



Edited by Anastasia Gorelova

BGSA Newsletter

June 2018



Pitt BGSA



@PittBGSA

Upcoming Events

- Escape the Room *June 23*
- **Summer Career Seminar Series:**
 - Dr. April Marrone, Regulatory Chemist at FDA Gastroenterology Devices Branch *July 10*
 - Dr. Abhishek Mandal, Senior Decision Support Analyst at Highmark *July 19*
 - Dr. Teresa Brosenitsch, Communications Coordinator in Research and Development at University of Pittsburgh *July 24*
- Formal at Maggie's Farm Rum *Date TBA*
- Orientation Picnic *August 22*
- BGSA Symposium *October 24*

Contents

Letter from the President	1
BGSA Representatives	1
BGSA Symposium 2018	2
Past Events	3-8
Student Spotlight	9
Travel Grants	9
Recent Publications	10-11

Letter from the President



Jennifer Boatz
jcb122@pitt.edu
BGS President,
2017-2018

The Spring semester went by very fast! We had a lot of fun at our annual ski trip, trivia night, and axe-throwing and we are planning more fun events for the summer. Our biggest event of the semester was SciPhD, a two-day career workshop aimed at helping graduate students and post-doctorates in STEM fields develop their professional, leadership, and business skills. Students have also been busy volunteering at local, regional, and international science fairs and attending parts II and III of our three part Grant Writing Series, which you can read about in this newsletter. Keep an eye out for flyers about seminars in our Summer Career Seminar Series! Our speakers include individuals in: data science and analytics, communications and editing, management, and research in the government and the private sector.

The BGS's 23rd Annual Research Symposium that will take place on October 24th is primarily being planned by the Cellular and Molecular Pathology graduate program. Nominations for several awards that will be presented at the symposium are due soon. If you are interested in helping out with the planning, email bgsa.symposium2018@gmail.com to join one of our Symposium Committees: Abstract Book and Program Committee, Facilities Committee, Reception Committee, Poster Organizing and Judging Committee, Oral Presentation Selection Committee, Distinguished Mentor Award Committee, Stephen L. Philips Award Committee, and the Most Well-Rounded Student Award Committee. I've found being involved in these committees to be a very rewarding process, and they also look great on a CV or resume!

Jennifer C. Boatz

BGS Representative, 2017-2018

Executive Board

- **President:** Jennifer Boatz
- **VP of Records:** Shelby Hemker
- **VP of Finance:** undetermined
- **VP of Communications:** Anastasia Gorelova
- **VP of University Relations:** Andrew Bradshaw
- **VP of Programming:** Ryan Staudt, Benjamin Warner

Program Representatives

- **IBGP First Year:** Nicole Martucci, Nicole Kaminski, Nolan Carew
- **Cell Biology and Molecular Physiology:** Rachel Wills, Paige Rudich
- **Molecular Pharmacology:** Ravi Patel
- **Cellular and Molecular Pathology:** Kyle Sylakowski, Anthony Otero, Abby Stahl
- **Immunology:** Aliyah Weinstein
- **Molecular Genetics and Developmental Biology:** Daniel Zuppo
- **Molecular Virology and Microbiology:** Mondraya Howard
- **Integrated Systems Biology/PIMB:** Kate Shipman, Ricardo DeMoya
- **Molecular Biophysics and Structural Biology:** Sara Whitlock and Stephen White
- **Biomedical Informatics:** Michael Ding
- **Neuroscience (CNUP):** Sarah Najjar and Matt Rich
- **Computational Biology:** Bentley Wingert
- **Clinical and Translational Sciences:** Francisco Javier Bonilla-Escobar
- **PMI:** Hiroshi Yano, Helen Rich, Azia Evans
- **Biomedical Master's Program (BMP):** John Gote

BGSA Symposium 2018



The poster features a circular portrait of Linda G. Griffith, a woman with short blonde hair wearing a red top and a necklace. The background of the poster shows a building and trees. Text on the poster includes the BGSA logo, the University of Pittsburgh logo, and the following information:

BGSA SYMPOSIUM BALLROOM A, THE UNIVERSITY CLUB,
123 UNIVERSITY PLACE, PITTSBURGH, PA

HOSTING GRADUATE PROGRAM:
CELLULAR & MOLECULAR PATHOLOGY (CMP)

DAISUKE NAKADA LECTURE
OCTOBER 24, 2018, 11AM

LINDA G. GRIFFITH Ph.D.
S.E.T.I. PROFESSOR OF BIOLOGICAL AND MECHANICAL ENGINEERING
DIRECTOR, MIT CENTER FOR GYNEPATHOLOGY RESEARCH,
MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)

Save the date!

Linda G. Griffith, PhD

S.E.T.I. Professor of Biological and Mechanical Engineering Director, MIT Center for Gynepathology Research, Massachusetts Institute of Technology (MIT)

The Griffith lab encompasses molecular-to-systems level analysis, design and synthesis of biomaterials, scaffolds, devices and micro-organs for a range of applications in regenerative medicine, tissue engineering, and in vitro drug development. A central theme is connecting the experimental systems to systems biology measurements. Most projects are highly interdisciplinary and translational, involving basic scientists, clinicians, and engineers, often with industry partners, to solve important problems in medicine and biology. Dr. Griffith is the recipient of the NSF Presidential Young Investigator Award, Popular Science Brilliant 10, and a member of the National Academy of Engineering, Biomedical Engineering Society, American Institute of Medical and Biological Engineers, and the MacArthur Fellows Program.

Apply to volunteer for BGSA Symposium Committees!

Send nominations to bgsa.symposium2018@gmail.com by:

- Distinguished Mentor Award - June 29th by 4pm
- Most Well Rounded Student Award - July 6th
- Stephen L. Phillips Award - July 6th

Past Events

Ski Trip to Seven Springs

On January 20th, the BGSA members and guests enjoyed an evening at the snowy mountains of Seven Springs Mountain Resort for the 2018 Annual BGSA Ski Trip. The BGSA provided transportation from Oakland to Seven Springs making it easy for graduate students to travel together. There was a great turnout of graduate student skiers/snowboarders. This event was great for beginners to try something new, with prorated lesson and rental tickets sold by BGSA, and snow sport connoisseurs to shred the slopes, with discounted lift tickets. Old or new skier/snowboarder, the \$5 lift tickets the BGSA provided were a hard deal to pass up! Lift ticket holders were able to hit the slopes from 4pm to 9:30pm during the night ski session. Participants were able to seek shelter from the cold in the Seven Springs lodge where they provided hot chocolate and other beverages to warm their spirit as well as food to fill their stomachs. Ideal weather conditions and great company made for a wonderful ski trip.



Nicole Kaminski, IBGP, 1st year



Andrew Bradshaw, CMP

Grant Writing Seminar Series, "How to Please a Study Section"

Dr. Kip Kinchington's talk "How to Please a Study Section" broke down the essentials needed to win over everyone in the study section room. We learned from Dr. Kinchington's first-hand account that this process can be challenging and unpredictable. Therefore, the onus is on the trainee to paint the simplest picture of their research without losing the pizzazz.

I was surprised to learn that the rating process can vary among branches within NIH, and often boils down to an expert reviewer and two 'distant' reviewers tackling up to 12 applications in just under 3 months. After this, your expert shows up for 2 full days of going to bat for the applications he or she supports most. Hence, as writers we are challenged to bring the EXCITEMENT and demonstrate ORIGINALITY whilst remaining crystal clear; no easy task for even the most articulate writers.

So how do we do this? - Dr. Kinchington kept the mood light and jovial while driving home the need to be logical and have a strong premise. Ultimately, he recommends a proactive approach, joking not to be a stranger to the Scientific Review Officer (SRO) because the NIH wants dialogue with applicants. After a fast and productive hour with BGSA pizza to quell the hungry graduate appetite, I felt like Dr. Kinchington had demystified the fellowship process and dissolved any uncertainties I had had before walking into his talk. I HIGHLY recommend everyone attends this talk and hope that Dr. Kinchington will be able to share his time and perspective with future trainees!



Benjamin Warner, MVM

Grant Writing Seminar Series, Post-Doc panel

This year's post-doc panel was included as the third installment of our new BGSA grant writing series. The annual series consists of informational meetings about the process of earning NIH funding as a graduate student and opportunities available to near graduates seeking post-doctoral positions.

The 2018 post-doc panel consisted of four unique individuals with a range of viewpoints. The panel included an investigator actively searching for a post-doc, a recently hired post-doc, an international post-doc, and a graduate student who has earned a new form of transitional funding for entering her future position with support. We received great advice about contacting hiring investigators, the interview process, and key factors such as flexibility and staying true to your skills and interests. Of course, one of the dominating topics was the new transitional funding that can be earned by a graduate student who will soon be applying for post-doctoral positions (F99/K00). Though currently limited to the National Cancer Institute, I think we can safely expect more programs at the NIH to adopt this funding mechanism.

I would like to specially thank Dr. Kathy Shair, Dr. Michael Washington, Dr. Aura Kullman, and Nicole Scharping for volunteering a providing a wealth of information for our 2018 post-doc panel



Axe throwing at Lumberjacks

BGSA students threw on flannel and channeled their inner lumberjack on February 22nd for an axe-throwing event at "Lumberjaxes Pittsburgh" in Millville. Lumberjaxes, which opened up last fall, is one of several axe-throwing venues recently established across the United States. Participants are taught the proper safety rules and technique by approved training staff, and then throw hatchets at painted wooden targets in hopes of scoring a bullseye. In between hearty bites of pizza and gulps of soda provided by the BGSA, students practiced their throwing technique, and competed in a round robin competition against their friends and classmates. The results of this round robin produced a ranking of each player in a final "March Madness" style tournament, as well as a healthy amount of trash talk. As the tournament wound down to the final match, a singled champion was named, and everyone gathered around together for a final picture.



Ryan Staudt, Mol Pharm



Dan Evans, PMI

Comprehensive Exam Panel

The accelerated timeline for Comps that occurred with the creation of the PMI program had a lot of inaugural first-year students apprehensive about the process. The BGSA Comps panel was enormously helpful because it gave us the chance to speak candidly to senior graduate students about what to expect and how to prepare. Moreover, the organizers took care to have students who had taken comps in microbiology or immunology from both before and after the two programs merged and the format change. With Comps near on the horizon for us, those of us who attended feel like we are fully aware of the challenges we face and how to overcome them.

Volunteering at the Carnegie Science Center’s “Engineer the Future” event

On February 24, BGSA members volunteered at Carnegie Science Center’s “Engineer the Future” event. Engineer the Future celebrates National Engineer Week by giving Science Center visitors the opportunity to engage in hands-on activities and see dazzling demonstrations at more than 40 exhibit tables. Attendees could visit tables to play bowling with robots with Carnegie STEM Girls, make bounce balls with the American Institute of Chemical Engineers, build race cars out of clothespins, straws, twist ties and buttons with the Frick Museum or learn about electrical safety from Eaton by seeing how a circuit breaker works. Volunteers were responsible for aiding exhibitors with registration, table set up and handing out surveys to Science Centers attendees that participating in activities and demonstrations. By cycling through the three responsibilities, volunteers were able to participate in the hands-on activities, check out the various Carnegie Science Center exhibits and received an event T-shirt!



Mondraya Howard, MVM

Stay tuned for future volunteer opportunities with the Carnegie Science Center

PRSEF Science Fair

Both new and returning BGSA judges attended the 79th Covestro Pittsburgh Regional Science & Engineering Fair in March. Several BGSA members met up during the free breakfast and judging orientation. When we broke off to find our respective judging categories, we found that several of us were sorted into the same groups, making the judging all that more fun. We saw a wide variety of projects, some done by high school students at home and others done in research labs at universities. We discussed the projects over lunch and, overall, we were impressed by these students’ projects and it was fun to get them as excited about science as we are. I’m sure many of us are looking forward to next year, and hopefully we can get some more students to volunteer!



Shelby Hemker, MDGB

Past Events

SciPhD



Anastasia Gorelova,
Mol Pharm

On Friday and Saturday, March 2nd-3rd, BGSA held our perhaps most successful career development event to date. 160 (!) students and postdocs gathered together to attend a career development workshop by SciPhD -- an NIH BEST endorsed company which provides training for scientists who want to transition from academia to non-academic careers. SciPhD cofounders Dr. Randall Ribaud and Larry Petcovic worked with us to design custom onsite full-day workshops specifically designed to cater to the interest of both with post-doctorates as well as graduate students. On Saturday alone we've covered such topics as "Negotiating as a Scientist", "Project Management as a Scientist" and more, and received supplementary online material at the end of the day.

To make this event a reality BGSA has collaborated with Pitt's Office of Academic Career Development, Women in Science and Medicine Association, 4th River Solutions, Graduate and Professional Student Government and the School of Medicine Graduate Studies Office. Judging by the attendance and enthusiasm of people in the room, it's evident that events like these are in demand and highly relevant to many of us. So if you know of an event or program that isn't offered on campus yet, don't be afraid to reach out to student organizations -- it's highly likely that other people are interested too.

Trivia night

Trivia fans across the BGSA flocked to the Thirsty Scholar on April 19th to test their wits (and dull them with two drink tickets). BGSA Pub Trivia, created and hosted by MMG's Dillon Kunkle, challenged teams with a crazy mix of questions testing knowledge across music, pop culture, history, sports, and science. For example, in "Real Thrones and Fake Nations", teams were tasked with naming fictional worlds and actual historical monarchs. This was immediately followed by an audio round where teams had to listen to terrible flute covers of popular songs and identify the title and artist. After competing through seven rounds of 10 questions, the points were counted, and first and second prize were awarded in the form of bar swag and Prantl's cupcakes.



Ryan Staudt, Mol Pharm

Student Appreciation breakfast

The first week of April was Graduate Student Appreciation Week. The BGSA celebrated by providing free breakfast items (donuts, bagels, fresh fruit, yogurt, juice, and coffee) to graduate students at the Graduate Student Lounge in Scaife Hall, at Bridgeside Point II, Hillman Cancer Center, Rangos, and the Offices at Baum. Scores of students showed up and enjoyed food and congenial conversation before returning to the lab. It was a wonderful start to the day of a graduate student!



Jennifer Boatz, MBSB

Past Events



Shelby Hemker, MGDB



Mars Elementary Science Fair

This year's Mars Area Elementary Science Fair was so much fun, especially when several of the students asked for autographs from all of the scientists judging their projects. We had a great turnout of volunteer judges, and even though most of them were new this year, there were no problems understanding our judging duties. There were more "making slime" projects than we could count, but there were also several original projects that caught our attention, such as the girls who analyzed the personality of different dogs and the boy who built a contraption to measure the strength of different batteries. It was rewarding to see so many budding scientists excited about science, and we are sure that this fair has helped kindle their scientific minds.

Scientist Walks into a Bar

BGSA members recently participated in two outreach events called "Two Scientists Walk Into A Bar", organized by the Carnegie Science Center. On two separate nights, pairs of scientists were stationed at bars and restaurants around Pittsburgh to chat about science with members of the public. It was a great opportunity to practice discussing the importance of and discoveries made by research, and to highlight that scientists actually get out of the lab!

With the value of science research and the use of evidence in public policy becoming increasingly contentious, collaborations between the BGSA and organizations working to connect scientists with the public are ever more important. The Carnegie Science Center plans to organize periodic installments of this event series, thanks to the involvement of BGSA members and other scientists from university and industry research programs in Pittsburgh.



Dan Evans, PMI



Intel Science Fair



Mondraya Howard, MVM

The Intel International Science and Engineering Fair (ISEF) is the world's largest international pre-college science competitions, where ~1800 high school students from more than 75 countries showcase their independent research in 22 different categories and compete for on average \$4 million in prizes. On Tuesday May 15, about 25 School of Medicine professors, postdocs and graduate

students arrived at the David Lawrence Convention Center to volunteer for 1.5 days to be science fair judges. On this first afternoon, judges met with their respective category caucus and received judging schedules containing the assigned projects we would interview the next day. We also had the opportunity to visit the exhibit hall and preview our assigned projects. This gave us a chance to come up with questions to ask during interviews with the students. The next day, we arrive bright and early at 8am to go over judging criteria before starting interviews at 9:30am. Each judge had about 15 interviews scheduled throughout the day where we talked to individual and team finalists about their research. It was very inspiring to see the passion and energy these young students had for science. Many students stated that they wanted to be scientists in the future, a couple of students were applying for grants for their work, and one student was applying for a patent for a device she created for her project. I was overly impressed with the quality of science projects I saw ranging from those that were done in a research lab to those done in high school classrooms. Creativity in projects was abundant: for example, one team project investigated antifungal activity of macro algae extracts to control the fungus *Phytophthora cinnamomi*, one of the most harmful plant pathogens worldwide; another student swabbed shark teeth to determine the type of bacteria that may cause infection following a shark bite; another student swabbed over 40 people to determine the composition and abundance of bacteria in the belly button. Following interviews, each category caucused to select which projects would receive awards. This felt like the longest part of the day; our category spent ~2.5 hours nominating and discussing which 20 finalists would receive 1st to 4th place awards with prizes ranging from \$5000 to \$500. Being a judge at Intel ISEF was a fantastic and rewarding experience that provided opportunities to have significant interactions with students and contribute to their STEM achievement

Student Spotlight



Paige Rudich, CBMP

Paige is one of our numerous outstanding graduate students in the CBMP program. In addition to her everyday hard work in the lab studying repeat-associated neurodegenerative disorders in the model organism *C. elegans*, Paige recently published a portion of her thesis work in a publication entitled "Nuclear localized C9orf72-associated arginine-containing dipeptides exhibit age-dependent toxicity in *C. elegans*" in the journal *Human Molecular Genetics*. Over the last year, Paige has presented her work at several meetings, including the Society for Neuroscience, The Brain Research Conference, and the International *C. elegans* meeting. She has also been actively involved in graduate student organization and even trained for and completed the Pittsburgh Marathon!

Todd Lamitina, PhD



Ryan Slack, MBSB

Ryan L. Slack, in the MBSB graduate program, is an excellent student. He comes to the lab to solve scientific problems, with unlimited curiosities. He joined my group after he found "Wow, Nuclear Magnetic Resonance (NMR) gives atomic information for the entire biomolecules!" However, his interest was not limited to NMR. He integrated other experimental and computational methods to understand biophysical phenomena. He contributed to three publications and presented his results in several conferences, including an oral presentation at the Gordon Research Symposium in Italy. Ryan is also a person who can help people based on his pure humanity. One of my colleagues working in another university once told me that one of his students was more like a co-worker than a student, and with whom he could discuss project plans. I did not believe his words at that time. However, with Ryan, I now know that there is such a student who has a great critical thinking and skills.

Rieko Ishima, PhD

Travel Grants

Congratulations to BGSA Travel Grant awardees!

- **June:** **Stephanie Ander** (PMI) and Jenna Schabdach (Biomedical Informatics)
- **May:** **Sarah Najjar** (CNUP), Enteric Nervous System Symposium and **Mark Murdock** (CMP), Biologic Scaffolds for Regenerative Medicine Symposium
- **April:** **Joshua Lorenz** (MolPharm), Experimental Biology and **Tiffany Bernardo** (CMP), Keystone Symposia of Molecular and Cellular Biology
- **March:** **Meghan Bucher** (CNUP), Society of Toxicology Meeting and **Greg Buchan** (MolPharm), Gordon Conference: Biology of Acute Respiratory Infection
- **February:** **Jennifer Boatz** (MBSB), Biophysical Society Meeting
- **January:** **Mark Murdock** (CMP), collaboration orientation at Harvard University

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. 8

Cell Biology and Molecular Physiology

Rudich, P., Snoznik, C., Watkins, S. C., Monaghan, J., Pandey, U. B., & Lamitina, S. T. (2017). Nuclear localized C9orf72-associated arginine-containing dipeptides exhibit age-dependent toxicity in *C. elegans*. *Human molecular genetics*, 26(24), 4916-4928.

Sohn, M., Korzeniowski, M., Zewe, J. P., **Wills, R. C.**, Hammond, G. R., Humpolickova, J., ... & Boura, E. (2018). PI (4, 5) P2 controls plasma membrane PI4P and PS levels via ORP5/8 recruitment to ER-PM contact sites. *J Cell Biol*, 217(5), 1797-1813.

Zewe, J. P., **Wills, R. C.**, Sangappa, S., Goulden, B. D., & Hammond, G. R. (2018). SAC1 degrades its lipid substrate PtdIns4P in the endoplasmic reticulum to maintain a steep chemical gradient with donor membranes. *Elife*, 7, e35588.

Molecular Pharmacology

Zhang, X., Cao, S., Barila, G., Edreira, M. M., Wankhede, M., **Naim, N.**, ... & Altschuler, D. L. (2018). Cyclase-Associated Protein 1 (CAP1) is a prenyl-binding partner of Rap1 GTPase. *Journal of Biological Chemistry*, 293(20), 7659-7673.

Moroco, J. A., Alvarado, J. J., **Staudt, R. P.**, Shi, H., Wales, T. E., Smithgall, T. E., & Engen, J. R. (2017). Remodeling of HIV-1 Nef Structure by Src-Family Kinase Binding. *Journal of molecular biology*.

Molecular Genetics and Developmental Biology (MGDB)

Han, H. I., Skvarca, L. B., Espiritu, E. B., Davidson, A. J., & Hukriede, N. A. (2018). The role of macrophages during acute kidney injury: destruction and repair. *Pediatric Nephrology*, 1-9.

Missinato, M. A., Saydmohammed, M., **Zuppo, D. A.**, Rao, K. S., Opie, G. W., Kühn, B., & Tsang, M. (2018). Dusp6 attenuates Ras/MAPK signaling to limit zebrafish heart regeneration. *Development*, 145(5), dev157206.

Molecular Biophysics and Structural Biology

Beckwitt EC, Kong M, Van Houten B. Studying protein-DNA interactions using atomic force microscopy. *Semin Cell Dev Biol*. 2018;73:220-30.

Hallwass F, Teles RR, **Hellemann E**, Griesinger C, Gil RR, Navarro-Vazquez A. Measurement of residual chemical shift anisotropies in compressed polymethylmethacrylate gels. Automatic compensation of gel isotropic shift contribution. *Magn Reson Chem*. 2018. Epub 2018/01/13.

Hellemann E, Gil RR. New Stretching Method for Aligning Gels: Its Application to the Measurement Residual Chemical Shift Anisotropies (RCSAs) without the Need for Isotropic Shift Correction. *Chemistry*. 2018;24(15):3689-93.

Jakubek RS, Handen J, **White SE**, Asher SA, Lednev IK. Ultraviolet resonance Raman spectroscopic markers for protein structure and dynamics. *TrAC Trends in Analytical Chemistry*. 2017. Epub 2017/12/11.

Witkowski A, Chan GKL, **Boatz JC**, Li NJ, Inoue AP, Wong JC, van der Wel PCA, Cavigiolio G. Methionine oxidized apolipoprotein A-I at the crossroads of HDL biogenesis and amyloid formation. *FASEB J*. 2018:fj201701127R. Epub 2018/02/07.

Clinical and Translational Sciences, Institute for Clinical Research Education

Colditz, J. B., Woods, M. S., & Primack, B. A. (2018). Adolescents Seeking Online Health Information: Topics, Approaches, and Challenges. In *Technology and Adolescent Mental Health* (pp. 21-35). Springer, Cham.

Colditz, J. B., Chu, K. H., Switzer, G. E., Pelechrinis, K., & Primack, B. A. (2018). Online data to contextualize waterpipe tobacco smoking establishments surrounding large US universities. *Health informatics journal*, 1460458217754242.

Bonilla-Velez, J., Small, M., **Bonilla-Escobar, F. J.**, Sharum, M., & Tulunay-Ugur, O. E. (2018). Voice and Swallowing Outcomes of Unilateral Vocal Fold Paralysis: Comparing Younger Adult and Geriatric Patients. *Otolaryngology–Head and Neck Surgery*, 0194599818756310.

Hoffman, B. L., Hoffman, R., Wessel, C. B., **Shensa, A.**, Woods, M. S., & Primack, B. A. (2017). Use of fictional medical television in health sciences education: a systematic review. *Advances in Health Sciences Education*, 1-16.

Shensa, A., Sidani, J. E., Dew, M. A., Escobar-Viera, C. G., & Primack, B. A. (2018). Social Media Use and Depression and Anxiety Symptoms: A Cluster Analysis. *American journal of health behavior*, 42(2).

Shensa, A., Sidani, J. E., Escobar-Viera, C. G., Chu, K. H., Bowman, N. D., Knight, J. M., & Primack, B. A. (2018). Real-life closeness of social media contacts and depressive symptoms among university students. *Journal of American college health*, 1-8.

Primack, B. A., **Shensa, A.**, Sidani, J. E., Tulikangas, M. C., Roberts, M. S., Colditz, J. B., ... & Fine, M. J. (2018). Comparison of toxicant load from waterpipe and cigarette tobacco smoking among young adults in the USA. *Tobacco control*, tobaccocontrol-2017.

Hoffman BL, Tulikangas MC, **Shensa A**, James AE, Colditz JB, Sidani JE, Primack BA. Pennsylvania policymakers' knowledge, attitudes, and likelihood for action regarding waterpipe tobacco smoking and electronic nicotine delivery systems. *Tobacco Prevention & Cessation*. In press, 2018.

PMI

Ander, S. E., Rudzki, E. N., Arora, N., Sadovsky, Y., Coyne, C. B., & Boyle, J. P. (2018). Human Placental Syncytiotrophoblasts Restrict *Toxoplasma gondii* Attachment and Replication and Respond to Infection by Producing Immunomodulatory Chemokines. *mBio*, 9(1), e01678-17.

Menk, A. V., **Scharping, N. E.**, Rivadeneira, D. B., Calderon, M. J., Watson, M. J., Dunstane, D., ... & Delgoffe, G. M. (2018). 4-1BB costimulation induces T cell mitochondrial function and biogenesis enabling cancer immunotherapeutic responses. *Journal of Experimental Medicine*, jem-20171068.

Menk, A. V., **Scharping, N. E.**, Moreci, R. S., Zeng, X., Guy, C., Salvatore, S., ... & Delgoffe, G. M. (2018). Early TCR signaling induces rapid aerobic glycolysis enabling distinct acute T cell effector functions. *Cell reports*, 22(6), 1509.

Ning, J., **Zhong, Z.**, **Fischer, D. K.**, Harris, G., Watkins, S. C., Ambrose, Z., & Zhang, P. (2018). Truncated CPSF6 forms higher order complexes that bind and disrupt HIV-1 capsid. *Journal of virology*, JVI-00368.