

13th Annual Graduate School and Internship Fair

October 19, 2012 8:30 am – 12:00 pm Room A300



Welcome to the 2012 STEM Graduate School and Internship Fair!

The UHD Scholars Academy STEM Graduate School and Internship Fair is an excellent opportunity for students within the College of Sciences and Technology to connect with prospective graduate schools and research/internship programs. Students are strongly encouraged to speak with as many different programs as possible to explore all available opportunities. Good luck and have fun!

8:30 - 9:15 am Registration and Check-in

9:15 - 10:15 am Student Poster Session and Breakfast Mixer

10:15 - 12:00 pm Graduate School and Internship Fair

Almighty Ministries, Inc.

Youth Development - Education

Baylor College of Medicine

Graduate Program in Molecular and Human Genetics Human Genome Sequencing Center PREP Program: Post-Bac Research/Education Program SMART Program: Summer Undergraduate Research Training

City of Houston – Houston Crime Laboratory

C3 Texas (Campus to Community Coalition of Texas)

Dallas Baptist University Graduate Programs

Emory University Physics Graduate Program

Kaplan Test Prep and Admissions Graduate Programs

Ohio State University College of Arts and Sciences

Sam Houston State University Office of Graduate Studies

Southern Methodist University The Guildhall Office of Admissions

Stephen F. Austin State University

Environmental Sciences & Geology Mathematics and Statistics MSNS Chemistry / Biochemistry

Texas A & M International University MS in Biology & MS in Mathematics & Education

Texas A & M University – College Station College of Engineering Nuclear Engineering and Health Physics

Texas A & M University Health Science Center School of Rural Public Health

Texas Chiropractic College Enrollment Management

Texas Southern University Graduate School Online Executive Masters of Public Administration

Texas Tech University Graduate School

Texas Tech University Health Sciences Center (HSC) School of Nursing

Texas Tech University HSC – El Paso Graduate School of Biomedical Sciences

Universidad Autonoma de Guadalajara School of Medicine

University of Houston-Central

College of Pharmacy College of Technology Graduate Programs Computer Science Graduate Program Mathematics Graduate Program

University of Houston-Downtown

Masters of Arts in Teaching M.S. in Professional Writing & Technical Communication NSF Noyce Teacher Scholarship Programs

University of Houston-Clear Lake School of Science and Computer Engineering

University of Mary Hardin-Baylor Graduate School

University of North Texas (UNT)

College of Engineering Toulouse Graduate School

UNT Health Science Center at Fort Worth School of Public Health

University of Texas at Austin Graduate School

McCombs School of Business - MS in Finance Program

University of Texas at El Paso Graduate School

University of Texas at San Antonio Graduate School

University of Texas Health Science Center Houston School of Biomedical Informatics School of Nursing The Houston Laboratory and Population Sciences Training Program in Gene-Environment Interaction

University of Texas Health Science Center at San Antonio Graduate School of Biomedical Sciences

University of Texas Health Science Center at Tyler Occupational Health Sciences Occupational & Environmental Health

University of Texas - MD Anderson Cancer Center School of Health Professions

University of Texas Medical Branch

Biochemistry and Molecular Biology Graduate School of Biomedical Sciences School of Health Professions School of Nursing

University of Texas School of Public Health School of Health Profession

Sponsored by: The Brown Foundation, Inc.; National Science Foundation (0728408, 0903948); and UH-Downtown.

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Welcome to the 2012 Graduate School and Internship Fair!

The UHD Scholars Academy is pleased to feature scholarly undergraduate STEM research poster presentations. Please join us in this scholarly undertaking by visiting each poster, dialoguing with the student presenters about their project, and encouraging them through offering constructive considerations that can benefit them in their next phase of research.

Student Research Poster Session:

 1 – Reihana Abdelmaksaud, Kimberlyn Garcia, "The Effects of Garlic Extracts + Acyclovir on the Suppression of the Herpes Simplex Virus Type I Replication in Vitro"
 UHD Faculty Mentor: Dr. Tyra Montgomery, Dr. Qavi Hamida

Project Location: University of Houston-Downtown

- 2 Rogelio Camacho, Yesenia Salazar, "The Effect of Heat on Granite Rocks for Nuclear Depository"
- UHD Faculty Mentor: Dr. Janusz Grebowicz, Dr. Jorge Tito-Izquierdo

Project Location: University of Houston-Downtown

3 – Kaleigh Ceasar, "The Poetry Wizard"
UHD Faculty Mentor: Dr. Hong Lin
Project Location: University of Houston-Downtown

 4 – Raymond Cherian, Sarah Syed, "Could *Platydesmus* Millipedes Dilute their Risk of Predation by Aggregating?"
 UHD Faculty Mentor: Dr. Barry Sullender
 Project Location: Bocas Del Toro, Boca Del Drago, Panama

5 – Fatoumata Diallo, "Computational Studies of 1, 2 HOPO Chelating Ligands"

UHD Faculty Mentor: **Dr. Maria Benavides** Project Location: University of Houston-Downtown

- 6 Heather Fulkerson, "The Human Mucosal Response Against *Staphylococcus aureus* Virulence Factors"
 Faculty Mentor: Dr. Bowden
 Co-Author: Andrea Bordt, Jesse Dunkle, Heather Moor M.D,
 Eric L. Brown PhD, M. Gabriela Bowden PhD
 Project Location: University Of Houston-Downtown
- 7 Martha Cecilia Guerra, "Establishing Homology between Mammalian and Zebrafish Stratified Epithelium"
 Faculty Mentor: Dr. Daniel Wagner
 Co-Author: Dr. Daniel Wagner
 Project Location: Rice University
- 8 Brian Holtkamp, "Analysis of Security Code Review Effectiveness"
- UHD Faculty Mentor: Dr. David Wagner
- Co-Authors: Mattew Finifter, Adrian Mettler, Anne Edmundson, Emanuel Rivera
- Project Location: University of California, Berkeley

 9 – Harrison Kraft, "Exclusive Paternal Care and the Natural History of *Platydesmus subovata*"
 HUD Ecculty Mantor: Dr. Borny Sullander

UHD Faculty Mentor: **Dr. Barry Sullender** Co-Author: Dr. Debbie Bush Project Location: Bocas Del Toro, Panama

10 – Adolfo Lara, "Development of Novel Molecular Markers for Species-Level Identification of Sea Anemones (*Cnidaria*, *Actiniaria*)"

Faculty Mentor: **Dr. Estefania Rodriguez, Dr. Mercer Burgler** Co-Author: Matt Erby

- Project Location: The American Museum of Natural History, New York
- 11 Milena Lobaina, "Inhibition of TK Negative HSV-1 Replication by Antiriral Agents from Single Clove Garlic in Vitro"
- UHD Faculty Mentor: Dr. Tyra Montgomery, Dr. Qavi Hamida
- Co-Authors: Issac Omuhambe, Dr. Tyra Montgomery, Dr. Qavi Hamida

Project Location: University of Houston-Downtown

12 – Aisha Mehmood, "Computational Calculations on Novel Plutonium Sequestering Agent"
Faculty Mentor: Dr. Maria Benavides
Co-Author: Dr. Maria Benavides
Project Location: University of Houston-Downtown

13 – Wilfredo Molina, "Recursive Evaluation Algorithms for 2-D h – Bezier Surfaces"
Faculty Mentors: Dr. Plamen Simeonov
Co-Author: Dr. Plamen Simeonov
Project Location: University of Houston-Downtown

14 –Vy Nguyen, "Brain Wave Analysis, Web Access"
Faculty Mentor: Dr. Hong Lin
Co-Author: Latpyya Smith, Lucino Flores, Qiang Guo, Troy Cartmill
Project Location: University of Houston – Downtown

15 – Owen Pate, "Preliminary Design of UHD Staff/ Faculty Parking Garage"

Faculty Mentor: Dr. Jorge A. Tito

- Co-Author: Balkrishna Patel, Juan Castillo, Aaron Kimmel and Jeffrey Wagner
- Project Location: University of Houston-Downtown

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- 16 Tilesh J. Patel, "Characterization of the Thermotropic Properties of Novel Catanionic Surfactants Derived from Quaternary Ammonium Surfactants and Dodecylbenzenesulfonate Existing as Room-Temperature Liquid Crystals"
- UHD Faculty Mentor: Dr. Robin Jose

Co-Author: Troy A. Cather, Dr. Prodip K. Bhowmik, Dr. Hesook Han, Dr. Janusz Grebowicz

Project Location: University of Houston-Downtown

- 17 Tilesh J. Patel, Troy A. Cather "Characterization of the Thermotropic Properties of Novel Catanionic Surfactants Derived from Quaternary Ammonium Surfactants and Bis(2ethylhexl) sulfosuccinate Existing as Room-Temperature Liquid Crystals"
- UHD Faculty Mentor: Dr. Robin Jose
- Co-Author: Troy A. Cather, Dr. Prodip K. Bhowmik, Dr. Hesook Han, Dr. Janusz Grebowicz

Project Location: University of Houston-Downtown

18 – Cynthia A. Quinones, "Synthesis and Characterization of Novel Polymerizable Room-Temperature Ionic Liquids for U.V Curable Coatings"

UHD Faculty Mentor: Robin Jose

Co-Author: Paulina Filipczar, Maureen Arinyi Project Location: University of Houston-Downtown

19 – Angela Rosales, "Comparison between Greens Bayou Wetlands Mitigation Bank and Anahuac National Wildlife Refuge using Diatom Data to Show how IKE and the 2011 Drought Affected these Wetlands"

UHD Faculty Mentor: Dr. Brad Hoge

Co-Author: Dorothy Ringer-Sumner, Denise Igbineweka Project Location: University of Houston-Downtown 20 – Iris R. Silva - Obando, "Identification of FoxF1 Mutations Affecting Patients with Alveolar Capillary Dysplasia with Misalignment of Pulmonary Veins (ACD/MPV)"

UHD Faculty Mentor: **Dr. Partha Sen**

Project Location: Baylor College of Medicine Molecular Core Laboratory

21 – Dat Truong, "Nano Particle Nickel and Nickel Oxide-Carbon Composites for Novel Voltammetric Detection"
Faculty Mentor: Dr. Mian Jiang
Co-Author: Dr. Mian Jiang
Project Location: University of Houston-Downtown

- 22 Mau Truong Dim, "Formulational Properties of a Newly Developed Low Viscosity Diacrylate – Functional Epoxy-Based Oligomer"
- Faculty Mentor: Dr. Byron K. Christmas
- Co-Author: Dayna Spencer
- Project Location: University Of Houston-Downtown CARSR Lab
- 23 Reyna Valdez, "Screening Novel Synthetic Compounds for their Cytotoxicity and Inhibition of Tubulin Polymerization"
 Faculty Mentor: Dr. Rachna Sadana

Co-Author: Andrew Mark, Ania Jeszka, Paula Mazurek, Patrycja Juchniewicz

Project Location: University Of Houston-Downtown

24 – Wei Yang Wang, "Mathematical Modeling of Glassy – Winged Sharpshooter Population"

Faculty Mentor: Dr. Jeong – Mi Yoon, Dr. Volodymyr Hrynkiv, Dr. Lisa Morano

Co-Author: Julie Nash, Wei Yang (Kevin) Wang Project Location: University Of Houston-Downtown