

I³ : Inclusion, Innovation & Inspiration

Fall/Winter 2017

Diversity News

IMSD@UB

iSEED

CLIMB

Announcements

A Message from the Director

Welcome to the Fall 2017 Issue of the I³ Newsletter. We take great pride in our efforts to build a more inclusive community at UB and would like to share some of our accomplishments and programs with you in this latest edition.

We are excited to announce that the Initiative for Maximizing Student Development (IMSD) grant has been renewed for another 5 years! This grant will go a long way in assisting our PhD students to achieve their academic goals.

In this issue, we hope that you gain insight on the research our students—past and present—are contributing to the STEM fields, grants that have been renewed, and awards presented to UB faculty, staff, and students.

Thank you for your support!

Margarita L. Dubocovich, PhD

A look inside this issue...

IMSD@UB

Initiative for Maximizing
Student Development

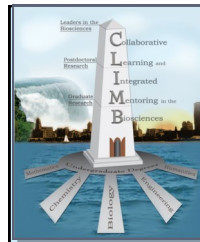
The Initiative for Maximizing Student Development (IMSD)

just welcomed a new cohort of students. Learn more about the success of current IMSD scholars!



The Institute for Strategic Enhancement of Educational Diversity (iSEED)

continues to support students across UB!



Learn about what **Collaborative Learning and Integrated Mentoring in Biosciences (CLIMB)** Program alumni

Office of Inclusion and Cultural Enhancement

35 Biomedical Education Building

Jacobs School of Medicine and Biomedical Sciences

Contact us!

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Program Staff

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Director of CLIMB Program;
Co-Director of iSEED Program
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SUNY Distinguished Professor

Rajendram Rajnarayanan, PhD
CLIMB Program Associate Director

Joanna R. Barthelemy, PhD
CLIMB/IMSD Senior Coordinator

Elizabeth Marshall

CLIMB UP Program Coordinator
Communications Associate

Barbara Burke

Senior Inclusion Associate

Excellence in Inclusion and Cultural Enhancement

The Office of Inclusion and Cultural Enhancement (OIACE) recognizes students, faculty, and staff in the Jacobs School of Medicine and Biomedical Sciences (JSMBS) for their work in creating a welcoming climate of respect and inclusiveness.

Since 2013, the Award of Excellence for Promoting Inclusion and Cultural Diversity has recognized individuals whose actions, example, and efforts contribute to a diverse, respectful environment at UB and in the Western New York Community. A diverse and inclusive campus community enhances excellence in research and academic medicine by broadening and strengthening teaching, learning, and scholarship.

This award, presented during the JSMBS Annual Faculty and Staff Recognition Awards ceremony, is given to recipients in the following categories: medical students or students in the MD/PhD program; medical residents; doctoral students; clinical or basic sciences faculty and staff.

This year an inaugural Community Service Award was also presented to Dr. David A. Milling for his exceptional service and dedication to providing outreach to diverse communities.

Visit our website:

<https://medicine.buffalo.edu/oiace/awards.html> for past recipients or information on how to nominate someone for the award.

The 2017 recipients were:
Taechin Yu, MD (Faculty)
Jaafar M. Angevin (Staff),
Susan M. Orrange (Staff)
Tom Fuchs (MSTP Student)
Isuan Asikhia, MD
(Resident)



Promoting Culturally Responsive Healthcare

The Office Of Inclusion and Cultural Enhancement (OIACE) was awarded the **Explorations in Diversity and Inclusive Excellence Grant** from the SUNY Office of Diversity, Equity and Inclusion. The grant is funding an OIACE collaborative initiative, “Dialogues on Cultural Diversity and Culturally Responsive Healthcare.” This initiative supports the primary mission of the Jacobs School of Medicine and Biomedical Sciences: *“To advance health and wellness across the life span for the people of New York and the world through the education of tomorrow’s leaders in health care and biomedical sciences, innovative research and outstanding clinical care.”*

The goals of this grant-funded initiative are to: Develop listening and two-way communications skills among residents as a foundation for cultural competence and patient centered care; Recognize and counteract bias on an individual, organization, system and societal level; and understand patient care in the context of health equity and social determinants of health (social competency). OIACE intends to accomplish these goals by developing workshops on cultural competencies allowing for discussions and group interactions.

Dubocovich Awarded UB President’s Medal



Margarita L. Dubocovich, PhD received the UB President’s Medal for her extraordinary service to the university during the Jacobs School of Medicine and Biomedical Sciences’ commencement ceremony on April 28, 2017.

The UB President’s Medal recognizes “outstanding scholarly or artistic achievements, humanitarian acts, contributions of time or treasure, exemplary leadership or any other major contribution to the development of the University at Buffalo and the quality of life in the UB community.”

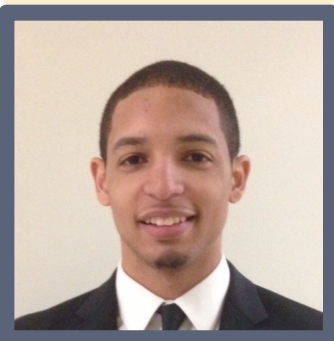
The IMSD@UB is a program that *develops student talents, promotes the professional growth of PhD students, and enhances intellectual and cultural diversity in the biomedical and behavioral sciences* at UB. The IMSD@UB began in 2012 with the support of the National Institutes of Health.

IMSD Renewed for 5 More Years

The Initiative for Maximizing Student Development (IMSD), "Enabling Access to Cutting-Edge Biomedical and Behavioral Science," was renewed for another 5 years, March 2017 to December 2021.

The goal of the IMSD is to increase excellence in PhD student recruitment, retention, and success. The IMSD will support an additional cohort of 20 underrepresented students in STEM in the next 5 years, providing funding for the first 2 years in a PhD program in disciplines from JSMBS, SDM, SPPS, SPHHP, CAS, SEAS and RPCI.

IMSD Student Receives PhRMA Foundation Predoctoral Fellowship



Anthony Jones
PhD Student
Neuroscience

Congratulations Anthony Jones!

Anthony received a two-year fellowship award in pharmacology/toxicology from the PhRMA Foundation. The award supports career development activities of scientists and encourages multidisciplinary training to apply the perspective of molecular, cell and systems biology to pharmacology and toxicology research. The award provides a yearly stipend of \$20,000.

Anthony is a PhD student in the neuroscience program and an IMSD scholar. His mentors are Margarita L. Dubocovich, PhD and Rajendram V. Rajnarayanan, PhD.

Anthony's research focuses on screening for environmental compounds such as chemicals found in pesticides that can disrupt circadian rhythms, creating a higher risk for diabetes, obesity, and other metabolic disorders.

Welcome Incoming IMSD & iSEED Scholars

Incoming students listed from left to right in column on left

Jamal Williams, MA, Buffalo State College
Pursuing PhD in Biomedical Sciences
Elise Perry, BS, Cedarville University
Pursuing PhD in Chemistry at UB
Ty Santiago, BS, SUNY Potsdam
Pursuing PhD in Chemistry
Juliany Marrero Vega, MS, University at Buffalo
Pursuing PhD in Pharmaceutical Sciences
Joseph Lucas, MS, Western Illinois University
Pursuing PhD in Biomedical Sciences
Thomas Straubinger, BS, University at Buffalo
Pursuing PhD in Pharmaceutical Sciences



Not shown: Nahyr Lopez, BS, University of Puerto Rico at Cayey; Lauren Shepard, BS, University at Buffalo

IMSD@UB Program News

Meet our IMSD Scholars

Mohamed Sharif: Department of Biochemistry at Jacobs School of Medicine and Biomedical Sciences



Mohamed Sharif is a PhD student in the Department of Biochemistry. He entered the program in Fall 2015 through the PhD Program in Biomedical Sciences. He received his degree in Biology and Chemistry from D'Youville College in 2013. Mohamed works in the labora-

tory of Dr. Yungki Park at the Hunter James Kelly Research Institute.

Q. Why did you choose to pursue a PhD?

I chose to pursue a PhD because it was a means for me to serve others while satisfying my curiosity, along with my hunger for exploration into uncharted territories. Mother Teresa once said, "there is joy in transcending self in order to serve others." This is the kind of joy that drives me to become a researcher. A simplistic yet elegant understanding that I need to stand at the forefront of my field and contribute my part to the cosmic pool of constantly changing scientific knowledge. So that one day, what I once considered a novel discovery can become common knowledge that can improve the quality of life for individuals.

Q. Why type of research are you involved in?

As part of my PhD training, I am currently working in the Park Lab at the Hunter James Kelly Research Institute, where my research focus is to understand the transcriptional regulatory network governing the differentiation of oligodendrocytes and central nervous system myelination, with long-term goal of treatment discovery for demyelinating diseases.

Q. What has been the most beneficial aspect of the IMSD program?

I was really fortunate to join the CLIMB program and become an IMSD Scholar. Through this R25 training grant, I was able to improve my laboratory skills and my development as a professional scientist

through a series of workshops. This experience enabled me to learn of many research grant opportunities, acquire experience in reading/writing research papers, and learn the importance of developing an ongoing biosketch early on. Above all, I really liked the study groups that we did during our first year, it was extremely helpful and it also provided us with an opportunity to interact with upper level graduate students. Through, this opportunity I had a student mentor who became a good friend and colleague.

Q. What has been your biggest challenge in graduate school?

Balancing my family and school life. I am a father of 2 boys (Mikael, 4, and Gabriel, 2 1/2 years old), and my wife is also a UB graduate student. Thus, I have to constantly find time to get all my work done, which requires me to constantly refine my time management skills.

Q. Any advice for new PhD students?

My advice would be to always ask questions because this is the best way to learn. Through this journey we are bound to meet lots of intellects. Take this opportunity to learn from them and network with them. Also, at times the work load of a PhD student can be stressful, but it is these times that we really have take it step at a time live in the moment.

Q. What is one thing you like about being at UB?

One thing I like about being at UB is the diverse and rich environment that UB provides for their students.

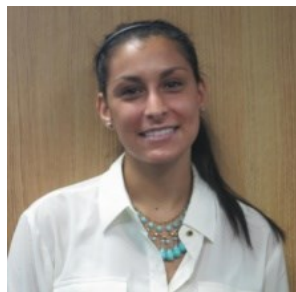
Q: Is there an accomplishment you are most proud of since the start of your PhD training?

The accomplishment I am proudest of is our first publication in the *Journal of Nucleic Acids Research*:

<https://academic.oup.com/nar/article/2970151/Homo-trimerization-is-essential-for-the>

Meet our IMSD Scholars

Spencer Rosario: Department of Pharmacology and Cancer Therapeutics at Roswell Park Cancer Institute



Spencer Rosario is a PhD student studying Molecular Pharmacology and Cancer Therapeutics at Roswell Park Cancer Institute.

Q.

Why did you choose to pursue a PhD?

While completing a Masters at Georgetown University, which was meant to help me decide if I wanted to go to medical school or pursue research, I fell completely in love with research and knew I wanted a PhD.

Q. What type of research are you involved in?

I am currently developing a bioinformatics pipeline to determine which metabolic pathways are most highly dysregulated in a tumor-tissue specific manner. Personalized medicine is where the field is heading, so we're hoping to be able to determine which metabolic pathways should be targeted in prostate versus breast versus ovarian cancers, as well as in a molecular subtype manner, such as adenocarcinoma versus neuroendocrine disease.

Q. What about your research excites you?

I believe what we are doing is not only cutting edge, but will also have a high impact within the clinic. Patients shouldn't be treated with the same drugs if their diseases are different at the molecular level, so this will allow us to tailor treatments to tumors.

Q. What has been the most beneficial aspect of the IMSD program?

The friendships I've built with other students has really been able to get me through some of the hard time grad school has thrown at me. Additionally, the opportunities to mentor/teach other students, being a summer research facilitator, has provided me with a chance to gain invaluable teaching experience, as I would really like to pursue a future career in academia.

Q. What has been your biggest challenge in graduate school?

My biggest challenge in grad school was learning how to prioritize. A lot of times, you will be handed a few different projects, sometimes by multiple PIs, and learning which ones need to be completed more rapidly than others will make your life easier.

Q. Do you have any advice for new PhD students?

Choose your mentor wisely and be very up front with them about your abilities. Your mentor is the person that will be guiding you through the next 4-6 years. Therefore, you want to make sure they not only have a mentoring style you can function under but also one you can learn from. Additionally, you have to be upfront about your abilities. Doing a Western Blot one time does not make you an expert. Take the time to learn the techniques of a lab; we all do things a little differently. Techniques can be learned, but it'll be harder if you already think you know it all.

Q. What is one thing you like about being at UB?

The diversity of research topics at UB means there's really something for everyone!

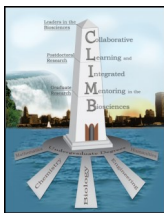
Q. What is the reason you came to UB?

Roswell Park Cancer Institute is the first institute in the nation dedicated exclusively to cancer research, as well as the first NCI-designated Comprehensive Cancer Center. Having an opportunity to work for a world-renowned institute and such accomplished mentors, wasn't something I could easily pass up.

Q. Is there an accomplishment you are most proud of since you started your PhD training?

I recently was able to publish a co-first author paper in *Science*, where a mouse model was developed to represent a more accurate depiction of what's occurring clinically in prostate cancer.

CLIMB Program News



The Collaborative Learning and Integrated Mentoring in the Biosciences (CLIMB) Program at UB provides professional development for students to not only learn, but apply, the essential skills of a professional scientist. This training will help students choose the best research opportunities, write outstanding fellowships and grants, craft publications, confidently present their work, and ultimately, find the best jobs.

Welcome to Joanna Barthelemy, PhD

Dr. Joanna Barthelemy is our new CLIMB/IMSD Coordinator. Dr. Barthelemy is a Buffalo native who received her B.S. in Biochemistry from Daemen College in 2010. After completing her undergraduate degree she went on to complete her PhD in Biomedical Sciences at Wright State University in Dayton, OH in 2015. Dr. Barthelemy's research projects focused on DNA replication and repair. She is an avid reader, nature lover, and Zumba enthusiast. Dr. Barthelemy is looking forward to meeting everyone in the CLIMB community and sharing her experiences and expertise with the CLIMB students.

CLIMB Pathways

We are excited to announce the formation of **CLIMB Pathways**! The CLIMB Pathways Program will be a professional development program tailored to students completing a master's degree in the life sciences across the University at Buffalo. This program is funded by a Professional Pathways Planning Grant through the SUNY Excels Seed Program, and will assist Masters students transitioning into graduate school, joining a research laboratory, and on finding the best career/educational pathway upon graduation. Please contact our office if you are an incoming Masters student and are interested in joining this exciting new program.

CLIMB Alumna Announced as Study Coordinator for Grant

Congratulations to **Katelyn Carr, PhD & Leonard Epstein, PhD** of the Behavioral Medicine Laboratory in the Department of Pediatrics. Dr. Epstein was awarded a \$2.8 million NIH grant to study childhood obesity. Katelyn is a postdoctoral researcher in the lab and is the study coordinator for the grant. She is a CLIMB alumna and served as a facilitator for the research communication workshops for the CLIMB UP for Summer Research program for two summers.

CLIMB UP Alumna Awarded 2017 NSF Graduate Research Fellowship

Congratulations, Alexandra Van Hall-Beauvais! Alexandra is the recipient of the 2017 National Science Foundation Graduate Research Fellowship Program (NSF-GRFP) which recognizes and supports outstanding graduate students in NSF-supported science, technology, engineering and mathematics disciplines. Alexandra is a PhD student at the Cornell University. She graduated from UB with a degree in chemistry.



UPCOMING LUNCH TIME SHOWS WILL BE ANNOUNCED SOON!

Interested in sharing your musical talents?

e-mail smbs-inclusion@buffalo.edu to sign up!

iSEED Program News



The Institute for Strategic Enhancement of Educational Diversity (iSEED) is a university-wide institute that promotes building a culturally and intellectually diverse and academically inclusive community of graduate students, postdoctoral fellows, faculty and staff. The iSEED is focused on excellence in education, engagement in research, mentoring and enhancement of professional development central to the UB mission.



We welcomed 26 students to our CLIMB UP Summer Research Program. iSEED helped fund twelve (12) of the CLIMB UP students to conduct research and present on their findings during a 10-week summer research experience.

iSEED students participating in CLIMB-UP came to us from all over the United States, including Puerto Rico and the Virgin Islands.

The CLIMB UP Summer Research Programs offers hands-on research with UB faculty mentors, along with lectures and workshops for professional development over a 10-week period.

iSEED Alumnae Presentations and Awards



Elizabeth Quaye

Elizabeth Quaye received Honorable Mention at the Department of Pharmacology and Toxicology's annual Research Symposium and Awards Dinner. She presented her summer research with Dr. Mahajan on "Methamphetamine Mediated Mitochondrial Dysfunction and Microglial Apoptosis" during the poster session which included research from graduate and undergraduate students in the department.

Elizabeth is a junior majoring in pharmacology and toxicology at UB. She was part of the Summer 2016 cohort of undergraduate summer scholars in the iSEED Summer Research Experience.



Lauren Shepard

On February 16, 2017, **Lauren Shepard**, ISEED 2016 Alumna, presented her research conducted with her summer mentor, Dr. Chip Ionita at the SPIE Medical Imaging Conference in Orlando, FL. The presentation was based on her co-authored paper titled "Initial Simulated FFR Investigation Using Flow Measurements in Patient-Specific 3D Printed Coronary Phantoms." In addition, Lauren had the privilege of presenting at the CURCA Celebration of Student Excellence and gave a combined talk at the SUNY SURC conference.

Lauren is now a PhD iSEED Scholar student at UB in Biomedical Engineering and Dr. Ionita is still her mentor.

Announcements

Our CLIMB scholars accomplish many great things throughout their PhD careers. Their work garners awards, accepted abstracts and publications and opportunities to present their work at national conferences in their field.

Amaris Borges Munoz, Chemistry. Amaris gave an oral presentation at the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy 2017 in Chicago, Illinois in March on "Modification of silicon particle for liquid chromatography." She presented a poster at the International Symposium on Chromatography 2016 in Cork, Ireland in August 2016 on Selectivity comparison and behavior evaluation of an amide-based stationary phase for supercritical fluid chromatography.

Emily Brooks, Biomedical Engineering. Emily presented a poster at the Orthopaedic Research Society Annual Meeting in March 2017 in San Diego, California on "Risk of Magnesium Implant Infections: Mg2Sr Supporting MRSA Growth." She also had two papers accepted for publication in Material Science and Engineering and Journal of Biomedical Materials Research Part B: Applied Biomaterials.

Laurie Grieshaber, Epidemiology and Environmental Health. Laurie gave a poster presentation at the American Society for Preventive Oncology (ASPO) Annual Meeting in March 2017 in Seattle, WA and at the American Association for Cancer Research (AACR) Annual Meeting in April 2017 in Washington, DC on "Telomere length genetic risk score is not associated with breast cancer survival."

Emily Sekera, Chemistry. Emily will present at the American Society for Mass Spectrometry (ASMS) Annual Conference June 2017 in Indianapolis, Indiana on "Quantitation of Stercobilin in the Fecal Material of Timothy Syndrome Mice as a Putative Biomarker for Autism." She is an author on an article published in Applied in Vitro Toxicology.

Aylin Flores, Toneia Washington, and LeDaniel Sims, all from our 2017 CLIMB UP Summer Research program, and funded by iSEED, had their abstracts accepted to present at the Annual Biomedical Research Conference for Minority Students (ABRCMS) in November 2017. In addition, Aylin Flores will present at the Annual Society for Advancement of Chicanos/Hispanics and Native Americans in Science Conference in October 2017.

CLIMB UP Accomplishments

Congratulations to all of our recent CLIMB UP graduates. Please send your graduation celebrations and accomplishments to climb@buffalo.edu so that we may include them in our newsletter



Angel Garcia
CLIMB UP 2016
Graduated from Tougaloo College; BS in Biology



Christine Breindel
CLIMB UP (iSEED)
2015
Just started UB's
DDS Program!

THREE CLIMB UP ALUMNAE ENTER UB MEDICAL CLASS OF 2021!



Congratulations and best wishes to:

Jalisa Kelly, 2016
Gabriel Gomez Chaves, 2016
Courtney Mangum, 2015