IMSD View

Initiative to Maximize Student Development

Volume 4 Issue 3

Excellence Community IMSD Collaboration

BROWN

Message from the Director

STEM Diversity and Critical Mass

Despite ongoing efforts, racial and ethnic minorities continue to be under-represented in academia. Membership in what might be perceived as less valued social groups, which affects self-assessment [Cohen & Garcia, 2008], and feelings of isolation are among the root causes. The experience of isolation is undeniably among the greatest challenges that URMs face in STEM fields and it often goes unrecognized or under-appreciated by peers at majority institutions. For students in particular, the experience diminishes self-efficacy – the belief in one's ability and capacity to achieve. In the case of STEM diversity, scientific self-efficacy benefits from the presence of minority and other under-represented scholars whose roles are distinct from those of diversity deans. The argument that 'the pool does not exist' and that 'raiding talent only moves the same individuals around' has always been the counter-argument to efforts to build critical mass. Ironically, 'raiding talent' has always worked for other professions and fields, and there is no reason why it cannot also work to begin addressing STEM diversity.

Andrew G. Campbell, Ph.D.
Associate Professor of Medical Science
IMSD PI & Program Director

SAVE THE DATES!

Training Modules:

Intro to Statistical Analysis of Data . . . . . July 8–11

Scientific Writing: Key Principles . . . . Aug 13, 14 & 16

Demystifying the Ph.D. Experience . . . . Aug 26–30

Reading Scientific Publications . . . . Sep 3, 17 & 19

IMSD Partners Meeting at Brown . . . . Sep 25–27

PHOTO CREDIT: Karen Ball

Guest seminar speaker Lola Brown (center) with Professors Diane Hoffman-Kim and Wayne Bowen.

UMBC Speaker Exchange Series Highlights IMSD Fellows

The Brown IMSD Seminar series, together with the Department of Molecular Pharmacology and Physiology, recently featured Lola Brown, doctoral candidate in Biochemistry and Molecular Biology at University of Maryland, Baltimore County (UMBC). Ms. Brown presented her Ph.D. research currently being conducted in the lab of HHMI Investigator and Professor Michael F. Summers on the "Characterization of the Myristylated FIV Matrix Protein". At the conclusion of her talk, the speaker gratefully acknowledged her host Professor Diane Hoffman-Kim who provided critical mentorship and support during her undergraduate years at Brown. This seminar was the inaugural event in the UMBC Speaker Exchange Series, a new initiative that provides senior level IMSD Fellows at UMBC with opportunities to travel to other participating IMSD partner institutions to present their research in an "unfamiliar" yet more intimate setting than that typically encountered at a national meeting or conference. During their visits, IMSD Fellows also meet with faculty and students and tour research laboratories of interest. Such an exchange increases the visibility of underrepresented IMSD Ph.D. students throughout the U.S. and provides them with an opportunity to network and explore potential postdoctoral opportunities.

Ms. Brown's visit was a success by all accounts, and served as the perfect springboard for this exciting new partnership between our participating IMSD programs and institutions

For further information about the UMBC Speaker Exchange Program, contact: Justine Johnson, Associate Director of the UMBC Meyerhoff Graduate Fellows Program (NIH-IMSD Program) at: j.johnson@umbc.edu.

–KZB

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13-05

BROWN Excellence

Congratulations

Noelle Hutchins Kelso, Ph.D. Candidate in Medical Science in the Pathobiology Graduate Program, successfully defended her thesis on March 15, 2013. Her dissertation focused on "The Multifaceted Roles of Fas and PD-L1 on Liver Sinusoidal Endothelial Cell Dysfunction in Sepsis". Noelle, a former IMSD senior scholar, will transition to a Postdoctoral Research Fellow position in the lab of Dr. Alfred Ayala at Rhode Island Hospital beginning July 1, 2013.

Eric James, Neuroscience Ph.D. student and IMSD trainee, has been awarded an NSF Graduate Research Fellowship. His research focuses on "Identification and Characterization of GABAergic Neurons in Xenopus Laevis Tadpoles". Eric was also the recent recipient of an IMSD travel award to present his research at the 2013 New England Science Symposium at Harvard Medical School.

Chima Ndumele, Ph.D. candidate in Health Services Research and Policy, presented and successfully defended his dissertation on May 1, 2013. His dissertation focused on "Examining Sources and Consequences of Variation among Adult Medicaid Enrollees". Chima is a former IMSD trainee and senior scholar and a mentee of Dr. Amal Trivedi in Brown's Program in Public Health. Chima is actively interviewing for a postdoctoral or faculty position.

Stacy-Ann Allen-Ramdial, Ph.D. Candidate in Pathobiology successfully defended her final examination on April 18, 2013 on the thesis entitled "Characterization of BKPyV Interaction with Disialylated Gangliosides and PKC Regulated Viral Entry". Stacy-Ann is a former IMSD senior scholar and a mentee of Professor Walter Atwood in Brown's Department of Molecular Biology, Cell Biology and Biochemistry. She is currently seeking a postdoctoral position in infectious disease research and is particularly interested in host-pathogen receptor interactions.

Joseph Bahlman, Ph.D. Candidate in Ecology and Evolutionary Biology successfully presented and defended his dissertation on September 18, 2012, titled "Variation in Morphology, Kinematics, and Performance in Flight of Mammals." Joe is a former IMSD senior scholar and has continued to work as a postdoctoral research associate in the lab Dr. Sharon Swartz. Joe recently was awarded a prestigious NSF postdoctoral fellowship in Biology and will begin his postdoctoral training at University of British Columbia in the lab of Professor Doug Altshuler in June. The proposed research involves studying hummingbirds to look at how wing strokes are powered and controlled to modulate aerodynamic forces.

Cristina Lopez-Fagundo, IMSD trainee & senior scholar, and Ph.D. candidate in Biomedical Engineering, has been awarded a Whitaker Fellowship to fund a postdoctoral position abroad. Upon completion of her Ph.D. degree, Cristina will carry out her postdoctoral research at the Center for Applied Biotechnology and Molecular Medicine, University of Zurich, Switzerland.

Angel Byrd, an IMSD senior scholar and MD/Ph.D. student, published a paper that was recently highlighted in the Journal of Immunology: Byrd AS, O'Brien XM, Johnson CM, Lavigne LM, Reichner JS. An Extracellular Matrix-Based Mechanism of Rapid Neutrophil Extracellular Trap Formation inResponse to Candida albicans. J Immunol. 2013 Apr 15;190(8):4136-48. doi: 10.4049/jimmunol.1202671. Epub 2013 Mar 15. PubMed PMID: 23509360; PubMed Central. PMCID: PMC3622194. Angel's publication and other achievements were recently featured in a Brown News article: http://news.brown.edu/pressreleases/2013/04/byrd.

Trainee Publications

Lizarazo D, Zabala V, Tong M, de la Monte S. Myriocin-Ceramide Inhibitor Modulates Insulin/IGF and ER Stress Pathways in Experimental Alcohol-Related Steatohepatitis. Journal of Biochemical and Pharmacological Research, Vol. 1 (3): September 2013.

Lopez M. Inefficiencies in the National Hockey League Points System and the Teams That Take Advantage. Journal of Sports Economics published online 29 April 2013. DOI: 10.1177/1527002513486654

López-Fagundo C, Mitchel JA, Ramchal TD, Dingle YL, Hoffman-Kim D. Navigating neurites utilize cellular topography of Schwann cell somas and processes for optimal guidance. Acta Biomaterialia, Available online 1 April 2013, ISSN 1742-7061, 10.1016/j.actbio.2013.03.032.

This research study was recently highlighted by Brown University News and Events:
http://news.brown.edu/pressreleases/2013/05/nerves

Published authors in Dr. de la Monte's lab (L to R: Teresa Ramirez, Valerie Zabala, Diane Lizarazo)

IMSD Students Awarded Sheridan Teaching Certificates

Several IMSD trainees and senior scholars were recently recognized for their successful completion of teaching programs offered through Brown University's Harriet W. Sheridan Center for Teaching and Learning. Among those who earned a Level I Certificate for Reflective Teaching were: **Heather Bennett**, **Jessica Chery, Eric James** and **Christopher Neil**. The following IMSD students received a Level III Certificate for successful completion of the professional development seminar: **Michael Lopez, Teresa Ramirez and Anika Toorie.**

Matt Hirakawa and Vé Léandre with Gordon School students
PHOTO CREDIT: Tracey Cronin

IMSD Spring Seminars Explore Career Options

The Brown IMSD Program and the Department of Molecular Pharmacology, Physiology and Biochemistry, co-hosted several scientific seminars this Spring. Guest speakers included JoAnn Trejo (Professor of Pharmacology at University of California, San Diego) and Justina McEvoy (Postdoctoral Fellow, St. Jude Children's Research Hospital) as well as University of Maryland, Baltimore County doctoral candidate Lola Brown (see feature article on page 1). In addition, IMSD partnered with the Office of Graduate and Postdoctoral Studies to organize a variety of career seminars and events. Among the featured guest speakers were Dr. Sharon Milgram (Director of the Office of Intramural Training & Education, NIH), Franklin Carrero-Martínez (Associate Professor, University of Puerto Rico; AAAS Roger Revelle Fellow in Global Stewardship), and Frank DeSilva (Scientific Review Officer, NIAID/NIH). Each of the speakers met with interested students and offered valuable insights on career options in scientific research, teaching, government, and industry. Further information about IMSD seminars and events can be found at: http://biomed.brown.edu/imsd/events/

-KZB

Dr. Sharon Milgram (NIH) presented a career workshop for Brown graduate students and postdocs

PHOTO CREDIT: Karen Ball

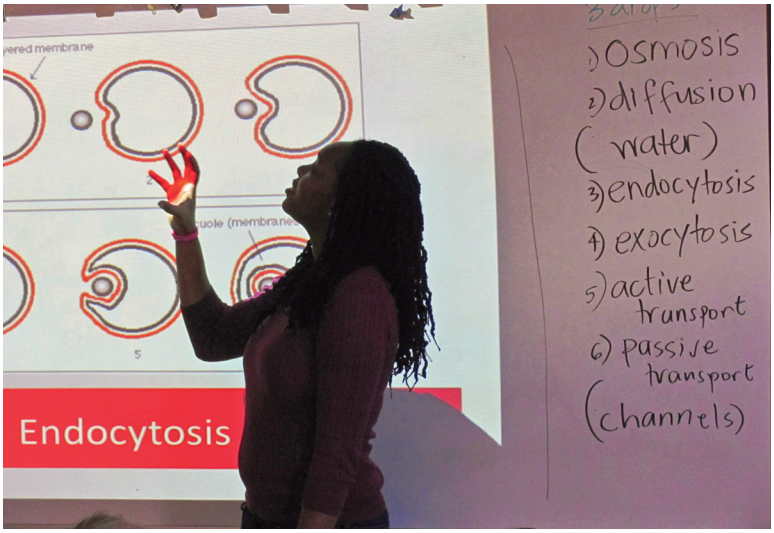
Gordon School Seminar Series Features Brown Ph.D. Students

The Gordon School is a racially diverse nursery through eighth grade coeducational independent school in East Providence, Rhode Island. Ms. Angela Flynn, a teacher at Gordon and a Brown graduate, contacted the Office of Graduate & Postdoctoral Studies to ask if any Ph.D. students would be willing to come to her class during the year to present information about their research as it coincided with the 7th grade science curriculum. Among the topics: cellular processes, genetics & heredity, body systems, cell division. In addition, the goal was to present positive role models of women and under-represented groups who had chosen these science careers.

A call went out to Brown Ph.D. students and many responded including several IMSD trainees. Vérida Léandre and Matt Hirakawa were the first visitors and they presented their science in an interactive and fun way. Vé used a game to demonstrate how cells would react to "invaders" and Matt incorporated his own childhood pictures into his trek from 7th grader to Ph.D. student! Subsequent speakers included Kathryn Grive and Lauren Quattrochi, and IMSD trainees Anika Toorie and Eric James.

This has been a great opportunity for the Gordon School students to learn how the topics they are studying fit into greater science research and also to learn about their own career and educational possibilities. Our own Ph.D. students have really enjoyed the community service aspect but also a chance to step outside of the lab and interact and perhaps inspire the next generation of scientists! We plan to continue this program in the coming years.

-Tracey Cronin



Vé Léandre explains cellular processes to 7th graders
PHOTO CREDIT: Tracey Cronin

BROWN Collaboration

Funding and Training Opportunities

F31 Predoctoral Individual National Research Service Award (NRSA)
Annual Diversity Deadlines: Aug. 13, Dec. 13, Apr. 13
AIDS-related applications: Sept. 7, Jan. 7, May 7
Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellowships (F31) provide support for promising doctoral candidates who will be performing dissertation research and training in scientific health-related fields relevant to the missions of the participating NIH Institutes and Centers. Individual opportunities may have different deadlines, please check the sites:
http://grants.nih.gov/training/F_files_nrsa.htm

Dissertation Support
R36 Dissertation Support
Standard Deadlines: June 16, Oct. 16, Feb. 16
AIDS-related applications: Sept. 7, Jan. 7, May 7
Note-Individual Opportunities may have different deadlines, please check the sites.

Conference Travel Awards:
ASCB MAC, FASEB MARC, Keystone Symposia
The Federation of American Societies for Experimental Biology (FASEB) provides information on their web site about science training and education awards made available through FASEB's member societies for students, trainees and science mentors. A complete list of upcoming eligible national meetings for travel awards can be found at:
http://www.faseb.org/marc/home.aspx

Eligible National Meetings	Mtg. Location	Mtg. Dates	Adv. Reg. Deadlines	MARC Deadlines
245th ACS National Meeting & Exposition	Indianapolis IN	9/8 – 9/12		7/26/13
ASBMB: Membrane-Anchored Serine Proteases	Potomac MD	9/19 – 9/22	6/12	6/28/13
Environmental Mutagen Society 44th Annual Meeting	Monterey CA	9/21 – 9/25	8/2	8/2/13
SACNAS 2013	San Antonio TX	10/3 – 10/6	9/5	8/16/13
2013 46th Annual Meeting of the Society for Leukocyte Biology	Newport RI	10/20 – 10/22	6/25	8/30/13
American Society of Human Genetics (ASHG) 2013 Annual Meeting	Boston MA	10/22 – 10/26	8/30	8/30/13
Society for Neuroscience 2013 Annual Meeting (Restricted; see app form)	San Diego CA	11/9 – 11/13		9/6/13
ABRCMS 2013: Annual Biomedical Research Conference for Minority Students	Nashville, TN	11/13 – 11/16	10/21	9/27/13
Association for Molecular Pathology 2013 Annual Meeting	Phoenix AZ	11/14 -11/16	9/10	9/24/13

Newsletter layout and design by Karen Ball and Brown Graphic Services

The National Institutes of Health (NIH) is recruiting candidates to participate in **The 8th NIH National Graduate Student Research Conference** to be held October 6 – 8, 2013 on the main NIH campus in Bethesda, Maryland. The purpose of this event is to recruit outstanding young scientists to postdoctoral positions at the NIH. This year the Conference will be held in conjunction with the 2013 NIH Research Festival, which highlights recent significant biomedical advances made at the NIH, and Conference participants will have the opportunity to attend Research Festival Sessions. To be eligible, students must be enrolled in a Ph.D. program in the U.S. and on schedule to complete their Ph.D. degree requirements between March 2013 and the end of October 2014. The deadline for application is June 15, 2013. Further details regarding the Conference and the link to the online application can be found at: https://www.training.nih.gov/programs/ngsrc

The Smithsonian Tropical Research Institute Graduate Fellowships are an excellent resource to provide support for graduate students and introduce them to tropical research. Although focused primarily on graduate students, awards are occasionally given to undergraduate and postdoctoral candidates. These fellowships enable selected candidates to work in the tropics and explore research possibilities at STRI. The Ernst Mayr Fellowship is awarded to an outstanding Short-Term Fellowship candidate every year. Deadlines: January 15, April 15, July 15 and October 15. (No Nationality Requirements)
http://www.stri.si.edu/english/education_fellowships/fellowships/

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Karen Ball – *Program Coordinator*

PARTNER INSTITUTIONS:

St. John's University, New York, NY

York College of the City University of New York

North Carolina A&T State University

The College of Mount Saint Vincent

Brown University's Initiative to Maximize Student Development (IMSD) is a predoctoral research training initiative that aspires to significantly increase the number of Ph.D.s from groups underrepresented in biomedical and behavioral research. The program is funded by a five-year continuation grant (2 R25 GM083270) by the National Institute of General Medical Sciences, National Institutes of Health (NIGMS/NIH).

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