11th ANNUAL
UHD STUDENT RESEARCH CONFERENCE

Sponsored by the UHD Scholars Academy
Funded by the
National Institute of General Medical Sciences (1T34GM079088),
National Science Foundation (0728408),
The Brown Foundation, Inc., and UH-Downtown

A showcase of academic excellence demonstrated by UHD undergraduates majoring within the
Colleges of Business, Humanities and Social Science, Public Service, and Sciences and Technology.

Friday, April 13, 2012

8:00 - 9:00 am  Registration and Continental Breakfast, Coffee House

9:00 am  Dr. William Flores, President, University of Houston-Downtown
Welcoming Remarks, UHD Wilhelmina Cullen Robertson Auditorium

9:10 am  Dr. Akif Uzman, Interim Dean, College of Sciences and Technology, UHD
Introduction of Keynote Speaker, Auditorium

9:10 - 9:40 am  Dr. Mesias Pedroza, Post-Doc, Baylor College of Medicine
Keynote Speaker, Auditorium

9:40 - 10:40 am  Oral Presentations, Session I, Auditorium

10:50 - 11:50 am  Oral Presentations, Session II, Auditorium
Introductions by Drs. Ken Johnson and Aimee Roundtree, SRC Co-Chairs

11:50 am  Dr. Weining Feng, Associate Professor of Engineering Technology, UHD
Introduction of External Community Speaker, Auditorium

11:50 - 12:10 pm  Mr. Terrence Ivers, SIEMENS, CEO Energy Oil & Gas, Compression & Solutions
External Community Speaker, Auditorium

12:10 - 1:30 pm  Lunch Break

1:30 - 3:30 pm  Open Poster Sessions, Room A300

Conference Co-Chairs:
Dr. Kenneth Johnson, Assistant Professor of Geology, UHD
Dr. Aimee Roundtree, Associate Professor of English, UHD

Conference Planning Committee:
Dr. David Branham, Assistant Professor of Social Sciences, UHD
Dr. Youn-Sha Chan, Associate Professor of Mathematics, UHD
Dr. Weining Feng, Associate Professor of Engineering Technology, UHD
Mr. Rene Garcia, Program Manager, UHD Scholars Academy
Dr. Marilyn McShane, Professor of Criminal Justice and Director of the
Institute for Community Justice, UHD
Dr. Lisa Morano, Chair of Natural Sciences Department, UHD
Dr. Kenneth Oberhoff, Assoc. Dean, UHD College of Sciences & Technology
Dr. Mary Jo Parker, Director, UHD Scholars Academy
Dr. Gene Preuss, Associate Professor of History, UHD
Dr. Ruth Robbins, Professor of Finance, Accounting and CIS, UHD
Dr. Larry Spears, Professor of Chemistry, UHD
Mrs. Mary Sykes, Lecturer of Finance, Accounting and CIS, UHD
Dr. Akif Uzman, Interim Dean, UHD College of Sciences and Technology
Dr. Jeong-Mi Yoon, Associate Professor of Mathematics, UHD

Oral and Poster Presentations:
David Amos, “Quantum Mechanical Calculations on Novel Actinide Chelating Agents”
UHD Faculty Mentor: Dr. Maria Benavides
Project Location: University of Houston-Downtown

Edgar Aquino, “Game Theory and the Mexican Drug War”
UHD Faculty Mentors: Drs. Timothy Redl and Edwin Tecarro
Project Location: University of Houston-Downtown

Nameera Baig, Mau Truong, Tori Dumas, “A Simple Process for Preparing Low Viscosity Diacylate-Functional Epoxy Oligomers”
UHD Faculty Mentor: Dr. Byron Christmas
Project Location: University of Houston-Downtown

Usiph Bent, Angelina Ardoin, and Stephanie Vera, “Analyzing the In-Group Bias Across Race and Gender Using Color Facial Images in a Flicker Paradigm”
UHD Faculty Mentors: Drs. Ruth Johnson, Mary Portillo, and Stephanie Babb
Project Location: University of Houston-Downtown

Maxwell Goedjen, Brian Holtkamp, “OS Applications: Pathfinding and Wireless Remote”
UHD Faculty Mentor: Dr. Ongard Sirisaengtaksin
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Claude Rubinson
Project Location: University of Houston-Downtown

Christine Varghese, “Human Trafficking: The Lack of Freedom”
Co-Authors: Esohe Iyamu-Osagiede
UHD Faculty Mentor: Dr. Richard Heard
Project Location: Houston, TX

Sara Wilder, Julie Nash, Wei Yang Wang, “Population Dynamics of Glassy-Winged Sharpshooters in Texas Vineyards”
UHD Faculty Mentors: Drs. Jeong-Mi Yoon, Volodymyr Hryniv, Lisa Morano
Project Location: University of Houston-Downtown

The UHD Scholars Academy (SA) is an academically competitive program in the College of Sciences and Technology (CST) that promotes scholarship and student success for undergraduate students majoring in Science, Technology, Engineering and Mathematics (STEM).

One Main Street, 725-North; Houston TX 77002-1001
Phone: 713-222-5344; Fax: 713-222-5356; scholars@uhd.edu; www.uhd.edu/scholars
Ivers received his mechanical engineering degree from the University of Houston and began his career at KBR, a leading international supplier for the oil and gas industry. At KBR, he held a number of managerial positions in the fields of pipelines and offshore engineering where he gained outstanding experience in the oil and gas business. From 2004 to 2007, Ivers served as Chief Operating Officer for Alliance Wood Group Engineering.

The Siemens Energy Sector is the world's leading supplier of a complete spectrum of products, services and solutions for the generation, transmission and distribution of power and for the extraction, conversion and transport of oil and gas. In fiscal 2010 (ended September 30), the Energy Sector had revenues of approximately EUR25.5 billion and received new orders totaling more than EUR30.1 billion and posted a profit of more than EUR3.6 billion. On September 30, 2010, the Energy Sector had a work force of more than 88,000. Further information is available at: http://www.siemens.com/energy.

Poster Presentation Session I (1:30PM-2:30PM):

1 - Reihana Abdelmaksond, Kimberlyn Garcia, Wendy Ramirez, "The Detrimental Effects of Garlic Extracts on Herpes Keratitis"
Co-Authors: Milena Lobaina, Isaac Omuhambwe
UHD Faculty Mentors: Drs. Tyra Montgomery and Hamida Qavi
Project Location: University of Houston-Downtown

3 - Amie Albanese and Jose Trejo, "Mathematical Modeling of BMP4 and FGF Signaling Pathways in Xenopus laevis"
UHD Faculty Mentor: Dr. Edwin Tecarro
Project Location: University of Houston-Downtown

5 - David Amos, "Quantum Mechanical Calculations on Novel Actinide Chelating Agents"
UHD Faculty Mentor: Dr. Maria Benavides
Project Location: University of Houston-Downtown

7 - Bria Anderson, Rosario Garcia, Linda Ouyirima, "Sickle Cell Anemia"
Co-Authors: Alejandro Mendez, Tracey Thomas, Hugo Tobias, Briana Villarreal, Marilyn Davila
UHD Faculty Mentor: Mitsue Nakamura
Project Location: University of Houston-Downtown

9 - Edgar Aquino, "Game Theory and the Mexican Drug War"
UHD Faculty Mentors: Drs. Timothy Redi and Edwin Tecarro
Project Location: University of Houston-Downtown

11 - Namieera Baig, Mau Truong, Tori Dumas, "A Simple Process for Preparing Low Viscosity Diacylate-Functional Epoxy Oligomers"
UHD Faculty Mentor: Dr. Byron Christina
Project Location: University of Houston-Downtown

13 - Nabil Bani, "Virtual Lab Instrument Controller"
UHD Faculty Mentor: Dr. Ongard Sirisaengtaksin
Project Location: University of Houston-Downtown

15 - Jesus Barron, Cassandra Flores, Massiel Rubio, "Impact of Soil Geology and Soil Texture on the Nutrient Status of Cabernet Grapesvines from the Texas Hill Country"
UHD Faculty Mentors: Drs. Ken Johnson and Lisa Morano
Project Location: University of Houston-Downtown

17 - Winford Becton, Sujan Devkota, Miguel Tierrafria, "Sensory Analysis of Wine from Vineyards on District Soils in the Texas Hill Country"
UHD Faculty Mentors: Drs. Ken Johnson and Lisa Morano
Project Location: University of Houston-Downtown

19 - Usiph Bent, Angelina Ardoin, and Stephanie Vera, "Analyzing the In-Group Bias Across Race and Gender Using Color Facial Images in a Flicker Paradigm"
UHD Faculty Mentors: Drs. Ruth Johnson, Mary Portillo, Stephanie Babb
Project Location: University of Houston-Downtown

21 - Gaganjot Bhatti, Layne Held, Jungsook Larson, "Modeling the Rate of Formation of cAMP in Preformed Signaling Complex of G-Proteins and Adenylyl Cyclase"
UHD Faculty Mentors: Drs. Rachna Sadana and Steven London
Project Location: University of Houston-Downtown

23 - Rogelio Camacho, Joseph Downing, "Thermal Analysis of Oil-Bearing Shale"
UHD Faculty Mentor: Dr. Janusz Grebowicz
Project Location: University of Houston-Downtown

25 - Sarah Campos, Rachel Peterson, Letitia Proctor, "I Am Who I Am: How Personality Relates to Parental Confidence"
UHD Faculty Mentor: Dr. Susan M. Henney
Project Location: University of Houston-Downtown

27 - Jennifer Castro, "Reflections on the Intersection of Career and Lifestyle: The Case of Houston Bartenders"
UHD Faculty Mentor: Dr. Claude Robinson
Project Location: University of Houston-Downtown

29 - Adriana Ceballos, Dulce N. Garcia, Rafael Rodriguez, "Business, Technology, and Brazil"
UHD Faculty Mentor: Dr. Ruth Robbins
Project Location: University of Houston-Downtown

31 - Pi-Chung Chang, Abideen Ojelade, Santa Vasquez, "Design and Control of Distillation Process"
UHD Faculty Mentor: Dr. Vassilios Tsouanas
Project Location: University of Houston-Downtown

33 - Raymond Cherian, "Palatability of Platydesmid subovata and Apparency as a Function of Group Size"
Co-Authors: Debbie Bush
UHD Faculty Mentor: Dr. Barry Sullender
Project Location: University of Houston-Downtown

35 - Marilyn Davila, "Comparisons of Corticosteriical and Thalamestricatiaal Projections in a UHD Mouse Model"
Co-Authors: Anne Pariensky (UCLA)
UHD Faculty Mentor: Dr. Michael Levine
Project Location: University of California at Las Angelas
37 - Fatoumata Diallo, “Computational Studies of 1, 2 HOPO Chelating Ligands”
Co-Author: Chelahny Ligands
UHD Faculty Mentor: Dr. Maria Benavides
Project Location: University of Houston-Downtown

UHD Faculty Mentors: Drs. Weining Feng and Jorge Tito
Project Location: University of Houston-Downtown

41 - Manuel Fernandez, Claudia Lara, Amanda Martinez, “Human Rights and the Global Community”
Co-Author: Jamie Stubblefield
UHD Faculty Mentor: Dr. Justin Hackett
Project Location: University of Houston-Downtown

43 - Ruslan Gashimov, “Sensors for Environmental Application Based on Their Fluorescence and Electrochemical Functionalities”
UHD Faculty Mentor: Dr. Mian Jiang
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Vasillios Tzouanas
Project Location: University of Houston-Downtown

47 - Melissa Greenlee, Jessie Uchendu, “Navigation System for 3D Models”
UHD Faculty Mentor: Dr. Ongard Sirisaengtaksin
Project Location: University of Houston-Downtown

49 - Daniel Gutierrez, Petra Villegas, “The Detrimental Effects of Implementation Intentions on Goal Progress”
UHD Faculty Mentor: Dr. Travis Crone
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Jorge A Tito
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Kathleen Roark
Project Location: University of Houston-Downtown

55 - Claire Kennedy, “Psychoanalysis of Nikon Advertisements”
UHD Faculty Mentor: Dr. Aimee Roundtree
Project Location: University of Houston-Downtown

57 - Purva Khakheria, Melanie Vargas, Nancy T. Wright, “The Engaged Citizen: Working to Ensure Human Rights”
UHD Faculty Mentor: Dr. Justin Hackett
Project Location: University of Houston-Downtown

59 - Naja Khan, Shanna Daniel, Amairani Hernandez, “Unstoppable”
Co-Authors: Jibri Pimento, Bilulfo Martinez, Nicholas Ramirez, Taylor Luckett, Sara Wilder
UHD Faculty Mentor: Mitsue Nakamura
Project Location: University of Houston-Downtown

61 - Adolfo Lara, “Exocytosis in Mast Cells: Munc13-4 Analysis”
Co-Author: Alfredo Davalos
UHD Faculty Mentor: Dr. Ruth Heidelberger
Project Location: University of Texas Health Science Center at Houston

Co-Author: Antonio Mendoza
UHD Faculty Mentor: Dr. Jeong-Mi Yoon
Project Location: University of Houston-Downtown

65 - Binh Le, “Female-biased Sex Ratios in Platysdesmid Millipedes”
Co-Authors: Nigar Safarova, Raymon Cherian, Debbie Bush
UHD Faculty Mentor: Dr. Barry Sullender
Project Location: University of Texas Health Science Center at Houston

67 - Doug Litwin, “Investigation of Laccase Genes in Texas Coastal Prairie Ascomycete Fungi”
Co-Authors: Fernando Andrade, Jesus Barron
UHD Faculty Mentor: Dr. Phil Lyons
Project Location: University of Houston-Downtown

69 - Lisa Matsell and Alberto Urbina, “Thermal Expansion and Compressive Strengths of Granite Rocks as Nuclear Waste Depository”
Co-Authors: Rogelio Camacho, Dr. Krystof Verner, Dr. Jorge Tito-Izquierdo
UHD Faculty Mentor: Dr. Janusz Grebowicz
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Yoon-Sha Chan
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Claude Rubinson
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Robin Jose
Project Location: University of Houston-Downtown

77 - Hakeem Ogunkoya, “Brachyrybe Leconttii Research”
Co-Author: Harrison Kraft
UHD Faculty Mentor: Dr. Barry Sullender
Project Location: University of Houston-Downtown

79 - Stephanie Oliver, Anthea Pasuelo Ramirez, “Mathematical Analysis of Discrete-Time Plant Propagation Models”
Co-Authors: Sara Wilder, Wei Yang Wang, Julie Nash
UHD Faculty Mentor: Dr. Jeong-Mi Yoon
Project Location: University of Houston-Downtown

81 - Shaneela Omar, “Interaction Between Arabidopsis Ca 2++/H+ Exchangers Caxi and Cax3”
UHD Faculty Mentors: Drs. Kendall Hirschi and Deborah Murray
Project Location: Baylor College of Medicine

83 - Owen Pate, Juan Castillo, “Properties of Lightweight Concrete”
UHD Faculty Mentor: Dr. Jorge A Tito
Project Location: University of Houston-Downtown

85 - Gerardo Rangel, Miguel Reynoso, Thomas Rodriguez, “Race, Crime and Homelessness: Demographic and Social Psychological Perspectives on the Homeless Population Around the UHD Area”
UHD Faculty Mentor: Dr. Judith Harris
Project Location: University of Houston-Downtown

87 - Mariel Richter, “Migmatization of Amphibolites on Pollock Mountain, Blue Mountains Province, Western Idaho”
Co-Authors: Melanie Barnes, Geological Sciences, Texas Tech University
UHD Faculty Mentor: Dr. Ken Johnson
Project Location: University of Houston-Downtown; Pollock Mountain, Blue Mountains, Western Idaho

89 - Lassan Samarakoon, “Comparison of Species Diversity In Coastal Prairie Soils”
UHD Faculty Mentor: Dr. Phil Lyons
Project Location: University of Houston-Downtown

91 - Mayra Sanchez and Kimberly Walker, “Mathematical Modeling of Pseudomonas aeruginosa Biofilm Growth”
UHD Faculty Mentors: Drs. Yoon-Sha Chan and Pooman Gulati
Project Location: University of Houston-Downtown

93 - Israel Sierra, “Determination of Sulfur-Containing Compounds by Carbon Based Electrodes Incorporated with Oxides”
Co-Authors: Jimmy Ngo (UHD), Jun Le (Rice)
UHD Faculty Mentor: Dr. Mian Jiang
Project Location: University of Houston-Downtown/Rice

95 - Francisca Torres, “Diversity in Deservingness: Feelings of Entitlement in College Students”
UHD Faculty Mentor: Dr. Kristen Anderson
Project Location: University of Houston-Downtown

97 - Claudia Valeria Turcios, Dayna Joella Spencer, “Syntheses and Characterization of Novel Optically Active Polymers”
UHD Faculty Mentor: Dr. Robin Jose
Project Location: University of Houston-Downtown
UHD Faculty Mentor: Dr. Richard Heard
Project Location: University, TX

101 - Sara Wilder, Julie Nash, Wei Yang Wang, “Population Dynamics of Glassy-Winged Sharpshooter in Texas Vineyards”
UHD Faculty Mentors: Drs. Jeong-Mi Yoon, Volodymyr Hryniv, Lisa Morano
Project Location: University of Houston-Downtown

**Poster Presentation Session II (2:30PM-3:30PM):**

2 - Nadia Abousouei, Rebecca Barbosa, Jacob Odong, “UV-Polymerizable Composites Containing Functionalized Carbon Nanotubes”
UHD Faculty Mentor: Dr. Byron Christmas
Project Location: University of Houston-Downtown

4 - Miriam Amah and Fatoumata Diallo, “Thermal Properties of Cu(DPA)(dpe)X Complexes”
Co-Author: Dr. S. Massoud
UHD Faculty Mentor: Dr. Janusz Grebowicz
Project Location: University of Houston-Downtown

6 - David Amos, “The Huckel π-energy of Cycles: A Graph Theoretic Approach”
UHD Faculty Mentor: Dr. Ermelinda Delavina
Project Location: University of Houston-Downtown

8 - Lilian Antunes, “Genome-Wide Assessment of Short Insertion and Deletion Variation in African-Americans”
UHD Faculty Mentor: Dr. Eric Boerwinkle
Project Location: University of Texas Health Science Center at Houston

10 - Edgar Aquino, Cory Ali, Hian Rojas, “Analysis of Diatoms and Arcellacean Death Assemblages to Determine Inclusion or Exclusion of Rare event Data in Comparison with Various Missing Data Analyses Techniques”
UHD Faculty Mentor: Drs. Ronald Barnes and Bradley Hoge
Project Location: University of Houston-Downtown

12 - Midar Balimuthajjo, An-Nisa Miller, and Janny Phung, “NSF Sponsored Research Program in Atmospheric Science: Houston Ozone Studies”
UHD Faculty Mentors: Drs. Penny Morris-Smith and Donald Musselwhite
Project Location: University of Houston-Downtown

14 - Susannah Bannom, “Transitional Objects and Symbolism: a Rhetorical Analysis of a Nobel Acceptance Speech”
UHD Faculty Mentor: Dr. Diana I. Bowen
Project Location: University of Houston-Downtown

16 - Stanislav Barskov, “A Novel Application of Fluorescence Based on Rhodamine B”
Co-Author: Rodney Lubowa
UHD Faculty Mentor: Dr. Mian Jiang
Project Location: University of Houston-Downtown

18 - Gloria Bello, “The Blackboard Learn Interface: A Usability Test”
UHD Faculty Mentor: Dr. Aimee Roundtree
Project Location: University of Houston-Downtown

20 - Rachel Bentley, Bethany Cruz, Michaela Glander, “Ethnic Differences-in Social Context and Alcohol-related Consequences”
Co-Author: Kelsey Passero
UHD Faculty Mentor: Dr. Cindy Stewart
Project Location: University of Houston-Downtown

22 - Debbie Bush, “Exploring the Use of Microsatellites Isolated from a Congener to the North American Millipede Brachycybe lecontii”
Co-Authors: Dalia Justo, Harrison Kraft, Nigar Safarova
UHD Faculty Mentor: Dr. Barry Sullender
Project Location: University of Houston-Downtown

24 - Rogelio Camacho, Yesenia Salazar, “Thermal Properties of Gypsum”
UHD Faculty Mentor: Dr. Janusz Grebowicz
Project Location: University of Houston-Downtown

26 - Estela Castillo, “Why do Women Fail to Regulate their Eating?”
UHD Faculty Location: University of Houston-Downtown

28 - Kaleigh Ceaser, “The Poetry Wizard”
Co-Author: Tony Le, Denise Montez
UHD Faculty Mentor: Dr. Hong Lin
Project Location: University of Houston-Downtown

30 - Pi-Chung Chang, Tuong Doan, Santa Vasquez, “Design and Economic Analysis of Distillation Processes”
UHD Faculty Mentor: Dr. Vassilios Tzouanas
Project Location: University of Houston-Downtown

Co-Authors: Esly Rivera, Roberto Manzano, Zaida Tinoco, Brian Holtkamp
UHD Faculty Mentor: Mitsue Nakamura
Project Location: University of Houston-Downtown

34 - Jamee Cox, “Visual Manipulation: How the Manipulation of Photographs were Used to Shape the image of Barack Obama”
UHD Faculty Mentor: Dr. Aimee Roundtree
Project Location: University of Houston-Downtown

36 - Randy Davila, “Synthesis and characterization of Novel Cataionic Amphiphiles”
Co-Author: Dr. Pradip K. Bhowmik
UHD Faculty Mentor: Dr. Janusz Grebowicz
Project Location: University of Houston-Downtown

38 - James A. Diaz, Crystal Nehs, Sandra Mata, “Evaluation of In-Group Bias Across Gender and Race Using a Flicker Paradigm”
Co-Author: Natalie Salazar
UHD Faculty Mentors: Drs. Ruth Johnson and Mary Portillo
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Vassilios Tzouanas
Project Location: University of Houston-Downtown

42 - Darlen Galicia, Fersen Leiva, Maria Preza, “Schizophrenia”
Co-Authors: Jesse Morka, Michey Kehl, Eber Quiroga, Alex Weston
UHD Faculty Mentor: Mitsue Nakamura
Project Location: University of Houston-Downtown

44 - Kul Raj Gaudel, Reyna Valdez, “Screening Isoform Specific PDE4B Inhibitors Using Fluorescence Assay”
UHD Faculty Mentor: Dr. Rachna Sadana
Project Location: University of Houston-Downtown

46 - Maxwell Goedjen, Brian Holtkamp, “OS Applications: Pathfinding and Wireless Remote”
UHD Faculty Mentor: Dr. Ongard Sirisaengtaksin
Project Location: University of Houston-Downtown

48 - Bonnie Guinn and Antonio Moreno, “Tracing Soil Geochemistry from the Soil to the Xylem Sap to Fruit and Wine”
UHD Faculty Mentors: Drs. Ken Johnson and Lisa Morano
Project Location: University of Houston-Downtown

50 - Kacey Hart, Sydnye McCraw, Annalisa Pablo, “Goals and Motivation: The Roles of Affect, Optimism, and Challenge Perceptions”
Co-Author: Hee Jin Kang (UHD)
UHD Faculty Mentor: Dr. Melissa Raymundo
Project Location: University of Houston-Downtown

52 - Shahrazad Houshmand, Maisha Margin, Amanda Parrish, “Gender Differences in the Social Context of Drinking and Alcohol Consumption Levels.”
Co-Author: Laquinta Milson
UHD Faculty Mentor: Dr. Cindy Stewart
Project Location: University of Houston-Downtown

54 - Janet Kasper, Lynn Hajdik, “Self-Awareness in Supervision”
UHD Faculty Mentor: Dr. Jo Daugherty Bailey
Project Location: University of Houston-Downtown

56 - Heather Kfoure, “A Rhetorical Analysis of Corporate Christmas Cards”
UHD Faculty Mentor: Dr. Aimee Roundtree
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. John Linantud
Project Location: University of Houston-Downtown
Co-Author: Argelia Alegre, Ashlyn Carr, Mari Corona, Roberto Montoya, Doris Munguia, Vivian Vy
UHD Faculty Mentor: Dr. Linda Bressler
Project Location: University of Houston-Downtown

62 - Carissa Larson, Kelsey Bogaards, Christina Zhratka, “The Embodied Effects of High Heels”
UHD Faculty Mentor: Dr. Travis Crone
Project Location: University of Houston-Downtown

64 - Erasmus Lawrian, Trieu Phung, “Design and Control of a Twin Tank Water Process”
UHD Faculty Mentor: Dr. Vassilios Tzouanas
Project Location: University of Houston-Downtown

66 - Aimee Lewis, “Schandenfreude: Downgrading Others to Upgrade the Self in response to Evaluation Threat”
UHD Faculty Mentor: Dr. Travis Crone
Project Location: University of Houston-Downtown

68 - Lisa Matsell, “Garnet Hornblendite Blocks in Serpentinite - Matrix Melange in the Blue Mountains Province, NE Oregon”
Co-Author: Dr. Joshua J. Schwartz (CSU Northridge) Maniel Richter (UHD), Josephy Wooden (Stanford)
UHD Faculty Mentor: Dr. Ken Johnson
Project Location: University of Houston-Downtown

70 - Elizabeth Mellado, Tiffany Zachreson, “The Influence of Media on Body Dissatisfaction and Eating Attitudes and Behaviors of Minority Women”
UHD Faculty Mentor: Dr. Melissa Raymundo
Project Location: University of Houston-Downtown

72 - Mark Mireles, Sudeep Westi, “A PC-Based Multifunction Instrument”
UHD Faculty Mentor: Dr. Weining Feng
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Mian Jiang
Project Location: University of Houston-Downtown

76 - Elnaz Nouri, “Memories of Past Experienced Infidelity”
UHD Faculty Mentor: Dr. Travis Crone
Project Location: University of Houston-Downtown

78 - Matthew Ojeda, Deepak Pandey, “Gene Expression Studies of Xylella Fastidiosa: Optimization of Growth and Culture Preparation For RNA Isolation”
UHD Faculty Mentor: Dr. Lisa Morano
Project Location: University of Houston-Downtown

80 - Stephanie Oliver, “A Study on Lower Bounds of the 2-Independence Number of Bipartite Graphs”
UHD Faculty Mentor: Dr. Ermelinda Delavina
Project Location: University of Houston-Downtown

82 - Manuel Palma, Byron Jackson, “A Program for Brain State Analysis using Electroencephalographic Data”
Co-Author: Johnathan Kuskos
UHD Faculty Mentor: Dr. Hong Lin
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Aimee Roundtree
Project Location: University of Houston-Downtown

86 - Abdullah Rashheed, “Android Permissions”
UHD Faculty Mentor: Dr. Ali Berrached
Project Location: University of Houston-Downtown

88 - Albert Rintrona, III, “Positively Speaking: Psychological Science’s Application to Rhetorical Praxis”
UHD Faculty Mentor: Dr. Derek De La Pena
Project Location: University of Houston-Downtown

90 - Alicia Y. San Miguel, Junely Miranda, Jennifer Lopez, “Memory for What, Where, and When in Everyday Situations”
UHD Faculty Mentors: Drs. Stephanie Babb and Ruth Johnson
Project Location: University of Houston-Downtown

92 - Nely Sanchez, Monica Martinez, “My Child, My Way: The Relationship between Ethnicity and Parenting”
UHD Faculty Mentor: Dr. Susan M. Henney
Project Location: University of Houston-Downtown

94 - Israel Sierra, “Thermophysical Property Analysis of Kerogen Extracted from Oil Shale”
Co-Author: Dr. Janusz Grebowicz
UHD Faculty Mentor: Dr. Michael Matson
Project Location: University of Houston-Downtown

96 - Tuan Tran, “Powder X-ray Diffraction Analysis of Novel, Liquid Crystalline Catanionic Surfactants”
Co-Autor: Randy Davila, Dr. Robin Jose
UHD Faculty Mentor: Dr. Michael Matson
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Aimee Roundtree
Project Location: University of Houston-Downtown

100 - Christopher Webb, “From Superman to Guessing Man”
UHD Faculty Mentor: Dr. Aimee Roundtree
Project Location: University of Houston-Downtown
Acknowledgements

It is a great pleasure to recognize the many individuals, organizations, and institutions supporting our UHD students in their research endeavors. These include significant funding of research over the past year from the National Institute of General Medical Sciences (1T34GM079088), National Science Foundation UBM Program (0734294), National Science Foundation S-STEM Program (0728408), The Brown Foundation, Inc., Welch Foundation (BJ-0027), NASA, Shell Oil Co. and University of Houston-Downtown.

Many students conducted their research during summer research programs on and off-campus. Faculty and staff members of these and other academic institutions, as well as personnel at industrial facilities, have generously supported/mentored our UHD students.

In addition, we would like to thank the UHD faculty and staff who have worked tirelessly to support undergraduate research experiences as well as the UHD staff, faculty and administrators who have helped make this conference a success.

Thank you for participating in the 11th Annual UHD Student Research Conference!

Please share your impressions of the event by completing a conference evaluation.

Thanks to the generous supporters of this student conference:

The Brown Foundation, Inc.
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National Science Foundation (Award No. 0728408)
UHD College of Business
UHD College of Humanities and Social Sciences
UHD College of Public Service
UHD College of Sciences & Technology
UHD President’s Office
UHD Scholars Academy
Mesias Pedroza received his Bachelor of Science in Biotechnology from UH-Downtown in 2007 and his Ph.D. in Biochemistry from the University of Texas at Houston Health Science Center in 2011. As an undergraduate, he participated in research at UHD and also at the University of Texas Medical Branch. Dr. Pedroza is currently a Post-Doc at Baylor College of Medicine.

Presentation Title: “The State of Research in America: The Scientist's Unique Role and What We Wish to Become in this Unsettling World”

Abstract

When people in the U.S. are asked in various surveys, whom they respect the most among various professionals, Scientists rank near the top. Not only that, the American people understand how research is linked to their health and well-being. Latest polls revealed how most Americans say it is important for the U.S. to be a global leader in health research, yet a majority think we are losing our competitive edge in Science, Technology, and Innovation. Also, 84% of Americans say it is important for the U.S. to work to improve health globally through research and development. More than 50% say investing in health research is important to job creation and economic recovery. Not only that, but most Americans say the amount we invest in medical and health research – 5 ½ cents of each health dollar – is not enough. However, health research spending in the U.S. increased slightly but is essentially stagnant when compared to measures of inflation. In contrast, countries around the world are continuing to rapidly scale up investments in research and development. Hence, scientific research and technological innovation competence is emerging in new parts of the world with unsettling implications for national economies and employment patterns for scientists and engineers. It may be more important now than ever before for scientists to keep the doors of their laboratories open to political, economic, social, and ideological currents in order to participate and leverage the outcome of attitudes that threaten the future of science in this country. The role of the scientist as an isolated explorer of the uncharted world of tomorrow must be reconciled with his role as a committed, responsible citizen of the unsettled world of the present.

For more conference information, visit www.uhd.edu/scholars/src.html.