

Graduate Program in Basic Medical Sciences

Administration

Dr. Ronald Balczon is completing his fifth year serving as Director of the Basic Medical Sciences Graduate Program.

Admissions

The Graduate Program Office coordinates the processing of applications to the program with University Admissions and/or International Student Services Offices. Upon receipt of all required documents, the Graduate Office reviews the file for accuracy before forwarding it to the program's Admissions Committee for review. The committee's decision regarding acceptance and an offer to matriculate or a decline is communicated to the student.

The Graduate Office hosted interviews in March, April, May, June, and July for applicants to the Fall 2010 class. A total of 18 students were interviewed (US=10; International=8). See summary below.

Admissions - BMS Graduate Program

		2010
Inquiries	US	63
	International	64
Applicants	US	20
	International	22
Acceptance	US	9
	International	2
Matriculant	US	8
	International	2
	Average GRE	1106
	Average GPA	3.44

Recruitment Activities

1. Graduate program information was distributed at several local high schools.
2. Graduate Office personnel hosted sessions at regional science conferences.
3. Dr. Balczon distributed program information and met with faculty colleagues at over thirty regional colleges and universities during Fall Semester. In April, Ms. Flagge participated in the Louisiana Regional College Career Fair in north Louisiana.

4. Local presentations were made to USA's Premedical Honors Society and Freshman Biomedical Sciences students.
5. Students and faculty from both Spring Hill College and William Carey University attended the Graduate Forum in November.

Curriculum

1. The format for instruction in the IDL 581 Fundamentals of Biomedical Sciences course was altered. The new mode was used for teaching spring semester, 2010. Changes are being considered for the IDL 580 Fundamentals and Signal Transduction courses for the 2011 academic year.
2. The third COM Research Forum was held on November 20, 2009.

New Programs/Policies/Requirements

1. Beginning Fall, 2009, graduate students began registering for Distinguished Scientist Seminars each week. Details regarding the number of absences allowed and work required for absences beyond the ones excused were approved at the 2009 December meeting of the Executive Committee.
2. Policy regarding the length of the written Qualifying Exam/Formal Proposal was reviewed at the Executive Committee's 2010 July meeting. Though NIH has shortened the length for grant proposals from twenty to twelve pages, the Basic Medical Sciences Executive Committee voted to keep the program's current policy in effect. Students are required to submit a twenty-page proposal.

BMSSO-Basic Medical Sciences Student Organization

The BMSSO hosted working lunch sessions for various academic, governmental and industry personnel to speak on topics, including CV development, applying for employment with NIH, CDC, etc. The organization also hosted the annual Charles Baugh "Dawg Day" and a holiday appreciation luncheon for BMS Graduate Faculty. Students raised funds through a week-long bake sale in October and T-Shirt sales for the American Cancer Society.

Extramural Support for Graduate Training

1. The NIH Institutional Training Grant on "Cell Signaling and Lung Pathobiology" continues to provide six predoctoral students with stipend support.
2. Many BMS Graduate Program students are applying for and receive extramural grant awards through American Heart Association and EPSCOR, as well as travel awards for participating at national conferences and annual meetings in the disciplines.

Graduates

Six students completed all requirements for the Ph.D. degree during the academic year (September 2009-August 2010). They are:

Joel Franklin Andrews

DISSERTATION TITLE: "Association of Host Mitochondria with the Parasitophorous Vacuole of *Toxoplasma gondii*: Mechanisms and Significance"
MAJOR PROFESSOR: Sailen Barik, Ph.D.
DEPARTMENT: Biochemistry and Molecular Biology
CURRENT POSITION: Postdoctoral Fellow; Mitchell Cancer Institute
University of South Alabama

Kyla Marie Frohlich

DISSERTATION TITLE: "Transport and Metabolism of sn-Glycerol-3-Phosphate and Dihydroxyacetone Phosphate by the Obligate Intracytoplasmic Pathogen *Rickettsia prowazekii*"
MAJOR PROFESSOR: Jonathon Audia, Ph.D.
DEPARTMENT: Microbiology and Immunology
CURRENT POSITION: Postdoctoral Fellow; LSU-New Orleans

Michelle Boemler Henesy

DISSERTATION TITLE: "Regulation of ANP-Stimulated cGMP Signals in Murine Leydig Tumor Cells"
MAJOR PROFESSOR: Thomas Rich, Ph.D.
DEPARTMENT: Pharmacology
CURRENT POSITION: Manager of Hospital Services, The American Red Cross, Birmingham, Alabama

Jessica L. Jones

DISSERTATION TITLE: "Characterization of Dilution Growth Arrest in *Vibrio vulnificus* and Recovery by Secreted Growth Factors"
MAJOR PROFESSOR: John Foster, Ph.D.
DEPARTMENT: Microbiology and Immunology
CURRENT POSITION: Agent, Food and Drug Administration, Health Services Center, Dauphin Island, Alabama

Kevin Michael Lowe

DISSERTATION TITLE: "Analysis of the Pathologic Impact of Site Specific Accumulations of Extravascular Pulmonary Fluid"
MAJOR PROFESSOR: Troy Stevens, Ph.D.

DEPARTMENT: Pharmacology-CLB
CURRENT POSITION: Fellow of Surgery, Dallas Methodist Medical Center, Texas

Samer Fuad Swedan

DISSERTATION TITLE: "Mechanism of Suppression of Host Interferon Response by the Nonstructural Proteins of Human Respiratory Syncytial Virus"
MAJOR PROFESSOR: Sailen Barik, Ph.D.

DEPARTMENT: Biochemistry and Molecular Biology
CURRENT POSITION: Assistant Professor, College of Applied Medical Sciences, Department of Medical Laboratory Sciences, Jordan University of Science and Technology

Ryan Joseph Viator

DISSERTATION TITLE: "Oxygen-Tension Controls Glucose Uptake and Metabolism in Endothelial Cells"
MAJOR PROFESSOR: Brian Fouty, M.D., Ph.D.
DEPARTMENT: Pharmacology-CLB
CURRENT POSITION: Postdoctoral Fellow, LSU-New Orleans

To date, 167 students have received a Ph.D. degree in Basic Medical Sciences, awarded by departments as follows:

Biochemistry/Molecular Biology	34	Pharmacology	46
Cell Biology and Neuroscience	27	Physiology	22
Microbiology/Immunology	38		