LSU IMSD
INITIATIVE FOR MAXIMIZING STUDENT DEVELOPMENT

Issue 6
Fall 2015

Program Staff

Program Director
Graça Vicente, Ph.D.

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Isiah Warner, Ph.D.
Marcia Newcomer, Ph.D.

Program Manager & Counselor
Gretchen Schneider, M.Ed., LPC

Annual News

Message from the Director P.1
Scholars P.2
Community Outreach P. 3
Where are they now? P.3
Seminars & Conferences P.4

Message from the Director

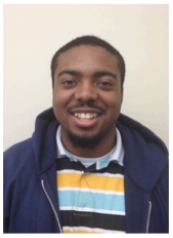
2015 has been a particularly successful year for the LSU IMSD Program: the first graduate scholar, Pamlea Brady, obtains her Ph.D. in Chemistry this semester, and six IMSD undergraduate scholars obtained their B. Sc. degrees, from LSU. Two former IMSD undergraduate scholars, Cristina Jones and Vyron George, both obtained their Ph.D.s from Georgia Tech this year. Our IMSD scholars continue to be recognized at LSU and around the Nation for their outstanding academic and research achievements, with a number of them winning awards in 2015. During the past year many IMSD faculty mentors and participants received distinguished research and teaching awards, and Ms. Gretchen Schneider, IMSD Coordinator and Counselor, received the 2015 Outstanding Staff Award from LSU. Congratulations to all! I am so proud of all our distinguished students, faculty and staff and I can't wait to hear about their achievements in the coming years! I wish you all a successful 2016 and invite you to visit the IMSD Program website (www.lsu.edu/imsd) and to participate in the online forum to read of the most recent news about our Program, to find new opportunities, and to meet new friends and collaborators. Geaux Tigers!

Graça Vicente, Ph.D.
PD of LSU IMSD Program

LSU IMSD Graduates First Doctoral Student

The LSU IMSD Program graduates its first doctoral student this December. On August 11, 2015, IMSD Scholar Pamlea Brady successfully defended her Ph.D. dissertation titled "Method Development for Assignment of NMR Peaks and the Determination of Quaternary Protein Structure Using Reductive Methylation." After earning her bachelor degree from Winston Salem State University in Winston Salem, NC., she entered the LSU Department of Chemistry doctoral program and joined the research group of Dr. Megan Macnaughtan. Pamlea is currently a NIH MERIT Postdoctoral Fellow at the University of Alabama at Birmingham. Her future plans include both teaching and research, but also coordinating an educational-based program to incite more participation/study of the STEM fields of youth in underdeveloped/rural areas.

Enhancing Diversity in the Biomedical and Behavioral Sciences
2015 Scholars



Denzel Alexander
Junior, Chemistry
Mentor: Dr. J. Garno

Frances Arinze
Junior, Biochem
Mentor: Dr. Johnson

Ashley Augustus
Sophomore, Biology
Mentor: Dr. K. Maruska

Brandon Byrd
Junior, Biochemistry
Mentor: Dr. G. Vicente

Caleb Darensbourg
Senior, Chemistry
Mentor: Dr. Sabliov

Jonte Ellison
Senior, Biology
Mentor: Dr. Jeyaseelan

Taylor Ferguson
Senior, Biology
Mentor: Dr. Jeyaseelan

Azzy Francis
Junior, Chemistry
Mentor: Dr. Garno

Rene Girard
Senior, Chemistry
Mentor: Dr. Garno

Dante Johnson
Senior, Biochem
Mentor: Dr. Grove

Brea Manuel
Junior, Psychology
Mentor: Dr. Warner

Zackari Murphy
Senior, Biochemistry
Mentor: Dr. D. Hayes

Nouriath Ningbinnin
Senior, Biochemistry
Mentor: Dr. Stephens

Alexis Payne
Senior, Biology
Mentor: Dr. Newcomer

Craig Richard
Senior, Biological Engin
Mentor: Dr. T. Monroe

Veronica Rubio
Senior, Biology
Mentor: Dr. F. Galvez

Sierra Sterling
Soph, Chemistry
Mentor: Dr. Warner

Brianna Young
Soph, Kinesiology & Psychology
Mentor: Dr. M. Calamia

2015 Graduate Scholars

Pamlea Brady
Chemistry
Research Advisor:
Dr. Megan Macnaughtan

Vernon Dunn
Biological Sciences
Research Advisor:
Dr. Evanna Gleason

Andres Villalpando
Chemistry
Research Advisor:
Dr. Rendy Kartika

HONORS & AWARDS

The following IMSD faculty mentors received distinguished teaching awards in 2015:

Dr. Jayne Garno- ACS Charles E. Coates Award (May 2015)

Dr. Rendy Kartika- Tiger Athletic Foundation Undergraduate Teaching Award in Science (May 2015)

Dr. Megan Macnaughtan- Tiger Athletic Foundation Undergraduate Teaching Award in Science (May 2015)

Dr. Cristina Sabliov- LSU Distinguished Faculty Award in Engineering (May 2015)

Dr. Graca Vicente- LSU Foundation Distinguished Faculty Teaching Award (May 2015)

LSU IMSD Coordinator and Counselor, **Gretchen Schneider**, received the 2015 LSU Foundation Outstanding Staff Service Award recipient.

Scholar Awards

Spring 2015

Azzy Francis received a LSU Department of Chemistry Outstanding Undergraduate Research Achievement Award in May 2015.

Dante Johnson received a LSU Department of Biological Sciences Charles McClesky Memorial Scholarship Award in May 2015.

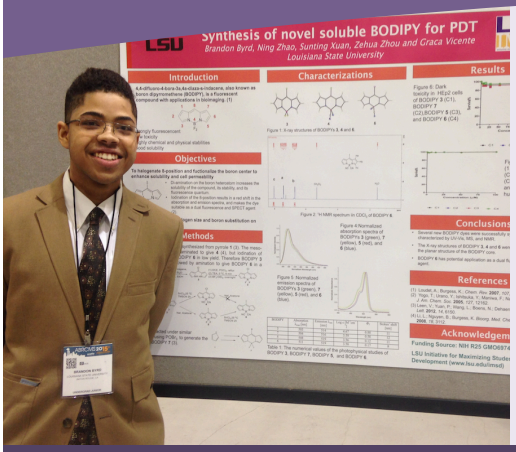
Dean's list - Brandon Byrd, Jonte Ellison, Craig Richard, Veronica Rubio

Chancellor's list- Zackari Murphy, Azzy Francis

Fall 2015

Jonte Ellison received 3rd place at the Phi Zeta Research Competition at the LSU School of Veterinary Medicine in Sept 2015.

Brandon Byrd received a poster award at the 2015 Annual Biomedical Research Conference for Minority Students (ABRCMS) in Seattle, in Nov. 2015.



IMSD Scholars Attend National Conference and Win a Poster Presentation Award

In November 2015, IMSD scholars Frances Arinze, Brandon Byrd, Vernon Dunn, Jonte Ellison, Craig Richard, Veronica Rubio, and Andres Villalpando attended the 2015 Annual Biomedical Research Conference for Minority Students in Seattle, Washington. More than 3,600 individuals attended the conference this year, including about 2,000 undergraduate and post-baccalaureate students, and 400 graduate students and postdoctoral scientists. Students come from more than 350 U.S. colleges and universities to participate and network. This year, a record number of 2,035 abstracts were submitted, and 243 awards were given to students in various categories. Brandon Byrd, a junior IMSD scholar conducting research in the laboratory of Dr. Graça Vicente, received an award for his research poster titled, "Synthesis of Novel Soluble BODIPYs for PDT."

Community Outreach

Super Science Saturday

IMSD Scholars volunteered at the 28th annual Super Science Saturday on October 31, 2015. The event consisted of 19 stations with activities aimed at children from kindergarten through high school. Super Science Saturday incorporated aspects of National Chemistry Week, which was themed "Chemistry Colors Our World." Many of the booths provided candy and other materials to participants visiting the booth or taking part in an experiment. The event attracted over 1100 K-12 students from the community and promotes excitement and creating thinking in science. Other outreach activities include tutoring and demonstrations at Baton Rouge K-12 schools.

Former IMSD Scholars Earn Ph.D.s

Former IMSD undergraduate scholar **Christina Jones** earned her Ph.D. in May 2015 from Georgia Tech. Dr. Jones received a NIST NRC Postdoctoral Fellowship and will be working with Jessica Reiner at Hollings Marina Laboratory in Charleston, SC.

Vyran George, IMSD scholar from 2006-2008, earned his Ph.D. in August 2015 from Georgia Tech in Chemical Engineering. He is currently employed with McKinsey & Company in Dallas, TX.

2014-2015 Publications

P. N. Brady and M. Macnaughtan. Analytical Biochemistry, 2015, 491, 43-51.

L. E. Englade-Franklin; G. Morrison; S. D. Verberne-Sutton; **A. L. Frances**; J. Y. Chan; J. C. Garno. *ACS Appl. Mater. Interfaces*, 2014, 6(18), 15942-15949.

S. M. Navarro; **C. Darensbourg**; L. Cross; R. Stout; D. Coulon; C. E. Astete; T. Morgan; C. M. Sabliov. *Therapeutic Delivery,* 2014, 5 (11), 1191-1201.

A. Villalpando; M. A. Saputra; T. H. Tugwell; R. Kartika. *Chem. Commun. (Camb)* 2015, 51 (81), 15075-8.

Past to Present:

Where are they now?

Tiffany Miles

Graduate Assistant
University of Arkansas for Medical Sciences
Biochemistry and Molecular Biology
LSU IMSD Scholar: 2006 – 2008
UAMS IMSD Scholar: 2014 – 2016

Since I was a child, I wanted to pursue the sciences. The LSU IMSD program provided my first experience in research and I loved it! I worked in the lab of Dr. Jacqueline Stephens and found an interest in signaling pathways in obesity related diseases. I finished LSU with a Bachelors in Biology and a concentration in secondary education. My goal was to teach for a number of years, then return to school to attain a doctorate. I taught at McKinley Middle Academic Magnet School for Visual and Performing Arts for 6 years as a 6th grade science teacher. The experience was phenomenal! I went in just wanting to motivate students to have a passion for science, as I did, but my students unknowingly helped me to develop as a person. Now, I am a second year graduate student at the University of Arkansas for Medical Sciences pursuing a doctorate in Biochemistry and Molecular Biology. I am studying the effects of a high fat diet on the Melanocortin 4 receptor (MC4R) system and possible treatments to alleviate these effects. I am grateful toward the IMSD program for my initial exposure to research which propelled me to continue my aspiration for the sciences.

2014-2015 Graduates

Kristina Cook
B.S., Food Science, Fall 2014
Ph.D. Program, LSU

Leo Fontenot
B.S., Chemistry, Fall 2014

Rasheda Gros
B.S., Chemistry, Fall 2014
Marathon Petroleum Corporation

Kristina Hickey
B.S., Kinesiology, Fall 2015

Caleb Darensbourg
B.S., Chemistry, Spring 2015

Rene Girard
B.S., Chemistry, Spring 2015
M.S. Program, UT Health

Dante Johnson
B.S., Biochem, Spring 2015
SC Johnson Internship

Nouriath Ningbinnin
B.S., Biochem, Spring 2015
Ph.D. Program, LSUHSC

Alexis Payne
B.S., Biology, Spring 2015

Upcoming Seminars

Friday, Jan. 22, 2015- 2:30 pm 210 Choppin Hall
Welcome Back Meeting

Friday, Feb. 12, 2016- 2:30 pm 210 Choppin Hall
"Library Services and Information Resources for the Sciences"
David Dunaway, Science Librarian, LSU Libraries

Friday, Feb 26, 2016- 2:30 pm 210 Choppin Hall
Rebecca Butcher, Ph.D.
Assistant Professor
Department of Chemistry
University of Florida

Friday, March 11, 2016- 2:30 pm 210 Choppin Hall
"Explorations with Simple Pyrrole Derivatives"
Michael Huggins, Ph.D.
Professor and Dean
College of Science and Engineering
University of West Florida

Friday, April 1, **2016- 2:30 pm 210 Choppin Hall**
IMSD Program goals, outcomes and evaluation
Eugene Kennedy, Ph.D.
Associate Professor
LSU School of Education

Friday, April 15, 2016 - 2:30 pm 210 Choppin Hall
"Structural Studies of Adeno Associated Viruses and their Cellular Interactions Towards the Rational Design of Targeted Therapies"
Mavis Agbandje-Mckenna, Ph.D.
Director, Center for Structural Biology
Professor, Dept. of Biochem and Molecular Biology
The McKnight Brain Institute
University of Florida

March 6 - 10, 2016
Georgia World Congress Center
Atlanta, GA USA

2016 ANNUAL CONFERENCE

April 7-9, 2016
Greenville, South Carolina
Greenville Marriott

March 13-17, 2016 San Diego, CA

201 CMB Baton Rouge, LA 70803
www.lsu.edu/imsd (225) 578-6961

For more event information, visit the on-line forum:
lsuimsd.forumotion.net