BGSA Newsletter

April 2017

Edited by Anastasia Gorelova

Upcoming Events

- Center for Creativity Post-Card Writing & Sign Making Event – April 20
- March for Science – April 22
- Spring Semi-formal – TBA
- Intramural Sports Activities – TBA
- Summer Career Seminar Series – TBA

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Dear fellow students and faculty members,

Since our last update in December, we’ve seen a great many changes in our university community, largely influenced by the new political administration. The BGSA echoes the sentiments of Chancellor Gallagher, by supporting our international students and calling for an immigration policy that does not discriminate against ethnic backgrounds or religious beliefs.

Fueled by student interest in advocating for science policy, the BGSA is co-sponsoring a trip to Washington DC for the March for Science on Earth Day, April 22, in collaboration with other organizations at Pitt and Duquesne University. In addition, the BGSA will host a postcard writing event, where students can reach out to local representatives. These events aim to prevent the mischaracterization of science as a partisan issue, and to advocate for fact-based policies in the public interest.

In the past few months, the BGSA has also sponsored several social and professional development events, as well as participated in community outreach, which you can read more about in this newsletter. Please visit the newly renovated BGSA website at www.bgsa.pitt.edu for continued updates on upcoming events, useful resources, and student accomplishments.

Looking forward to finishing off a great Spring semester!

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**BGSA Representatives, 2016-2017**

**Executive Board**

- **President:** Abby Stahl
- **VP of Records:** Paige Rudich
- **VP of Finance:** Lisa Jean Clark
- **VP of Communications:** Anastasia Gorelova
- **VP of University Relations:** Eileen Wong
- **VP of Programming:** Adolfo Frias

**Program Representatives**

- **IBGP First Year:** Christopher Chuckran and Nikki Naim
- **Cell Biology and Molecular Physiology:** Rachel Wills
- **Molecular Pharmacology:** Ryan Staudt and Eleanor Johnston
- **Cellular and Molecular Pathology:** Colin Beckwit, Morgan Preziosi, and Anthony Otero
- **Immunology:** Aliyah Weinstein, Helen Rich and Hiroshi Yano
- **Molecular Genetics and Developmental Biology:** Fine Han and Daniel Zuppo
- **Molecular Virology and Microbiology:** Justin Wendzicki and Mondraya Howard
- **Integrated Systems Biology/PIMB:** Kate Shipman, Celestino Velasquez, and Ricardo DeMoya
- **Molecular Biophysics and Structural Biology:** Sara Whitlock and Stephen White
- **Biomedical Informatics:** Jose Posada
- **Neuroscience:** Sarah Najjar and Matt Rich
- **Computational Biology:** Jocelyn Sunseri
- **Clinical and Translational Sciences:** Alyce Anderson
End of Foundations Happy Hour

With a deadline at noon and a Happy Hour at five, the first snowfall of winter marked the End of Foundations. Despite the busy week and stress of a rotation report behind us the IGSA first-year students had flights booked for the next morning to visit family for the holidays. The venue gave us the whole second floor of the bar and free reign to stay as late as we wanted. Before leaving you could tell the event was a hit as several groups of attendees gathered outside to chat more and enjoy the snow as it covered and quieted the sounds of Walnut street.

Nikki Naim, IGSA

Ski trip

The BGSA had its annual ski trip on January 28 at Hidden Valley Resort! Over twenty attendees skied and snowboarded during the resort’s Twilight Session, and the weather was perfect for the occasion! Many of the participants had never skied before and definitely improved over the course of the trip. After several hours of intense skiing, many participants relaxed and chatted with friends over food from the snack bar. Everyone had a fun time, and the BGSA is looking forward to next year’s trip!

Lisa Clark, MBSB

Comprehensive Exam Panel

Every year, the BGSA hosts the Comprehensive Exam Panel where second year graduate students get tips for the upcoming comprehensive exams from the upper classmen. To keep everyone alert we provided cookies, water, tea and coffee. We had a good turnout this year. Our volunteer panelist shared their past experiences and tips with tackling the comprehensive exams. Keeping with the format from the years before, we began with general tips and broke off into the program specific groups to cover more specific details on the comprehensive exams. Lastly, I’d like to thank all the volunteers for helping with this event and good luck to those taking the comprehensive exam!

Adolfo Frias, Immunology
Make a Mug Workshop

Several BGSA members gathered on January 12 at Kiln-N-Time to mold clay into platters and mugs. We struggled at first to roll out the clay, but before long were etching intricate designs into our pieces. We enjoyed light refreshments and sang along to the great variety of music the owner, Sandy, played. We reconvened on January 26 to paint our fired pieces. After much discussion of the best colors to use, we got straight to work while still taking time to admire everyone’s progress. We received our finished pottery a week later and put it to use right away!

Professional figure making, two-part workshop

On Feb 7th and Feb 21st, the BGSA and WSMA hosted a joint event for students to become acquainted with multiple graphic design programs. The “Figure and Graphic Design Principles for Publication” series was held in two parts: the first session was an introduction to graphic design software (what programs were available, their strengths and weaknesses, and the thought process for making an idea become a illustration) and the second session was a more-detailed oriented look into using Adobe Photoshop by improving figure ideas submitted by returning students. As someone with little experience in graphic design, I gained enough basic knowledge from this event that I feel comfortable enough to try making more complex figures in the future (the packet that was distributed was very helpful as a reference!). I really appreciated the instructor’s, Dr. Ricardo Londoño, sense of humor and knowledge on how to swiftly navigate each program: these two aspects of his presentation helped show that using these software isn’t an insurmountable challenge, but simply takes time and becomes straightforward with more practice. Students with no or little experience with graphic design software could really benefit from this series, and if BGSA hosts this event again in the future I’d highly recommend attending as it was both intellectual and entertaining.
Past Events

STEM Saturday Academy, Community Outreach

On February 25, a group of BGSA members volunteered at Community College of Allegheny County (CCAC) for Carnegie Science Center’s STEM Saturday Academy! The Academy provides an opportunity for middle school girls in the Pittsburgh area to learn about STEM, life skills, and college life.

BGSA taught the life skills activity, where the girls learned about tools to use to manage stress. The girls measured their heart rates after being stressed (running in place) and after relaxing (coloring mandalas) to observe stress affects the body. Many girls identified teachers, friends and family as their main source of distress. We facilitated a discussion about productive ways to mitigate distress and using communication as an effective tool to maintain healthy relationships with friends and family. BGSA also helped with the STEM activity; CCAC chemistry faculty lead the STEM lesson and taught the girls about how enzymes work in metabolic processes to generate nutrients for our bodies. The girls used this knowledge to make cheese from milk using the enzyme rennet. This activity was very fun and the girls were very excited to apply what they learned about enzymes to produce a food that many of them eat on a regular basis.

Stay tuned for the dates for next STEM Saturday Academies we are always looking for volunteers!

Please contact Mondraya Howard at moh16@pitt.edu for more information. We would love for you to join us!

Student Spotlight

Rochelle is a hardworking student who is exceptionally passionate for her work on chemoprevention of colorectal cancer by nonsteroidal anti-inflammatory drugs (NSAIDs). You can immediately feel her passion and engagement when you speak to her in front of her poster, or sit in her seminar presentation. For her accomplishments, Rochelle received the BGSA Poster Award and the John Lazo Pharmacology Fellowship. Most recently, she has been awarded with a Get Your Rear in Gear (GYRIG) Scholar-in-Training Award by the American Association for Cancer Research (AACR) to present her work at the upcoming AACR annual meeting in Washington D.C. She has also enjoyed mentoring two Pitt undergraduate students and a high-school student from the UPCI Summer Academy. She is expected to submit a manuscript in next several months. I am proud of Rochelle’s accomplishments and feel that she has a great potential of becoming a leader in cancer research.

Lin Zhang, PhD
Born in Damascus, Syria, Huda Akil came to the U.S. in the 1960s to get her Ph.D. at UCLA. After completing a post-doc at Stanford University, Dr. Akil began work as a professor at the University of Michigan in 1978 and has been there ever since. She is now a Professor of Psychiatry and co-director of the Molecular & Behavioral Neuroscience Institute at Michigan. She has made seminal contributions to our understanding of the neurobiology of emotions and affect, including pain, stress, depression, and addictive behavior. She began her research work at the time of the discovery of endorphins and participated in the development of that field through a combination of behavioral, anatomical, molecular, and translational studies. Throughout her career, she has developed new technologies for studying the function and regulation of neural circuits, as well as new paradigms and animal models of affective behavior. This includes the study of the neurobiology of temperament and its relevance to differences in mood and addictive disorders. She is currently engaged in large-scale studies to discover new genes and proteins that cause vulnerability to major depression and bipolar illness. The hallmark of her work is its multidimensional, collaborative, and integrative nature. Dr. Akil has received many awards and honors and has been recognized as one of the most cited researchers in neuroscience. She is a member of the National Academy of Sciences and served as President of the Society for Neuroscience in 2002.
Travel Grants

Congratulations to BGSA Travel Grant awardees!

January - Sharie Ganchua. Share presented her research at the 2017 Keystone Symposia Conference: New Developments in Our Basic Understanding of Tuberculosis!

February – Ryan Slack. Ryan studies the proteolytic maturation of HIV-1 Reverse Transcriptase and presented his research at the Biophysical Society Annual Meeting!

March – Jennifer Boatz. Jenn uses magic angle spinning solid state Nuclear Magnetic Resonance (MAS NMR) to study the aggregation of human gamma-D-crystallin mutant P23T. She presented this work at the 58th Experimental Nuclear Magnetic Resonance Conference.

April - Muwen (Ben) Kong. Ben used single molecule techniques to describe the binding of Poly-(ADP)-polymerase 1 (PARP1) to DNA. Ben presented his work at Keystone Symposia on Molecular and Cellular Biology – Genomic Instability and DNA Repair.

The BGSA will award one travel grant of $250 per month to one eligible student within one of the School of Medicine’s graduate programs. BGSA Travel Grants can be used to reimburse travel and lodging costs, and event-specific fees. To learn more and to submit an application, please go to http://www.bgsa.pitt.edu/travel-grants.html or email BGSATravelGrants@gmail.com.

Recent Student Publications

CTS


MVM

- Kunkle DE, Bina XR, Bina JE. The Vibrio cholerae VexGH RND efflux system maintains cellular homeostasis by effluxing vibriobactin. 2017. mBio. Accepted for publication.
CMP

- Preziosi M, Monga SP. Updates on the Mechanisms of Liver Regeneration. Seminars in Liver Diseases, Manuscript Accepted. 2017
- Preziosi ME, Singh S, Valore EV, Jung CL, Popovic B, Poddar M, Nagarajan S, Ganz T, Monga SP. Mice lacking liver-specific β-catenin develop steatohepatitis and fibrosis after iron overload. Journal of Hepatology, Manuscript Accepted. 2017

CMB


MGDB


MBSB