The MD/PhD Program welcomed three new students to the program this spring.

Arpan Satsangi, GS-3, transferred into the program from the Biomedical Engineering PhD program. Arpan will continue to pursue his PhD in Dr. Ong’s research lab.

Lauren Rosenberg is continuing her MS-1 studies and will be pursuing cancer research.

Katie Hinchee, GS-1, is transferring into the program from the Biochemistry PhD program. Katie will continue to work in Dr. Bettie Sue Masters’ lab while she completes her PhD work.

All three students have already been actively involved in the program and are making wonderful contributions.

Please help welcome each of them the MD/PhD family!

3 New Students Join MD/PhD Program

MD/PhD Website Receives a Facelift

The MD/PhD website has recently received an overhaul. The new website features more student resources, better information for potential students, and a “News” section that is continuously updated with current stories of student accomplishments. Take a few minutes to look it over and let us know what you think!

http://som.uthscsa.edu/mdphd/
Scientist Uncover Novel Mechanism of Glioblastoma Development

- Changes to specific proteins can lead to tumor growth and development.
- Glioblastoma patients often have a poor prognosis.
- Understanding molecular mechanisms can lead to new treatments.

PHILADELPHIA — Most research on glioblastoma development, a complicated tumor of the brain with a poor prognosis, has focused on the gene transcription level, but scientists suggest that post-transcriptional regulation could be equally or even more important.

In a recent report in Molecular Cancer Research, a journal of the American Association for Cancer Research, scientists led by Luiz O. F. Penalva, Ph.D., an assistant professor in the department of cellular and structural biology at the University of Texas Health Science Center at San Antonio, illustrated that the connection between two RNA-binding proteins, Musashi1 and HuR, can have important consequences to glioblastoma.

“This is a novel finding in terms of what we know about glioblastoma development,” said Penalva. “Most of what we know about glioblastoma is limited to gene transcription-level research, but there are other regulatory processes beyond transcription that when disrupted could contribute to tumor formation.”

RNA-binding proteins are key regulators in all cellular processes from splicing to translation. Changes that affect either their function or expression levels can have dramatic consequences to protein production and can lead to disease states including cancer.

In the lab, Penalva and his colleagues showed that increased levels of HuR up-regulate the expression of another RNA-binding protein, Musashi1. Both proteins control the expression of cancer-related genes; their interaction brings together two important gene networks with major consequences to glioblastoma development.

The results are still early, but Penalva stressed that little is known about glioblastoma development and the findings represent a move toward greater understanding.

“To treat cancer, you have to understand what triggers tumor formation,” said Penalva. “If we continue to think that all the activity is at the transcription level, we are just fooling ourselves. Clearly, something is going on beyond that level.”  

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Students Test Survival Skills in January B2B

January’s Bench to Bedside presented the students with a different experience. They participated in a “survival” exercise in which they were given a scenario of being involved in a helicopter crash in the Cascade Mountains. The students were given details of the scenario including a list of various items on board the helicopter that could aid in their survival. The students ranked the items in order of importance both individually and as a team. The group engaged in wonderful discussions among their teams.

The scenario was an excellent exercise in communication and team work.

Will Lavery Publication & Travel Award

Will Lavery, GS-3, has a publication in the February volume of Investigative Ophthalmology and Visual Science (IOVS) entitled “Magnetic Resonance Imaging Indicates Decreased Choroidal and Retinal Blood Flow in the DBA/2J Mouse Model of Glaucoma”. The PubMed article can be found at the following link:


Will was also recently awarded a travel grant to present at this year’s Association for Research in Vision and Ophthalmology (ARVO) annual meeting.

Will is presenting data regarding neural control of episcleral venous pressure.

Will is a member of the Molecular, Cellular, & Integrative Physiology track and works in Dr. Jeff Kiel’s lab.

Please join us in congratulating Will on these exciting accomplishments!

Congratulations,
Josephine!

Josephine Thinwa, GS-4, recently attended the Texas Branch American Society for Microbiology conference in Arlington, TX where she presented a poster entitled, “Modulation of IL-18 secretion from the gut epithelium by Yersinia toxins”. Josephine was awarded the Samuel Kaplan Award (1st place poster award).

Josephine is also the “Featured Student” on the Department of Microbiology and Immunology website.

Check it out!
http://www.uthscsa.edu/micro/students/thinwa.asp
Presidential Awards 2012

Several faculty and staff connected to the MD/PhD Program were among those recently awarded the 2012 Presidential Award. The award “recognizes employees who work tirelessly every day to advance our missions of education, research, clinical care, and service.” Many deserving faculty and staff were nominated for demonstrating outstanding service in their respective fields. For a complete listing of the awardees, visit Inside UTHSCSA.

Distinguished Senior Research Scholar

Joel B. Baseman, PhD, Chair, Department of Microbiology and Immunology, School of Medicine. Dr. Baseman is the PhD mentor of Suzanna Maupin (GS-1).

Distinguished Junior Research Scholar

Salvatore Oddo, PhD, Assistant Professor, Department of Physiology, School of Medicine. Dr. Oddo is the PhD advisor of Elena Wisely (GS-1).

Teaching Excellence Awardees

Linda M. McManus, PhD, Distinguished Teaching Professor, Department of Pathology, School of Medicine, Department of Periodontics, Dental School. Dr. McManus runs the F-Troop, is a member of the MD/PhD Advisory Committee, and serves as the co-mentor of the F-30 awarded to David Melton (GS-2).

Employee Excellence Award

Janice L. Smith, Assistant to the Dean, Graduate School of Biomedical Sciences. Mrs. Smith is instrumental in maintaining daily operations in the Dean’s Office.

Katie Hinchee Wins Handbook Cover Art Contest

The Handbook Committee held a contest for students and faculty to submit artwork to be featured as the front cover of the new MD/PhD Program handbook that will be published in the coming weeks.

Several very good submissions came in, but Katie’s take on Leonardo DaVinci’s Vitruvian Man, “MD/PhD style” won the prize! Katie’s half graduate student, half medical student sketch embodies the life of a MD/PhD student.
2nd Annual Holiday Party

Dr. Linda McManus once again hosted the Annual MD/PhD Holiday Party at her home. Students, faculty, and guests enjoyed wonderful food, drinks, and great company. David Melton supplied the party with his famous homemade eggnog this year!

Several faculty and students participated in a White Elephant gift exchange. Some of the faculty had more fun than the students (see Dr. Shireman’s photo with the Nerf Blaster).

David Melton, Will Lavery, Danielle Victor, and Suzie Thibodeaux did a wonderful job planning the party. A very special thank you goes to Dr. McManus for hosting.

Dr. Larry Barnes Retires

Larry Barnes, PhD, has announced he will retire effective August 31st, 2012. Dr. Barnes has served the UT Health Science Center for 36 years after joining the faculty as an Assistant Professor in Biochemistry in 1976. He rose through the ranks serving in several capacities including Interim Chair of Biochemistry from 2002-2004. He was recruited to the Graduate School of Biomedical Sciences in 2005 to be the Associate Dean.

Throughout his time at the UTHSCSA, Dr. Barnes has made immeasurable contributions, including playing a leading role in the development of the Integrated Multidisciplinary Graduate Program (IMGP).

Dr. Barnes also serves on the MD/PhD Advisory Committee helping lead the administration and evolution of the MD/PhD Program. We would like to thank Dr. Barnes for his lasting contributions to our program. He has been an enthusiastic supporter and a valuable resource. Please join us in congratulating Dr. Barnes and wishing him all the joy and happiness as he begins the next phase of his life.
Administrative Updates

Handbook Task Force

The Handbook Task Force has been working the past several months to develop a comprehensive guide of policies, procedures, and general program information. The handbook was recently sent to the MD/PhD Advisory Committee for review and approval. Once the Advisory Committee approves it, the handbook will be published both electronically (via the website) and in print for current students. Many thanks to the members of the committee, led by Dr. Linda McManus, for the time and effort they have put into creating a valuable resource for the program.

Self-Study Task Force

The Self-Study Task Force recently completed the strategic plan for the MD/PhD Program. The plan, Vision 2020, contains long-term goals for the program and a comprehensive plan to achieve them. Two external consultants will visit the campus in mid-March to take a critical look at the program and offer valuable input to further assist in reaching the goals of the strategic plan.

Important Dates

Bench to Bedside Series

Monday, April 16th
Monday, May 14th
Monday, June 11th

2nd Visit for MD/PhD Accepted Applicants

March 1-3

External Consultant Visit

March 19th MSTP Directors of the University of Pennsylvania and University of Alabama at Birmingham, Drs. Lawrence “Skip” Brass and Robin Lorenz, will be on campus conducting an external MSTP mock site visit.

Advisory Committee Meetings

Monday, April 16
Monday, May 14