Society of Toxicology 2011
The 50th Annual Meeting of the Society of Toxicology (SOT) was held in Washington, DC, March 6-10, 2011. Thirty students, faculty and staff from TAMU attended the meeting and presented 21 abstracts.

The students represented TAMU well by being very involved in the meeting and winning numerous awards:

Nicole Mitchell received the Frank C. Lu award given by the Food Safety Specialty Section.

Aishwarya Sooresh received the Dr. Laxman Desai Graduate Student Best Abstract Award from the Association of Scientists of Indian Origin.

Ahmed Ridha received the Reproductive and Developmental Toxicology Specialty Section Award.

Satya Pathi received 2nd Place in the Carcinogenesis Specialty Section.

Sandeep Sreevalsan and Nivedita Banerjee both received Honorable Mention in the Molecular Biology Specialty Section.

Nivedita Banerjee and Sandeep Sreevalsan received SOT Travel Awards.

Mike Berg, Nicole Mitchell, Satya Pathi, Ahmed Ridha, Amy Romoser and Vijayalekshmi Vasanthakumari each received College of Veterinary Medicine Graduate Student Association travel awards.

Mike Berg, Kim Daniel, Nicole Mitchell, Amy Romoser and Dr. Alice Villalobos participated in the SOT Undergraduate Education Program. Mike, Nicole and Amy served as Peer Mentors to the students in the program. Dr. Villalobos served as a Host Mentor and assisted with the scientific program, while Mrs. Daniel assisted with the logistics, the alumni program, and the Toxicology Program Director’s sessions. The SOT Committee on Diversity Initiatives (CDI) hosts the Undergraduate Education Program each year to increase the awareness of toxicology as a scientific discipline and choice of career, and to improve the knowledge of basic principles and concepts of toxicology. Undergraduate participants are selected from a pool of applicants and are from underrepresented ethnic groups or from universities with limited research budgets and are exposed to lectures and interactive sessions, career panels, information sessions on applying to graduate school, and a graduate recruiting session.

Three TAMU undergraduate students, David Figueroa, Allen Ho and Alex Smith participated in the open portions of the Undergraduate Education Program, and each presented posters at the meeting.

SOT abstracts and photos are on pages 4-5.
Meetings

Tox Forum 2010

The Toxicology Graduate Student Forum took place on August 26, 2010 at The Veranda in Bryan. Twenty-five trainees presented abstracts, and Dr. Tim Phillips delivered the keynote address entitled “Enterosorbent Therapy for Populations at Risk for Aflatoxicosis.” Kelly Scribner (Porter Lab) and Mike Berg (Sayes Lab) tied for Best Platform Presentations, while Cameron Armstrong (Allred Lab), Aishwarya Sooresh (Sayes Lab) and Charlotte Rambo (Pillai Lab) tied for Best Poster Presentations.

GCSOT 2010

The 2010 Gulf Coast Society of Toxicology annual meeting, themed “Fetal Basis of Adult Disease,” was held at the Baylor College of Medicine campus in Houston, TX, October 14-15. Sixteen TAMU faculty, postdoctoral trainees and graduate students attended the meeting.

The keynote address was given by Dr. Kenneth Ramos, Professor at the University of Louisville, and formerly of TAMU. Lectures were presented by Drs. Stephen Safe of TAMU, Kjersti Aagaard-Tillery of Baylor College of Medicine, David Williams of Oregon State University, Donald Fox of the University of Houston, and Thomas Gasiewicz of the University of Rochester.

Indira Jutooru (Safe Lab) received 1st Place for her Poster Presentation, while Kelly Scribner (Porter Lab) received 2nd Place for her Platform Presentation. Nivedita Banerjee, Gayathri Chadalapaka, Indira Jutooru, Xi Li, Nicole Mitchell, Satya Pathi, Ahmed Ridha, Amelia Romoser, Kelly Scribner and Sandeep Sreevalsan, Vijayalekshmi Vasanthakumari and Katie Zychowski each received travel awards from GCSOT to attend the meeting. Other TAMU attendees were Mike Berg, Sharon Epps, Alicia Marroquin-Cardona, Chandni Nair, Charlotte Rambo, John Taylor, Dr. Weston Porter and Dr. Alice Villalobos.

Awards and Honors

Travis Mays (TVMDL and Phillips Labs) attended the Annual Midwest AOAC Meeting in June 2010 held in Minneapolis, MN and presented the poster “GI Content Microscopy: Technique and Applications to Veterinary Toxicology.”

Congratulations to Kelly Scribner (Porter Lab) who received a very prestigious U.S. Department of Defense Breast Cancer Research Program Pre-doctoral Traineeship Award. This award will support a portion of her doctoral research. She also received a 2010 San Antonio Breast Cancer Symposium (SABCS) Basic Science Scholars-In-Training Scholarship.

Kelly Scribner attended two conferences in September 2010: the MRS-AAAC Metastasis and the Tumor Microenvironment Conference in Philadelphia, PA, the 6th Annual Breast Cancer Research and Education Program in Montgomery, TX. She presented “Singleminded-2s (Sim2s) inhibits MCF10DCIS. COM progression and metastasis in vivo by promoting differentiation” at both.

Charlotte Rambo (Pillai Lab) received a student travel award from the Council of Ionizing Radiation Measurements and Standards (CIRMS) to attend their October 2010 annual meeting in Gaithersburg, MD. She presented poster and oral presentations entitled “Delineating Differences in Microbiological Effects Arising from Exposure to Varying Ionizing Radiation Dose-Rates and Energies.” She also presented a poster entitled “Application of High Energy Electron Beam and Chemical Oxidants to Destroy Endocrine Disrupting Compounds in Wastewater Effluent and Biosolids.”

Satya Pathi (Safe Lab) presented “GT-094, a NO-NSAID, Inhibits Colon Cancer Cell Growth by Activation of a Reactive Oxygen Species (ROS)-MicroRNA-27a:ZBTB10-Specificity Protein (Sp) Pathway” at the Cancer Prevention and Research Institute of Texas (CPRIT) conference, November 16-19, 2010, Austin, TX.

Kelly Scribner presented “Inhibition of DCIS progression through promotion of differentiation” at the CTRC-AAAC Breast Cancer Research Symposium, in December 2010, San Antonio, TX.
**Student Representatives**

**Mike Berg** (Sayes Lab) was elected to a second term to continue as the 2010-11 Student Representative, Gulf Coast Chapter, Society of Toxicology.

**Satya Pathi** (Safe Lab) is serving as the 2010-11 Travel Award Secretary for the TAMU College of Veterinary Medicine and Biomedical Sciences Graduate Student Association.

**Kelly Scribner** (Porter Lab) serves as the 2010-11 Toxicology Graduate Student Representative as well as the TAMU Graduate Student Council Representative.

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**2010 Faculty Awards**

**Louise C. Abbott**
TAMU Association of Former Students
Distinguished Achievement Award for Teaching
Pfizer Carl J. Norden Distinguished Achievement for Teaching in Veterinary Medicine

**Clinton D. Allred**
International Life Sciences Institute (North America) Future Leaders Award

**Robert C. Burghardt**
Society for the Study of Reproduction
Distinguished Service Award

**Raymond J. Carroll**
Journal of Nonparametric Statistics Best Paper
MERIT Award, National Cancer Institute

**Robert S. Chapkin**
Texas A&M University System Regents Fellow

**Kung-Hui “Bella” Chu**
TEES Select Young Faculty Fellow

**Michael F. Criscitiello**
American Association of Immunologists Junior Faculty Travel Grant

**Andreas K. Holzenburg**
Ambassador Scientist of the Alexander von Humboldt Foundation
Fellow of the Royal Microscopical Society

**Arul Jayaraman**
TEES Select Young Faculty Fellow

**Thomas J. McDonald**
Excellence in Leadership and Service Award, Texas A&M Health Science Center

**Miguel Mora**
Research on falcons and other birds featured by EarthSky Communications, Inc. Austin, TX

SETAC Presidential Citation for Exemplary Service

**Timothy D. Phillips**
Chubb Award - Sigma Xi National Award for Innovation

**Patricia V. Pietrantonio**
University Prize for Agriculture and Cattle Sciences, Universidad Autonoma de Tamaulipas, Mexico

**Suresh D. Pillai**
Distinguished Lecturer, Institute of Food Technologists (IFT)

**Weston W. Porter**
Pfizer Award for Research Excellence

**Leon H. Russell**
Honorary Doctor of Science Degree, University of Missouri-Columbia, MO
AVMA Award, American Veterinary Medical Association

**Christie M. Sayes**
DuPont Young Professor Award

**Cheryl L. Walker**
Andrew Sowell-Wade Huggins Professorship and Graduate Fellowship in Cancer Research
Cozzarelli Prize from the National Academy of Sciences

**James R. Wild**
Master Teachers Council, TAMU College of Agriculture and Life Sciences

**PATENTS**
Six IFT members received patents in 2010.
Congratulations to **Sakhila Banu, Arul Jayaraman, Tim Phillips, Susanne Talcott, Nancy Turner** and **Tom Wood** for this distinction.
**SOT’11 Abstracts**

**EFFECT OF LOW-DOSE MERCURIC CHLORIDE EXPOSURE ON EARLY ZEBRAFISH EMBRYO DEVELOPMENT.** [LC Abbott]1, EA Moussa2 and SA Hassan2.


**POMEGRANATE EXTRACT EXERTED CHEMOPREVENTIVE EFFECTS IN COLON CANCER CELLS AND TARGETED MICRORNA-21A AND MICRORNA-126.** [Nivedita Banerjee]1, Giuliana Noratto1, Xiangrong Li1, Susanne Mertens-Talcott1,2,1 Nutrition and Food Science. [1]College of Veterinary Medicine, Texas A&M University, College Station, TX, USA; [2]Institute of Biosciences & Technology, Texas A&M Health Science Center, Houston, TX, USA.

**INTERNALIZATION OF CARBON BLACK AND IRON OXIDE NANOPARTICLE MIXTURES LEADS TO OXIDANT PRODUCTION.** [J Michael Berg and Sayes, Christie M. Texas A&M University, College Station, TX.]

**TOLFENAMIC ACID INHIBITS GROWTH AND SURVIVAL OF MULTIPLE TUMORS AND DOWNREGULATES SPECIFICITY PROTEIN (SP) TRANSCRIPTION FACTORS.** [Gayathri Chadalapaka]1, Indira Juturu1, Sandeep Sreevalsan1, Satya Pathi1, Heather Wilson1 and Stephen Safe1, Department of Veterinary Physiology & Pharmacology, 1Department of Small Animal Clinical Sciences, Texas A&M University, College Station, TX.

**RETAINED BACTERICIDAL ACTIVITY OF DIPHENYLIODONIUM CHLORIDE IMPREGNATED IN ALGINATE BEADS FOLLOWING EXPOSURE TO STOMACH-STIMULATING PH CONDITIONS.** [SV Epps]1, NA Krueger2, TD Phillips1, RB Harvey2, J Taylor1, RC Anderson2 and DJ Nisbet2, 1Veterinary Integrative Biosciences/Toxicology, Texas A&M University, College Station, TX; 2USDA/ARS, Southern Plains Agricultural Research Center, College Station, TX.

**CELLULAR ANTIOXIDANTS AND PRE-DISPOSITION TO DAMAGE BY METAL OXIDE AND NANOPARTICLES: A TOXICOLOGICAL COMPARISON BETWEEN HUMAN PULMONARY EPITHELIAL AND MESOTHELIAL CELL LINES.** [DE Figueroa]1, J Berg1, A Romoser2 and CM Sayes1,2, Biomedical Engineering, 2Veterinary Physiology & Pharmacology, Texas A&M University, College Station, TX.

**THE ROLE OF SURFACE CHEMISTRY ON INTRACELLULAR OXIDANT GENERATION.** [SH Ho]1, JM Berg2, B Guo3 and CM Sayes1,2, Biomedical Engineering, 2Toxicology Program, 3Mechanical Engineering, Texas A&M University, College Station, TX.

**ROLE OF SPECIFICITY PROTEIN (SP) TRANSCRIPTION FACTORS IN REGULATION OF STAT3 IN PANCREATIC CANCER CELLS.** [ID Juturu]1, G Chadalapaka1 and SH Safe1,2, Veterinary Physiology and Pharmacology, Texas A&M University, College Station, TX, USA; 1Institute of Biosciences & Technology, Texas A&M Health Science Center, Houston, TX, USA.

**LIGAND-DEPENDENT ACTIVATION AND DEACTIVATION OF NUCLEAR RECEPTOR SUBFAMILY 4 MEMBERS IN PANCREATIC CANCER CELLS.** [X Li]1, S. Safe1,2, College of Medicine, Texas A&M Health Science Center, College Station, TX, USA; 1Veterinary Physiology and Pharmacology, Texas A&M University, College Station, TX, USA; 1Institute of Biosciences & Technology, Texas A&M Health Science Center, Houston, TX, USA.

**AFLATOXIN PREVALENCE AND HEPATOCELLULAR CARCINOMA IN GHANA: A REGIONAL ANALYSIS.** [PJ Mitchell]1, PE Jolly1, CM Jolly2, A Marroquin-Cardona1 and TD Phillips1, 1College of Veterinary Medicine, Texas A&M University, College Station, TX; 2Department of Epidemiology, School of Public Health, University of Alabama Birmingham, Birmingham, AL; 3Department of Agricultural Economic and Rural Sociology, Auburn University, Auburn, AL.

**CURCUMIN DECREASES INFLAMMATION IN NORMAL CELLS AND EXERTS CHEMOPREVENTIVE EFFECT ON COLON CANCER CELLS THROUGH REGULATION OF KEY MICRORNAS.** [Giuliana Noratto]1, Susanne Mertens-Talcott1,2, Department of Nutrition and Food Science, 2Department of Vet. Phys. And Pharm., Texas A&M University, College Station, TX, USA.

**GT-094, A NO-NSAID, INHIBITS COLON CANCER CELL GROWTH BY ACTIVATION OF A REACTIVE OXYGEN SPECIES (ROS)-MICRORNA-27A:ZBTB10-SPECIFICITY PROTEIN (SP) PATHWAY.** [S Pathi1 and S Safe1,2, Veterinary Physiology and Pharmacology, Texas A&M University, College Station, TX, USA; 1Institute of Biosciences & Technology, Texas A&M Health Science Center, Houston, TX, USA.

**CYTOTOXICOLOGICAL AND PATHWAY-FOCUSED PERTURBATIONS IN DERMAL CELLS EXPOSED TO QUANTUM DOTT SYSTEMS.** [Amelia A. Romoser and Christie M. Sayes, Interdisciplinary Faculty of Toxicology, Texas A&M University, College Station TX 77843, USA.

**ONCOCGENIC MICRORNAS AS DRUG TARGETS FOR CANCER CHEMOTHERAPY.** [S. Safe, Veterinary Physiology, Texas A&M University, College Station, TX.

**BUILDING MATHEMATICAL MODELS FOR NANOPARTICLE-INDUCED REACTIVE OXYGEN SPECIES PRODUCTION: A STUDY COMPARING SILVER, ZINC, COPPER, NICKEL AND IRON NANOPARTICLES.** [PA Smith]1, I Ivanov2 and CM Sayes1,2, Biomedical Engineering, 2Veterinary Physiology & Pharmacology, Texas A&M University, College Station, TX.

**SYNTHESIS, CHARACTERIZATION AND TOXICITY STUDIES OF DISCRETE SIZE NANOPARTICLE-PESTICIDE CONJUGATE FOR NOVEL PESTICIDE DELIVERY.** [Aishwarya Sooresh]1, Michelle Pine1,2,3, and Christie M. Sayes1,2, 1Interdisciplinary Program in Materials Science and Engineering; 2Department Veterinary Integrative Bioscience; 3Interdisciplinary Faculty of Toxicology, 2Department of Veterinary Physiology and Pharmacology, Texas A&M University, College Station, TX.

**CANNABINOIDS INDUCE TYROSINE PHOSPHATASES AND INHIBIT SP TRANSCRIPTION FACTORS IN COLON AND PROSTATE CANCER CELLS.** [S. Sreevalsan]1, N. Kaminski1 and SH Safe1,2, Veterinary Physiology and Pharmacology, Texas A&M University, College Station, TX, USA; 1Institute of Biosciences & Technology, Texas A&M Health Science Center, Houston, TX, USA; 2Center for Integrative Toxicology, Michigan State University, East Lansing, MI.

**THE EFFECTS OF CILOSTAZOL ON MOUSE OOCYTE MEIOTIC MATURATION AND MORPHOLOGY.** [A.M. Taiyeb]1, D. Kraemer1, V. Fajt1 and CM Sayes1,2, 1Department of Veterinary Physiology and Pharmacology; 2Interdisciplinary Faculty of Toxicology, Texas A&M University, College Station, TX.

**AH RECEPTOR INHIBITS GENE EXPRESSION OF DELETED IN LIVER CANCER (DLC1) THROUGH REGULATION OF MICRORNA IN MOUSE LIVER CELLS.** [Y Tian]1, S Ke1, M Huang2, B Zhou1 and Z Zhou2, 1Program of Toxicology, Texas A&M University, College Station, TX; 2School of Public Health, Fudan University, Shanghai, China.

**MOLECULAR MECHANISM OF ACTION OF INSULIN SENSITIZING DRUG-METFORMIN AS ANTICANCER AGENT IN PANCREATIC CANCER.** [V. Vasanthakumari]1 and S Safe1,2, 1Veterinary Physiology and Pharmacology, Texas A&M University, College Station, TX, USA; 1Institute of Biosciences & Technology, Texas A&M Health Science Center, Houston, TX, USA.

**AFB1 BINDING CAPACITIES OF EXCELERITE CLAY SAMPLES FROM PANACA, NEVADA.** [K Zychowski]1, A Marroquin-Cardona1, Y Deng2 and TD Phillips1, 1College of Veterinary
TAMU Night at SOT
Recent Graduates

Abraham G. Robinson II completed the PhD portion of his combined DVM-PhD program and received that diploma in December 2010. He has now returned to complete vet school at TAMU.

John F. Taylor also received his PhD in December 2010 and is employed with Weisinger, Inc. as an Environmental Specialist.

Contact Us

To be added or removed from the distribution list, or to update your contact information, please send an email with “newsletter” in the subject line to tox@cvm.tamu.edu.

For newsletter archives or to learn more about the TAMU Toxicology Program, visit our website: http://toxicology.tamu.edu.

Future Seminars

Mar. 28  Alison C. Elder, PhD, University of Rochester
“Inhaled Nanoparticles and the Brain: Is there a Link between Exposure and Pathology?”

Apr. 4  Sharon Epps, Toxicology Masters Student
“Retained Bactericidal Activity of Diphenyliodonium Chloride Impregnated in Alginate Beads After Exposure to Stomach-Simulating pH Conditions”

Apr. 13  Amy Bouton, PhD, University of Virginia School of Medicine
“Signaling Complexes that Regulate Breast Tumor Cell Growth, Motility, and Therapeutic Response”

Apr. 18  Nicole J. Mitchell, Toxicology Doctoral Student
“Aflatoxin Prevalence and Hepatocellular Carcinoma in Ghana: A Regional Analysis”

Satya Sreehari Pathi, Toxicology Doctoral Student
“GT-094, a NO-NSAID Inhibits Colon Cancer Cell Growth by Activation of ROS-MicroRNA27a:ZBTB10-Specificity Protein (Sp) Pathway”

Apr. 25  Quinton A. Winger, PhD, Colorado State University
“Pluripotency Factors Regulating Stemness in Trophoblast Stem Cells”

May 2  Charlotte Rambo, Toxicology Doctoral Student
“Microbial Responses to Ionizing Dose Rate Effects”

Alicia G. Marroquin-Cardona, Toxicology Doctoral Student
“Characterization and Safety of Calcium and Sodium Bentonites as Potential Aflatoxin Enterosorbents for Humans”