A Message from the Director

Welcome to our second issue of the I³ Newsletter. We are pleased to report on our students’ accomplishments, and to share with you the interdisciplinary programs and activities our office has coordinated throughout the academic year.

One event that stands out was our annual CLIMB UP and iSEED summer visit to the Buffalo Clinical and Translational Research Center (CTRC); we were thrilled to introduce over 50 undergraduate researchers to the work being done through UB’s Clinical and Translational Science Award (CTSA) and graduate programs in the Jacobs School of Medicine and Biomedical Sciences. Not only is the physical landscape of downtown Buffalo changing right before our eyes, but so is the future of science— and we are excited to be a part of this transformation at all levels.

We hope you enjoy this issue! We are proud of our students, and are excited that we are continuing to build a stronger, more inclusive community at UB.

Thank you for your support!

Margarita L. Dubocovich, PhD

A look inside this issue...

The Initiative for Maximizing Student Development (IMSD) is about to welcome a new cohort of students. Learn more about the success of current IMSD scholars!

The Institute for Strategic Enhancement of Educational Diversity (iSEED) has excellent leadership!

Learn about what Collaborative Learning and Integrated Mentoring in Biosciences (CLIMB) Program alumni are up to!

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Women in Medicine and Science Leadership Symposium

On March 5, 2016, the Office of Inclusion and Cultural Enhancement attended the first Women in Medicine and Science Leadership Symposium. The event featured Sara Laschever, author of the book “Ask for It: Women and the Power of Negotiation,” as a keynote speaker. Sara spoke to the group about the struggles of women in the workplace and provided strategies on how women can get what they want. The symposium also featured a distinguished panel of women in medicine which included Dr. Gale Burstein, Dr. Helen Cappuccino, Dr. Iris Danziger and Dr. Nancy Nielsen. Each woman spoke about their careers within medicine. The topics of this panel discussion included: considering family and career, working in non-traditional career fields, and the business side of medical practice. This panel generated a lively discussion regarding the challenges of women in medicine.

This event was sponsored by the UBDoctHERS network.

UB Summer Programs Learn About Clinical and Translational Research

On June 17, 2016, over 50 summer undergraduate research students visited the Clinical and Translational Research Center (CTRC) for an afternoon of interactive activities and discussions in clinical and translational research. The event, “Graduate and Professional Careers in Clinical and Translational Research,” introduced students to the Clinical and Translational Science Award (CTSA) and graduate programs in the Jacobs School of Medicine and Biomedical Sciences. The students in attendance are part of CLIMB UP, Collegiate Science and Technology Entry Program (CSTEP), iSEED, and SUNY Louis Stokes Alliance for Minority Participation (SUNY-LSAMP) summer research programs conducting research with UB faculty in STEM and the health sciences. Students learned about the PhD and medical degree programs in the Jacobs School of Medicine and Biomedical Sciences. Students also engaged in a panel discussion with current JSMBS graduate students: MD/PhD student Nadav Weinstock, and PhD students, Anthony Jones, Lakeisha Lewter, and Jessie Polanco Garcia.

HIV/AIDS in At-Risk Communities: The Conscientious Clinician

On November 19, 2015, the National Black Leadership Commission on AIDS, Inc. (NBLCA) provided an interactive workshop on HIV/AIDS treatment and prevention, working with at-risk communities, marginalization, and the therapeutic alliance between doctors and patients. The event featured a conversation with a community member from Evergreen Health Services who is affected by HIV/AIDS. This event was sponsored by the Office of Inclusion and Cultural Enhancement (JSMBS), the Department of Community Health and Health Behavior and the School of Public Health and Health Professions.
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.

**Congratulations!**

We would like to congratulate Spencer Rosario, PhD student in the Department of Molecular Pharmacology & Cancer Therapeutics at Roswell Park Cancer Institute and Jennifer Martin, PhD Student in the Department of Pharmacology and Toxicology, for passing their qualifying exams!

**Summer Internship at the National Institute of Health**

Congratulations to Jennifer Martin and Lauren Mueller for their acceptance into the Graduate Summer Opportunity to Advance Research (GSOAR) Program! GSOAR students will spend 9–weeks during the summer working at the NIH. Students are matched with a research mentor in the NIH Intramural Research Program (IRP) where they will learn about and engage in clinical and translational research. In addition, scholars will participate in leadership development programs, a research symposium and NIH Summer Poster Day and engage in professional development training. GSOAR students will be afforded the opportunity to access all of the summer activities available able the NIH.

Learn more about the GSOAR program here: [https://www.training.nih.gov/gsoar_home_page](https://www.training.nih.gov/gsoar_home_page)

**Welcome 2016 IMSD Scholars!**

On July 1, the IMSD@UB Program welcomed four new IMSD scholars. As IMSD Scholars, they are given the opportunity to begin their graduate career before the Fall semester begins launching them onto an accelerated track towards research independence.

**Martin Garnero**
PhD Program, Chemistry, College of Arts and Sciences.
BS, Chemistry, University of North Florida, April 2016

**Steven Lewis**
PhD Program, Biomedical Sciences (PPBS), Jacobs School of Medicine and Biomedical Sciences. BS, Biochemistry and Sociology, Nazareth College, 2014

**Rasheen Powell**
PhD Program in Pharmacology and Toxicology, Jacobs School of Medicine and Biomedical Sciences. BS, Chemistry and Pharmacology and Toxicology, University at Buffalo, May 2016

**John Davis**
PhD Program, Molecular Pharmacology and Cancer Therapeutics, Roswell Park Cancer Institute (RPCI). MS, Cancer Biology, Prevention and Control, University of the District of Columbia/Georgetown University, May 2013 BS, Biomedical Engineering, Washington University in St. Louis, May 2016
Meet our Scholars

Lakeisha Lewter, PhD student in the Neuroscience Program, has learned a great deal during her time at UB. After receiving a BS in Biology (psychology minor) from Morgan State University, Lakeisha was accepted into the PhD program in Biomedical Sciences. She finished her second year in graduate school and is about to complete her qualifying exam.

Why did you choose to pursue a PhD?
I chose to pursue a PhD because of an undergraduate research program I was a part of at Morgan State University. The program exposed us to research and faculty to help me decide that I wanted to pursue a career in research.

What type of research are you involved in?
Dr. Jun-Xu Li’s research is focused on the discovery of novel therapeutics for pain. The aim of my research is to understand the behavioral effects of positive allosteric modulators (PAMs), molecules that affect the activity of the GABA$_A$ receptors, to explore their potential utility as pain relievers.

What about your research excites you?
My research focuses on studying the effect of novel compounds which allows me to create a story about the role these compounds have in the treatment of pain.

What has been the most beneficial aspect of the IMSD program?
The most beneficial aspect of the program was gaining practice presenting my research to other students. It allowed me to feel more comfortable with my presentation skills and it allowed me to learn about the research other students were doing.

What has been your biggest challenge in grad school?
The biggest challenge for me has been finding a balance between coursework and lab work; especially in my first year of graduate school.

Do you have any advice for new PhD students?
My advice would be to become comfortable with disappointments or failures. Sometimes an experiment may not turn out as you expect it to, so it is important to find the silver lining in those failures.

What is one thing you like about being at UB?
The one I like most about being at the University at Buffalo is the environment. The faculty are very welcoming and encouraging. They want you to succeed and they are always willing to give you advice.

Diversity Supplements Awarded to IMSD students

Three IMSD students were awarded National Institutes of Health (NIH) Diversity Supplements. PhD student in Pharmacology and Toxicology, Jennifer Martin, and PhD student in the Neuroscience Program, Lakeisha Lewter, working with mentors in the Department of Pharmacology and Toxicology received funding from National Institute on Drug Abuse (NIDA). PhD student in the Neuroscience Program, Jessie Polanco, received funding from the National Center for Advancing Translational Sciences (NCATS) through the Clinical and Translational Science Award (CTSA).
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.

Professional Development Workshops

During the Spring 2016 semester, several new professional development workshops were offered. Nell Arnoff in the Health Sciences Library presented a workshop on predatory journals and publishers. One student remarked “I knew close to nothing about this topic before the workshop, now I feel prepared to not only detect predatory journals, but now I know that HSL has staff that are willing to help us... if we or our advisors are unsure about the credentials of a particular journal.” Another workshop on the topic of a Research Pitch and how to craft one was introduced to help students synthesize their research into a few sentences. One student remarked “I will probably start listening more closely to how scholars in my filed introduce their research. I had never paid attention to this.”

These new workshops were great successes. Thank you to the students for providing your feedback!

Summer Research at UB

The CLIMB UP for Summer Research and iSEED Summer Research Experience welcomed 26 undergraduate students representing several universities throughout the country to engage in hands on research for 10 weeks in STEM and the health sciences. The students are majors in biological and biomedical sciences, engineering, physics, psychology, nursing, and public health from institutions such as Fayetteville State University, Tougaloo College, and UB.

During the summer program, students participated in a one-week Introduction to Laboratory Skills course, met UB faculty through the BIO-STEM Scientific Lecture series, learned about UB graduate and professional programs, and networked with students from other institutions.

The program concluded at the UB Summer Research Day at the Center for the Arts on August 5, 2016 at the UB North Campus. All students presented a poster during the poster session and two students were selected to give an oral presentation of their summer research. Mariah Costa, biomedical engineering major from University of Akron represented iSEED with her research in the laboratory of Dr. Ciprian Ionita of the Department of Biomedical Engineering. Kaliana Veros, pharmacology and toxicology major from UB, represented CLIMB UP with her research in the laboratory of Dr. Margarita L. Dubocovich of the Department of Pharmacology and Toxicology.
CLIMB Program News

Excellence in Graduate Student Mentoring Award

Each year, a member of the UB Graduate Faculty who has demonstrated “truly outstanding and sustained support and development of graduate students from course completion and subsequent career placement,” receives the Excellence in Graduate Student Mentoring Award. This year Margarita L. Dubocovich, PhD and Mark O’Brian, PhD were the recipients of this award. On April 1, 2016, they were recognized at the Graduate School’s Spring Awards Ceremony during which Dr. Michael Cain, Vice President for Health Sciences and Dean of the Jacobs School of Medicine and Biomedical Sciences stated that “she (Dubocovich) is a faculty member who has consistently devoted her life to professional excellence, sustained a high-caliber research program, been an excellent advisor and mentor to numerous graduate trainees, and created mentorship programs that will have an enduring legacy.” The ceremony was followed by a reception for all of the honorees and their guests.

Post-Doctoral Teaching Training for Academic Careers Seminar Series

This seminar series was provided by the Office of Postdoctoral Scholars and the Center for Educational Innovation (CEI). Faculty and staff within the CEI developed this six week series that introduced a variety of topics related to academic teaching including: essential elements to effective university teaching, basics of assessments, creating a syllabus, teaching using technology, online learning and teaching as scholarship. The seminar series was attended by former CLIMB scholars Shannon Clough and Katelyn Carr. Postdoctoral scholars who attended all of the seminars in the series received a certificate of completion presented at the Eighth Annual Postdoctoral Scholars Research Symposium on June 10, 2016.

CLIMB UP Alumni Accepted to Graduate Program at Cornell University

Alexandra Van Hall, recent graduate from the University at Buffalo (UB) and a 2014 CLIMB UP summer alumna, will head to Cornell University to pursue a PhD in Chemistry! Alexandra spent her summer CLIMB-UP experience working with Dr. Margarita L. Dubocovich studying the interaction between pesticides and melatonin receptors on the risk of diabetes. She was selected to present her project at the annual University at Buffalo Summer Research Day representing the CLIMB UP program. Alexandra spent a summer at the University at Cambridge in the Department of Genetics with Dr. Marisa Segal. In addition to her research experience, Alexandra has completed several service learning projects including building sidewalks in a rural area of Costa Rica and mentoring students within the Buffalo Public Schools. Alexandra is an exceptional student receiving several awards including the SUNY Chancellor’s award and Outstanding Senior from the Department of Chemistry.

Congratulations and good luck, Alexandra!
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.

**Workshop for Graduate Faculty Administrators, and Admissions Committees**

Frank Bayliss, PhD, Director of the Student Enrichment Opportunities Office at San Francisco State University provided two workshops titled “Attracting and Training STEM Graduate Students from Underrepresented Groups.” Dr. Bayliss described the limitations of using GPA and GRE scores as the only criteria for admissions students into graduate programs. He highlighted the fact that GRE and GPA scores do not necessarily predict student success and eliminates some students from the application pool. Using a holistic review of graduate applications will ensure all students are considered for admission.

**Meet the newest iSEED graduate scholar!**

Carolina Rojas Pion is a PhD student in the Department of Educational Culture, Policy and Society in the Graduate School of Education. Carolina is the first iSEED scholar outside of the STEM fields. Carolina has actively and thoughtfully participated in the CLIMB workshops during her first semester at UB. Carolina’s research interests include understanding the role of language in education and the barriers to educational attainment for latina/latino individuals.

**Jennifer Zirnheld, PhD honored for her influence on STEM**

Jennifer Zirnheld, PhD, was recognized as one of the 100 most inspiring women in STEM by ‘Insight Into Diversity’ magazine. Dr. Zirnheld, associate professor in the Department of Electrical Engineering, is the SEED Steering Committee Co-Chair. She is also the Director of the Energy Systems Integration (ESI) Laboratory. Dr. Zirnheld has mentored graduate and undergraduate students through iSEED, Louis Stokes Alliance for Minority Participation (LSAMP) and Ronald E. McNair. In addition to her mentoring expertise, Dr. Zirnheld is involved in several elementary and middle school programs teaching children about STEM and inspiring them to become scientists.
Meetings and Conferences

Meeting and conferences are an excellent way to network and learn more about a particular field of research or new technique. A few students have attended conferences and presented their research this spring and summer.


CLIMB Student Selected for Mentoring Program

CLIMB Scholar Alexandria Trujillo received a travel award to attend the Experimental Biology 2016 (EB 2016) meeting in San Diego, California in April 2016. Trujillo was also selected to participate in the ASPET “Big Ideas” Mentoring Program at EB 2016. The program selects a cohort of graduate students and postdoctoral fellows to join trained coaches and participate in a yearlong mentoring and professional development program. Trujillo is mentored by John M. Sullivan, MD, PhD, associate professor of ophthalmology.

Other CLIMB scholars Sushmitha Gururaj, Angela Gocher and Danielle Tomasello presented posters at EB 2016.

The Spring 2016 music series featured artists including: Gayle Hutton & Irene Reilly, Ellene Sandoval & Rebeccah Stevens, Ted Nicolosi, Jim Harb & Colleen Curtin, Docapella, David Kaye and Meiyi Shi. Thank you to all of those who provided their musical talents!

To sign up to perform during the Fall 2016 semester contact Liz Marshall at eam6@buffalo.edu.

The Center for Medical Humanities and the Office of Inclusion and Cultural Enhancement co-sponsored ‘Music is Medicine’; a lunchtime concert featuring artists from the medical school community.