

Texas A&M University-CONACYT Research Grant Program 2015 Awarded Proposals

Advanced Computational Methods for Detection of High-Risk Coronary Atherosclerotic Plaques Based on Optical Coherence Tomography and Fluorescence Lifetime Imaging

Javier Jo, Biomedical Engineering, Texas A&M

Daniel Ulises Campos Delgado, Universidad Autónoma de San Luis Potosí (UASLP)

Antibody-guided vaccination to prevent coccidial infections in poultry - correlation with xanthophyll absorption, an indicator for gut health

Luc Berghman, Department of Poultry Science, Texas A&M

Xochitl Hernandez-Velasco, Universidad Nacional Autónoma de México (UNAM)

Development of high throughput DNA sequencing genomic tools for conservation genomics of the Critically Endangered Kemp's Ridley sea turtle (*Lepidochelys kempii*): A binational genomic monitoring effort for nesting populations in Tamaulipas and Texas

Luis A. Hurtado, Department of Wildlife and Fisheries Sciences, Texas A&M

Miguel Angel Reyes López, Instituto Politécnico Nacional (IPN)

Distribution patterns of anchialine fauna in the Yucatan Peninsula

Thomas Iliffe, Department of Marine Biology, Texas A&M at Galveston

Fernando Alvarez, Universidad Nacional Autónoma de México (UNAM)

Immunogenetic assessment of the critically endangered totoaba fish to enhance survival and repopulation after hatchery rearing

Micheal Criscitiello, Department of Veterinary Pathobiology, Texas A&M

Also A. Arvizu-Flores, University of Sonora (UNISON)

Molecular characterization of the adverse effects of shift work on metabolic and cardiovascular functions

Jerome S. Menet, Department of Biology, Texas A&M

Rudolf M. Buijs, Universidad Nacional Autónoma de México (UNAM)

Plastic in diabetes-an epigenetic investigation

Mahua Choudhury, Department of Rangel College of Pharmacy, Texas A&M

Antonio De León Rodríguez, Instituto Potosino de Investigación Científica y Tecnologica (IPICYT)

Reactivity and stability of core-shell nanocatalysts for the oxygen reduction reaction: Theory and experiments

Perla B. Balbuena, Department of Chemical Engineering, Texas A&M

Omar Solorza Feria, Investigación y de Estudios Avanzados del Instituto Politécnico Nacional (CINVESTAV)

Role of Flippase Proteins during polarized growth in *Aspergillus nidulans* and *Neurospora crassa*

Brian D. Shaw, Department of Plant Pathology & Microbiology, Texas A&M

Rosa R. Mouríño-Pérez, Centro de Investigación Científica y Educación superior de Ensenada (CICESE)

The Mexican Plateau as a center of diversification for arid land fauna: a comparative phylogeographic study of multiple rodent species

Jessica E. Light, Department of Wildlife & Fisheries Sciences, Texas A&M

Jesús A. Fernández, Universidad Autónoma de Chihuahua (UACH)

Special Research Program

Characterization of population genetic structures and outbreak biotopes of the Central American locust (*Schistocerca piceifrons piceifrons*) using novel and integrative technologies

Hojun Song, Department of Entomology, Texas A&M

María Guadalupe Galindo Mendoza, Universidad Autónoma de San Luis Potosí (UASLP)

Microcapsule Delivery Platform to Enhance Immune Protection against Brucellosis

Thomas A. Ficht, Department of Veterinary Pathobiology, Texas A&M

Francisco Suárez-Guemes, Universidad Nacional Autónoma de México (UNAM)