



TEXAS TECH UNIVERSITY
Office of International Affairs™

Texas Tech University - São Paulo Research Foundation SPRINT Program (2014-2022)





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In August, 2014, the Office of International Affairs at Texas Tech University (TTU) signed a research [Collaborative Agreement](#) with the prestigious São Paulo Research Foundation (FAPESP) in Brazil. The agreement aims to promote scientific and technological collaboration between researchers from Texas Tech University and the State of São Paulo, Brazil, through the funding of joint research projects.

To incentivize scientific and technological collaboration, TTU and FAPESP have successfully co-sponsored six rounds of proposals under the framework of the [FAPESP SPRINT](#) (São Paulo Researchers in International Collaboration) program with teams winning support for exchange of faculty and postdoctoral researchers in each cycle. Projects have ranged from the human and medical sciences to more traditional Science, Technology, Engineering, and Math (STEM) projects in biology, chemistry, engineering, and physics.

Building on the success of the first two rounds, TTU hosted a STEM Across Continents Workshop for Brazilian partners in 2016 and FAPESP Week in 2017. Both workshops created opportunities to showcase previous work and to network for potential future collaborations.

About FAPESP

[FAPESP](#) is a public foundation with the mission to support research projects in higher education and research institutions, in all fields of knowledge. FAPESP maintains cooperation agreements with national and international research funding agencies, higher education and research institutions and business enterprises.





TTU-FAPESP SPRINT Program at a Glance

<https://www.depts.ttu.edu/international/intlrsch/Brazil@Tech/sprint.php>

- *TTU hosted 2016 SPRINT Workshop with 17 researchers from FAPESP*
- *TTU selected to host the renowned FAPESP week in 2017 to extend scientific cooperation between the two countries in research projects in all disciplines*
- *Over 17 research teams funded for joint projects*
- *TTU and FAPESP have each committed over \$310,000 over 7 years*
- *More than \$10M in grant proposals submitted as a result of research collaborations*
- *Research conducted resulted in more than 45 new publications*
- *TTU researchers have participated at more than 80 conferences in over 8 countries*
- *Six workshops and symposia organized between TTU and FAPESP collaborators*

Awarded SPRINT Proposals:

2014 - 2015 Researchers

Project Title

Harvinder Singh Gill

Texas Tech University

Evaluation of Pain and Anesthetic Efficacy After Topical Application of Microneedles

Michelle Franz Montan Braga Leite

Universidade Estadual de Campinas (UNICAMP)

Nural Akchurin,

Texas Tech University

SPRACE-UNESP and TTU Collaboration in High-energy Physics in the Compact Muon Solenoid Experiment at the Large Hadron Collider

Sérgio Ferraz Novaes

Universidade Estadual Paulista (UNESP)

Christopher Rock

Texas Tech University

The Auto-Regulatory Loop Involving MIR828, TAS4, and MYB Transcription Factors: Basic and Applied Studies

Ivan de Godoy Maia

São Paulo State University (UNESP)

Hans Lischka

Texas Tech University

High-Level Quantum Chemical Investigations of Defect Structures in Model Graphene Systems

Francisco Bolivar Correcto Machado

Instituto Tecnológico De Aeronáutica (ITA)

Stephen Ekwaro-Osire

Texas Tech University

Probabilistic Dynamics Analysis and Lubricant Analysis to Improve Reliability of Gearboxes

Aparecido Carlos Goncalves

São Paulo State University (UNESP)





Awarded SPRINT Proposals:

2015 - 2016 Researchers

Project Title

Ann Mastergeorge & Elizabeth Trejos-Castillo,
Texas Tech University

Incidence and Effects of Toxic Stress on Cognitive and Socioemotional, Neurodevelopmental Outcomes in Children and Adolescents: A Cross National Comparative Collaboration

Andrea Parolin Jackowski,
Universidade Federal De São Paulo (UNIFESP)

David Klein
Texas Tech University

Determination of Emerging Contaminants and the Comparison of Efficiency of Removal by Wastewater Treatment in São Paulo State, Brazil and Lubbock, Texas, United States of America

Cassiana Montagner Carolina Raimund
Universidade Estadual de Campinas (UNICAMP)

Reynaldo Patino
Texas Tech University

Endocrine-disrupting Chemicals, Global Warming and Reproductive Health in Fishes

Ricardo Shohei Hattori
Agência Paulista de Tecnologia dos Agronegócios (APTA)

Naima Moustaid-Moussa
Texas Tech University

Mechanisms Mediating Anti-inflammatory Effects of Omega 3 Fatty Acids in Metabolic Disorders: Role of Lipid Mediators and Micro RNAs

Sonia Jancar
University São Paulo (USP)

Kameswara Rao Kottapalli
Texas Tech University

Molecular Mechanisms Including Micro RNA Regulation of Abiotic and Biotic Stress Tolerance in Sugarcane

Sonia Marli Zingaretti
Universidade de Ribeirao Preto

Awarded SPRINT Proposals:

2016 - 2017 Researchers

Project Title

Bill Poirier

Texas Tech University

Fermi Accelerators, Inverse Fermi Accelerators, Nonadiabatic Dynamics and Quantum Trajectories: Towards a Method for Electron Dynamics

Mahir Saleh Hussein

University São Paulo (USP)

Amanda M.V. Brown

Texas Tech University

Metabolic Processes in the Cooperative Microbial Symbionts of Brazilian Membracids

Monica Tallarico Pupo

School of Pharmaceutical Sciences of Ribeirao Preto

2017 - 2018 Researchers

Project Title

Bradley Johnson

Texas Tech University

Evaluation of Vitamin A Status on Sera Metabolites, Muscle Fiber Type and Carcass Characteristics of Feedlot Cattle

Danilo Domingues Millen

Universidade Estadual Paulista (UNESP)

Naima Moustaid-Moussa

Texas Tech University

Mechanisms Linking Angiotensins to Obesity and Diabetes: Role of Inflammation, Endoplasmic Reticulum Stress and Autophagy

Joilson de Oliveira Marins

University São Paulo (USP)

Jorge Salazar-Bravo

Texas Tech University

Experimental Infection of Neotropical Bats with Hantavirus

Luiz Tadeu Moraes Figueiredo

University São Paulo (USP)





Awarded SPRINT Proposals:

2018 - 2019 Researchers

Project Title

Stephen Ekwaro-Osire
Texas Tech University

Condition Monitoring and Prognostics of Bearings Considering Uncertainties

Katia Lucchesi Cavalca Dedini
Universidade Estadual de Campinas (UNICAMP)

Naima Moustaid-Moussa
Texas Tech University

Mechanisms Underlying the Anti-inflammatory and Thermogenic Effects of Fish Oil in Obesity and Associated Metabolic Diseases

William Tadeu Lara Festuccia
Institute of Biomedical Sciences (USP)

2019 - 2020

No Awards Chosen

2020 - 2021

Edition Cancelled

2021 - 2022

Naima Moustaid-Moussa
Texas Tech University

Peroxisomes as Mediators of the Metabolic Effects of Fish Oil in Obesity and Associated Metabolic Diseases

William Tadeu Lara Festuccia
Institute of Biomedical Sciences (USP)

Bill Poirier
Texas Tech University

Riding Quantum Trajectories Beyond Born-Oppenheimer: Building Better Methods for Reaction Dynamics

Brett Carlson
Instituto Tecnológica de Aeronáutica



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