SOP Researchers Seek a Cure for Breast Cancer

The Department of Defense awarded the Breast Cancer Center for Excellence funding in support of “Studies Directed toward the Eradication of Brain Metastases of Breast Cancer.” The Center consists of twenty-four privat investigators all working toward one major goal: a cure for breast cancer. To find this cure, it is up to these scientists to answer these questions: What molecular aspects of tumor cells contributed to brain metastatic propensity? What is the role of brain physiology in brain metastasis of breast cancer? And can they combine knowledge from these two fields to identify, preclinically validate and clinically test strategies to prevent or improve the treatment of brain metastases? TTUHSC SOP’s Dr. Quentin Smith and Dr. Paul Lockman where both privileged enough to be a part of this amazing opportunity.

Brain metastasis of breast cancer is a devastating disease that is potentially rising in incidence. There is currently no effective treatment and there are several serious quality of life issues with current treatments. Dr. Smith and Dr. Lockman are working on the blood-brain-barrier (BBB) and brain drug delivery of different types of treatments/drugs. As a requirement of the center, our two faculty must attend an annual meeting, monthly updates, and work closely with other center members on various projects. As a result of this grant opportunity, Dr. Smith and Dr. Lockman have several peer-reviewed publications, have been invited to several national meetings as speakers, and have found a new passion for science.

If you would like more information on the background of breast cancer metastases to brain and their implications or more information and links to the Center visit http://www.brainmetsbc.org.
Dr. Smith Speaks at National Conferences

Quentin Smith, TTUHSC Distinguished Professor & Chair of the Pharmaceutical Sciences Department, was invited to The American Society of Clinical Oncology breast cancer meeting last month in Washington, DC. Dr. Smith presented “Lapatinib distribution in brain metastases of breast cancer following oral dosing in mice.” After attending the meeting, Dr. Smith flew to Amelia Island, Fl to attend the Annual Meeting of DOD Center of Excellence in Breast Center where attendees had the opportunity to see his presentation “Report of research on drug permeability to brain metastases and planning for upcoming clinical trial. In October, the Department Chair will be traveling to Boston, MA for the Annual Carolyn Frye-Halloran Symposium and to New York, NY to the Study Section Review panel for the Michael J Fox Foundation.

CATALYST Seminar Series Starts Back Up

September hosted the first of this season’s CATALYST seminars. Quentin Smith, Ph.D. Pharmaceutical Sciences Chair, spoke to several faculty and post doctoral fellows, Tuesday, September 16th. Dr. Smith’s presented "Drug uptake into brain metastases of breast cancer.” Faculty and Post Docs are encouraged to ask and discuss the research or grant ideas being presented. The next seminar will be Tuesday, October 21st with Dr. Majid Moridani. If you would like to attend or present your research, RSVP to the Office of Research by Friday, October 17th.

Pharm Sci Department Welcomes New Faculty

Vardan Karamyan, Pharm.D., Ph.D. joined the School of Pharmacy’s Pharmaceutical Sciences department in August, after three and a half years with the University of Mississippi. Dr. Karamyan received his Pharm.D. (Hons.) from the School of Pharmacy, Yerevan State Medical University, Armenia, and Ph.D. in Biology from the Institute of Biochemistry, National Academy of Sciences, Yerevan, Armenia. After completing the Ph.D. program in Biology and having a research Faculty position at the School of Pharmacy, Yerevan State Medical University, Dr. Karamyan joined the laboratory of Dr. Robert C. Speth at the Department of Pharmacology, School of Pharmacy, University of Mississippi (UM). While there, he studied brain angiotensin receptors and their role in angiotensin II and angiotensin III-mediated blood pressure regulation. In a course of studies on brain proteolytic enzymes degrading angiotensins, Dr. Karamyan discovered a novel binding site for angiotensin peptides. His primary research interests involve understanding of the nature and function of the brain renin-angiotensin system in health and disease. The ongoing studies are focused on isolation and identification of the novel angiotensin binding site and revealing its physiological and/or pathophysiological function. Dr. Karamyan will be mentoring new graduate student Mamunur Rashid.
Names in the News

Dr. Cynthia Raehl was recognized by TTUHSC and her peers for her role as the FY 2008 American Association of Colleges of Pharmacy (AACP) President. Dr. Raehl received a plaque honoring her great achievement. Friends and family along with TTUHSC faculty and staff attended a reception August 15th to congratulate her on a job well done. Dr. Raehl plans to continue to work with the AACP for many years to come.♦

Cancer Biology Center Members & New Research Building

It is official: the Cancer Biology Center members will be the new residents of the Coulter Research Building. The Center strives to enhance basic and translational research within the field of cancer biology and therapeutics through the individual and collaborative effects of its members. Their goal is to improve the healthcare of people through the biomedical and pharmaceutical research to discover mechanisms underlying cancer development for better diagnosis and treatment. The Cancer Center recently welcomed their newest member, Dr. Xinli Liu, giving the center 9 current members, of which 77% currently have extramural peer reviewed funding. The building is scheduled to open in December and faculty members will begin moving in starting late December and January. The open laboratory set up of the building will provide the center’s members with the opportunity to work closely together on shared projects. The facility will be equipped with modern equipment and all needed infrastructure to conduct world class research in cancer biology ♦

Seminars


"Characterization of Blood Brain Barrier Permeability Changes in Time and Space during Ischemia/Reperfusion injury."

Dr. Trent Woodruff, Development Fellow, University of Queensland, School of Biomedical Sciences, Brisbane, Australia. Monday, September 8, 2008. SOP Room 107.

"Role of the complement factor 5a (C5a) in neurodegenerative disease: inhibition of neuro-inflammation with a specific C5a receptor antagonist."


"Development of TCRm Antibodies Against HLA-G: Potential Multi-cancer Immunotherapy."


"Nicotine inhibits P-glycoprotein- in vitro and in situ evidence."

[Continues on Pg 4]
[Continued from Pg 3]


♦

Publications


[Continues on Pg 5]
Publications

[Continued from Pg 4]


