

IMSD *View*

INITIATIVE TO MAXIMIZE STUDENT DEVELOPMENT

VOLUME 2 ISSUE 3



BROWN

MESSAGE FROM THE DIRECTOR

Reshaping training

Support for under-represented student groups and individual scientists at minority serving institutions (MSIs) and other under-served institutions continues to work well as documented by those who go on to outstanding graduate and professional careers. Improvements in training outcomes, especially at MSIs, however can be achieved by supporting the development of more robustly integrated and cross-institutional training experiences. One way to achieve this is by supporting the works of MSI faculty-led research teams of undergraduate students. These teams can work collaboratively on joint pilot research projects with research teams at non-MSIs. The synergy created by this helps to achieve research and educational training outcomes that would otherwise not be achieved by the current modes of support. Byproducts of such team-based collaborations could include reciprocal sabbatical opportunities for partner faculty, internships for students from MSIs at the non-MSI partner institution and a more informed and experienced cohort of graduate prospects. In short, approaches such as this help to produce vertically integrated training and research structures that run throughout the training continuum. Creation of these working structures yield the optimal ecology for graduate prospects, role models, colleagues and collaborators who share common interests and goals.

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



IMSD partners at Brown's Van Wickles gates. L to R: Sharon Wellman (NC A&T), Dr. Chris Bazinet (St. John's University), Dr. Janet Rollins (College of Mt. Saint Vincent), Drs. Louis Levinger and Gerry McNeil (York College, CUNY)

PARTNERING FOR SUCCESS

With generous funding support from Brown's Office of Institutional Diversity and the Division of Biology and Medicine, the IMSD Program was pleased to be able to host a second partners visit in Fall 2011. Representatives from York College, North Carolina A & T and the College of Mt. Saint Vincent returned to Brown in November with several undergraduate students. Participants learned about PhD programs in Biology and Medicine, attended scientific seminars and career discussions, and toured the Brown campus and several research labs. Dr. Jabbar Bennett, Assistant Dean of Recruiting and Professional Development for the Brown Graduate School, also met with partner students and shared helpful tips about the graduate school application process. The participation of undergraduate students in this campus visit provided a unique opportunity for peer mentoring by Brown graduate students, including several who are also alumni of the partner schools. Robert Fernandez, a junior at York College/CUNY commented, "I got to talk to one of the graduate students about their perspective on the academic and social life at Brown University. He was very helpful since he explained the daily life of a graduate student, such as what to expect in classes, how to choose a research lab and what to expect when doing research." He added, "I hope the IMSD Partner Campus Visit to Brown University is a recurring event because this visit can show undergraduate students the opportunities that Ph.D. programs offer." The excitement and momentum generated by these recent visits will serve to deepen our existing partnerships and lay the groundwork for future collaborations. KZB

SAVE THE DATES!

Winter 2012 Training Modules:

Beyond the Hypothesis. Jan. 9-13

Designing and Delivering
Scientific Presentations. Jan. 10-12

Defending Your Research Proposal
and Critiquing Those of Others. Jan. 17-20

Claude Steele MLK LectureFeb. 1

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BROWN

Excellence

CONGRATULATIONS

- Pathobiology graduate student and IMSD Senior Scholar **Tania Nevers** successfully defended her PhD Thesis “Inflammatory and Dysfunctional Regulatory T Cells in Adverse Pregnancy Outcomes” on December 16th. Dr. Nevers will begin her postdoctoral training at Women & Infants Hospital in Providence, Rhode Island.
- **Diana Lizarazo**, IMSD Senior Scholar and graduate student in the Suzanne de la Monte lab, attended the 62nd *Annual Liver Meeting* hosted by the American Association for the Study of Liver Diseases (AASLD) in San Francisco, November 4-8th. Diana presented her poster entitled “Indirect and direct roles of GSK-3 β activation in relation to aspartyl-(asparaginyl)- β -hydroxylase (AAH) expression and function: Consequences with respect to hepatocellular motility in ethanol-exposed cells”.
- Health Services Research graduate student, and former IMSD trainee **Chima Ndumele**, recently published his research in *The American Journal of Cardiology*. The study led by Ndumele finds that people who said emergency rooms were their usual site of medical care were less likely to know they had chronic conditions, including high blood pressure and high cholesterol, than those who got primary care at doctors’ offices or clinics. The study suggests that more could be done to address these disparities and increase primary care access. Full report online: <http://uk.reuters.com/article/2011/12/01/us-without-primary-care-idUKTRE7B02S120111201>
- **George E. Aninwene II** attended the 2011 Materials Research Society Fall Meeting November 28th -December 2nd in Boston. He presented his poster “Lubricin as a Novel Protein Coating to Prevent Bacterial Biofouling”. George is a fourth-year PhD candidate in the Biomedical Engineering graduate program and an IMSD Senior Scholar.



Photo credit: Michele Curry

IMSD Senior Scholars and emerging PhDs at Tania Nevers’ doctoral defense (L to R): Tania Nevers, Victoria Ruiz and Pam Gaddi. All are alumni of St. John’s University.

- **Bethany Wilcox**, IMSD graduate student in Biomedical Engineering, recently co-authored two journal articles. An e-pub article on the “Magnitude of Head Impact Exposures in Individual Collegiate Football Players” was featured in the August 2011 issue of the *Journal of Applied Biomechanics* (<http://www.ncbi.nlm.nih.gov/pubmed/219118540>). A related paper on “Head impact exposure in collegiate football players” was published in the October 2011 issue of *The Journal of Biomechanics* (<http://www.ncbi.nlm.nih.gov/pubmed/21872862>).
- IMSD faculty module leader and internal advisory board member, **Dr. Jabbar Bennett**, has been appointed as Associate Dean for Diversity, Division of Biology and Medicine and Director, Office of Diversity and Multicultural Affairs, The Warren Alpert Medical School. He is also continuing in his present role of Assistant Dean for Recruiting and Professional Development for Brown’s Graduate School. The new role allows Dr. Bennett to lead and coordinate diversity efforts and professional development for medical and graduate students in both units.

PAMELA GADDI EARNS PHD IN MEDICAL SCIENCES

This November, **Pamela Gaddi**, St. Johns ‘05, successfully defended her dissertation thesis entitled “The Role of Interleukin-10 in the regulation of immune responses in the liver during MCMV infection.” This thesis investigated the role of IL-10, an antiinflammatory cytokine, in regulating inflammatory responses to infection with murine cytomegalovirus. Pam hopes to have the findings of her research submitted for publication in early 2012.

Pam first got a taste of biomedical research on a summer internship at the Harvard School of Public Health, and continued to do research after having joined the St. John’s IMSD program. Pam credits her early experiences in biomedical research at St. Johns and beyond with inspiring her pursuits in research, especially in research that has relevance to amelioration of human disease.

Pam will continue on in the lab of Dr. Salazar Mather, at Brown for the spring semester as a Research Associate until May 2012, and is applying for postdoctoral positions to extend her studies in IL-10 and immunomodulatory mechanisms that control disease pathogenesis. Pam aspires to mentor young scientists in the laboratory in the future as well as have opportunities to contribute to training programs that have enabled her to pursue scientific research. -PG



IMSD graduate students and senior scholars with guest speaker L to R: Victoria Ruiz, Anika Toorie, Leon Toussaint, Heather Bennett, Natalie Chavez, Noelle Hutchins, Prof. Avery August

IMSD SEMINAR SERIES FEATURES DRs. AVERY AUGUST AND TYRONE HAYES

The IMSD Seminar Series featured two prominent guest speakers during the Fall semester who are conducting cutting edge research in the biomedical sciences. Dr. Avery August (Professor of Immunology, Cornell University College of Veterinary Medicine) discussed his research on the signaling of Tec kinases in Innate Immune T cells. Dr. Tyrone Hayes (Professor of Integrative Biology, University of California, Berkeley) discussed his work which examines the effects of the herbicide Atrazine on the sexual development of frogs. These events were co-sponsored by the Department of Molecular Microbiology & Immunology, and the Graduate Program in Ecology & Evolutionary Biology, respectively. In addition, both speakers met with IMSD-affiliated students to share their personal experiences, discuss career opportunities and challenges, and engage in informal Q&A. The IMSD Program purposely seeks speakers who offer unique and diverse perspectives and can serve as role models and mentors to students from traditionally underrepresented groups in the sciences.

POSTER SESSION FOR IMSD PARTNERS HIGHLIGHTS STUDENT RESEARCH



Senior scholar Kim Sherwood discusses her research with Prof. Janet Rollins (College of Mt. Saint Vincent) at IMSD Partners poster session

This year's IMSD Partners meeting featured a new opportunity for partner faculty and program staff to attend research presentations by IMSD students and senior scholars. IMSD students, many of whom are alumni of the partner institutions, discussed their research and responded to questions from partner faculty about their academic progress and career plans. These exchanges serve to demonstrate students' research competency and provide partner faculty with a clearer sense of the level of scholarship required of a typical graduate student at Brown. This insight, in turn, helps faculty at our partner institutions improve curricular mapping to better prepare their undergraduate students to apply for and succeed in pre-doctoral training programs at Brown and other competitive research institutions.

STUDENTS RETURN TO THEIR UNDERGRADUATE INSTITUTIONS TO SHARE THEIR GRADUATE EXPERIENCES



Eight PhD students who joined Brown graduate programs from our partner institutions recently returned to their undergraduate institutions to share their experiences and insights of the graduate training process. Five of these trainees, all graduates of York College/CUNY (<http://www.york.cuny.edu/>) formed a panel of guest speakers who shared their insight with York College administrators, faculty and students. The student panelists were also joined by IMSD PI & Program director, **Prof. Andrew G. Campbell**, who is also a graduate of York. Simultaneously, across town at St. John's University (<http://www.stjohns.edu/>), **Victoria Ruiz** and **Tania Nevers** shared their journey from St. John's to Brown with current SJU undergraduate students, faculty and administrators. Nevers has recently defended her graduate thesis, and Ruiz is scheduled to defend in March 2012. Ruiz will begin postdoctoral training at New York University Medical Center and Nevers at Women & Infants Hospital in Providence, Rhode Island. The insight that both provided their audience with is designed to help prospective graduate applicants emulate these peer mentors and reproduce their success in the sciences.



Collaboration

FUNDING AND TRAINING OPPORTUNITIES

F31 Predoctoral Individual National Research Service Award (NRSA)

Annual Diversity Deadlines: Dec. 13, Apr. 13, Aug. 13

AIDS-related applications: Jan. 7, May 7, Sept. 7

Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellowships (F31). This individual predoctoral research training fellowship provides 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: Feb. 16, June 16, Oct. 16

AIDS-related applications: Jan. 7, May 7, Sept. 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. See FASEB website for a complete list of upcoming eligible national meetings for travel awards: <http://www.faseb.org/marc/home.aspx>

2012 NIGMS Workshop for Postdocs Transitioning to Independent Positions

March 12-13, 2012; National Institutes of Health in Bethesda, MD

This workshop is intended to bring together approximately 150 postdoctoral investigators who will soon be seeking their first independent positions. The registration deadline has been extended to Jan 6, 2012. All ASBMB postdoctoral members, particularly those from underrepresented minority groups, are encouraged to apply. FASEB is pleased to provide up to \$1,250 in travel support to all eligible attendees.

<http://nigmsworkshop.org/NIGMS/pages/default.aspx>

Keystone Symposia

The Keystone Symposium on Molecular and Cellular Biology announces its 2011-2012 Meeting Season. A chronological listing of upcoming meetings can be found at: <http://www.keystonesymposia.org/Meetings/ListMeetings.cfm>. Information about URM travel scholarships can be found at: <http://www.keystonesymposia.org/Scholarships/MinorityTravel.cfm>

New England Science Symposium

Sun, April 1, Harvard Med School, 77 Ave Louis Pasteur, Boston, MA.

This event provides a forum for postdoctoral fellows; medical, dental and graduate students; post-baccalaureates; college and community college students to share their biomedical and health-related research activities through oral or poster presentations, to engage in discussions related to career development in the sciences, to exchange ideas and to expand their professional networks. http://www.mfdp.med.harvard.edu/med_grad/ness/

Eligible National Meetings	Mtg. Location	Mtg. Dates	Adv. Reg. Deadlines	MARC Deadlines
Conference on Semantics in Healthcare and Life Sciences (CSHALS) 2012 (Official ISCB Meeting)	Cambridge/Boston, MA	2/22 – 2/24	1/20/12	1/11/12
53rd Annual Drosophila Research Conference (Official Genetics Society of America Conference)	Chicago, IL	3/7 – 3/11	1/30/12	1/25/12
Histochemistry 2012: The Histochemical Society 63rd Annual Meeting	Woods Hole, MA	3/21 – 3/24	2/10/12	2/3/12
Society of Developmental Biology (SDB) 2012 Northeast Regional Meeting	Woods Hole, MA	4/13 – 4/15	3/9/12	3/2/12
Experimental Biology 2012	San Diego, CA	4/21 – 4/25	2/23/12	3/9/12
IMMUNOLOGY 2012™: Annual Meeting of The American Association of Immunologists	Boston, MA	5/4 – 5/8	3/16/12	3/30/12

PROGRAM STAFF:

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