

upstategrad update

transforming students from consumers of knowledge into producers of knowledge

november 2015

FROM THE DEAN:

In our PhD programs, one of the critical competencies that we try to instill in students is independence. Independence has many meanings in this context and spans many other competencies. It starts in the learning process, where we work to help students become independent and life long learners. We push them to investigate literature in new fields on their own with a love for learning what is known, how it was found and how things work from a systems to a molecular level. Many of us do this constantly without thinking, but it is something that we learned to do along the way.

We also strive to instill research independence. The idea is to push students to a point where they are designing and performing their own experiments, analyzing the data and deciding on their own what experiment to do next. At the highest level, they are identifying new areas of study and designing entire projects on their own.

Lastly, we strive for students to become independent thinkers. We want them to decide things on their own, to challenge our ideas, hypotheses and results. In the end, we strive for them to act and feel as our peers as opposed to our students.

Gaining independence is often a challenge. Faculty advisors help students achieve this in different ways, and no two faculty members would agree on which method is best. In the end, we know when a student is ready to graduate when they tell us what they are doing next, when they run their advisory committee meeting, and when the papers arrive on our desks nearly ready to submit. It would be wrong of me to say that we achieve this every time with every student, but we hopefully get close. Those students that achieve this independence have fantastic careers ahead of them.

– **Mark E. Schmitt, PhD**

Dean, College of Graduate Studies

Professor, Biochemistry and Molecular Biology

schmittm@upstate.edu

In the past month, the following researchers in the College of Graduate Studies have published articles:

COUOH-CARDEL S, Milgrom E, **WILKENS S**.

Affinity Purification and Structural Features of the Yeast Vacuolar ATPase Vo Membrane Sector. *Journal of Biological Chemistry*. 2015 Sep 28;. [Epub ahead of print]

<http://www.ncbi.nlm.nih.gov/pubmed/26416888?dopt=Abstract>

DOLEZAL D, Liu Z, **ZHOU Q**, **PIGNONI F**.

Fly LMBR1/LIMR-type protein Lipid promotes germ-line stem cell self-renewal by enhancing BMP signaling. *Proceedings of the National Academy of Sciences of the United States of America*. 2015 Oct 28;. [Epub ahead of print]

<http://www.ncbi.nlm.nih.gov/pubmed/26512105?dopt=Abstract>

Russo CM, Adhikari AA, Wallach DR, **FERNANDES S**, Balch AN, **KERR WG**, Chisholm JD.

Synthesis and initial evaluation of quinoline-based inhibitors of the SH2-containing inositol 5'-phosphatase (SHIP). *Bioorganic & Medicinal Chemistry Letters*. 2015 Sep 15;. [Epub ahead of print]

<http://www.ncbi.nlm.nih.gov/pubmed/26453006?dopt=Abstract>

Blanco-Menéndez N, Del Fresno C, **FERNANDES S**, Calvo E, Conde-Garrosa R, **KERR WG**, Sancho D.

SHIP-1 Couples to the Dectin-1 hemITAM and Selectively Modulates Reactive Oxygen Species Production in Dendritic Cells in Response to *Candida albicans*. *Journal of Immunology*. 2015 Sep 28;. [Epub ahead of print]

<http://www.ncbi.nlm.nih.gov/pubmed/26416276?dopt=Abstract>

GOKEY JJ, Ji Y, Tay HG, Litts B, **AMACK JD**.

Kupffer's vesicle size threshold for robust left-right patterning of the zebrafish embryo. *Developmental Dynamics*. 2015 Oct 7;. [Epub ahead of print]

<http://www.ncbi.nlm.nih.gov/pubmed/26442502?dopt=Abstract>

Ha JH, **KARCHIN JM**, Walker-Kopp N, Castañeda CA, **LOH SN**.

Engineered Domain Swapping as an On/Off Switch for Protein Function. *Chemistry & Biology*. 2015 Oct 22;22(10):1384-93.

<http://www.ncbi.nlm.nih.gov/pubmed/26496687?dopt=Abstract>

LUCCHESI C, **SHEIKH MS**, **HUANG Y**.

Negative regulation of RNA-binding protein HuR by tumor-suppressor ECRG2. *Oncogene*. 2015 Oct 5 [Epub ahead of print]

<http://www.ncbi.nlm.nih.gov/pubmed/26434587>

MILLER MR, **BLYSTONE SD**.

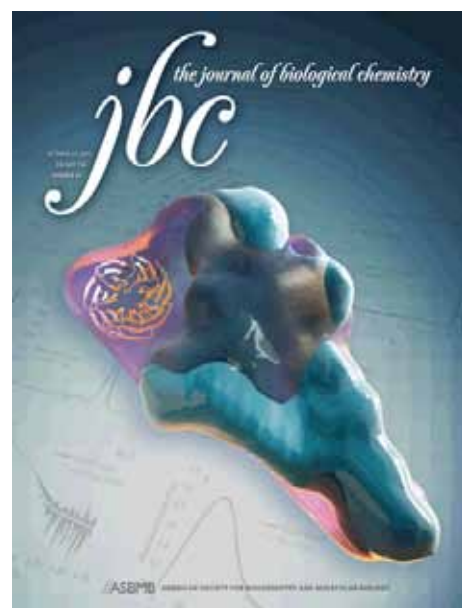
Reliable and inexpensive expression of large, tagged, exogenous proteins in murine bone marrow-derived macrophages using a second generation lentiviral system. *Journal of Biological Methods*. 2(3):e23 (2015).

<http://www.ncbi.nlm.nih.gov/pubmed/26457319?dopt=Abstract>

Hang LE, **PENG J**, Tan W, Szakal B, Menolfi D, Sheng Z, Lobachev K, Branzei D, **FENG W**, Zhao X.

Rtt107 Is a Multi-functional Scaffold Supporting Replication Progression with Partner SUMO and Ubiquitin Ligases. *Molecular Cell*. 2015 Sep 29;. [Epub ahead of print]

<http://www.ncbi.nlm.nih.gov/pubmed/26439300?dopt=Abstract>



A recent publication from now-graduate **STEPHEN SHINSKY** and his dissertation advisor, **MICHAEL COSGROVE** entitled: "Unique Role of the WD-40 Repeat Protein 5 (WDR5) Subunit within the Mixed Lineage Leukemia 3 (MLL3) Histone Methyltransferase Complex" published in the *Journal of Biological Chemistry* was featured on the cover of the October 23rd issue. The article was e-published ahead of the issue in late August.

presentations

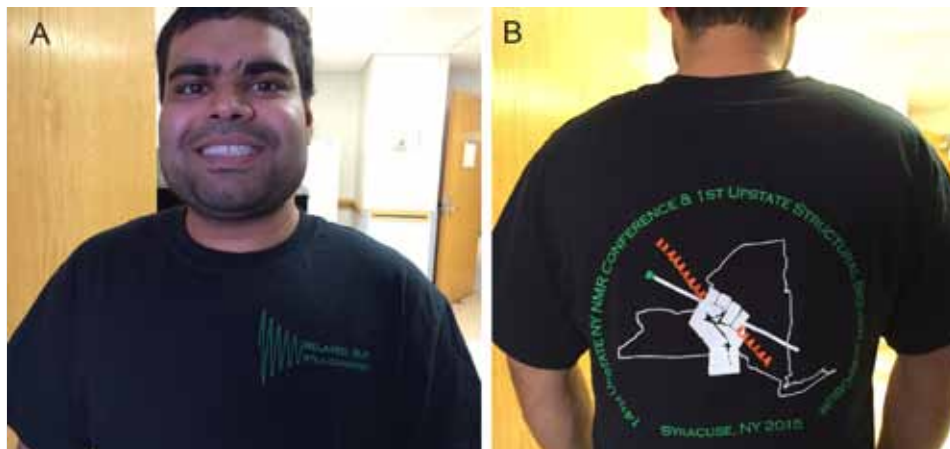
In the past month, the following researchers have attended, and presented, at conferences:



Society for Neuroscience Annual Meeting

Chicago, IL | October 17 - 21, 2015

MAMUNUR RASHID, a PhD Student in Neuroscience, presented a poster entitled “Conditional knockout of paxillin in the nervous system disrupts migrating neuron morphology and delays cortical lamination.” This work showed that deletion of paxillin from the developing cortex, produced a migration delay and altered morphology of the migrating neurons, in a cell-autonomous fashion. Above, Mamun and his wife, Liz, are pictured in front of Cloud Gate at Millennium Park.



14th Upstate NY NMR Symposium/1st Upstate Structural Biology Symposium

Syracuse, NY | October 19 - 20, 2015

REBECCA OOT, PhD, a postdoc in Biochemistry and Molecular Biology with Dr. Stephan Wilkens, presented a talk entitled, “Crystal Structure of yeast V1-ATPase in the Autoinhibited State”. The symposium, sponsored by the Syracuse Hill Colleges (SUNY College for Environmental Science and Forestry (SUNY ESF), Syracuse University (SU) and SUNY Upstate Medical University (SUNY Upstate), featured oral presentations and a poster session covering NMR spectroscopy related topics on day one and more general structural biology based themes on day two. Pictured above: **SUBHRA BANERJEE**, a PhD Student in Biochemistry, models the Symposium T-Shirt.



New York Immunology Conference

Bolton Landing, New York | October 25 - 28, 2015

The following students presented at last month's conference: **KEVIN KENDERES**, a PhD Student in Microbiology and Immunology; **SCOTT MINCHENBERG**, an MD/PhD Student in Microbiology and Immunology; **AMBER PAPIILLION**, a PhD Student in Microbiology and Immunology; **MEGAN PEPPENELLI**, a PhD Student in Microbiology and Immunology; and **KARIN SCHNEIDER**, a PhD Student in Microbiology and Immunology.

On October 7-8, 2015 **REYNA MARTINEZ-DELUNA**, PhD, a postdoc in Ophthalmology with Dr. Michael Zuber, participated in the Emerging Vision Scientists Day held in Washington, DC. The Day was sponsored by the Alliance for Eye and Vision Research. The goal of the event was to educate lawmakers about the importance to maintain/increase funding in vision research to the National Eye Institute (NEI). Reyna attended a Congressional Briefing on Uncorrected refractive error, presented a poster on her laboratory's work at the Emerging Vision Scientist Congressional Reception and conducted Congressional Office Visits (NY's two Senators Charles Schumer and Kirsten Gillibrand and Congressman John Katko, Representative of NY's 24th Congressional District). Pictured at left top: Reyna with Morgan Brand, Legislative Aide to NY Senator Charles E. Schumer, and Brian Hofland, PhD, President Research to Prevent Blindness. Pictured at left bottom: Reyna with the 2015 Alliance for Eye and Vision Research's Emerging Vision Scientists.

from our students:

ARIJITA CHAKRABORTY, a student in Biochemistry and Molecular Biology, successfully passed her qualifying exam last month. Arijita's advisor is Dr. Wenyi Feng. **Congratulations, Arijita!**

ANGELINA REGUA, a student in Biochemistry and Molecular Biology, successfully passed her qualifying exam last month. Angelina's advisor is Dr. Leszek Kotula. **Congratulations, Angelina!**

CHRIS LUCCHESI, a PhD Candidate in Pharmacology, successfully defended his Dissertation last month. Chris joined the laboratory of Xinbin Chen, DVM, PhD, in the Department of Surgical & Radiological Sciences at the University of California, Davis School of Veterinary Medicine. Chris is pictured at right with his dissertation advisor, Dr. Ying Huang. **Congratulations, Chris!**



The Graduate Student Association (GSA) held a bake sale on October 15th and 16th. A portion of the proceeds were donated to Making Strides Against Breast Cancer - the GSA and College of Graduate Studies team participated in the Cancer walk held in downtown Syracuse on October 18th. Pictured at left are your GSA Officers; from left to right: **DAKSHESH PATEL**, Treasurer; **MEGAN GRIBBLE**, President; **HEATHER NELSON**, Vice-President; and **SARAH BARGER**, Secretary

A College of Graduate Studies (COGS) Student Forum was held on October 14th. Dr. Mark Schmitt, Dean of the College of Graduate Studies, and Dr. Julie White, Dean of Student Affairs, gave brief updates on what is occurring in their offices and answered questions from students. The forums are designed to acquaint students with their Upstate Student Government (USG), to connect students with their USG Reps and VPs, and to hear from the students. The Forum was sponsored by the USG and organized by the COGS Representatives, pictured at left. From left to right: **CAMERON MACQUARRIE**, USG Representative; **ERIC ZLUHAN**, USG Representative; and **OLESEA COJOHARI**, USG Vice President



from our alumni:



MIRIAM DONOHUE ('12), is currently an Assistant Professor of Cell & Developmental Biology here at SUNY Upstate. She teaches Gross Anatomy and Neuroanatomy for medical students, and also teaches Gross Anatomy for the Physician Assistant students in the College of Health Professions. In January, she will be returning to her hometown to begin a new position as Assistant Professor of Anatomy at the Burrell College of Osteopathic Medicine in Las Cruces, New Mexico. **We wish you the best of luck, Miriam!**



JANET HUMEI ZHENG ('14) became a U.S. citizen on Oct 15th! The naturalization oath ceremony was held at the US District Court for Western Tennessee in Memphis. Janet legally changed her name to Janet Huimei Zheng and has begun publishing under her "new" name.



SHEENA CLAIRE LI ('11) is currently a Foreign Postdoctoral Research Fellow at the RIKEN Institute in Japan. She is working with Charles Boone, PhD, on a highly collaborative project involving researchers from Japan, Canada and the United States. The goal utilizes yeast chemical genomics to assign function to compounds whose mode of action isn't known. Sheena's work is being supported by a Foreign Postdoctoral Research Fellowship from RIKEN. Sheena is pictured with her partner, Mike, in Chiba, Japan.

RUTH CHIQUET-EHRISMANN, who came to Upstate in 1980 with David Turner from the ETH Zurich to complete her doctoral work here, died unexpectedly on September 4th at her home near Basel, Switzerland. She was 60 years old. Ruth had a distinguished career as a senior group leader at the Friedrich Miescher Institute and as an adjunct professor at the University of Basel. She studied the extracellular microenvironment and the roles of plasma membrane and matrix proteins in development and tumorigenesis. She and her collaborators identified, cloned, and characterized two important protein families: tenascins and tenurins. Ruth is survived by her husband (and occasional collaborator), Matthias Chiquet, another of David's doctoral students, and by her three children. Our thoughts are with Ruth's family, friends and colleagues during this difficult time.

**We love hearing from you...
Don't forget to drop by our website and
let us know how you're doing!**

<http://www.upstate.edu/grad/gradalumni/intouch.php>

IS THERE SOMETHING WE MISSED??

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

apsa northeast regional meeting

It was an exciting October weekend, with more than 130 guests from all across the country and even across international borders visiting Syracuse. The Northeast Regional Meeting of the American Physician Scientists Association (APSA) was in full swing with more attendees than the regional conferences held in the rest of the country combined. President Eastwood started the day, laying out what he sees as the role science plays in the Upstate mission. "We really have three functions -- research, education, and healthcare. And as I see it, research feeds the other two functions. Can you imagine what would happen if research were to stop? We'd be back in the Dark Ages." These words remind us that science and science-based medicine is not something only a select few ought be concerned with, but is instead integral to every aspect of our healthcare system.

Our goal in hosting the APSA conference was to bring together people of all disciplines and degree levels with a desire to advance the cause of human health through the power of science. While this role typically thought to be filled by MD/PhD's, the conference broke this stereotype with MD students, PhD students, DO students, medical residents, and even undergraduates complimenting the typical cavalcade of MD/PhD's. Our three student speakers, Aisha Siebert of University of Rochester, Amy Ku of SUNY Buffalo, and our own Shunqing Zhang presented their research alongside Dr. Douglas S. Kwon of Harvard Medical School and MIT, and Dr. Andy J. Minn of University of Pennsylvania in what proved to be a wonderfully interesting and diverse array of research projects and interests.

In addition to the oral presentations, there were 45 poster presentations encompassing topics ranging from basic bench-top science and translational drug discovery to clinical case reports and even clinical trials. It is this diversity of contributions that exemplifies the purpose of the conference -- to highlight that people of every health-related discipline interested in improving healthcare through science can do so, and there are a wide range of useful contributions to be made. Ultimately, the University of Rochester won the day, taking home the top three prizes in the poster competition. Nguyen Mai took first, followed by Kyle M. Koster and Allison J. Li.

The conference was met with high praise as born out by those attending the event and the post-conference surveys. While there were some areas for improvement, overall the conference was a phenomenal success and we would like to congratulate both our winners and all of those who put in so much effort to make it all happen. Now we return back to work, reenergized and with a renewed perspective on our research efforts. If President Eastwood's words ring true and without research we would be back in the Dark Ages, then research is truly a lantern that guides us in the modern world.

– **Adam Blanden** MD/PhD Student, Biochemistry and Molecular Biology

Pictured: **ADAM BLANDEN**, an MD/PhD Student in Biochemistry and Molecular Biology; **DR. DOUGLAS KWON**, Assistant Professor of Medicine, Harvard Medical School; **DR. ANDY MINN**, Assistant Professor of Radiation Oncology, University of Pennsylvania; and **DR. GREGORY EASTWOOD**, Interim President of Upstate Medical University.



career development & mentoring



It was standing room only as **DR. MICHAEL COSGROVE**, Associate Professor of Biochemistry and Molecular Biology, presented our first Career Development Workshop of the Academic Year. Dr. Cosgrove, along with a few faculty panelists, including **DR. HEIDI HEHNLY**, Assistant Professor of Cell and Developmental Biology; **DR. JASON HORTON**, Assistant Professor of Orthopedic Surgery; and **DR. BRUCE KNUTSON**, Assistant Professor of Biochemistry and Molecular Biology, presented “How to Select a Postdoc Advisor” to our graduate students on Tuesday, October 6th.



A couple weeks later, **DR. YAIHARA FORTIS-SANTIAGO**, Program Manager for Science Alliance at the **NEW YORK ACADEMY OF SCIENCES** visited campus on October 21st. She gave an informal presentation about “Networking 101” to our graduate students and postdocs, a starter tool for scientists as they begin making connections and building their networks. The presentation also featured several opportunities for participants to hone their networking skills and apply the techniques they learned. The event was open to graduate students and postdocs in the College of Graduate Studies at Upstate and at SUNY ESF.

For a complete list of upcoming workshops and events, please visit:
<http://upstate.edu/grad/career/careerdev.php>



SIX STEPS TO SUCCESS has begun! This discussion series was designed to help our first year students get off to a strong start in grad school. Pictured above, **DR. FRANCESCA PIGNONI** led our second discussion entitled “Selecting a Research Topic and Mentor”, alongside panelists: **MARISSA SMITH**, a Second Year Student in Biochemistry & Molecular Biology and **CAMERON MACQUARRIE**, a Second Year Student in Anatomy & Cell Biology. A complete list of this year’s topics and presenters can be viewed on our website: <http://upstate.edu/grad/students/mentoring.php>

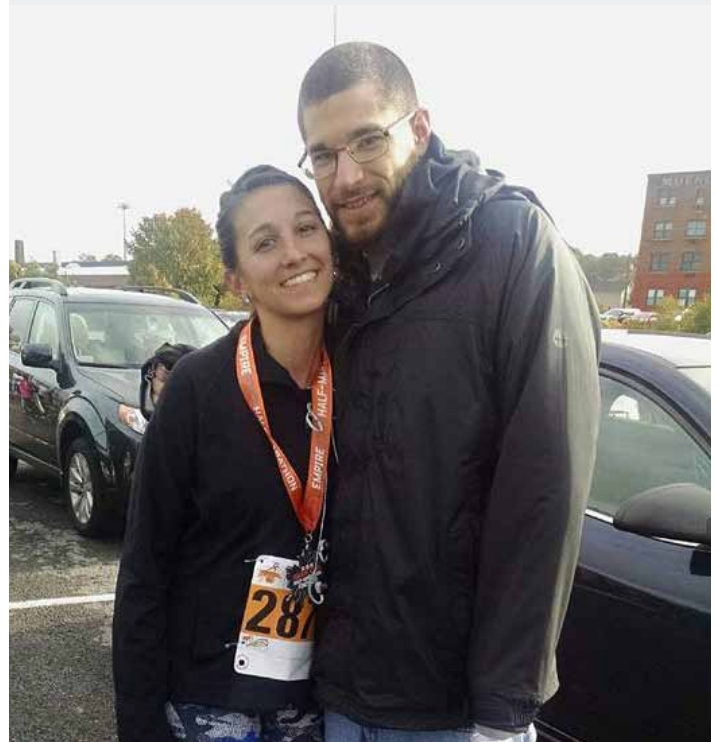
in other news



Three of our students participated in the Wine Glass Marathon, held 10/4/15 in Corning, NY: **GREG GORECZNY**, a PhD Student in Anatomy & Molecular Biology, **HEATHER NELSON**, a PhD Student in Anatomy & Molecular Biology, and **STUTI SHARMA**, a PhD Student in Biochemistry & Molecular Biology.

This was Greg's second marathon, and Stuti and Heather's first marathon. Heather qualified for the 2017 Boston Marathon. We suspect a part of their motivation was the wine glass and bottle of sparkling wine at the finish line... **Congratulations to Greg, Heather & Stuti for finishing the marathon!**

MARISSA SMITH, a PhD Student in Biochemistry & Molecular Biology, completed the Empire State Half-Marathon along the Onondaga Lake shoreline on 10/18/15. Marissa's boyfriend, Shaun, congratulated her at the finish line.



save the dates!

CAREER DEVELOPMENT WORKSHOP

Keeping Professional Boundaries on the Web

Tuesday, January 19, 2016

12:00 PM

WH 3113

We live in an increasingly connected society, where we're always plugged in. As a professional, social media and internet presence can be a great resource for growing your business or professional identity ... when used appropriately. Join us as Dr. Ann Botash shows us how to get the most out of social media.

STUDENT WORKSHOP

Psychological Self Care and Well Being in Graduate School

Tuesday, January 26, 2016

12:00 PM

WH 3113

We all know grad school can be tough, but you're not alone. Join us for an informal session on how to identify and deal with the stressors of graduate school, presented by the Student Counseling Center's Holly Vanderhoff, PhD; Michael Miller, PhD and Siphon Mbuqe, PhD.

AFTERNOON TEA & SWEETS

Every Wednesday at 3:00

WH 3120

***First Wednesday of the month, tea is at NRB 3708.**

Give me a break! Join us each Wednesday at 3pm for a very informal setting where we provide you tea and other goodies, sponsored by the College of Graduate Studies. Stay as long as you can or as long as you like ... everyone's welcome at tea time!

IS THERE SOMETHING WE MISSED??
Email Jennifer Brennan at brennanj@upstate.edu