

upstategrad update

transforming students from consumers of knowledge into producers of knowledge

june/july 2016

CHANGING PERSPECTIVE

As you all know, this is a presidential election year and it has certainly been one that most of us will not forget. It has been incredibly entertaining, but also frightening on many levels. I have seen my friends and family come out in strong support of one candidate or another and been truly surprised. Indeed, as a scientist, I have found this election to be incredibly fascinating from a social anthropology perspective. Yes, I said it; I like social anthropology and would probably go into that if I could start over in graduate school again, but I will leave that for another blog. But I have used this opportunity to probe the social logic behind different choices. First, it has helped me to be much more accepting of various folks and it has given me great insights. For example, this last weekend I was in rural Maine visiting my nephew and met a group of hardcore Republicans. What I found is that they really just want to be left alone (libertarian side of the Republican Party). I found them to be incredibly generous and accepting of me, an outsider. Best of all, they had a great sense of humor that kept me laughing into the next day. They are just one small facet of the differing opinions that make up our populous. No one candidate is perfect for any of us but we must balance the issues that we see as important and make a choice. Most importantly, we need to be accepting of others' choices and we don't have to tell anyone what choice we make. So I recommend following the election from a scientific perspective, it will keep it much more entertaining and far less frightening.

– Mark E. Schmitt, PhD

Dean, College of Graduate Studies

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GcsR, a TyrR-Like Enhancer-Binding Protein, Regulates Expression of the Glycine Cleavage System in *Pseudomonas aeruginosa* PA01.

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Human cytomegalovirus induces an atypical activation of Akt to stimulate the survival of short-lived monocytes.

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J Virol. 2016 May 4. pii: JVI.00214-16. [Epub ahead of print]

Super Elongation Complex contains a TFIIIF-related subcomplex.

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Mutations in zebrafish *pitx2* model congenital malformations in Axenfeld-Rieger syndrome but do not disrupt left-right placement of visceral organs.

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ZAFREEN L, Walker-Kopp N, Huang LS, **BERRY E.**
Arch Biochem Biophys. 2016 Jun 11;604:47-56. [Epub ahead of print]

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EMBO J. 2016 Jun 13;. [Epub ahead of print]

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XU Q, Lin X, Matiukas A, **ZHANG X, VEENSTRA RD.**
Channels (Austin). 2016 Jun 15;:1-13. [Epub ahead of print]

Myosin 1e promotes breast cancer malignancy by enhancing tumor cell proliferation and stimulating tumor cell de-differentiation.

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Oncotarget. 2016 Jun 17;. [Epub ahead of print]

Mitochondrial dysfunction in the liver and antiphospholipid antibody production precede disease onset and respond to rapamycin in lupus-prone mice.

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Arthritis Rheumatol. 2016 Jun 22;. [Epub ahead of print]

The FNIP co-chaperones decelerate the Hsp90 chaperone cycle and enhance drug binding.

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Nat Commun. 2016 Jun 29;7:12037.

presentations



AMBER PAPILLION, MEGAN PEPPENELLI AND SCOTT MINCHENBERG attended the American Association of Immunologists Annual Meeting in Seattle, WA from May 13th through 17th. Megan received an AAI Trainee Abstract Award to cover her travel to the meeting. The students are pictured above with **DR. CHRISTINE KING** and **DR. STEVEN TAFFET**, who also attended the conference. Also in attendance, but not pictured above were postdocs **NEETU SRIVASTAVA** and **RAKI SUDAN** in Microbiology & Immunology.



A group of graduate students and postdocs attended the annual Association for Research in Vision and Ophthalmology (ARVO) meeting held May 1st through 5th in Seattle, Washington. **SAPTARSHI BISWAS, NYCOLE MAZA, ROSE PASQUALE, DMITRI SERJANOV, and KIM WONG** – all PhD Students in Neuroscience – attended the meeting. Ophthalmology postdocs **REYNA MARTINEZ-DELUNA** and **RAJIB PRAMANIK** were also in attendance. Pictured from left, clockwise: Rajib Pramanik; Saptarshi Biswas; Dmitri Serjanov; Reyna Martinez-De Luna and her husband; Nycole Maza; Rose Pasquale and Kimberly Wong. Also in attendance, but not pictured here, was **SUNGSU LEE**, an MD/PhD Student in Neuroscience.



DAWN LAMMERT, an MD/PhD Student in Neuroscience, presented at the Gordon Research Conference & Seminar 2016: Fragile X & Autism Related Disorders at Mount Snow in West Dover, Vermont from June 4th through the 10th. Dawn gave an oral presentation at the Seminar entitled, “RELN mutations identified in autism spectrum patients cause a protein biosynthetic defect.” Dawn then gave a poster presentation at the Conference, titled “Reelin mutations in a conserved RXR motif lead to a defect in reelin protein secretion and support a role for altered reelin protein dynamics in autism spectrum patients.” Dawn is pictured in the back left in a yellow sweater.



SUBHRAJIT BANERJEE, a PhD Student in Biochemistry & Molecular Biology, presented at the Gordon Research Conference 2016: Lysosome and Endocytosis in Andover, New Hampshire from June 12th through 17th. Subhrajit's poster was titled “Regulation of V-ATPases by Compartment Specific Phosphoinositides.” Subhrajit is pictured at center.

from our students



PARISA AFSHARI, a PhD student in Neuroscience, successfully defended her dissertation in May. Parisa's dissertation advisor is Dr. Frank Middleton. Parisa has accepted a postdoctoral position in the Neuroscience & Physiology Department, here at Upstate. **Congratulations, Parisa!**



ZACHARY OAKS, an MD/PhD student in Biochemistry & Molecular Biology, successfully defended his dissertation in May. Zach's dissertation advisor is Dr. Andras Perl. Zach will now return to the College of Medicine to complete his MD training. **Congratulations, Zach!**



Students from the College of Graduate Studies volunteered their time to serve as judges for the SUNY ESF Environmental Challenge held at the Carrier Dome on May 17th. The annual Challenge is a science fair and career exploration opportunity for seventh and eighth graders in the Syracuse City School District. Judges included: Sarah Barger, Olesea Cojohari, Heather Nelson & Stuti Sharma.



FROM LEFT: Anna John, Ashley Canning, Ashleigh Jackobel and Marissa Smith attended "BioSAX Essentials 6: Getting Started in Biological Small-Angle X-Ray Solution Scattering" held at the Wilson Laboratory at Cornell University. The day and a half workshop consisted of lectures and hands-on tutorials on the basics of BioSAXS data collection and processing from expert practitioners in the field.

from our students



CHINAZA EGBUTA, a PhD student in Pharmacology, successfully defended her dissertation in June. Chinaza's dissertation advisor is Dr. Debashis Ghosh. Chinaza has accepted a postdoc position with Leslie Gold, PhD, in the Division of Translational Medicine, Department of Medicine at the New York University School of Medicine. **Congratulations, Chinaza!**



WILLIAM HILINSKI, a PhD student in Neuroscience, successfully defended his dissertation in June. Will's dissertation advisor is Dr. Katharine Lewis. **Congratulations, Will!**



ZAINAB MANSARAY-STORMS, a PhD student in Neuroscience, successfully defended her dissertation in June. Zainab's dissertation advisor is Dr. Brian Howell. Zainab has accepted a position as a Scientist I at Bristol-Myers Squibb in Syracuse. **Congratulations, Zainab!**



SCOTT MINCHENBERG, an MD/PhD student in Microbiology & Immunology, received an NIH National Research Service F30 Fellowship for three years. The title of the fellowship is "Oligodendrocyte-Specific Regulation of Mitochondrial Function." Scott is pictured above at right celebrating with past fellowship recipients and classmates: **KAREN HOWARD** and **ADAM BLANDEN**. **Congratulations Scott!**

CHRISTOPHER BARTLOW, an MD/PhD student in Anatomy & Cell Biology, successfully passed his qualifying exam in June. **Congratulations, Chris!**

DARIA LAROCCA, a PhD student in Neuroscience, successfully passed her qualifying exam in June. **Congratulations, Daria!**

from our alumni



Alumnae **KELLY SALINAS**, pictured at left, and **KIM ZACCARIA**, pictured at right, are Toxicologists in the Environmental Health Analysis department at SRC, Inc, formerly known as Syracuse Research Corporation, in North Syracuse, NY. The primary roles of this position are to conduct and document systematic literature reviews for government-sponsored human health risk assessments (U.S. EPA; CDC), analyze and review available scientific literature, perform hazard identification and dose-response assessment, and derive safety values/reference doses to protect human health. Risk assessment projects include analysis of three separate data streams, including human, animal, and mechanistic data. Often human data are inadequate to identify human health hazards or the dose at which a specific chemical poses a risk. Therefore, careful examination of animal data, including thorough review of biochemical mechanisms of action and potential relevance to human health, are critical in this process. Toxicologists at SRC, Inc. also work with the U.S. EPA's Safer Choice chemical program, which helps "consumers and commercial buyers identify and select products with safer chemical ingredients, without sacrificing quality or performance". Both Kelly and Kim initially joined SRC, Inc. as postdoctoral associates. Kelly graduated with her PhD in Biochemistry & Molecular Biology in 2008 and Kim graduated with her PhD in Anatomy & Cell Biology in 2011.

SHELLEY STEVENS, another SUNY Upstate alumnus, joined SRC, Inc. as a postdoctoral associate this May.

**We love hearing from you ...
Drop by our website & let us know how you're doing!**

JEFF MILLS is a Research & Development Scientist at Acumen Detection, an LLC spin-off of SRC, Inc. Jeff started working at SRC in 2012 in SRC's ChemBio division as a part of a team designing novel assays to detect biological warfare agents and toxins (such as Ricin, Botulinum Toxin and Staphylococcal Enterotoxins). This work, which utilized SRC's BSL 3 laboratory, resulted in numerous patents and supported SRC's bid for various government contracts. Jeff and a majority of the ChemBio team transitioned into Acumen Detection in November 2015 to develop novel assays that detect food pathogens (such as Salmonella and Listeria). Acumen Detection's mission is to develop and produce affordable, easy-to-use, accurate identification systems that provide actionable information to farmers and food processors within one to five hours, on the farm and in the processing facility. Even though Acumen Detection has only been in operation for approximately 6 month, its small team has already developed numerous assays that have the potential to reshape the food testing industry. For example, Jeff has helped develop a cutting-edge assay that can quickly identify the causative agents in mastitis infections in dairy cows using only raw milk samples. Instead of waiting 2-3 days, farmers are now able to make real-time management decisions in a few hours to control intramammary infections in their herds and reduce the use of antibiotics. Currently, mastitis is responsible for \$1 to \$2 billion in losses per year for US dairy farmers. Prior to joining SRC, Jeff worked as a postdoctoral fellow at Cornell determining factors that can trigger or prevent autoimmune diseases such as Multiple Sclerosis and Inflammatory Bowel Disease. Jeff graduated with his PhD in Microbiology & Immunology in 2007.

IS THERE SOMETHING WE MISSED??

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

from our alumni



Alumnus **ADEM KOKSAL** and his new wife Dilara married on June 5, 2016. The two honeymooned in Ireland and Spain. The newlyweds currently live in the Washington DC metro area where Dilara is a registered nurse specializing in pediatric care and Adem is currently working as a Scientist at MedImmune/AstraZeneca, a pharma company, where he is researching new biologics for oncology and infectious diseases. Adem graduated with his PhD in Biochemistry & Molecular Biology in 2011.

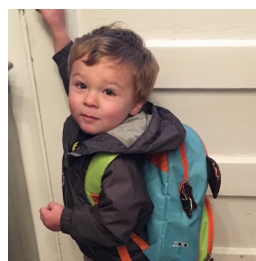
**We love hearing from you ...
Drop by our website &
let us know how you're doing!**



A group of our alumni in attendance at Adem's wedding, from left: **REBECCA OOT**, PhD, Biochemistry & Molecular Biology 2012; **BRANDY VERHALEN**, PhD, Biochemistry & Molecular Biology, 2011; **ADAM OLIA**, PhD, Biochemistry & Molecular Biology 2009; **KAYLEN LOTT**, PhD, Biochemistry & Molecular Biology 2011; **JONATHAN NARDOZZI**, PhD, Biochemistry & Molecular Biology 2010; **COLLEEN KUEMMEL**, PhD, Biochemistry & Molecular Biology, 2012; **PRISCILA SATO**, PhD, Pharmacology 2012, with her husband Dr. Gino Cingolani and their two children.

KAYLEN is a postdoc in Dr. Laurie Read's lab at the University of Buffalo. She married Masashi Ohira, who graduated from the MD/PhD program here in 2010. The two were married in April 2015 and both are doing well.

REBECCA is a postdoc in Biochemistry & Molecular Biology here at SUNY Upstate. Her project is focused on understanding the mechanism of regulation of the vacuolar ATPase using structural biology and biochemistry. The enzyme has been implicated in a wide variety of human diseases and has been shown to play an important role in tumor metastasis. A detailed understanding of how the enzyme's function is modulated will aid in the design of therapeutics.



BRANDY is a research associate at the University of Alabama at Birmingham in the Department of Microbiology; she is studying virus-host interactions of Polyomaviruses.

JONATHAN joined a start-up company called Torque Therapeutics based in Cambridge, MA in January 2016. "We are developing a cancer therapeutic, using nanoparticle-based engineering of patient immune cells." Jonathan's son Nico, pictured at left, will be two years old in August. Jon says "He's getting bigger and smarter every day. Camila and I couldn't be happier with him."

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commencement: may 22, 2016



We gathered on Sunday, May 22nd to celebrate the success of our 2016 graduates and potential graduates! We kicked off the events with a pre-commencement brunch in the Weiskotten Cafeteria and then proceeded to the Carrier Theater at the Civic Center for the ceremony, which included: remarks by President Laraque-Arena and Dean Mark Schmitt. The student selected speaker was Chinaza Egbuta and the student selected flag bearer was Josh Karchin. The following students participated in the ceremony:

Parisa Afshari

PhD, Neuroscience

Chinaza Egbuta

PhD, Pharmacology

Joshua Karchin

PhD, Biochemistry & Molecular Biology

Jeremiah Martino

PhD, Physiology

Maria Camargo

PhD, Biochemistry & Molecular Biology

William Hilinski

PhD, Neuroscience

Yaxin Liu

PhD, Biochemistry & Molecular Biology

Thomas Russell

MS, Physiology

The video of the entire ceremony is available on YouTube at: https://www.youtube.com/watch?v=bsZz6BR_1EY



welcome to campus



The **SUMMER UNDERGRADUATE RESEARCH FELLOWSHIP PROGRAM** began Monday, June 6th and runs through Friday, August 12th. The program is designed to give undergraduate students a glimpse of life as a graduate student, gaining invaluable experience doing hands-on research while working alongside faculty, postdocs and graduate students. During this intensive ten-week program, undergraduates formulate a proposal, perform experiments, and write a formal research paper, potentially giving them the opportunity to see their work published. Each student works under the supervision and guidance of a principal investigator, who is assigned based on mutual research interests. In addition, students attend research seminars presented by faculty and graduate students. They will then give a presentation of their research to their peers and supervisors. Outside of the lab, we offer guidance on applying to graduate school, career planning and classes on ethics, humane use of animals, lab safety, and presentation skills. And we do have some fun – SURF Director, Dr. Michael Cosgrove, organizes some social events like nature walks, kayaking trips and more so students can get to know each other outside the lab. Each year the SURF Program also helps us recruit outstanding graduate students as former SURF students are eligible for fast-track admission to our Biomedical Sciences Program. We are happy to welcome this year's participants to campus:

Maia Baskerville, Wells College
Dr. Gary Chan, Microbiology & Immunology

Lee Bauter, LeMoyne College
Dr. Wenyi Feng, Biochemistry & Molecular Biology

Max Cravener, Lock Haven University
Dr. Gary Winslow, Microbiology & Immunology

Siddhartha Dhakal, University of Louisiana at Monroe
Dr. Yunlei Yang, Neuroscience & Physiology

Michael Dolan, Binghamton University
Dr. William Brunken, Ophthalmology

Rhiannon Gabriel-Jones, Bard College at Simons Rock
Dr. Frank Middleton, Neuroscience & Physiology

Shelby Helwig, Lock Haven University
Dr. Heidi Hehnly, Cell & Developmental Biology

Alana MacDonald, Binghamton University
Dr. William Kerr, Microbiology & Immunology

Elsie Odhiambo, Smith College
Dr. Juntao Luo, Pharmacology

Clara Richardson, SUNY Cobleskill
Dr. Mira Krendel, Cell & Developmental Biology

We are pleased to announce the addition of four students to the MD/PhD Program this year:

JENNIFER CHEUNG, a graduate from Yale, is doing her summer rotation with Dr. William Kerr

NICHOLAS NGUYEN, a graduate from the University of California at San Diego, is doing his lab rotation with Dr. Stephen Glatt

BRANDON WYMAN, a graduate from the University of Buffalo, is doing his rotation with Dr. Andras Perl

MICHAEL GARONE, a graduate from SUNY Geneseo, has already completed one year of medical school here prior to entering the MD/PhD Program this summer. He is doing his lab rotation with Dr. William Kerr.

1000 GIRLS, 1000 FUTURES, sponsored by the New York Academy of Sciences is looking for new mentors for the upcoming year! Mentors work with high school girls interested in STEM to help them develop skills like leadership, communication, and critical thinking. Mentors help guide the girls through the college readiness component of the program, which includes an overview of the college application, selection and admissions process. The program runs for one year beginning in September 2016 and all mentorship is virtual in nature. There is a training module available to prepare mentors and the NYAS staff offers support throughout the program. **The application deadline is July 18th.** For more information visit: <http://www.1000girls1000futures.org>

Plus, some of last year's mentors were featured in a video campaign for the program - check it out! <https://www.youtube.com/watch?v=kQ18NckFaGw>

[Read more about the SURF Program here!](#)

in other news



We are very happy to welcome baby Lucas to the Graduate Studies family! **KRYSTAL RIPA** and her husband Michael welcomed Lucas Dennis Ripa into the world on May 17th at 4:34 PM. Lucas weighed 8 pounds, 1 oz and measured 20.5 inches long. Both baby and momma are doing well. Krystal will return to the office in August.



The Graduate Student Association hosted their annual picnic on Friday, June 24th at Oneida Shores. The day included lots of good food, fun and as always, the Annual Softball Tournament, where Biochemistry once again reclaimed the highly-coveted softball trophy...

LAURA SZCZESNIAK, an MD/PhD student, and **JACQUALYN SCHULMAN**, a PhD student in Pharmacology, participated in the Syracuse Cystic Fibrosis Foundation Great Strides Walk on Saturday May 21st at Green Lakes State Park. The Cystic Fibrosis Foundation has raised and invested hundreds of millions of dollars to support research, development of new drugs and therapies, in the search for a cure. Keep up the great work ladies!



MARISSA SMITH, a PhD student in Biochemistry & Molecular Biology, ran the Vermont City Marathon in Burlington, VT on Sunday, May 29th.

upcoming events & save the dates!

SAVE THE DATE

Join us for the 16th Annual

BIOMEDICAL SCIENCES RETREAT

Thursday, September 15, 2016 | 8:00 AM - 6:00 PM | The Lodge at Welch Allyn, Skaneateles, NY

UPSTATE
MEDICAL UNIVERSITY
COLLEGE OF GRADUATE STUDIES

AFTERNOON TEA | Every Wednesday at 3:00 | **WH 3120 or NRB 3708*** | *First Wednesday of the month, tea is at the NRB.

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