Memorandum of Understanding formalized between UTSA and the Ponce School of Medicine & Health Sciences

Congratulations to Dr. Perry
Appointed Semmes Foundation Endowed Chair in Neurobiology

Congratulations to Dr. Jose-Yacaman
Awarded the Mexican Scientific Council's Highest Distinction of Scientific Emeritus

Important Dates to Remember
- September — Dr. Sidney McNairy Talk
- October 3-6 — SACNAS Annual Convention
- October 18 — UTSA COS Research Conference

This newsletter was supported by a grant from the National Institute on Minority Health and Health Disparities (G12MD007591) from the National Institutes of Health.
Ms. Christella Robledo formalized a Memorandum of Understanding (MOU) between UTSA and the Ponce School of Medicine & Health Sciences.

Dr. Tsin published an article named, Optical and Spectroscopic Properties of Human Whole Blood and Plasma with and without Y2O3 and Nd3+:Y2O3 Nanoparticles and presented 4 talks in the ARVO Meeting held in Seattle, Washington for 2013.

Dr. Perry was appointed the Semmes Foundation Endowed Chair in Neurobiology.

In April, Dr. Perry gave the keynote lecture at an Alzheimer Symposium in Puebla, Mexico.


The Core hosted two events this quarter - both were attended at maximum capacity:

1. Strategies for Correlative Microscopy in Biosciences Research - a lunch and webinar hosted in collaboration with Carl Zeiss Microimaging.
2. Advanced Imaging Techniques in Fluorescence Microscopy: From Super Resolution to FCS to Correlative Imaging with EM - a lunch and seminar featuring Dr. Angela Bardo, a Systems and Applications Specialist for Carl Zeiss Microimaging.

The Biophotonics Core had six publications between January and April.

In April, the Core assisted in the PREM-hosted workshop on Materials World Modules given by Northwestern University.

In February, Dr. Jose-Yacaman was awarded the honor of Scientific Emeritus, the highest distinction in the Mexican Scientific Council.

PhD candidate Nabraj Bhattachari is a recipient of the spring 2013 Presidential Dissertation Fellowship Award. Nabraj has worked as a research assistant under the supervision of Dr. Miguel Jose-Yacaman for three years.

Drs. Jose-Yacaman and Ponce-Pedraza and their colleagues have published two Book Chapters; one of these is the book cover:


Dr. Garcia and his team have been the Editors of the book entitled “Fundamental Concepts, Practical Applications, and Limitations of Capillary Electrophoresis and Microchip Capillary Electrophoresis.”

The Nanotechnology Core had eight additional publications between January and April.

The Kleberg Advanced Microscopy Center provided tours to students from Stinson Middle School and to students in the Nanotechnology program at Northwest Vista College.
PhD student Chengwei Lei received an NSF travel award to attend RECOMB in Beijing, China. He also received the 2013 UTSA Graduate Research Award.

PhD student Zhen Gao presented a paper in APBC in Vancouver, Canada.

Dr. Ruan has published four manuscripts and Dr. Wang has published one manuscript.

PhD student Chengwei Lei published a paper in Bioinformatics as first author and a paper in Nature Biotechnology with collaborators.

PhD student Md Jamiul Jahid published a paper in BMC Genomics as first author and a paper in Nature Communications with collaborators.

The CSBC successfully sponsored a workshop on performing life science research in an HPC environment. The Texas Advanced Computing Center (TACC) and the NIH Multiscale Modeling Consortium High Performance Computing working group were co-sponsors.

New instrumentation and algorithms in operation: MALDI/TOF/TOF/MS/MS; Bruker Image Prep system; Bruker ESI micro TOF with an APCI II source; Perkin Elmer JANUS Automated Sample Workstation; upgrade of Matrix Science Mascot (ver 2.4); Proteome Software Scaffold (ver 3.0 Q+S); FreezerWorks

The following projects have resulted in manuscripts:
- UTSA Small Grant Award - Protein Biomarkers of Chlamydia trachomatis
- UTSA Small Grant Award - Dissecting the Aberrant Epigenome in Glioblastoma Multiforme (GBM) by Proteomic Analysis
- Collaboration with Baylor College of Medicine/Texas Children’s Hospital

The following grants/projects are in development:
- UTSA Small Grant Award - Characterize the Host Proteome Induced by Tobacco PPD2
- UTSA Small Grant Award - Growth Hormone Molecular Biology in Primates
- UTSA Small Grant Award - Anti-Cancer Properties of Sandalwood Oil
- NIMHD/RTRN Pilot Small Grant Program

Collaborations with industry thought leaders

Multi-university collaboration exploring RTRN survey for RTRN proposal: Innovative Technologies Cluster

Jeremiah Babcock successfully defended his qualifying exam and has become a PhD candidate in the Physics Doctoral Program.

Jeremiah Babcock published a manuscript as first author.

RTRN presentation for the Infectious and Immunological Diseases Cluster by Dr. Forsthuber.
**Seminars in Translational Research (STRECH)**

Most recent seminar: April 24, 2013

“Endovascular Simulator for Research, Development, Training and Treatment Planning” by Dr. Barry Lieber from Stony Brook University Medical Center.

The Seminars in Translational Research (STRECH) series is a collaborative project among UTSA RCMI, UTHSCSA IIMS and CTRC, and the UTSA-UTHSCSA Joint Graduate Program in Biomedical Engineering.

The seminars bring together basic and clinical researchers from UTSA and UTHSCSA to promote new multidisciplinary collaborations that foster the development of innovative theories, approaches, and technologies in clinical and translational research.

Seminars are normally held on the third Wednesday of the month, alternating between the UTSA and UTHSCSA campuses.

More details can be found on the STRECH website:

[http://translationalseminars.utsa.edu](http://translationalseminars.utsa.edu)

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**Christella’s Corner**

- Reminder: Update RTRN Profiles as it is an essential part of collaborating within the RCMI community.
- Important: For all those using the core facilities, please remember to acknowledge the RCMI at UTSA grant. ([G12MD007591](http://translationalseminars.utsa.edu))
- Link your ERA Commons with My NCBI if you haven’t already done so. This is a newly implemented policy that is required for NIH reporting.

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**Research Project 1**

Photo-Induced Unfolding of Cancer-Specific Membrane Receptors
Principal Investigator: Lorenzo Brancaleon, PhD

**Research Project 2**

Biomarker Discovery in Glucocorticoid Resistance in EAE
Principal Investigator: Thomas Forsthuber, MD, PhD

**Research Project 3**

Advanced Data Processing for Capillary LC/MS Data
Principal Investigator: Jianqiu Michelle Zhang, PhD