mol Pharmacol. 2017 Jun;91(6):567-575. doi: 10.1124/mol.116.107409. Epub 2017 Mar 20.

#### MILLER MR, MILLER EW, BLYSTONE SD.

Non-canonical activity of the podosomal formin FMNL1y supports immune cell migration.

J Cell Sci. 2017 May 15;130(10):1730-1739. doi: 10.1242/jcs.195099. Epub 2017 Mar 27.

#### WANG L, Shi C, WRIGHT FA, GUO D, WANG X, Wang D, WOJCIKIEWICZ RJ, LUO J.

Multifunctional Telodendrimer Nanocarriers Restore Synergy of Bortezomib and Doxorubicin in Ovarian Cancer Treatment.

Cancer Res. 2017 Apr 10. doi: 10.1158/0008-5472.CAN-16-3119. [Epub ahead of print]

#### LAMMERT DB, MIDDLETON FA, Pan J, OLSON EC, HOWELL BW.

The de novo Autism Spectrum Disorder RELN R2290C Mutation Reduces Reelin Secretion and Increases Protein Disulfide Isomerase Expression.

J Neurochem. 2017 Apr 17. doi: 10.1111/jnc.14045. [Epub ahead of print]

#### LEDFORD KL, MARTINEZ-DE LUNA RI, Theisen MA, Rawlins KD, VICZIAN AS, ZUBER ME.

Distinct cis-acting regions control six6 expression during eye field and optic cup stages of eye formation.

Dev Biol. 2017 Jun 15;426(2):418-428. doi: 10.1016/j.ydbio.2017.04.003. Epub 2017 Apr 21.

#### ZARELLA MD, TS'O DY.

Cue combination encoding via contextual modulation of V1 and V2 neurons.

Eye Brain. 2016 Oct 21;8:177-193. doi: 10.2147/EB.S105616. eCollection 2016.

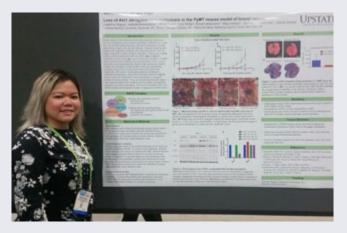
#### PAPILLION AM, KENDERES KJ, Yates JL, WINSLOW GM.

Early derivation of IgM memory cells and bone marrow plasmablasts.

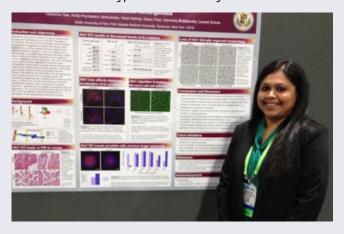
PLoS One. 2017 Jun 2;12(6):e0178853. doi: 10.1371/journal.pone.0178853. eCollection 2017.

### presentations

ANGELINA REGUA, a PhD student in Biochemistry & Molecular Biology, presented at the American Association for Cancer Research (AACR) Annual Meeting in Washington DC from April 1st through 5th. Angelina presented a poster titled "Loss of Abi1 abrogates lung metastasis in the PyMT mouse model of breast cancer."

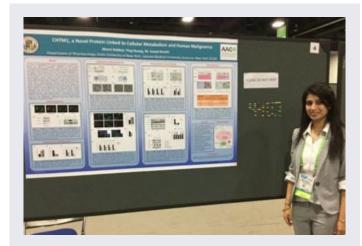


**DISHAREE DAS,** a PhD student in Biochemistry & Molecular Biology, presented at the American Association for Cancer Research (AACR) Annual Meeting in Washington DC from April 1st through 5th. Disharee presented a poster titled "The key role of Abi1 loss in dysregulating cell-cell adhesion during prostate cancer tumorigenesis."

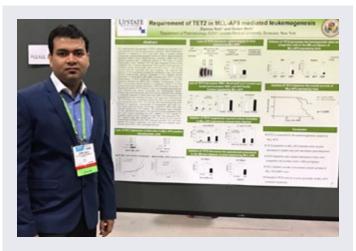


**HEATHER NELSON,** a PhD student in Anatomy & Cell Biology, participated in the SUNY Graduate Research Conference: Research Today and Tomorrow, sponsored by the SUNY Faculty Senate, in Saratoga Springs, NY on March 7th. The day featured a poster session and three concurrent sessions featuring student presentations. Heather was one of three students to represent SUNY Upstate and was selected to give an oral presentation titled "Regulation of Receptor-mediated Ca2+ signaling by stromal interaction molecule 2."

**ASHLEY JACKOBEL, KEVIN NAMITZ, & SWETHA DEVI VELIVELA,** PhD students in Biochemistry & Molecular Biology, presented at the American Society for Biochemistry & Molecular Biology (ASBMB) Annual Meeting in Chicago, IL from April 22nd through 26th.



MANSI BABBAR, a PhD student in Pharmacology, presented at the American Association for Cancer Research (AACR) Annual Meeting in Washington DC from April 1st through 5th. Mansi presented a poster titled "CHTM1, a Novel Protein linked to Cellular Metabolism and Human Malignancy."



**DIPMOY NATH,** a PhD student in Pharmacology, presented at the American Association for Cancer Research (AACR) Annual Meeting in Washington DC from April 1st through 5th. Dipmoy presented a poster titled "Requirement of TET2 in MLL-AF9 mediated leukemogenesis."

## from our students

JIE PENG, a PhD student in Biochemistry & Molecular Biology, successfully defended his dissertation in March. Jie's dissertation advisor is Dr. WENYI FENG. Congratulations, Jie!



KARIN SCHNEIDER, a PhD student in Microbiology & Immunology, successfully defended her dissertation in April. Karin's dissertation advisor is Dr. PAUL MASSA. Karin has accepted a postdoctoral position in the Microbiology & Immunology department with Dr. TIMOTHY ENDY. Congratulations, Karin!

**DIANA DUNN**, a PhD Student in Biochemistry & Molecular Biology, was awarded the 2017 Chancellor's Award for Student Excellence. This award honors students who have best demonstrated, and been recognized for, their integration of academic excellence with other aspects of their lives, which may include leadership, campus involvement, athletics, career achievement, community service or creative and performing arts. A reception was held for recipients at the Empire State Plaza Convention Center in Albany, NY, in April. Pictured below is Diana with Chancellor Nancy Zimpher, at left, and Dr. Lynn Cleary, Vice President for Academic Affairs at Upstate.





**AGNIK DASGUPTA,** a PhD student in Anatomy & Cell Biology, successfully defended his dissertation in April. Agnik's dissertation advisor is Dr. **JEFFREY AMACK**. Agnik has accepted a postdoctoral position with Dr. A.J. Hudspeth at Rockefeller University. **Congratulations, Agnik!** 

## from our students

**DANIEL TYLEE**, an MD/PhD student in Neuroscience, successfully defended his dissertation in April. Dan's dissertation advisor is Dr. **STEPHEN GLATT**. Dan is returning to the College of Medicine to finish his MD/PhD degree. **Congratulations, Dan!** 





**ADAM BLANDEN,** an MD/PhD student in Biochemistry & Molecular Biology, successfully defended his dissertation in April. Adam's dissertation advisor is Dr. **STEWART LOH. Congratulations, Adam!** 

Three graduates from the MD/PhD program this year. The three participated in Match Day on March 16, 2017:

**DARIN DOLEZAL** will complete his residency in Pathology at Yale University. In addition to earning his MD, Darin completed a PhD in Biochemistry & Molecular Biology; his dissertation advisor was Dr. **FRANCESCA PIGNONI. Congratulations, Darin!** 

**MATTHEW GUMBLETON** will complete his residency in Internal Medicine at the University of Utah. In addition to earning his MD, Matt completed a PhD in Microbiology & Immunology; his dissertation advisor was Dr. **WILLIAM KERR**. **Congratulations**, **Matt!** 

**RYAN O'DELL** will complete his residency in Psychiatry/Research at Yale University. In addition to earning his MD, Ryan completed a PhD in Neuroscience; his dissertation advisor was Dr. **ERIC OLSON. Congratulations, Ryan!** 

### from our alumni

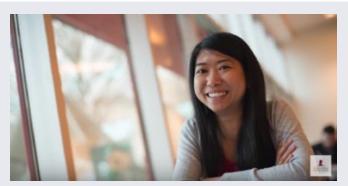


ROBERT ZAJDEL, PHD (Anatomy & Cell Biology '98) was a recipient of SUNY Upstate Medical University's 2017 Gold Standard Award. This award recognizes faculty who have demonstrated dedication, passion, vision and commitment to their work and to Upstate. Rob is an Assistant Professor in the Department of Cell & Developmental Biology at SUNY Upstate. The awards were presented at the Annual Celebration of the Upstate Faculty held on March 21, 2017. Rob's wife, Carol Sames, is an associate professor in the College of Health Professions and is director of the Vitality Fitness program. Together, they have four children.

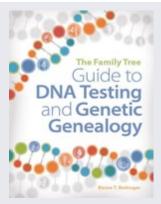
Pictured above from left, Dr. Joseph Sanger, Professor & Chair of Cell & Developmental Biology; Dr. Robert Zajdel and Dr. Danielle Laraque-Arena.

#### **Congratulations Rob!**

**STEVEN HICKS, MD, PHD** (Neuroscience '12), returned to the Upstate campus on April 18th & 19th for the Autism Symposium, sponsored by the Department of Neuroscience & Physiology. Steve was a guest speaker for the two-day event. He presented: "Identifying autism spectrum disorder using salivary miRNA." Steve is currently an Assistant Professor of Pediatrics at Penn State University. Steve is a graduate of the MD/PhD Program here at SUNY Upstate.



**JANET ZHENG, PHD** (Biochemistry & Molecular Biology '14), a postdoctoral research associate in Structural Biology at St. Jude Children's Research Hospital, was featured in an Employee Spotlight for St. Jude. **Click the image above to watch her employee spotlight and learn more about her story!** 



#### **BLAINE BETTINGER, PHD, JD**

(Biochemistry & Molecular Biology '06), recently published a new book The Family Tree Guide to DNA Testing and Genetic Geneaology. The book was reviewed in the Spring 2017 issue of Genome Magazine. The review is available online here.

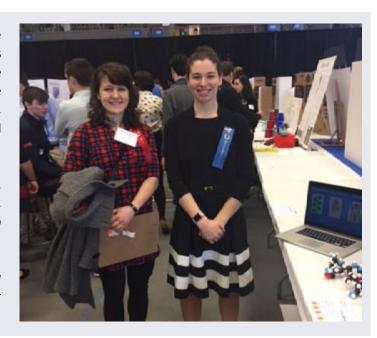


## happening on and around campus

The College of Graduate Studies again participated in the Central New York Science & Engineering Fair, sponsored by the Museum of Science and Technology. This year's event was held on March 26th at the SRC Arena, at Onondaga Community College. The competition is for Central New York Students in the 4th - 12th grade. Every year, we award one outstanding high school student whose project has demonstrated creativity, innovation and scientific excellence in the biological sciences the "Upstate Dean's Award in the Biological Sciences." The winner receives a \$500 award and a plaque.

This year's award was presented to Elise White, a Junior at Binghamton High School. The award was judged by Dr. **DAVID AMBERG**, Vice President for Research, and Dr. **MICHAEL COSGROVE**, Director of our Summer Undergraduate Research Fellowship Program. Students in the College of Graduate Studies also volunteered as judges.

Pictured here is **OLESEA COJOHARI**, a PhD Student in Microbiology & Immunology and volunteer judge for the event, along with the Upstate Dean's Award Winner **ELISE WHITE.** 





The International Student Association (ISA) held its annual International Student Festival on Friday, April 14th. Pictured are students in the College of Graduate Studies with our International Student Advisor. From left: **PEI-JU LIU**, a PhD Student in Anatomy & Cell Biology; **SUMANA SUNDARAMURTHY**, a PhD Student in Anatomy & Cell Biology; **PEU SANTRA**, a PhD Student in Anatomy & Cell Biology; **JENNIFER ABBOTT**, our International Student Advisor; **ESTHER MUTONGI**, a MS Student in Microbiology & Immunology; and **ARTURO BARBACHANO-GUERRERO**, a PhD Student in Microbiology & Immunology.

# beyond the doctorate research day- 3/1/17

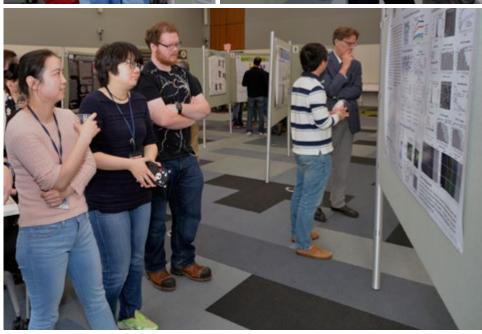








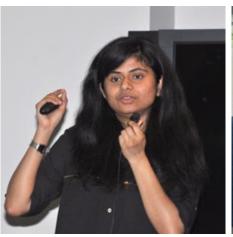


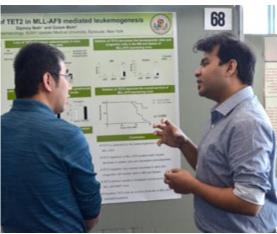


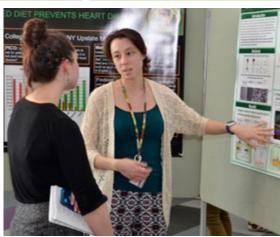




# student research day: 4/26/17

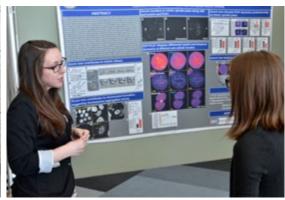




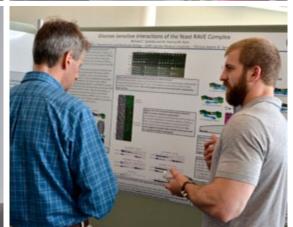




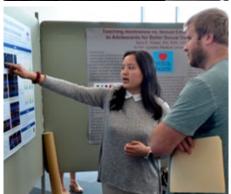




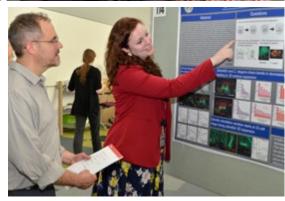








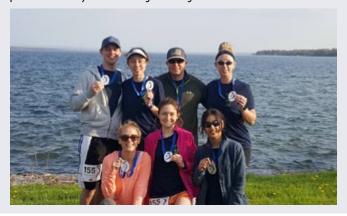
On Wednesday, April 26th, more than 140 students from all four colleges at Upstate, participated in the Annual Charles R. Ross Memorial Student Research Day; thirty-two are students in the College of Graduate Studies. ARIJITA CHAKRABORTY, a PhD Candidate with Dr. WENYI FENG in Biochemistry & Molecular Biology, was selected as the Oral Presenter for the College of Graduate Studies. And MATT GUMBLETON, an MD/PhD Student who completed his dissertation research in Dr. WILLIAM KERR's Lab in Microbiology & Immunology, was chosen to be the Oral Presenter for the College of Medicine. Pictured at right: LINDSAY RATHBUN, a PhD Student in Anatomy & Cell Biology, was awarded the First Place Prize for the Best Poster Presentation as judged by Faculty & Students. Pictured at left: CHRISTINE LY, an MD/PhD Student in Neuroscience, was awarded Second Place for the Best Poster Presentation.



## in other news

The Fifth Annual Syracuse Half Marathon was held on Saturday, March 26th in downtown Syracuse. Graduate Students **GREG GORECZNY**, **HEATHER NELSON**, **STUTI SHARMA**, and **KIMBERLY WONG** and MD/PhD Student **ALAN BLANEY** all participated in the half marathon. Congratulations runners!

Graduate Students **GREG GORECZNY**, **HEATHER NELSON**, **STUTI SHARMA**, and **KIMBERLY WONG** also ran the Seneca7 together on April 30th. Seneca7 is a relay race around the scenic Seneca Lake. The race is 77.7 miles in total. Below is a picture of the relay team including our four graduate students.



**XIAN ZHANG,** a PhD Student in Pharmacology, and her husband **YIFAN GONG**, a PhD Student in Neuroscience at Syracuse University, welcomed their first child, Leo, on March 12, 2017. Little Leo was 20 inches long and weighed 6lbs, 3oz. **Congratulations to the new parents!** 





**HEATHER NELSON,** a PhD Student in Anatomy & Cell Biology, completed the Boston Marathon on Patriots Day, Monday, April 17th. Her overall time was 3:40:47. **Congratulations, Heather!** 

On Saturday, April 22nd — Earth Day — researchers, teachers, students, parents and citizens alike gathered to "March for Science." Across the country and around the world, people marched in support of the positive impacts science offers us and in defense of its purpose in policymaking.



A group of Upstate researchers, including faculty, students, alumni and postdocs, traveled to Washington DC to participate in the March for Science there. Back in Syracuse, Dr. RICHARD VEENSTRA, professor of Pharmacology, was one of the featured speakers at the March for Science - Syracuse. Watch his speech here. Meanwhile, first year graduate student BRIAN ZEBERL was at the March for Science in Rochester, NY. Brian was quoted in the Democrat & Chronicle: "When we lose funding from the government, that's less technological advancement that could help someone in need." Read more here.

## upcoming events & save the dates

#### **YOUR NEXT NIH F30 & F31 FELLOWSHIP DEADLINE IS:**

April 8, 2017

**August 8, 2017** 

**December 8, 2017** 

Visit here for more information.

#### **NEED HELP WRITING YOUR NIH GRANT?**

We can help! Research Administration is hosting a day-long workshop on NIH Grantwriting featuring Dr. Lauren Broyles, a grantwriting consultant for academic researchers. The workshop will be Monday, July 17th from 8:30 AM - 4:30 PM in Weiskotten 103. Registration information will be coming. Contact Katie Keough (keoughk@upstate.edu) in Research Administration for questions.



#### **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.

#### MAX MOZELL FUND TO SUPPORT STUDENT TRAVEL AWARDS

We need your support! We have created the Max Mozell Fund for the College of Graduate Studies in order to provide graduate students with travel awards so they can present their research at national meetings and conferences.

The fund was named for Maxwell Mozell, PhD. Dr. Mozell joined the faculty at SUNY Upstate Medical University in 1961 and exemplified an academic career which embraces research, teaching and administration. He was a Professor of Neuroscience and Physiology, a SUNY Distinguished Service Professor and recipient of the Chancellor's Award for Excellence in Scholarship and Creative Activities. Dr. Mozell served as Dean of the College of Graduate Studies beginning in 1990 until his retirement in 2008.

It is our goal to raise \$10,000, which would provide us an endowment status that earns income that can be used on an annual basis for these travel awards.

Please consider making a donation today. Donating is easy. Simply visit the fund online at <a href="https://www.upstatefoundation.org/GraduateStudies">https://www.upstatefoundation.org/GraduateStudies</a> and follow the prompts. Every little bit helps, and donations of any size are appreciated.

Thank you in advance for your generosity!