News & Updates:

A study performed by Dr. Velazquez (Murphy Lab) was selected for a press release by the American Physiological Society [http://www.the-aps.org/mm/hp/Audiences/Public-Press/2016-48.html]. The study ‘Weight loss following diet-induced obesity does not alter colon tumorigenesis in the AOM mouse model’ was co-authored by Dr. Reilly Enos, Meredith Carson, Dr. Taryn Cranford, Jackie Bader, Dr. Ioulia Chatzistamou, Dr. Udai Singh, Dr. Prakash Nagarkatti, Dr. Mitzi Nagarkatti, Dr. Mark Davis, Dr. James Carson and Dr. Angela Murphy.

Dr. Berlin Londono-Renteria (Colpitts lab) spent the month of October in the laboratory of Dr. George Dimopoulos at the Johns Hopkins Malaria Research Institute in the Johns Hopkins University Bloomberg School of Public Health, funded by a Burroughs Wellcome Award.

In November, Dr. Robert Startz presented a lecture on “Diseases of Famous People” at the Alumni Center as part of Carolina Classroom.

Dr. Tonya Colpitts served on an NIH NIAID Special Virology IRG Panel in November.

Dr. Carole Oskeritzian was invited to give a talk untitled “Mast cells and sphingosine-1-phosphate: the integrated signaling unit controlling inflammation” at the University of South Carolina Aiken Fall Biology Seminar Series, November 18, 2016, Aiken, SC. During her visit, she met with faculty and prospective students interested in joining USC School of Medicine as graduate students and medical students.

Dr. Udai Singh served on the National Institutes of Health (NIH), Immunity and Host defense (IHD) study section as ad-hoc member on October 27-28, 2016 reviewing grants.

Dr. Berlin Londono-Renteria (Colpitts lab) was an invited guest and speaker at the Deployment and Travel Related Infections Research Area Annual Meeting held at the Henry M. Jackson Foundation for the Advancement of Military Medicine (Bethesda - Maryland).

Taryn Cranford (Murphy Lab) successfully defended her dissertation and graduated with a Ph.D in December. She is now pursuing a post-doctoral fellow at Mayo Clinic in Jacksonville.

Dr. Tonya Colpitts served as a Scientist Reviewer for the Department of Defense MIDRP Flavivirus Research Panel and PRMRP Emerging Infectious Diseases Panel.

Dr. Pirisi-Creek gave an invited talk at the University of West Virginia Cancer Center, December 7, 2016.

Dr. Tonya Colpitts was selected as an Associate Editor for the journal Virology.

Dr. Carole Oskeritzian was invited to deliver the Journal of Lipid Research Junior Investigator Award Recipient Plenary Talk entitled “Redefining the skin hypodermis functions: newly uncovered site of mast cell- and sphingosine-1-phosphate-mediated pathogenic remodeling in pre-symptomatic eczema” during the 2016 annual SERLC, November 9-11, Cashiers, NC.

Dr. Testerman welcomed Yvonne Hui to her laboratory as a new research associate. Yvonne brings a wealth of experience in cell and molecular biology from previous employment by Drs. LaVoie and Fan.

Dr. Berlin Londono-Renteria (Colpitts lab) accepted a tenure-track faculty position at Kansas State University. She will begin her position in January of 2017. The department wishes her the best and will miss her!

The Colpitts lab research on transmission-blocking vaccines for dengue virus infection was featured on national Fox News Health: [http://www.foxnews.com/health/2016/12/05/us-researchers-developing-new-vaccine-to-help-prevent-spread-dengue-fever.html]
Katherine M. Castleberry, a Magellan Scholar in Dr. Carole Oskeritzian’s laboratory, has finished her classwork in December 2016. She will be graduating Cum Laude with Leadership Distinction with a Bachelor of Science in Biological Science and a minor in Chemistry from USC in May 2017. She will continue her research efforts in the Oskeritzian Laboratory until then.

Yvon Woappi graduated with his Ph.D., from Dr. Pirisi-Creek’s laboratory, in December, 2016 and moved on to a postdoctoral job at Brigham and Women’s hospital, Harvard Medical School, Boston, MA.

Through the efforts and commitment of M2 student Joshua Schoen, grant funding from the Intersociety Council for Pathology Information (ICPI) was obtained, as well as matching funds generously provided by the PMI Chair, Dr. Mitzi Nagarkatti, to promote events and initiatives of the USCSOM Medical Student Interest Group for Pathology for the academic year 2016-2017. The first meeting of the group was held in the M2 Classroom at Noon on Thursday 17 November in conjunction with (and celebration of) International Pathology Day. Lunch was offered and Dr. Jeff Welsh of Pathology Associates of Lexington, P.A. gave a presentation titled: “Past, Present, and Future in the Practice of Pathology – A Few Cases to Surprise your Surgeon”. Dr. Welsh engaged attendees with “a day in the life of a practicing pathologist…”, a contemporary philosophy of practice, the ever more important role of the pathologist on the molecular pathology-era 21st-century healthcare team vis-à-vis patient care, management decisions, “tailored/personalized therapy”, prognostic informational support to the clinicians… and how practicing pathologists can make a difference in patients’ lives through their contribution to patient care – helping to begin the healing process, as from their diagnosis “healing began”.

Students also had the opportunity to “meet and greet” with physicians and other students who share their interest in pathology as a career in medicine.

Dr. Tonya Colpitts was interviewed about her research for an article in the Charleston Post and Courier: [http://www.postandcourier.com/features/your_health/usc-researcher-wants-humans-to-spread-dengue-vaccine-to-mosquitoes/article_ea4a85ee-ab6d-11e6-bf97-3f135733cad2.html](http://www.postandcourier.com/features/your_health/usc-researcher-wants-humans-to-spread-dengue-vaccine-to-mosquitoes/article_ea4a85ee-ab6d-11e6-bf97-3f135733cad2.html)

**Honors & Awards:**

Dr. Mitzi Nagarkatti has been named as the SmartState Endowed Chair of Center for Cancer Drug Discovery. This appointment was recommended by the USC Committee on Named and Distinguished Professorships, with the approval by the Provost and the President of the University of South Carolina.

Dr. James F. Catropppo, Course Director for Medical Pathology, has been promoted to the rank of Clinical Associate Professor in the Department of Pathology, Microbiology and Immunology of the USC School of Medicine.

Dr. Mitzi Nagarkatti was recently awarded a five-year National Institutes of Health Research Project Grant for $2.4million to study the connection between inflammation and post-traumatic stress disorder (PTSD).

Dr. Carole Oskeritzian was the recipient of the 2016 Journal of Lipid Research Junior Investigator Award. This award is sponsored by the American Society for Biochemistry and Molecular Biology and recognizes not-yet-tenured investigators who made significant scholarly contributions to lipid research.

Taryn Cranford (Murphy Lab) was the recipient of a Sorensen Research Fellow award ($5,000) from the Center for Colon Cancer Research.

Dr. Sarah Rothenberg (Environmental Health Sciences), Dr. Marij Pena (Biological Sciences), Dr. Angela Murphy (PMI), and Dr. Jim Carson (Exercise Science) received a pilot grant in the amount of 80K from the Center for Colon Cancer Research to study ‘The role of microbiome in intestinal tumor development and response to 5-FU chemotherapy’.

Dr. Carole Oskeritzian is the recipient of a new award by NIH/NIGMS entitled “Pilot Project: Mast cell-based non-invasive screening for colorectal cancer.” Dr. Oskeritzian serves as Pilot Project PI and Dr. Frank Berger, Director of the USC Colon Cancer Research Center, serves as PI on this COBRE grant. This award was funded on September 28, 2016 for one year and a total amount of $56,000. Nabihah I. Kumte, a sophomore from the Honors College at USC, will conduct this research project, also supported by Alena P. Chumanevich, Research Associate (Oskeritzian Lab) and Celestia (Tia) Davis, USC Mouse Core Manager and Research Specialist and the expertise of Drs. Marjorette (Marj) Peña (Biological Sciences) and Ioulia Chatzistamou (PMI).

Piper Wedman, PhD Candidate in Dr. Oskeritzian’s laboratory received a Travel Award from USC Graduate School to attend the 51st South Eastern Regional Lipid Conference (SERLC), November 9-11, 2016, Cashiers, NC.
Publications:


**Presentations:**

Dr. Berlin Londono-Renteria and Mr. Nicholas Dopkins (graduate student) from the Colpitts lab presented “Dengue immune sera enhance Zika virus infection in primary human macrophages” at the American Society of Tropical Medicine and Hygiene Annual Meeting, in Atlanta, GA.

Carson MS, Enos RT, Velazquez KT and Murphy EA. Estrogen is protective against the development of obesity, adipose tissue inflammation and insulin resistance. Carolina’s Women’s Health Research Forum, Columbia, SC November 4th, 2016.

Dr. Prakash Nagarkatti gave an invited presentation titled “Epigenetic Mechanisms in Immunomodulation Mediated by Resveratrol in SEB-induced Acute Lung Injury” at the 4th International Conference on Resveratrol and Health, Nov. 17-19, 2016, in Taipei, Taiwan.

Dr. Prakash Nagarkatti was also invited to China Medical University (CMU) to present his research and sign an MOU for faculty/student exchange.

Ms. Andrea Troupin, MSPH, and Mr. Alex Hall (graduate student) from the Colpitts lab presented “A Role for Human Skin Mast Cells in Dengue Virus Infection and Systemic Spread” at the American Society of Tropical Medicine and Hygiene Annual Meeting, in Atlanta, GA.


Dr. Tonya Colpitts gave an invited talk entitled ‘Discover of flavivirus host factors in the mosquito transmission vector’ at the U.S. Department of Homeland Security National Biodefense Analysis & Countermeasures Center (NBACC) at Fort Detrick, Maryland.


Dr. Mitzi Nagarkatti was invited to present “Microbiome Profile of Lung-gut Axis in Staphylococcal Enterotoxin-induced Acute Lung-injury Following Treatment with Resveratrol” at the 4th International Conference on Resveratrol and Health, November 17-19, 2016, in Taipei, Taiwan. Dr. Mitzi Nagarkatti was also invited to China Medical University (CMU) to present her research.


Dr. Berlin Londono-Renteria (Colpitts lab) presented her work on “Human C5a interacts with a G-protein coupled receptor in Aedes aegypti cells modulating dengue virus infection in vitro” at the XXV International Congress of Entomology (ICE 2016) in Orlando, FL.

Piper Wedman, PhD Candidate in Dr. Oskeritzian’s laboratory presented a poster entitled “New insights in atopic dermatitis pathogenesis: Mast cell activation augments ceramide lipids and triggers endoplasmic reticulum stress-induced apoptosis”, also authored by Alena P. Chumanevich, Ahmed Aladhami, Katherine M. Castleberry, Reilly T. Enos, K. Alexa Gandy, Kandy T. Velazquez, Angela E. Murphy, John W. Fuseler, Mitzi Nagarkatti and Carole A. Oskeritzian at the 2016 annual SERLC, November 9-11, Cashiers, NC.

Dr. Tonya Colpitts gave an invited talk entitled “Transmission-blocking vaccines for arbovirosis” at the Tulane School of Public Health and Tropical Medicine in New Orleans, LA.