



University of Pittsburgh School of Medicine BGSA Newsletter

June, 2016 edition
Edited by Gregory Logan



Dear fellow students and faculty members,

I can hardly believe that three months have passed and it's time again for a BGSA Newsletter! This first half of 2016 has certainly been flying by, and the BGSA has been keeping busy with a variety of professional and social events.

With the end of the academic year, we wrapped up a season of volunteering with the Carnegie Science Center, working with middle school-aged girls to foster their love of science. Back on campus, we hosted Mark Roth from the Pittsburgh Post Gazette for a dynamic and interactive workshop on science writing. We also hosted a number of social events this spring, and we have a full calendar of upcoming events, all of which you can read about in this edition. In particular, make sure to save the date for the BGSA's two biggest events of the year: our annual Orientation Picnic on August 24, and the BGSA Symposium on October 26.

As always, the BGSA relies on and appreciates the support of all students and faculty in the School of Medicine for our continued success. Students are always welcome to attend our monthly meetings, held the first Monday of every month in BST 1195. Don't forget that you can stay in touch with the BGSA through Facebook, Twitter (@PittBGSA), our website (bgsa.pitt.edu), and our mailing list (email me and ask to be added). We are always glad to see new faces, and have plenty of opportunities to get involved.

Enjoy the summer!

Aliyah Weinstein
BGSA President
alw151@pitt.edu

Grad Student Appreciation Week

Graduate Student Appreciation Week took place April 3-9. This year we expanded beyond students in Oakland by providing doughnuts, bagels, and other breakfast items to students in all laboratory spaces across campus, including Bridge-side Point, Magee, Hillman Cancer Center, Children's Hospital, and the Biomedical Informatics Building.
-Greg Logan

BGSA Ski Trip

The BGSA and friends traveled by bus to Seven Springs Resort near the end of the winter in early March to snowboard and ski down the slopes before the snow melted. For many people, this was their first time on the slopes! A ski instructor taught people how to ski the bunny slope, and afterwards everyone got on the lift and braved going down the mountains. -Jennifer Boatz

Contents

Letter from the President	1
BGSA Representatives	2
Past Events	2
Student Spotlight	3
Publications	4
Photo Gallery	5
Travel Grants	6

Upcoming Events

Spring Reception

June 10th, 6:30-9:30pm
Center for PostNatural History

Meditation with the Stress Free Zone

June 15th, 6pm
Location, TBA

Jeremy Berg Career Seminar

June 20th, 5:30pm, BST S123

BGSA Meeting

July 11th, 1:30pm
BST 1195

Kayaking trip

July 30th, 10-11am
Kayak Pittsburgh, North Shore

Orientation Picnic

August 24th, 4pm
Veterans Pavillion, Schenley

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 Rudlich

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 Representative

Ben Warner

WSMA Representative

Alyce Anderson

Trampoline Park

The BGSA had a blast jumping around and doing flips on trampolines at the Flight Trampoline Park on May 7th, 2016! The park has over 50 trampolines to jump on, as well as air mats and hanging targets to try to reach during the flight time. Seven students

from Pitt School of Medicine came out on Saturday to exercise at the park for 1.5 hours, and enjoy healthy snacks like Gatorade, trail mix, and bananas. A group of students from CMU joined in on the fun as well!

-Jennifer Boatz

Glass Center

BGSA held its first event at the Pittsburgh Glass Center, a night filled with food, friendship, and fiery fun! About 20 BGSA members and friends of BGSA attended the event, which included a tour of the Pittsburgh Glass Center, a demonstration of glass-blowing, and a hands-on activity to make a unique glass ball float. Everyone

learned about the heat and artistry that goes into blowing glass, and applied some of that knowledge to making a glass ball of their own. During the tour, attendees also learned about the different forms of glass artwork made at the Glass Center, including fused glass mosaics, glass etching, and flame work. -Eileen Wong

Science Communication

On May 26th, the BGSA hosted Mark Roth, science writer at the Pittsburgh Post Gazette, for a discussion on science writing and communication to the public. A small crowd was able to take advantage of Mark's over 30 years in the business of science communication and learn tips on how to make research accessible to non-scientists. For example, using

analogies to relate scientific concepts to everyday life makes them more approachable. Mark also shared advice for beginning a career in science writing, including reading pieces of other writers and practicing your own writing, such as on a blog. You can reach Mark with related questions at mroth@post-gazette.com. - Aliyah Weinstein

Carnegie Science Center Volunteering

A team of BGSA students volunteered at STEM Saturday Academies, which is held at Chatham once a month. This program is ran by the Carnegie Science Center and is for middle school girls from underprivileged schools interested in science. The girls rotate through a science section, a college prep section, and an engineering section. The volunteers helped the girls make LED bracelets that could

light up. The students were excited to meet female scientists and had many questions about what it was like to be a scientist and the different paths we followed to get to graduate school. The STEM Saturday Academies are a great way to get involved in supporting young women in science, and I would strongly recommend that you volunteer next school year!

- Paige Rudich

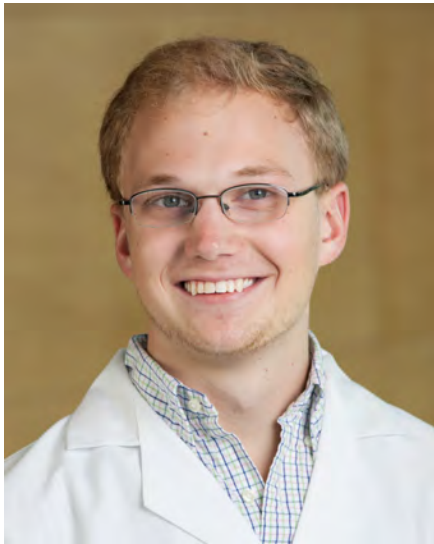
Pitt Health Innovation Case Competition

Congratulations to team Inspiromics in winning 2nd place at this year's Pitt Health Innovation Case Competition! This annual competition hosted by Fourth Rivers Solutions (4RS) and the Biomedical Engineering Society assembles teams of graduate students and post docs from across the University of Pittsburgh and other local institutions. Each team of consultants are given one week to solve a mock case and present their findings to a panel of judges composed of profes-

sional consultants, academics, and leaders from pharmaceutical industries. In this year's competition, 12 teams presented their recommendations on how Fitbit, the popular pedometer company, should enter the healthcare market. The BGSA helps sponsor this event and students from the School of Medicine are heavily involved its organization, including Alicia Watson, Emma (Tianyu) He, and Chelsea Merkel who are Chief Officers of 4RS. -Nyla Naim and Agustin Cruz

Student Spotlight

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



Taylor Eddens
3th Year Graduate Student
Jay Kolls Lab
Immunology

It is my pleasure to nominate Taylor Eddens for the BGSA student spotlight. Taylor is developing into an exceptional scientist. In the past year he has demonstrated a critical role for eosinophils and eosinophilopoiesis in host defense against the opportunistic fungus *Pneumocystis*. This work was published as a first author paper in the *Journal of Immunology*. In addition to this he has a

revised paper at the *American Journal of Respiratory Critical Care Medicine* demonstrating type 2 and IgE responses to *Pneumocystis* in patients with severe asthma. Thirdly he single handedly annotated the *Pneumocystis murina* genome and co-developed an RNA-seq pipeline for this non-culturable fungus and he has paper in preparation on the fungal kinome of this organisms. On top of this he is also severing as Chair of the 2016 Gordon Research Seminar on the Biology of Emerging Respiratory Pathogens and serves as a senior student committee co-chair of the MSTP at the University of Pittsburgh.

Arielle Fisher
3rd Year Graduate Student
Gerald Douglas Lab
Biomedical Informatics

Arielle Fisher is a 3rd year graduate student. She conducts research in the Center for Health Informatics for the Underserved and is developing an electronic inventory management and dispensing system for the Birmingham Free Clinic. Arielle has traveled to Malawi, Africa twice to complete internships with the Department of HIV & Aids. She was awarded a prestigious scholarship to present her research at

the IEEE International Conference on Healthcare Informatics Doctoral Consortium; her abstract is published in the conference proceedings. She presented a poster at the American Medical Informatics Association. Arielle published a first-author paper in *BMC Health Services Research*, a second-author paper in *The American Journal of Tropical Medicine and Hygiene*, and recently submitted her second first-author paper. She won the 2015 Hattie Becich Award for Best Teaching Assistant and is the elected student representative for the Biomedical Informatics graduate program.



Morgan Preziosi
3rd Year Graduate Student
Satdarshan Monga Lab
Cell and Molecular Pathology

It is my pleasure to nominate Morgan Preziosi for the BGSA student spotlight. In her two-year tenure in my lab she has attended four national conferences, presented several posters, and given oral presentations. She won three travel awards from ASIP to attend meetings hosted by ASIP. She is coauthor on three papers in my lab and has recently drafted her first first-author paper,

which we will submit to *Journal of Hepatology*. She was a fellow on the Angiogenesis Training Grant and is currently working on an F31 grant on a different project. Outside the lab, she served on the following committees: Interdisciplinary Biomedical Graduate Program Admissions Committee, Pathology Retreat Committee, and trainee member of the ASIP Publications Committee. Morgan has great people skills and is a natural leader. Hardworking, dependable, intelligent, and perseverant, she is adept at learning new techniques and has brought new technologies to the lab.



Cell Biology and Molecular Physiology

Wickline, E.D., Dale, I.W., **Merkel, C.D., Heier, J.A.**, Stolz, D.B., Kwiatkowski, A.V. 2016 Alpha-T-catenin is a constitutive actin-binding α -catenin that directly couples the cadherin-catenin complex to actin filaments. *J Biol Chem*. doi:10.1074/jbc.M116.735423 PMID: 27231342

Cellular and Molecular Pathology

Feliciano Alvarado T, Puliga E, **Preziosi M**, Poddar M, Singh S, Columbano A, Nejak-Bowen K, Monga SP. Hormone Receptor- β Agonist Induces β -Catenin-Dependent Hepatocyte Proliferation in Mice: Implications in Hepatic Regeneration. *Gene expression*. 2016; Manuscript Accepted

Integrated Systems Biology

Velásquez C, Cheng E, Shuda M, Lee-Oesterreich PJ, Pogge von Strandmann L, Gritsenko MA, Jacobs JM, Moore PS, Chang Y. CDK1 generates a novel, mitotic 4E-BP1 isoform by Ser83 phosphorylation. *Proc Natl Acad Sci USA*. 2016 June. In press.

Molecular Biophysics and Structural Biology

Sharaf, N.G., Ishima, R., Gronenborn, A.M., 2016. Conformational plasticity of the NNRTI-binding pocket in HIV-1 reverse transcriptase - A fluorine NMR study. *Biochemistry*. doi:10.1021/acs.biochem.6b00113. PMID: 27163463

Hoop, C.L., Lin, H-K, Kar, K., Magyarfalvi, G., Lamley, J.M., **Boatz, J.C., Mandal, A.**, Lewandowski, J.R., Wetzel, R., van der Wel, P.C., 2016. Huntingtin exon 1 fibrils feature an interdigitated β -hairpin-based polyglutamine core. *PNAS*. doi: 10.1073/pnas.1521933113. PMID: 26831073

Molecular Genetics and Developmental Biology

Hemker SL, Sims-Lucas S, Ho J. Role of hypoxia during nephrogenesis. *Pediatr Nephrol*. 2016 Feb 12. [Epub ahead of print] PubMed PMID: 26872484.

McClendon TB*, **Sullivan MR***, Bernstein KA, Yanowitz JL. SWS-1 functions with the RAD-51 paralogs to promote homologous recombination in *Caenorhabditis elegans*. *Genetics*. Early online 2016 March. In Press. doi: 10.1534/genetics.115.185827 *denotes equal contribution

Bohm S, B Szakal, BW Herken, **MR Sullivan**, MJ Mihalevic, FF Kabbinavar, D Brnzei, NL Clark, KA Bernstein. The budding yeast ubiquitin protease Ubp7 is a novel component involved in S phase progression. *Journal of Biological Chemistry*. 2016 February. doi: 10.1074/jbc.M115.671057 PMID: 26740628

Molecular Virology and Microbiology

Bayer, A, Lennemann, NJ, Ouyang, Y, Bramley, JC, Morosky, S, Marques, ET Jr, Cherry, S, Sadovsky, Y, Coyne, CB. 2016. Type III Interferons Produced by Human Placental Trophoblasts Confer Protection against Zika Virus Infection. *Cell Host Microbe*. doi: 10.1016/j.chom.2016.03.008. PMID: 27066743

DiFazio, RM, Mattila, JT, Klein, EC, Cirrincione, LR, **Howard, M, Wong, EA**, Flynn, JL. Active transforming growth factor- β is associated with phenotypic changes in granulomas after drug treatment in pulmonary tuberculosis. 2016. *Fibrogenesis Tissue Repair*. doi: 10.1186/s13069-016-0043-3. PMID: 27148404

Hendricks, MR, Bomberger, JM. Digging through the Obstruction: Insight into the Epithelial Cell Response to Respiratory Virus Infection in Patients with Cystic Fibrosis. *J Virol*. doi: 10.1128/JVI.01864-15. PMID: 26865718

Pharmacology

Ghouleh I, Meijles D, **Mutchler S**, Zhang Q, Sahoo S, **Gorelova A**, Amaral JH, Rodriguez AI, Mamonova T, Song GJ, Bisello A, Friedman PA, Cifuentes-Pagano ME, Pagano PJ. Binding of EBP50 to Nox Organizing Subunit p47^{phox} is Pivotal to Cellular Reactive Species Generation. *PNAS*, accepted June 2, 2016

Photos

Photocredits:
Aliyah Weinstein
Mondraya Howard



Pittsburgh Glass Center



Volunteering with Carnegie Science Center



Graduate Student Appreciation Week



Congratulations to PHICC winners

Pictured: Nyla Naim, Yevgeniya Monisova, Lyndsay Avery, Nikhil Varshney, Agustin Cruz



Science Communication Seminar

BGSA Comic

by Nyla Naim



Travel Grants

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

The Details

Starting in July 2016, 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. Students must be presenting at a conference (in the form of a poster or a talk) outside of Allegheny County in order to be eligible for this travel grant. Applications for students who are not presenting will not be accepted. Applicants are strongly encouraged to volunteer time at BGSA events and meetings prior to applying. Participation in the BGSA will be considered in the process of deciding a winner and in the case of tie-breakers. BGSA travel grants can only be used for conference-specific expenses, lodging, and transportation.

Application Deadlines

Month of conference:

July 2016
August 2016
September 2016
October 2016

Apply by:

July 4, 2016
July 25, 2016
September 5, 2016
September 26, 2016

How to Apply

Send an email to BGSATravelGrants@gmail.com

Your application email should contain the following information:

Name:
Graduate Program:
Email:
Expected graduation date:

Advisor name:
Advisor email:

Conference:
Location:
Date(s) of conference:

Please provide a personal statement (<500 words) outlining the implications of your research, identifying the benefits you will attain from attending this conference, and detailing how winning a BGSA travel grant would be helpful to your graduate career.

Have you ever participated in the BGSA before (e.g. voted at meetings, volunteered for an event, etc.)? Yes/No
If yes, how have you participated in the BGSA during your graduate career (<150 words)?

Attach proof of participation (letter of acceptance to present talk or poster) to application.

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