



University of Pittsburgh School of Medicine
BGSA Newsletter

August, 2016 edition
 Edited by Gregory Logan



Dear fellow students and faculty members,

2016 has certainly been flying by- I can hardly believe we are already in the process of welcoming the newest class of grad students to Pitt this week! The BGSA enjoys being a part of this process every year, from meeting the new students at lunch the first day to hosting the annual Orientation Picnic.

Within the BGSA, we are gearing up for nominations and elections for the 2016-17 Executive Board and Program Representatives. This process is taking place now through September. We're always excited for new members to get involved! Be sure to find out more details about how to participate later on in this newsletter or at the next BGSA meeting on September 12th.

Finally, we are looking ahead to the BGSA Symposium on Wednesday, October 26th. Calls for abstract submissions and award nominations have gone out over the past two weeks. This is always a great opportunity for students and faculty to learn about the breadth of research going on in the School of Medicine. I hope to see you all there.

This is my last letter as BGSA President. To conclude, I'd like to thank everyone who continues to support this organization. For a recap of the past year, you can download our End of Year Report from the BGSA website (bgsa.pitt.edu) after September 2nd.

See you on the other side!

Aliyah Weinstein
 BGSA President
 Immunology program

Painting with a Twist

BGSA had a blast at Paint Night at Painting with a Twist – Southside on August 17! Attendees experienced a two-hour painting class, where everyone was taught step-by-step how to paint a beautiful canvas masterpiece! BGSA members and friends painted a sunset over the Pittsburgh skyline and were able to make personal touches to their artwork. Attendees also enjoyed wine, beer, and snacks while painting. Paint Night was a fun escape from the lab and was a great opportunity to socialize with friends in a creative, upbeat atmosphere!
 - Lisa Clark

Five Interview Styles

In conjunction with Fourth River Solutions and the UPPDA, the BGSA was excited to host Holly Wilbanks of the Wilbanks Consulting Group for an interactive workshop on the Five Most Common Interview Styles and How Scientists Prepare for Them. Attendees learned what types of questions they might get asked in an interview, and then had an opportunity to practice their answers and get feedback from Holly. We hope this information was helpful to all grad students, no matter how close to the job search you are!
 - Aliyah Weinstein

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Upcoming Events

See page 6 for details

Orientation Picnic

August 24th, 4:00-9:00PM
 Vietnam Veterans Pavilion

BGSA Elections

September 19-23
 Elections will take place online

BGSA Symposium

Oct 26, 8am-5pm
 University Club

BGSA Meetings

Sep 12, 1:30pm BST 1195
 Oct 3, 1:30pm BST 1195
 Nov 7, 1:30pm BST 1195
 Dec 5, 1:30pm BST 1195

BGSA Council

2015-2016

Officers

President

Aliyah Weinstein (IMM)

VP of Records

Abby Stahl (CMP)

VP of Finance

Jennifer Boatz (MBSB)

VP of Communications

Gregory Logan (CMP)

VP of University Outreach

Abby Stahl *Interim

VP of Programing

Aliyah Weinstein *Interim

Representatives

Biomedical Informatics

Jose Posada

Cell Biology

Paige Rudich

Cellular and Molecular Pathology

Morgan Preziosi

Clinical and Translational Science

Alyce Anderson

Computational Biology

Kristina Buschur

Immunology

Agustin Cruz and Adolfo Frias

Integrative Systems Biology

Celestino Velasquez

Mol. Biophysics and Structural Bio

Lisa Clark

Mol. Genetics and Dev. Biology

Fine Han

Mol. Virology and Microbiology

Mondraya Howard, Justin Wendzicki,
and Eileen Wong

Neuroscience

Puja Parekh

Pharmacology

Shireen Attaran and Nyla Naim

1st-year Representatives

Ben Warner

WSMA Representative

Alyce Anderson

BGSA Relaxes at the Stress Free Zone

Did you know that the Stress Free Zone (SFZ), located on the third floor of the William Pitt Union, offers free walk-in services like light therapy and inverted massage chairs as well as regularly scheduled yoga and meditation classes for all Pitt students? On June 15, six BGSA students attended a private workshop on mindfulness meditation hosted by Hallie Stotsky, MEd, RYT. The twenty-minute

audio session focused on body-mind awareness and relaxation techniques. Mindfulness practices can decrease stress and anxiety, and improve concentration, memory, and a sense of well-being. Check out more mindfulness meditation audio clips online at bit.ly/StressFreePitt and look out for more BGSA SFZ events in the future!

-Abby Stahl

Spring Reception

In early June, the BGSA hosted its first Spring Reception to celebrate the end of the semester and the beginning of summer. We rented out the Center for PostNatural History in Garfield, a small museum focused on genetic engineering and

biotechnology. About 40 students and their guests enjoyed dinner and drinks catered from local restaurants while exploring the museum. We are looking forward to making this an annual event!

- Aliyah Weinstein

Aaron Gerlach Seminar

For our second Career Seminar of the summer, we hosted Pitt alum Aaron Gerlach, who is currently the Director of Business Development at Icagen. He explained the difference between industry careers in biotech and pharma, and what PhD students can expect if they choose to

pursue a career in one of those industries. It's always inspiring to hear from successful program graduates and learn what they have been able to do since earning their PhD!

- Aliyah Weinstein

Jeremy Berg Seminar

On June 20th, in a very colloquial way Dr. Jeremy Berg shared with about twenty of us students few stories about his career and the opportunities that this has presented him. After training and working at Stanford and Harvard, and Johns Hopkins. Besides being an academic he has had a successful career as a scientific administrator as Director of the National Institute of General Medical Sciences (NIGMS) at the National Institutes of Health (NIH). Now he is the director of the Institute of Personalized Medicine at the University of Pittsburgh. More recently, he has become editor-in-chief of Science

magazine. Dr. Jeremy Berg is doubtless an example of success and excellence. His career story taught us that a scientific career will be different for each one of us. Indeed, one thing I learned from listening to him is that a scientific path will involve a variety of different responsibilities, interests and opportunities. It will be up to us and our families to choose the final path to a professional success. For more lessons and tips from Dr. Jeremy Berg, go to the BGSA website and see Past Events at <http://www.bgsa.pitt.edu/events.html>

-Agustin Cruz

Designing effective Powerpoint Presentations

Recently BGSA hosted a seminar to increase the understanding of what components are utilized to design a solid PowerPoint presentation. This event was presented by Nisha Shanmugaraj from Carnegie Mellon University's Global Communications Center, and she demonstrated to us key features to add, what types of slides to avoid, and what types of body language are most effective in keeping an audience engaged with a talk. Nisha discussed how to make appropriate slide headers, use minimal backgrounds, simplify slides, and use open, more fluid

body language to help keep the audience interested in the talk. Seven graduate students and 1 post-doc attended the event. Overall, this seminar benefited attendees through its simple approach by helping us become more analytical/self-critical when designing presentations about our projects and I would recommend this seminar to future students. We hope to schedule a similar event before the second year students take their comprehensive exams next year.

-Daniel Zuppo

Student Spotlight

To Nominate a student for the next Student Spotlight, go to bit.ly/StudentSpotlightBGSA



Andrew King

3th Year Graduate Student
Greg Cooper Lab
Biomedical Informatics

Andy is conducting research in Greg Cooper's lab on the development of a Learning Electronic Medical Record (LEMR) system. This work seeks to address existing problems with the display of healthcare data including information overload and the mismatch between a physician's natural workflow and current EMR workflow. A LEMR models how clinicians use the EMR and

presents data in a personalized manner based upon patient characteristics. He recently won the best student paper award at the 2015 annual meeting of AMIA, the American Medical Informatics Association. His paper, "Development and Preliminary Evaluation of a Prototype of a Learning Electronic Medical Record System," explores the use of machine learning to predict which items might be highlighted in a novel electronic medical record display. A third year student in Biomedical Informatics, Andy is also active with our CoSBBI summer program for high-school students.

Laurén Kinner

5th Year Graduate Student
Robert Binder Lab
Immunology

Ms. Lauren Kinner is a fourth year student in the immunology program working with Dr. Binder in the Department of Immunology. Her research is focused on understanding how heat shock proteins (HSPs) modulate immune responses. Contrary to mainstream, Lauren has established that HSPs, which are endogenous chaperones, together with their cell surface

receptor CD91, are key players in host defense against tumors. She has used her outstanding skills as a determined experimentalist and persevered through arduous microscopy and immunological studies to test this hypothesis. She recently presented her studies at the AAI meeting. Lauren has co-authored two manuscripts, with several others in preparation. She is actively involved in mentoring, playing significant roles in the UPCI academy. Aka the 'hat lady', Lauren is an exceptional graduate student. Outside of lab, Lauren has a passion for breweries, beer and Colorado.



Aliyah Weinstein

4th Year Graduate Student
Walter Storkus Lab
Immunology

Aliyah has dramatically progressed her thesis project describing a novel mechanism through which immunity may be induced within growing tumors in mice, leading to therapeutic benefit. Her highly-translational results have been reported at national symposia and submitted for journal publication. Aliyah has received an American Association of Immunology (AAI) Young Investigator

Award, a Joy Cappel Young Investigator Award from Rockland Immunochemicals and a Chateaubriand Fellowship to expand her Ph.D. studies in a peer laboratory in Paris, France in 2017. She has also participated in the mentoring of high school (High School Academy) and undergraduate (SURP) students in 2015 and 2016. Outside the lab, Aliyah has twice participated in the NatureJobs Journalism competition, received a GPSG Leadership and Service Award, and she currently serves as the President of the BGSA and VP of Committees to the GPSG (Graduate and Professional Student Government).

Immunology

Cadena AM, Flynn JL, Fortune SM. The Importance of First Impressions: Early Events in Mycobacterium tuberculosis Infection Influence Outcome. MBio. 2016 Apr 5;7(2):e00342-16. doi: 10.1128/mBio.00342-16. Review. PMID: 27048801 Free PMC Article

Lin PL, Maiello P, Gideon HP, Coleman MT, **Cadena AM**, Rodgers MA, Gregg R, O'Malley M, Tomko J, Fillmore D, Frye LJ, Rutledge T, **DiFazio RM**, Janssen C, Klein E, Andersen PL, Fortune SM, Flynn JL. PET CT Identifies Reactivation Risk in Cynomolgus Macaques with Latent M. tuberculosis. PLoS Pathog. 2016 Jul 5;12(7):e1005739. doi: 10.1371/journal.ppat.1005739. eCollection 2016 Jul. PMID: 27379816 Free PMC Article

Scharping NE, Menk AV, Moreci RS, Whetstone RD, Dadey RE, Watkins SC, Ferris RL, Delgoffe GM. The Tumor Microenvironment Represses T Cell Mitochondrial Biogenesis to Drive Intratumoral T Cell Metabolic Insufficiency and Dysfunction. Immunity. 2016 Aug 16;45(2):374-88. doi: 10.1016/j.immuni.2016.07.009. Epub 2016 Aug 2. PMID: 27496732

Zhang Q, Vignali DA. Co-stimulatory and Co-inhibitory Pathways in Autoimmunity. Immunity. 2016 May 17;44(5):1034-51. doi: 10.1016/j.immuni.2016.04.017. Review. PMID: 27192568

Weinstein, AM and Storkus, WJ. Biosynthesis and Functional Significance of Peripheral Node Addressin in Cancer-Associated TLO. Front. Immunol. 09 August 2016. <http://dx.doi.org/10.3389/fimmu.2016.00301>

Molecular Biophysics and Structural Biology

Debiec, K.T., Cerutti, D.S., Baker, L.R., Gronenborn, A.M., Case, D.A., Chong, L.T., 2016. Further along the Road Less Traveled: AMBER ff15ipq, an Original Protein Force Field Built on a Self-Consistent Physical Model. JCTC. doi: 10.1021/acs.jctc.6b00567. PMID: 27399642.

Molecular Virology and Microbiology

Bina X, **Howard M**, Ante V, and Bina J. Vibrio cholerae LeuO links the ToxR regulon to the expression of lipid A remodeling genes. 2016, Infection and Immunity (accepted for publication)

Neuroscience

Becker-Krail, D., Farrand, A.Q., Boger, H.A., Lavin, A., 2016. Effects of fingolimod administration in a genetic model of cognitive deficits. J Neurosci Res. 2016 Jul 20. doi: 10.1002/jnr.23799. PMID: 27439747

Lohani, S., Poplawsky, A. J., Kim, S. G., & Moghaddam, B., 2016. Unexpected global impact of VTA dopamine neuron activation as measured by opto-fMRI. Mol Psychiatry. doi: 10.1038/mp.2016.102

Roth, S., Dreixler, J.C., Mathew, B., Balyasnikova, I., **Mann, J.R.**, Boddapoti, V., Xue, L., Lesniak, M.S., 2016. Hypoxic-Preconditioned Bone Marrow Stem Cell Medium Significantly Improves Outcome After Retinal Ischemia in Rats. Invest Ophthalmol Vis Sci. doi: 10.1167/iovs.15-17381. PMID: 27367588.

Rich MT, Abbot TB, Chung L, Gulcicek EE, Stone KL, Colangelo CM, Lam TT, Nairn A, Taylor JR, Torregrossa MM (2016). Phosphoproteomic Analysis Reveals a Novel Mechanism of CaMKII α Regulation Inversely Induced by Cocaine Memory Extinction versus Reconsolidation. J Neurosci. 36(29):7589-7600. PMID: 27445140

Graziane, NM, Sun, S*, **Wright, WJ***, Jang, D., Zheng, L., Huang, YH, Neslter, EJ, Wang, YT, Schlüter, OM, & Dong, Y. (2016) Opposing mechanisms mediate morphine- and cocaine-induced generation of silent synapses. Nature Neuroscience, 19: 915-925. doi:10.1038/nn.4313. PMID: 27239940. * equal contribution

Wright, WJ, & Dong, Y. (2016). NMDA receptors: "C"ing the culprits behind cocaine-induced metaplasticity. Biological Psychiatry [In press].

Zimmerman, E.C., Grace, A.A., 2016. The nucleus reuniens of the midline thalamus gates prefrontal-hippocampal modulation of ventral tegmental area dopamine neuron activity. The Journal of Neuroscience. In press.

Pharmacology

Erdem C, **Nagle AM**, Casa AJ, Litzenburger BL, Wang Y, Taylor DL, Lee AV, Lezon TR. 2016. Proteomic screening and lasso regression reveal differential signaling in insulin and insulin-like growth factor I pathways. Mol Cell Proteomics. PMID: 27364358

Photos



BGSA Reception



Five Most Common Interview Styles



Aaron Gerlach



Jeremy Berg



Painting with a Twist



Upcoming events

Stay up to date on BGSA events by following us on social media

Facebook: **Pitt BGSA**

Twitter: **@PittBGSA**

BGSA Elections

Interested in becoming more involved in the BGSA? Elections for the 2016-17 board are coming up and we are looking for people to run for Program Representative and Executive Board positions!

Any School of Medicine grad student may be a Program Representative, regardless of their previous involvement with the BGSA. Candidates for the Executive Board must be active BGSA members and have attended at least 3 meetings in a past year. You can visit the Elections page on the BGSA website (<http://www.bgsa.pitt.edu/elections.html>) for more details regarding the specifics of each position.

If you are interested in running for a position or know someone who is, please visit <http://bit.ly/BGSANominations2016> to nominate yourself or a friend! The deadline for nominations is Friday, September 16th.

Elections will take place on line from September 19th-23rd. All graduate students are eligible to vote! Please keep an eye out for details on the 19th or visit <http://bit.ly/BGSAElections2016> that week to cast your votes.

You can also email Abby (ecs40@pitt.edu) or Aliyah (alw151@pitt.edu) with any questions. We look forward to seeing you involved this coming year!

BGSA Symposium

Every graduate student on the SOM is invited to participate in the organization of the BGSA symposium this year. The symposium will be on Wednesday, October 26th, 2016 from 8am to 5pm at the University Club.

We have several highlights for this event. The Nakada Speaker for this year is Dr. Arpita Maiti (<http://www.bgsa.pitt.edu/daisuke-nakada-lecture.html>). She is the Director of External R&D at Pfizer and she will tell us about the Microbiome research going on at her company. In addition to the Nakada Lecture, we have implemented for this year two new events. We will have a career discussion panel with the theme "How to choose your post-doc: advice for a graduate student" and we will also hear from the recipient of the Distinguished Mentor Award what the award means for her/him.

We look forward to having students from throughout the SOM participate in the planing of this event. If you are interested in helping with the organization please contact the chair(s) of the committee(s) that you are interested in, or you can contact Agustin Cruz or Adolfo Frias. These are the chairs of each committees:

Symposium co-chairs: Adolfo Frias (adf44@pitt.edu) and Agustin Cruz (cucho@pitt.edu)

Distinguished Mentor Award Chair: Nyla Naim (nyn1@pitt.edu)
Stephen L. Phillips Award (for best paper): Hiroshi Yano (hiy12@pitt.edu)
Most Well Rounded Student Award Chair: Nilesh Amatya (nia25@pitt.edu)
Poster and judging Chair: Adolfo Frias (adf44@pitt.edu)
Oral presentations Chair: Nicole Scharping (nes63@pitt.edu)
Abstract and book Chair: Kritika Ramani (krr57@pitt.edu)
Career Panel: Aliyah Weinstein (alw151@pitt.edu)
Happy hour chair: Lauren Kinner (lak98@pitt.edu)

Abstracts are due Friday September 30th.

Use the following link to submit your abstract
<https://goo.gl/forms/hqFcVvKaFnLKXQnd2>

Orientation Picnic

On August 24th from 4:00 to 9:00p.m. the BGSA will be hosting the annual BGSA Student Orientation Picnic. The Picnic will be held at the Vietnam Veterans Pavilion in Schenley Park. Come hungry! We will have food and drinks, including our classic sangria as well as beer from East End Brewery. For dessert, we will have ice cream sandwiches from Leona's Ice Cream. Welcome the new students and play a round of cornhole with your friends!

Travel Grants

**BGSA is now offering travel grants!
Find out how you can apply:**

The BGSA will award one \$250 travel grant per month to an eligible student within the University of Pittsburgh School of Medicine's graduate programs. The BGSA Travel Grant can be used to reimburse travel and lodging costs, and conference specific fees. Please apply within the 30 days preceding the application deadline listed below.

Application Deadlines

Month of conference:

September 2016

October 2016

November 2016

December 2016

Apply by:

September 5, 2016

September 26, 2016

October 31, 2016

November 28, 2016

How to Apply

Go to the BGSA website and complete an application

<http://bgsa.pitt.edu/travel-grants.html>

If you have any questions email Jennifer Boatz (JCB122@pitt.edu)

Congratulations to our previous award recipients!



Congratulations to Justin Wendzicki for winning the BGSA Travel Award for the month of July! Justin recently presented his work at the DNA Tumor Virus Meeting in Montreal, Canada. Justin is a student in the Molecular Virology and Microbiology (MVM) program, and is mentored by Dr. Yuan Chang. Justin is working to elucidate the mechanisms behind how Merkel cell polyomavirus causes the aggressive skin cancer Merkel cell carcinoma.



Congratulations to Adetunji Fayomi for winning the BGSA Travel Award for the month of August! Adetunji will present his work at the Gordan Mammalian Reproduction Research Conference in New Hampshire. Adetunji is a student in the Molecular Genetics and Developmental Biology graduate program, and is mentored by Dr. Kyle Orwig. Adetunji is studying the developmental dynamics of spermatogonial stem cells in primates using Rhesus macaque as a model.