

# upstategrad update

transforming students from consumers of knowledge into producers of knowledge

october 2015

## FROM THE DEAN: **SCIENCE AND RELIGION**

Last week, I had the good fortune to attend a community discussion sponsored by SUNY ESF, one of our sibling institutions. The panel included George Coyne, a distinguished Jesuit priest from LeMoyne who has a PhD in astrophysics and previously served as the director of the Vatican Observatory, and Warren Allmon, a Paleontologist from Cornell who is a well-known atheist. The discussion was on Science and Religion and was quite fascinating. Indeed after two and-a-half hours, ESF President Quentin Wheeler needed to call it to a close. Surprisingly, the two guests agreed on nearly everything and both fear where our government is headed. The issue at heart here was the high number of Americans who still intermix science and religion. A 2014 Gallup pole found that 42% of Americans believe the earth is less than 10,000 years old. This has resulted in an anti-intellectual attack across the country and within our Federal Government, where science is ignored or dismissed as unimportant. It endangers research funding, our health, our economy and our security as a nation. It's this abandonment of reason that produces much of the dysfunction we see today in government and in society. As scientists, it is our duty to ensure the education of our students and the public as to what science is and what it is not. We need to be honest about its promises and its pitfalls. We must continue pointing out science is not religion and religion is not science. One is based on beliefs and values, while the other is built on facts and results. The two are mutually exclusive from each other and should not be confused. Many of us as scientists are still highly religious and, rightfully so, we find no conflict between these two parts of our lives. Science and religion can both survive by keeping them separate and distinct entities and by all of us continuing in civil discourse about the fate of our country based on good science and strong values.

– **Mark E. Schmitt, PhD**

Dean, College of Graduate Studies

Professor, Biochemistry and Molecular Biology

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

**AFSHARI P**, Myles-Worsley M, **COHEN OS**, Tiobech J, **FARAONE SV**, Byerley W, **MIDDLETON FA**.

Characterization of a novel mutation in SLC1A1 associated with schizophrenia. *Molecular Neuropsychiatry*. 2015;1(3):125-144.

<http://www.ncbi.nlm.nih.gov/pubmed/26380821?dopt=Abstract>

**COHEN OS**, Weickert TW, **HESS JL**, Paish LM, McCoy SY, Rothmond DA, Galletly C, Liu D, Weinberg DD, Huang XF, Xu Q, Shen Y, Zhang D, Yue W, Yan J, Wang L, Lu T, He L, Shi Y, Xu M, Che R, Tang W, Chen CH, Chang WH, Hwu HG, Liu CM, Liu YL, Wen CC, Fann CS, Chang CC, Kanazawa T, **MIDDLETON FA**, **DUNCAN TM**, **FARAONE SV**, Weickert CS, Tsuang MT, **GLATT SJ**.

A splicing-regulatory polymorphism in DRD2 disrupts ZRANB2 binding, impairs cognitive functioning and increases risk for schizophrenia in six Han Chinese samples.

*Molecular Psychiatry*. 2015 Sep 8;. [Epub ahead of print]

<http://www.ncbi.nlm.nih.gov/pubmed/26347318?dopt=Abstract>

**GORECZNY GJ**, **WORMER DB**, **TURNER CE**.

A Simplified System for Evaluating Cell Mechanosensing and Durotaxis In Vitro. *Journal of Visualized Experiments*. 2015 Aug 27;(102).

<http://www.ncbi.nlm.nih.gov/pubmed/26381826?dopt=Abstract>

**HESS JL**, Kawaguchi DM, Wagner KE, **FARAONE SV**, **GLATT SJ**.

The influence of genes on "positive valence systems" constructs: A systematic review. *American Journal of Medical Genetics. Part B, Neuropsychiatric Genetics*. 2015 Sep 14;= [Epub ahead of print]

<http://www.ncbi.nlm.nih.gov/pubmed/26365619?dopt=Abstract>

**IGNACIO C**, **HICKS SD**, Burke P, Lewis L, Szombathyne-Meszaros Z, **MIDDLETON FA**.

Alterations in serum microRNA in humans with alcohol use disorders impact cell proliferation and cell death pathways and predict structural and functional changes in brain. *BMC Neurosci*. 2015 Sep 5;16:55.

<http://www.ncbi.nlm.nih.gov/pubmed/26341662?dopt=Abstract>

King CA, Li X, **BARBACHANO-GUERRERO A**, Bhaduri-McIntosh S.

STAT3 Regulates Lytic Activation of Kaposi's Sarcoma-associated Herpesvirus. *Journal of Virology*. 2015 Sep 2;. [Epub ahead of print]

<http://www.ncbi.nlm.nih.gov/pubmed/26339061?dopt=Abstract>

**LUI K**, **SHEIKH MS**, **HUANG Y**.

Regulation of p53 oligomerization by Ras superfamily protein RBEL1A. *Genes Cancer*. 6(7-8):307-16 (2015).

<http://www.ncbi.nlm.nih.gov/pubmed/26413214>

**PERL A**, Hanczko R, Lai ZW, **OAKS Z**, Kelly R, Borsuk R, Asara JM, Phillips PE.

Comprehensive metabolome analyses reveal N-acetylcysteine-responsive accumulation of kynurenine in systemic lupus erythematosus: implications for activation of the mechanistic target of rapamycin. *Metabolomics*. 2015;11(5):1157-1174.

<http://www.ncbi.nlm.nih.gov/pubmed/26366134?dopt=Abstract>

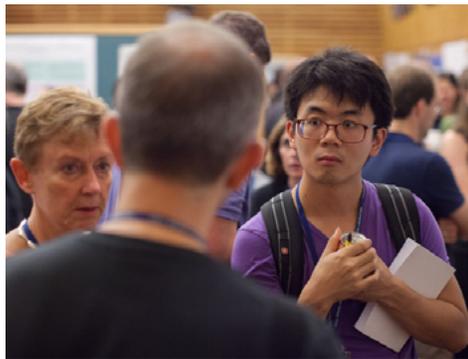
**STEPHEN A. SHINSKY** and **M.S. COSGROVE**.

Unique Role of the WD-40 Repeat Protein 5 (WDR5) Subunit within the Mixed Lineage Leukemia 3 (MLL3) Histone Methyltransferase Complex. *Journal of Biol Chem*. [Epub ahead of print]

<http://www.ncbi.nlm.nih.gov/pubmed/26324722>

# presentations

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



**Cold Spring Harbor Laboratory Meetings:  
Eukaryotic DNA Replication & Genome Maintenance**  
Cold Spring Harbor, New York | September 1 - 5, 2015

Jie Peng, a PhD Candidate in Biochemistry and Molecular Biology, presented a poster



**Sixth BHD Symposium and First International Kidney Cancer Symposium**  
Syracuse, New York | September 23 - 26, 2015

Adam Blanden, an MD/PhD in Biochemistry & Molecular Biology, presented a poster and a talk.  
Diana Dunn, a PhD Candidate in Biochemistry & Molecular Biology, presented a poster and a talk.

**Left to right:** Damir Khabibullin (Second Place Poster, Brigham and Women's Hospital, Harvard Medical School); **DIANA DUNN** (Third Place Poster, Biochemistry and Molecular Biology, Upstate Medical University); Adam Price (First Place Poster, University of Cincinnati College of Medicine); and Presentation Judge Sunil Sudarshan, MD (University of Alabama at Birmingham).

The Sixth BHD Symposium and First International Kidney Cancer Symposium brought nearly 100 participants from around the globe to Syracuse, September 23rd through the 26th to highlight the latest scientific discoveries and treatments for kidney cancer and BHD. BHD is short for Birt-Hogg-Dubé syndrome, a hereditary condition associated with multiple benign skin tumors, lung cysts, and an increased risk of both benign kidney tumors and kidney cancer.

Kidney cancer is one of the ten most common cancers in men and women. However, treatment may be more challenging, as chemotherapy, one of the most traditional treatments for cancer, is generally not effective in treating kidney cancer.

Unlike most scientific conferences, this symposium provided a half-day session where patients with kidney cancers had the opportunity to talk directly with the scientists and clinicians who are researching

cures and providing care. "We are breaking down the barriers that often exist between the scientist, clinician and patient, by bringing them together under one roof," said Mehdi Mollapour, PhD, co-chair of the symposium organizing committee and a kidney cancer researcher in the College of Graduate Studies at Upstate. "Bringing the scientific and medical communities together with patients extends our knowledge of the disease and treatments to the people who live with this illness everyday."

Gennady Bratslavsky, MD, chair of the Department of Urology at Upstate, and symposium co-chair said "This is why scientists and clinicians gather at a conference such as this; everyday we are getting a step closer to finding new drugs that will target cancer cells in the kidney, enabling us to eradicate this cancer."

The symposium featured two distinguished keynote speakers: W. Marston Linehan, MD, who pio-

neered the genetic basis of kidney cancer, and Robert G. Uzzo, MD, a recognized leader in the field of urologic oncology.

Linehan is Chief of the Urologic Oncology Branch at the National Cancer Institute and Center for Cancer Research in Bethesda, Maryland. Uzzo is Professor and Chair of the department of surgery at Fox Chase Cancer Center in Philadelphia.

The symposium also featured a poster session, sponsored by Faculty of 1000. Two graduate students, Adam Blanden and Diana Dunn gave an oral presentation and a poster presentation. Diana won an award for her presentation. See above.

"This symposium helps put Syracuse on the map as a location where outstanding medical research and surgeries are being done, and reflects well on the reputation that Upstate is building in the area of kidney cancer research and treatment," said Mollapour.

# from our students:

**LIZ SNYDER**, a student in Microbiology and Immunology successfully passed her qualifying exam last month. Liz's advisor is Dr. Steven Taffet.

**Congratulations, Liz!**

**XIAN ZHANG**, a student in Pharmacology successfully passed her qualifying exam last month. Xian's advisor is Dr. Richard Veenstra.

**Congratulations, Xian!**

**JESSICA OUDERKIRK PECONE**, a PhD Candidate in Anatomy and Cell Biology, successfully defended her Dissertation last month. Jessica is pictured below with her advisor Dr. Mira Krendel and her daughter Gabriella.

**Congratulations, Jess!**



**STEPHEN SHINSKY**, a PhD Candidate in Biochemistry and Molecular Biology, successfully defended his Dissertation last month. Stephen has accepted a postdoc position with Brian Strahl, PhD, at the University of North Carolina Chapel Hill in the Biochemistry & Biophysics Department. Stephen is pictured above with his advisor Dr. Michael Cosgrove. **Congratulations, Stephen!**

**ZAHRA MOTAHARI**, a PhD Candidate in Biochemistry and Molecular Biology, successfully defended her Dissertation last month.

Zahra is pictured at right with her advisor Dr. Michael Zuber.

**Congratulations, Zahra!**



# from our alumni:

Last month, **AKOS MERSICH**, MD, PhD ('12) said "I do!" Pictured at his September wedding, from left to right is: **NAVEED NAEEM**, MD ('07), his wife Mariam, **NEVA WATSON**, PhD ('15), Alexis Ritvo (Akos' wife), **MATT MILLER**, PhD ('15), **AKOS**, **ERIC MILLER** (current student), Amanda Dumoff (Adam's wife), and **ADAM GERBER**, MD, PhD ('12). Akos started a Child and Adolescent Psychiatry Fellowship at the University of Colorado this past July.

**Congratulations Akos and Alexis!**



**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>



**DARYLL C. DYKES**, MD, PhD, JD ('95) was recognized at the College of Medicine's Alumni weekend. Dr. Dykes received the Distinguished Young Alumnus award. He is an orthopaedic spine surgeon, health law scholar and health policy consultant practicing in Minneapolis-St. Paul area, and a former U.S. Marine. Dr. Dykes received his PhD in Biochemistry and Molecular Biology with Dr. Matthew Pincus.

At left, **JASON HORTON**, PhD ('11), presented a poster at the Biomedical Sciences Retreat on September 15th. Dr. Horton's abstract was entitled, "MT1-MMP Mediates Plasticity and Divergence of the Osteoblast and Adipocyte Lineages Through Cleavage of DLK1." Dr. Horton has returned to Upstate as an Assistant Professor in the Department of Orthopedics effective October 1, 2015. **Welcome back, Jason!**

At right, **CHARLES DANKO**, PhD ('09), was the Alumni Guest Speaker for the Biomedical Sciences Retreat last month. He presented "Positive Selection in Regulatory Elements Drives Changes in Gene Expression in the Adaptive Immune System of Primate Species." Dr. Danko is an Assistant Professor at the Baker Institute and the College of Veterinary Medicine at Cornell University. Dr. Danko earned his PhD in Pharmacology in the laboratory of Dr. Arkadii Pertsov.

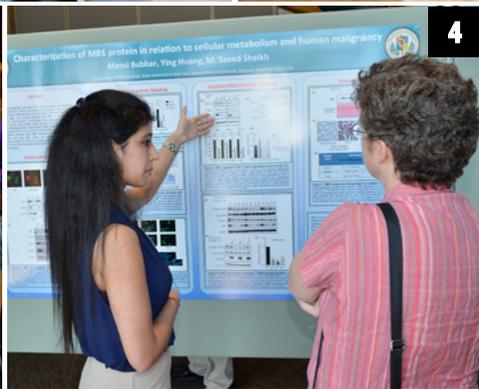
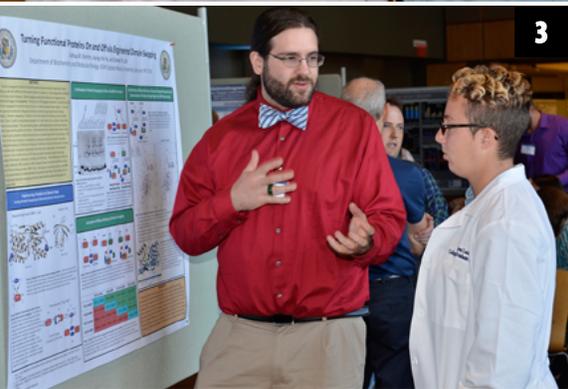


**IS THERE SOMETHING WE MISSED??**

Email Jennifer Brennan at [brennanj@upstate.edu](mailto:brennanj@upstate.edu)

or Terri Brown at [brownt@upstate.edu](mailto:brownt@upstate.edu) to get it included in the next issue!

# biomedical sciences retreat - 9/17/15



**1** At right, Assistant Professor of Pharmacology, Dr. Juntao Luo alongside his former mentor and one of our Distinguished Guest Speakers for the Retreat, sponsored by the Department of Pharmacology: Dr. Kit S. Lam, Professor and Chair of Biochemistry and Molecular Medicine at UC Davis Cancer Center. **2** Our second Distinguished Guest Speaker for the day, sponsored by the Department of Ophthalmology: Dr. David Berson, Sidney A. Fox and Dorothea Doctors Fox Professor of Ophthalmology and Visual Sciences, Professor of Neuroscience at Brown University. **3** Second Prize Poster Presenter, Joshua Karchin, a PhD Candidate in Biochemistry and Molecular Biology, presents his poster to first year graduate student Arianna Laszlo. **4** Second Prize Poster Presenter, Mansi Babbar, a PhD Candidate in Pharmacology, presents her poster to Dr. Patricia Kane, Chair of Biochemistry and Molecular Biology. **5** First Place Poster Presenter, Dmitri Serjanov, a PhD Candidate in Physiology, presents his poster to second year graduate student Eric Zajicek. **6** A fairly recent tradition: the presentation of the white coat to first year students in the College of Graduate Studies. **7** The Retreat featured faculty lecturers from each of the basic science departments; pictured here is Dr. Xin Jie Chen, Professor of Biochemistry and Molecular Biology.

# in other news



**CASSANDRA BARNES**, a PhD Student in Biochemistry and Molecular Biology with Dr. Peter Calvert, ran the Teal Ribbon Run-Walk for Ovarian Cancer Awareness on September 19th.

In May, Cassandra was diagnosed with stage 1 ovarian cancer. After receiving surgical treatment, we're happy to report Cassandra is currently cancer free!

She ran to raise money for ovarian cancer research and awareness, especially in young women who never see this terrible disease coming.

**ASHLEY CANNING**, first-year PhD student, and Sarah Eldredge, first-year PT student, ran the Cure SMA 5K on 9/26/16. Sarah won first place among all women runners! All donations go directly to support the families of children with Spinal Muscular Atrophy, a degenerative disease similar to ALS, found in children and also help to fund research for therapies and potential treatments. The Foundation website is: <http://www.curesma.org/>



**JESSICA LO**, PhD married Phillip Wong on September 26, 2015. Jessica earned her PhD from the Pharmacology Program in Dr. Debashish Ghosh's lab.

Pictured at right, Jessica and Phillip sharing their first dance as a married couple.

**Congratulations Jessica and Phillip!**



# save the dates!

## STUDENT WORKSHOP

**Learning to Survive on a Graduate Student Stipend**

Wednesday, October 28, 2015

12:00 PM

Setnor 3507

*This informal session is designed to answer any and all questions you may have about budgeting, saving for unforeseen costs, how to find decent yet affordable housing, and why your credit score is so important while in graduate school! Come with questions, we'll have Presented by Michelle "Shelley" Stock, Assistant Director of Financial Aid and Student Admissions.*

## CAREER DEVELOPMENT WORKSHOP

**Conflict Resolution: Communication and Leadership Skills**

Tuesday, November 17, 2015

12:00 PM

IHP A&B

*Whether approaching your boss or handling a troublesome colleague, whatever you do in life, good communication skills are crucial for success. Join us to learn how to become a polished communicator and leader in the workplace. Plus tips and tricks for handling conflict like a constant professional. Presented by Holly McCurdy, Senior Organizational Training Specialist, Professional Development.*

## STUDENT WORKSHOP

**Psychological Self Care and Well Being in Graduate School**

Tuesday, November 2, 2015

12:00 PM

WH 3105

*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!*

## MARK YOUR CALENDARS!

**The Graduate Studies Holiday Party is Wednesday, December 2nd at the Dinosaur Bar-B-Que! More info coming soon!**

**IS THERE SOMETHING WE MISSED??**  
Email Jennifer Brennan at [brennanj@upstate.edu](mailto:brennanj@upstate.edu)