

BGSA Newsletter

August 2019



Pitt BGSA



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Upcoming Events

- Summer Career Seminar Series:
 - Dr. Gregory Frank, Director of Infectious Disease Policy at the Biotechnology Innovation Organization..... Aug 15th
 - Dr. Katy Wack, VP of Development at Western Oncolytics.... Aug 27th
- Orientation Picnic Aug 21st
- BGSA Symposium Oct 2nd

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Letter from the President



Shelby Hemker slh131@pitt.edu BGSA President, 2018-2019

We have had very active Spring and Summer semesters with interviewing for the incoming class, planning our various events, and gearing up for the Fall semester. Our annual skip trip and spring social events were huge hits this year and we were able to host a new CV writing workshop as well. Students have also volunteered for various outreach events, including the Mars Area Elementary Science Fair, the Covestro Pittsburgh Regional Science and Engineering Fair, and extracting DNA with middle school students.

We in the midst of our Summer Career Seminar Series hosting three speakers in various non-academic fields. So far, we heard from Stephen Yoder, CEO of Pieris Pharmaceuticals, and in August we will hear from Greg Frank, Director of Infectious Disease Policy at the Biotechnology Innovation Organization, and Katy Wack, VP of Development at Western Oncolytics. Furthermore, we are excited for our next big social event, the Annual BGSA Welcome Picnic which will be on Wednesday, August 21 at the Vietnam Veteran's Pavilion in Schenley Park. I look forward to seeing everyone there!

The 24th Annual BGSA Symposium, hosted by the Molecular Pharmacology Program, will be on Wednesday, October 2 at the University Club featuring Dr. Diane Jorkasky, Chief Medical Officer and Head of Development at Complexa Therapeutics, as our keynote speaker for the Daisuke Nakada Lecture. We are reviewing the nominations for awards and selecting oral presenters, and don't forget to submit your abstracts by August 16. We hope to make this year the biggest turnout yet!

Shelby Hemker

BGSA Representatives, 2018-2019

Executive Board

President: Shelby Hemker
VP of Records: Becca Kritschil
VP of Finance: Azia Evans

VP of Communications: Ryan Staudt
 VP of University Relations: Sam Herron
 VP of Programming: Nicole Martucci

Program Representatives

• IBGP First Year: Corinne Farrell, Angela Hinchie

• Cell Biology and Molecular Physiology: Rachel Wills

• Molecular Pharmacology: Nicole Kaminski

 Cellular and Molecular Pathology: Meghan Mooring, Mason Donnell

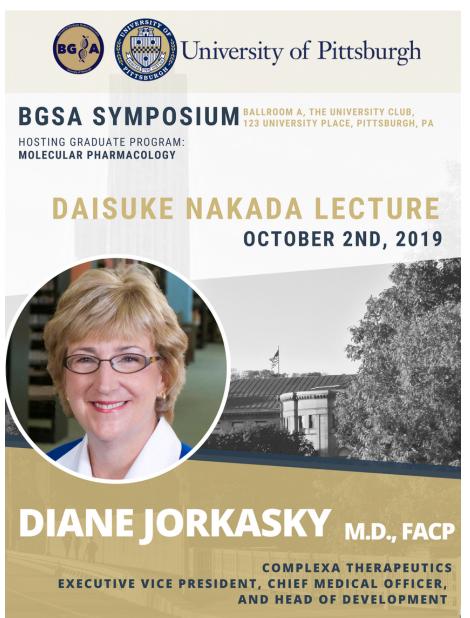
- Molecular Genetics and Developmental Biology: Namrata Kumar, Nikki Naim
- Integrated Systems Biology/PIMB: Kate Shipman
- Molecular Biophysics and Structural Biology: Nacef Guessaymi

• Biomedical Informatics: Michael Ding

• Neuroscience (CNUP): TBD

- Computational Biology: Bentley Wingert
- Clinical and Translational Sciences: Jason Colditz
- Program for Microbiology and Immunology: Haley Cartwright, Ben Warner
- Biomedical Master's Program (BMP): Laura Weiss

BGSA Symposium 2019



Save the date!

Diane Jorkasky, M.D., FACP Executive Vice President Chief Medical Officer Complexa Therapeutics

Dr. Jorkasky is Chief Medical Officer and Head of Development at Complexa Therapeutics. She serves on the board of directors of OSE Therapeutics and is a member of the scientific advisory board of BioMotiv. Dr. Jorkasky has served as Chief Medical Officer at Endo Pharmaceuticals and Aileron Therapeutics. She has held executive appointments directing clinical research at Pfizer and SmithKline Beecham. She is on the medical school faculties of Yale University, University of Pennsylvania, the Uniformed Services University of Health Sciences and the University of California, San Francisco. Dr. Jorkasky is board certified in internal medicine, nephrology and clinical pharmacology and is an author of over 100 peer-reviewed publications.

Submit your poster abstract for the 2019 BGSA Symposium by August 16th

Past Events

Introduction to Adobe Illustrator Class

An Introduction to Adobe Illustrator class was hosted by the BGSA on February 27th from noon – 2pm. The class was offered to BGSA graduate students through the Health Sciences Library and taught by the library experts in graphic design. The interactive class allowed students to learn the basic skills and fundamental tools within Illustrator. Step by step, each student made a scientific image with their Illustrator software or software provided to them by the library. At the end of the course, students were not only rewarded with competence in Adobe Illustrator but also an abundance of pizza.



Nicole Kaminski, Pharmacology



Mondraya Howard, MVM

Transferable Skills of PhD Scientists Workshop

BGSA was excited to host Holly Wilbanks of the Wilbanks Consulting Group for an interactive workshop on the Transferable Skills of PhD Scientists and How to Use Them in Your Job Search. Attendees first created a list of transferable skills PhD scientists develop during graduate school such as project management, problem solving, communication, and adaptability. Next, we learned how to illustrate these skills in a job search either in the written form (developing a resume/CV or on LinkedIn) or orally (in an interview). To highlight skills on a resume or CV, we were taught to focus on how the skill was employed, what objective the skill was used for and the results of such actions. For interviews, attendees were advised to think of a story for each transferable skill and connect it to the specific job/company.

The interactive portion of the workshop included analyzing a job description, based on the career interests of the attendees, and editing sample resumes to better illustrate skills necessary for the job. This workshop was extremely beneficial and BGSA attendees seemed to soak up all of Holly's advice. On a personal level, this workshop came at a perfect time; I was in the middle of job searching when I attended the workshop and the techniques learned helped me land some interviews in the process.

Past Events

Corinne Farrell, Cell Biology

BGSA Annual Ski Trip to Seven Springs Ski Resort

On February 16, BGSA hosted the annual ski trip at Seven Springs Mountain Resort! With 48 attendees, this event was a strong success! Students had the option of snow tubing or skiing. During the evening session, students had a blast with old and new friends! After a few hours on the slopes, it was time to unwind at the bar for food and drinks. Overall, the event was exciting and we are looking forward to making this trip again!





Pottery Making with the BGSA

The BGSA hosted a pottery making event at Kiln N Time in Lawrenceville. 19 students attended and were able to hand mold a variety of pieces. We made mugs, planting pots, plates, and even some creative jewelry holders! We enjoyed some delicious food, snacks and wine while we molded our pieces as well. The pottery was then fired and two weeks later we came back to paint and glaze our creations. They came out so wonderful and everyone had a great time!



Nicole Martucci, Pathology





Sam Herron, Pathology

Graduate Student Appreciation Week

In celebration of the national Graduate Student Appreciation Week, the BGSA hosted graduate student breakfasts at several of the Pittsburgh research institutes. Varying in location from day to day, students in the host building and around campus could take a break from the morning lab routine and wander down to the breakfast locations for bagels, pastries, fruits, and the all-important coffee. The breakfasts also allowed students the chance to catch up and socialize with their peers from other corners of campus. The breakfasts were well attended, with upwards of 40 students taking time out of their day to celebrate the work put in throughout the year by both themselves and their fellow graduate students. And to get coffee.

Volunteering at the Mars Area Elementary Science Fair

On April 4th, 2019 sixteen Pitt students attended the Mars Area Science Fair to help judge and discuss the Mars Area Elementary School student's projects. The students ranged from first graders to fifth graders, but all put together their own science project. We walked around to each group to discuss their projects with them, and talked about what a real scientist does on a daily basis. At the end of the night, we were able to hand out trophies to each participant.



Nicole Martucci, Pathology

DNA Extraction Demo at Northside Catholic Academy



Mondraya Howard, MVM

On April 24, a group of BGSA members visited Ms. Zurcher's 7th grade science class at Northside Catholic Academy to give a DNA extraction demo. First, students were given a presentation about the function of DNA and how it is used by scientists in medicine and forensics. Then students were walked through the DNA extraction protocol and provided with the science behind each step before they set off to extract DNA from oranges or bananas. The students had a great time overall, it was wonderful to see how excited they were to learn about DNA extraction and engaged with our discussion questions following the demo.



Past Events

Azia Evans, PMI

BGSA Spring Semi-Formal at Kingfly Spirits

Each spring the BGSA hosts an annual Spring Semi-Formal (that is typically not so formal) open to all students in the School of Medicine at a local venue unique to Pittsburgh. Previous years have seen the event at Wigle Whiskey and Maggie's Rum Farm; however, this year we hosted the event at the new Kingfly Spirits space in the Strip District. 50 students across many of the programs we cater to came out on Wednesday May 8th to enjoy spirits and appetizers for an evening of relaxing and socialization. The event proved to be a huge success this year, with many of the attendees continuing to enjoy the atmosphere of the Kingfly venue even after the event officially ended. This event has proven to be one of the more popular events BGSA hosts each spring, and this year was no different. We hope all attendees enjoyed the event and getting the chance to explore a new establishment in our local neighborhood.









Student Spotlight



Heidi Schmidt, Pharm

It is my honor to nominate Heidi Schmidt for the BGSA Student Spotlight. Heidi is a rising third year PhD student in the Molecular Pharmacology Program and has been working in my lab for the past year. Heidi has made significant strides in her thesis project which focuses on the role of xanthine oxidase during hemolysis. In just her first year, Heidi has published a first author review in Redox Biology and has been recognized for studies by being selected for an oral presentation at the AHA Fellows Research Day. Most impressively, Heidi recently received a fundable score on her NIH Ruth L. Kirschstein F31 grant application. With this trajectory, I believe Heidi's hard work and dedication will translate into new strategies to better treat individuals with hemolysis-associated diseases such as sickle cell and thalassemia. In the future, Heidi plans to pursue a career in academics with the goal of one day leading her own independent research laboratory.

Adam C. Straub, PhD



Hiroshi Yano, Immunology

I am nominating Hiroshi Yano for his outstanding commitment, effort, work ethic contribution and leadership in steering his primary project to publication in Nature Immunology. He and co-first author Deepali Sawant developed an incredible team to complete this terrific project entitled "Adaptive plasticity of IL10+ and IL35+ regulatory T cells cooperatively promote intratumoral T cell exhaustion". This paper was highlighted by a News & View and has a fantastic Altmetric score of 89, and is currently ranked 6th out of 57 NI articles track of a similar age.

Dario A. Vignali, PhD

Travel Grants

Congratulations to 2019's BGSA Travel Grant awardees!

- July: Kristina Lamens (PMI), Ananya Mukundan (MBSB)
- June: Azia Evans (PMI), Nikki Naim (CMBP)
- May: Song-my Hoang (Pharm), Adolfo Frias (PMI)
- April: Kate Shipman (ISB), Patrick Wilkinson (CMP)
- March: Lisa Clark (MBSB), Ashuvinee Elangovan (MGDB)
- February: Sayali Onkar (PMI), Rebecca Kritschil (CMP)

The BGSA will award TWO travel grants of \$250 per month to two eligible students within 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

Biomedical Informatics

Barda AJ, Ruiz VM, Gigliotti T, Tsui F. An argument for reporting data standardization procedures in multi-site predictive modeling: case study on the impact of LOINC standardization on model performance. JAMIA Open, 00), 2018, 1-8. doi: 10.1093/jamiaopen/ooy063

Cell Biology and Molecular Physiology

Li Y, **Merkel CD**, Zeng X, et al. The N-cadherin interactome in primary cardiomyocytes as defined using quantitative proximity proteomics. J Cell Sci. 2019;132(3):jcs221606. Published 2019 Feb 11. doi:10.1242/jcs.221606

Cellular and Molecular Pathology

Hoekstra M, Ouweneel A, Nahon J, **van der Geest R** et al. ATP-binding cassette transporter G1 deficiency is associated with mild glucocorticoid insufficiency in mice. Biochimica et Biophysica Acta (BBA) - Molecular and Cell Biology of Lipids. 2019;1864(4):443-451. doi:10.1016/j.bbalip.2019.01.003

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Clinical and Translational Science

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Computational Biology

Sunseri J, King JE, Francoeur PG, Koes DR. Convolutional neural network scoring and minimization in the D3R 2017 community challenge. 2019. Journal of Computer-Aided Molecular Design; 33(1):19-34.

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Zhang S, Li H, Krieger JM, Bahar I. Shared signature dynamics tempered by local fluctuations enables fold adaptability and specificity. 2019 Apr 27. Molecular Biology and Evolution.

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Integrative Systems Biology

Cargill K, Hemker S, **Clugston A**, Murali A, Mukherjee E, Liu J Bushnell D, Bodnar AJ, Saifudeen Z, Ho J1, Bates CM, Kostka D, Goetzman ES, Sims-Lucas S. Von Hippel-Lindau Acts as a Metabolic Switch Controlling Nephron Progenitor Differentiation. Journal of the American Society of Nephrology. 2019;30(7):1192-1205. doi:10.1681/asn.2018111170

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Molecular Biophysics and Structural Biology

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Jakubek R, Workman R, **White S**, Asher S. Polyglutamine Solution-State Structural Propensity Is Repeat Length Dependent. The Journal of Physical Chemistry B. 2019;123(19):4193-4203. doi:10.1021/acs.jpcb.9b01433

Jakubek R, **White S**, Asher S. UV Resonance Raman Structural Characterization of an (In)soluble Polyglutamine Peptide. The Journal of Physical Chemistry B. 2019;123(8):1749-1763. doi:10.1021/acs.jpcb.8b10783

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Molecular Genetics and Developmental Biology (MGDB)

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Schmidt HM, Kelley EE, Straub AC. The impact of xanthine oxidase (XO) on hemolytic diseases. Redox Biol. 2019;21:101072. doi:10.1016/j.redox.2018.101072

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Program in Microbiology and Immunology

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Grousd J, Rich H, Alcorn J. Host-Pathogen Interactions in Gram-Positive Bacterial Pneumonia. Clin Microbiol Rev. 2019;32(3). doi:10.1128/cmr.00107-18

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Vujanovic L, **Chuckran C**, Lin Y, et al. CD56dim CD16- Natural Killer Cell Profiling in Melanoma Patients Receiving a Cancer Vaccine and Interferon-α. Front Immunol. 2019;10:14. Published 2019 Jan 29. doi:10.3389/fimmu.2019.00014

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