**14th ANNUAL**
**UHD STUDENT RESEARCH CONFERENCE**

Sponsored by the UHD Scholars Academy
Funded by the
National Science Foundation (0934913),
U.S. Department of Education (P120A130040),
U.S. Nuclear Regulatory Commission (NRC-27-10-1121),
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 10, 2015

### Conference Co-Chairs:
Dr. Weineng Feng, Associate Professor of Engineering Technology, UHD  
Dr. Chynette Nealy, Associate Professor of Management, Marketing & Business Administration, UHD

### Conference Planning Committee:
Dr. Maria Bhattacharjee, Associate Professor of Urban Education, UHD  
Dr. David Branham, Associate Professor of Social Sciences, UHD  
Dr. Irene Chen, Professor of Urban Education, UHD  
Mr. Rene Garcia, Program Manager, UHD Scholars Academy  
Dr. Kenneth Johnson, Associate Professor of Geology, UHD  
Dr. Matthew Johnson, Assistant Professor of Criminal Justice, UHD  
Dr. Ruth Johnson, Associate Professor of Social Sciences, UHD  
Dr. Hong Lin, Professor of Computer Science, UHD  
Dr. Michelle Moosally, Chair of English Department, UHD  
Dr. Lisa Morano, Chair of Natural Sciences Department, UHD  
Dr. Mary Jo Parker, Director, Scholars Academy  
Dr. Lucille Pointer, Chair of Management, Marketing & Business Administration, UHD  
Dr. Gene Preuss, Associate Professor of History, UHD  
Dr. Edwin Tecarro, Associate Professor of Mathematics, UHD  
Dr. Akif Uzman, Dean, UHD College of Sciences and Technology

### Oral and Poster Presentations:

#### 19 - Shebna Cheema, “Dysregulation of Dopamine Handling in Dopaminergic Neurons of Drosophila Parkinson’s Disease Models”
Co-Authors: Antonio Tito1,2, Zhen Xu2, Yanning Rui1, Zhihua Chen1, Kira Wegner4, Zoe Tao4, Wen-Ting Li4, Mian Jiang3, Hugo Bellen6,7, and Sheng Zhang1,2.  
1 Institute of Molecular Medicine, University of Texas Health Science Center Houston, 2Graduate School of Biomedical Sciences, 3University of Houston-Downtown, 4Rice University, 5UT Houston Medical School, 6Baylor College of Medicine, 7Howard Hughes Medical Institute  
Project Sponsor: Brown Foundation, Inc.  
UHD Faculty Mentor: Dr. Mian Jiang

#### 34 - Jonathan Rafael Garza, Sishir Subedi, Yuntian Zhang, “A System for Capturing and Processing EEG Data”
Co-Authors: Minghao Yang, Robert Jackson, Eloy Perez, Israel Cervantes  
UHD Faculty Mentors: Drs. Yunwei Cui and Hong Lin  
Project Sponsor: National Science Foundation  
Project Location: University of Houston-Downtown

#### 89 - Tuan Hoang, “Theory and Practice in Motion”
Co-Authors: Vu Hong, Anjunee Armstrong, and CJ Senior Seminar Students of Fall 2014  
UHD Faculty Mentor: Dr. Judith Harris  
Project Location: University of Houston-Downtown
46 - Danil Karasev and Xavier Mendez, “Application of Image Processing Analysis in Concrete Strain Measurements”
UHD Faculty Mentor: Dr. Arash Rahmatian
Project Sponsor: U.S. Department of Defense
Project Location: University of Houston-Downtown

Co-Authors: Henderson Jones, Benjamin Pilgrim
UHD Faculty Mentor: Dr. Raehna Sadana
Project Location: University of Houston-Downtown

51 - Geraldine Lerner, “Investigation of the Mechanism of Action of Saffron Extracts on Streptococcus mutans Biofilms”
Co-Authors: Shima Taghikhani, Irin Girgis
UHD Faculty Mentor: Dr. Poonam Gulati
Project Sponsor: UHD ORCA
Project Location: University of Houston-Downtown

5 - Randranic Arceneaux, Jean-Marie Schweizer, Yash Voltaire, “Workplace Incivility: Does Ethnicity Matter?”
UHD Faculty Mentor: Dr. Susan Henney
Project Location: University of Houston-Downtown

74 - Evelyn Valdez, “Comparison of hydraulic design between an evergreen and a deciduous chaparral shrub”
Co-Authors: Tien Dong1, Sergiy Koskhi1, R. Brandon Pratt2, Anna L. Jacobsen2, Evan D. MacKinnon2. (1)University of Houston-Downtown, (2)California State University Bakersfield
UHD Faculty Mentor: Dr. Michael Tobin
Project Sponsors: Brown Foundation, Inc. and National Science Foundation
Project Location: University of Houston-Downtown, California State University Bakersfield

Poster Presentation Session I (1:30PM-2:45PM):

1 - Bina Ahmed and Alice Solomon, “Growth Patterns of Bacteria in Single- and Multi-species Biofilms”
UHD Faculty Mentor: Dr. Poonam Gulati
Project Sponsor: UHD High Impact Practices
Project Location: University of Houston-Downtown

3 - La’Chelle Andrews, Lesley Colonia, Stephanie Garcia, “Pet Closeness and Romantic Relationships”
UHD Faculty Mentor: Dr. Kristen Capuozzo
Project Location: University of Houston-Downtown

5 - Randranic Arceneaux, Jean-Marie Schweizer, Yash Voltaire, “Workplace Incivility: Does Ethnicity Matter?”
UHD Faculty Mentor: Dr. Susan Henney
Project Location: University of Houston-Downtown

7 - Asma Aziz and Ryan Horton, “Plastic Degradation by Marine Microbes”
Co-Author: Erika Flores
UHD Faculty Mentor: Dr. Poonam Gulati
Project Sponsor: UHD High Impact Practices
Project Location: University of Houston-Downtown

9 - Oluwatolani Balogun, “Computational Investigation of Imidazolium-based Ionic Liquid Crystals Bearing a Cholesteryl Mesogenic Group”
UHD Faculty Mentor: Dr. Maria Benavides
Project Sponsors: U.S. Nuclear Regulatory Commission and Welch Foundation
Project Location: University of Houston-Downtown

11 - Mahesh Basyal, “Computational Studies of Gadolinium (III)-Based Ligands Used in Diagnostic Medical Imaging”
UHD Faculty Mentor: Dr. Maria Benavides
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Susan Henney
Project Location: University of Houston-Downtown

15 - Huy Bui and Quincy Henderson, “Characterization of Alcohol Sensitivity and Rapid Tolerance using a LOR Paradigm”
Co-Author: Gregg Roman, University of Houston
UHD Faculty Mentor: Dr. Yuanyuan Kang
Project Location: University of Houston-Downtown

16 - Asma Aziz and Ryan Horton, “Pet Closeness and Romantic Relationships”
UHD Faculty Mentor: Dr. Susan Henney
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Ruth Robbins
Project Location: University of Houston-Downtown

19 - Shena Cheema, “Dysregulation of Dopamine Handling in Dopaminergic Neurons of Drosophila Parkinson’s Disease Models”
Co-Authors: Antonio Titolo1,2, Zhen Xu1, Yanning Rui1, Zhihua Chen1, Kira Wegner4, Zoe Tao4, Wen-Ting Liu4, Mian Jiang3, Hugo Bellen6,7, and Sheng Zhang1,2. 1Institute of Molecular Medicine, University of Texas Health Science Center Houston, 2Graduate School of Biomedical Sciences, 3University of Houston-Downtown, 4Rice University, 5UT Houston Medical School, 6Baylor College of Medicine, 7Howard Hughes Medical Institute
UHD Faculty Mentor: Dr. Mian Jiang
Project Location: University of Texas Health Science Center Houston

21 - Marianna Cortes, “Development of an Ultraviolet Polymerizable Coating Using Boron Isotopes”
UHD Faculty Mentor: Dr. Byron Christmas
Project Location: University of Houston-Downtown

23 - Prisilia Cruz, “Monitoring and Classifying the Diatoms in the Trinity River’s Swamp”
UHD Faculty Mentor: Dr. Brad Hoge
Project Sponsor: U.S. Department of Education
Project Location: University of Houston-Downtown

25 - Rajni Dhadral and Linus Klingler, “Fungi in the World of Cancer”
Co-Authors: Lea Means, Viktor Hanov, Reyna Valdez, Jowar Henandez, Victor Akhanov
UHD Faculty Mentors: Drs. Philip Lyons and Raehna Sadana
Project Location: University of Houston-Downtown

26 - Ngan Do and Steve Leon, “Workout Coupling: Study The Influence Of One’s Workout On The Others”
UHD Faculty Mentor: Dr. Dvijesh Shastri
Project Sponsor: National Science Foundation
Project Location: University of Houston-Downtown

27 - LuCrezia Dorsey, Deepa Motwani, Muntaha Saleem, “Stepping Up Our Game”
Co-Authors: Students from Business Communications 3350
UHD Faculty Mentor: Dr. Chynette Nealy
Project Location: University of Houston-Downtown

29 - Hassan El-Mehaalwi, “Visualization of the Electric Field”
UHD Faculty Mentor: Dr. Larry Sterna
Project Location: University of Houston-Downtown

31 - Anthony Galvan, Karina Torres, Leticia Villalobos, “Is It Possible To Slowing Down The Aging Process and The Diseases Associated With It?”
Co-Authors: Juangerardo Parra, Luis Gomez, Russell Williams, Crystal Lujan, Obioma McReynolds
UHD Faculty Mentor: Ms. Mitsue Nakamura
Project Sponsors: Brown Foundation, Inc. and U.S. Department of Education
Project Location: University of Houston-Downtown

33 - Eduardo Garza, “Does Psychopathy Predict IQ?”
UHD Faculty Mentor: Dr. Katrina Ruffino
Project Location: University of Houston-Downtown

35 - Irin Girgis and Sandy Gramajo, “Investigating the Role of Streptococcus salivarius in Oral Health”
UHD Faculty Mentor: Dr. Poonam Gulati
Project Sponsor: UHD ORCA
Project Location: University of Houston-Downtown

37 - Annabella Gutierrez, “The History of the Plain English Movement in the U.S.”
UHD Faculty Mentor: Dr. Natalia Matveeva
Project Location: University of Houston-Downtown

39 - Charles Hayes and Matthew McCann, “Statecraft: Realpolitik and the Competitive Spirit”
UHD Faculty Mentor: Dr. John Linantud
Project Location: University of Houston-Downtown
41 - Amairani Hernandez Garcia, Crystal Llanas, German Villalobos, “String Vibrations in Oil Industry”
UHD Faculty Mentor: Dr. Katarina Jeglic
Project Location: University of Houston-Downtown

43 - Keonna Hines Kese, Andrea Kirkpatrick, TaShiqua Loston, “Examining biases in facial processing: Do “they” really all look alike?”
UHD Faculty Mentor: Dr. Ruth Johnson
Project Location: University of Houston-Downtown

45 - Sheetara Johnson and Itam Otu, “Is Correcting a Child the Community’s Business? The Concept of Non-Parental Discipline”
UHD Faculty Mentor: Dr. Susan Henney
Project Location: University of Houston-Downtown

47 - Namrata Kayastha, “Understanding Role of Meditation in Human Performance”
Co-Authors: Israel Cervantes, Raúl Rios, Edgar Ramirez
UHD Faculty Mentor: Dr. Dviresh Shastri
Project Location: University of Houston-Downtown

Co-Authors: Henderson Jones, Benjamin Pilgrim
UHD Faculty Mentor: Dr. Rachna Sadana
Project Location: University of Houston-Downtown

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Co-Authors: Shima Taghikhani, Irin Gigris
UHD Faculty Mentor: Dr. Poonam Gulati
Project Sponsors: UHD ORCA
Project Location: University of Houston-Downtown

53 - Glenda Mateos, Garrett Arnold, Daniel Robledo, “Diversity and Geographic Distribution of Truffles in Texas”
Co-Autho: Juan Olives
UHD Faculty Mentor: Dr. Phil Lyons
Project Location: University of Houston-Downtown

55 - Carlos Montes, “Distance Measurement with Ultrasonic Technology”
UHD Faculty Mentor: Dr. Weining Feng
Project Sponsors: Brown Foundation, Inc. and U.S. Department of Education
Project Location: University of Houston-Downtown

57 - Niikky Nguyen, Joesheena Rempis, Lamar Woods, “Enter the Jaeger: Mind-Control of Technology”
Co-Authors: David Alquicira, Gabriella Hines, Henry Zhang
UHD Faculty Mentor: Ms. Mitsue Nakamura
Project Sponsors: Brown Foundation, Inc. and U.S. Department of Education
Project Location: University of Houston-Downtown

59 - Zachary Olson, Bina Ahmed, Daniel Robledo, Chelsi Kaspereit, Merlin Herrera, Jeneice Julius, Jessie Smith, Vivita Sedai, Sean Contreras, Ashley Batiste, Tyrone Minor, Melvin Onyia, Csilla Buday, Ximena Romero, “Screening Thirty Synthetic Compounds Identified Four as Potential Anti-cancer Agents”
UHD Faculty Mentor: Dr. Rachna Sadana
Project Location: University of Houston-Downtown

61 - Sarah Patterson, “Country Report: Mexico”
UHD Faculty Mentor: Dr. John Linantud
Project Location: University of Houston-Downtown

63 - Lucero Priego-Pineda, Patrick Tavechaa, Bri Wooten, “Is a Robocop Suit Possible?”
Co-Authors: Momena Shah, Crystal Torres, Parsa Ebrahimzadeh, Taylor Locklear, Dougles Syzdek
UHD Faculty Mentor: Ms. Mitsue Nakamura
Project Sponsors: Brown Foundation, Inc. and U.S. Department of Education
Project Location: University of Houston-Downtown

65 - Travis Riley and Caroline Smith, “Investigating Death Penalty Juror Variables”
UHD Faculty Mentor: Dr. Kristen Capuozzo
Project Location: University of Houston-Downtown

67 - Vivita Sedai, “Diatoms Comparison at the Trinity River Reservoir and Fort Anahuac Marsh”
UHD Faculty Mentor: Dr. Brad Hoge
Project Sponsors: Brown Foundation, Inc. and U.S. Department of Education
Project Location: University of Houston-Downtown

69 - Ahmed Shahab, “Quantum Mechanical Studies of New Ferrocene Containing Ionic Liquids”
UHD Faculty Mentor: Dr. Maria Benavides
Project Location: University of Houston-Downtown

71 - Jessiie Smith and Irma Zia, “Comparative Minimum Leaf Conductance in Ancestral and Modern Wheat Varieties”
UHD Faculty Mentor: Dr. Michael Tobin
Project Sponsor: U.S. Department of Agriculture
Project Location: University of Houston-Downtown

73 - Alisa Turchaninova, “Analyzing Human Activity Patterns via a Mobile App”
Co-Authors: Ashik Khatri, Ilyas Vyanik, Ioannis Pavlidis, Computer Sciences, University of Houston
Project Location: University of Houston

75 - Reyna Valdez, “Analysis of Grape Cultivars for Pierce’s Disease Resistance with a Xylella-specific QRT PCR Probe”
Co-Authors: Csilla Buday, Amanda Markham
UHD Faculty Mentor: Dr. Lisa Morano
Project Location: University of Houston-Downtown

77 - Saima Valliani and Sara Valliani, “Using SSR Fingerprinting to Evaluate Genetic Diversity of Xylella fastidiosa in Texas”
UHD Faculty Mentor: Dr. Lisa Morano
Project Location: University of Houston-Downtown

79 - Sheeda Han Ngoc Vo, “The Application of Nickel Hexacyanoferration Film in Amino Acids Detection”
UHD Faculty Mentor: Dr. Mian Jiang
Project Location: University of Houston-Downtown

81 - DaNae Woodard, “Evolution of Enzyme Functions in Amycolatopsis NSAR/OSBS”
Co-Authors: Andy McMillan, Denis Odokonyero, Mahana Lopez
UHD Faculty Mentor: Dr. Margaret Glasner
Project Location: Texas A&M University

Co-Authors: Francisco Colon, Katherine Freeman, Leah Mulkey
UHD Faculty Mentor: Dr. Brad Hoge
Project Sponsors: National Oceanic and Atmospheric Administration and National Science Foundation
Project Location: University of Houston-Downtown

Project Location: University of Houston-Downtown

Service Learning Projects
Poster Presentation Session (1:30PM-2:45PM):

85 - Asma Aziz and Evelyn Valdez, “Service Learning Project – Creating Childhood Vaccines Brochures”
Co-Authors: Monique Fountain, Mecian Nelom, David Flores, Arturo Tomoch
UHD Faculty Mentor: Dr. Poonam Gulati
Project Sponsor: Texas State Representative Sylvester Turner
Project Location: University of Houston-Downtown

87 - Ryan Cherian, Michelle Graczyk, Jeneice Julius, “Service Learning Project – Science Corner”
Co-Authors: Raven Houston, Semira Teheri, Mary Truong, Ted Uotani, Danial Khan, Christa Landowski, Andrew Phan
UHD Faculty Mentor: Dr. Poonam Gulati
Project Sponsor: Texas State Representative Sylvester Turner
Project Location: University of Houston-Downtown

89 - Tuan Hoang, “Theory and Practice in Motion”
Co-Authors: Vi Hong, Aujanee Armstrong, and CJ Senior Seminar Students of Fall 2014
UHD Faculty Mentor: Dr. Judith Harris
Project Location: University of Houston-Downtown
91 - Robert Jackson, “Service Learning Project – Boys and Girls Club”
UHD Faculty Mentor: Dr. Mary Jo Parker
Project Sponsor: U.S. Department of Education
Project Location: University of Houston-Downtown

22 - Charles Crouch and Rafo Linan, “Ozone Trends in the Houston Metropolitan Area”
UHD Faculty Mentor: Drs. Penny Morris-Smith and Donald Musselwhite
Project Location: University of Houston-Downtown

93 - Haneen Mohammed, Vicente Rodriguez, Saima Valliani, “Developing STEM at Hartman and Clifton Middle Schools”
Co-Authors: LiFan Chen, Lisa Martinez, Ana Zertuche
UHD Faculty Mentor: Dr. Mary Jo Parker
Project Sponsor: U.S. Department of Education
Project Location: University of Houston-Downtown

14 – HuyBui, “2D-(q,h)-Bernstein Polynomials and 2D-(q,h)-Bèzier Surfaces”
UHD Faculty Mentor: Dr. Plamen Simeonov
Project Sponsor: U.S. Department of Education
Project Location: University of Houston-Downtown

28 - Talia Dutra, Rashod Moten, Olufunmilola Subalude, “Why Aren’t we all Feminists? Women’s and Men’s Reasons for Identifying as Feminists or Non-Feminists”
UHD Faculty Mentor: Dr. Kristin Anderson
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. Mary Jo Parker
Project Sponsor: U.S. Department of Education
Project Location: University of Houston-Downtown

18 - Erick Chavez, Chelsea Conaway, Nelson Garza, “I think I am Special, Therefore I am Special: Ethnic and Gender Patterns of Entitlement”
UHD Faculty Mentor: Dr. Kristin Anderson
Project Location: University of Houston-Downtown

9 - Yarmilla Reyes, Rudy Santos, Juangerardo Parra, “KIPP Connect Middle School Service Learning Project”
Co-Authors: Irvin Romero, Elizabeth Salas, Obioma McReynolds, Leticia Villalobos, Melissa Cedillos
UHD Faculty Mentor: Ms. Mitsue Nakamura
Project Sponsor: U.S. Department of Education
Project Location: University of Houston-Downtown

28 - Talia Dutra, Rashod Moten, Olufunmilola Subalude, “Why Aren’t we all Feminists? Women’s and Men’s Reasons for Identifying as Feminists or Non-Feminists”
UHD Faculty Mentor: Dr. Kristin Anderson
Project Location: University of Houston-Downtown

Poster Presentation Session II (2:45PM - 4:00PM):

2 - Doris Amaro and Benjamin Pilgrim, “The Efficacy of Black Seed and Saffron on Inhibiting Breast Cancer Cell Growth”
UHD Faculty Mentor: Drs. Tyra Hessel and Hamida Qavi
Project Sponsor: Texas State Legislature – JAMP
Project Location: University of Houston-Downtown

8 - Ashley Babers and Tiffany Pham, “Phylogeographic Analysis of Geomyos personatus Subspecies in Texas”
UHD Faculty Mentor: Dr. Amy Baird
Project Sponsor: Brown Foundation, Inc.
Project Location: University of Houston-Downtown

6 - Teresita Avila and Lauren Gordon, “How Perceived Self-Efficacy Relates to Goal Perceptions and Affect”
UHD Faculty Mentor: Dr. Melissa Raymund
Project Location: University of Houston-Downtown

10 - Vanessa Barrientos, Sarah Tahmourpour, Kenny Perez, “Does Personality Predict Offense Type?”
UHD Faculty Mentor: Dr. Katrina Rufino
Project Location: University of Houston-Downtown

30 - Maria Frausto, “Generation Of Hybrids Between Two Drosophila Species To Study Exploration Behavior”
Co-Authors: Greg Roman, University of Houston
UHD Faculty Mentor: Dr. Yuanyuan Kang
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. John Linantud
Project Location: University of Houston-Downtown

32 - Kenah Shayne Garcia, “The Efficacy Of Anticancer Components From Turmeric On Breast Cancer Cell Growth In Vitro”
UHD Faculty Mentors: Drs. Tyra Hessel and Hamida Qavi
Project Sponsors: Brown Foundation, Inc. and U.S. Department of Education
Project Location: University of Houston-Downtown

34 - Jonathan Rafael Garza, Sishir Subedi, Yuntian Zhang, “A System for Capturing and Processing EEG Data”
Co-Authors: Minghao Yang, Robert Jackson, Eloy Perez, Israel Cervantes
UHD Faculty Mentors: Drs. Yunwei Cui and Hong Lin
Project Sponsor: National Science Foundation
Project Location: University of Houston-Downtown

36 - Jose M. Gonzalez, Fernando Rodarte, Valerie Figueroa, “Is the Creation of an Avatar Possible?”
Co-Authors: Melissa Cedillos, Alex Coleman, Julio Enriquez, Elizabeth Salas, Rafael Trevino
UHD Faculty Mentor: Ms. Mitsue Nakamura
Project Sponsor: Brown Foundation, Inc. and U.S. Department of Education
Project Location: University of Houston-Downtown

40 - Yvette Hayes, “Quarterly Blood Donations: Helping Blood Banks Meet Demand Year Round”
UHD Faculty Mentor: Dr. Elizabeth Hatfield
Project Location: University of Houston-Downtown

42 - Gabriella Hines, “Molecular phylogenetics of Rhinoclemmys: A reassessment of taxonomic status and relationships”
UHD Faculty Mentor: Dr. Amy Baird
Project Sponsor: U.S. Department of Education
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. John Linantud
Project Location: University of Houston-Downtown

46 - Danil Karasev and Xavier Mendez, “Application of Image Processing Analysis in Concrete Strain Measurements”
UHD Faculty Mentor: Dr. Arash Rahmantian
Project Sponsor: U.S. Department of Defense
Project Location: University of Houston-Downtown

48 - Angelle Kelley and Victor Rios, “The Relations Among Dating Violence and Attributions of Blame for Intimate Partner Violence”
UHD Faculty Mentor: Dr. Cindy Stewart
Project Location: University of Houston-Downtown

50 - Guadalupe Lee, “Efficacy Determination of Components from Neem Leaves on Breast Cancer Cell Proliferation in Vitro”
UHD Faculty Mentors: Drs. Tyra Hessel and Hamida Qavi
Project Location: University of Houston-Downtown
52 - Kimberly Louden and Jasmin Murillo, “Victims who Engage in Victim Blame: The Relations among Previous Victimization and Blame Attributions for Intimate Partner Violence”
UHD Faculty Mentor: Dr. Cindy Stewart
Project Location: University of Houston-Downtown

54 - Ayman Mohamed, Juan Salazar, Harry Craig, “Durability and Sustainability of Concrete”
UHD Faculty Mentor: Dr. Arash Rahmantian
Project Location: University of Houston-Downtown

56 - Devalina Nag, “Introverts in Group Discussions: Supported or Squeched?”
UHD Faculty Mentor: Dr. Whitney Morgan
Project Location: University of Houston-Downtown

58 - Jenebu Okwori, “Comparison of Anticancer Efficacy of Components from Saffron Sticks”
UHD Faculty Mentors: Drs. Tyra Hessel and Hamida Qavi
Project Location: University of Houston-Downtown

60 - Valentina Osile, “Efficacy of Black Onion Seeds On Breast Cancer Cells In Vitro”
UHD Faculty Mentor: Drs. Tyra Hessel and Hamida Qavi
Project Location: University of Houston-Downtown

62 - Ivan Perez, “The Disconnection Between Cash and Earnings”
UHD Faculty Mentor: Drs. Prakash Deo and Cathy Liu
Project Location: University of Houston-Downtown

64 - Charles Punnathara, “Electrochemical Study of Prussian Blue in Sensory Chemistry”
UHD Faculty Mentor: Dr. Mian Jiang
Project Location: University of Houston-Downtown

66 - Alesha Rimmelin, “Genetic Diversity of Bowhead Whales (Balaena mysticetus) Based on the Sequences of Three Mitochondrial Genes”
Co-Authors: Christina Q. Tran1, John W. Bickham2, J. Craig George3, Robert Saydam3, 1University of Houston-Downtown, 2Battelle Memorial Institute, 3North Slope Borough
UHD Faculty Mentor: Dr. Amy Baird
Project Location: University of Houston-Downtown

UHD Faculty Mentor: Dr. John Linantud
Project Location: University of Houston-Downtown

Co-Authors: Austin Phuc Nguyen
UHD Faculty Mentor: Dr. Dvijesh Shastri
Project Sponsor: National Science Foundation
Project Location: University of Houston-Downtown

72 - Dominique Torres, “Computational Studies of Transition Metal Complexes of Tetradentate Schiff Base Ligands”
UHD Faculty Mentor: Dr. Maria Benavides
Project Sponsors: U.S. Nuclear Regulatory Commission and Welch Foundation
Project Location: University of Houston-Downtown

74 - Evelyn Valdez, “Comparison of hydraulic design between an evergreen and a deciduous chaparral shrub”
Co-Authors: Tien Dong1, Sergiy Koshkin1, R. Brandon Pratt2, Anna L. Jacobson1, Evan D. MacKinnon2, (1)University of Houston-Downtown, (2)California State University Bakersfield
UHD Faculty Mentor: Dr. Michael Tobin
Project Sponsors: Brown Foundation, Inc. and National Science Foundation
Project Location: University of Houston-Downtown

76 - Reyna Valdez, “Bis(indolyl) ketohydrazide-hydrazones: Identification of Potent and Selective Novel Tubulin Inhibitors”
Co-Authors: Mukund Tantak and Dalip Kumar, Department of Chemistry, Birla Institute of Technology and Science, India
UHD Faculty Mentor: Dr. Rachna Sadana
Project Sponsors: UHD ORCA
Project Location: University of Houston-Downtown

78 - Holly Vernon, “Pauses in Fluent and Semispeakers as a Strategy for Resolving Lexical Gaps”
UHD Faculty Mentor: Dr. Reynaldo Romero
Project Location: University of Houston-Downtown

80 - Daniel Willhem, “Synthesis of liquid crystal compounds with hierarchical architecture”
Co-Authors: Hania Makowska, Iza Krygier, Wydzial Chemiczny Politechnika Lodzka, Lodz, Poland
UHD Faculty Mentor: Dr. Robin Jose
Project Location: University of Houston-Downtown

82 - Richard Wrangpetch, “Comparison if Diatom Diversity in San Jacinto River and Trinity River”
UHD Faculty Mentor: Dr. Brad Hoge
Project Sponsors: National Oceanic and Atmospheric Administration and National Science Foundation
Project Location: University of Houston-Downtown

84 - Ana Zertuche, “An Analysis of the Role and Impact of the Supplemental Instruction Program in Mathematics at the University of Houston-Downtown”
UHD Faculty Mentor: Dr. Timothy Redl
Project Location: University of Houston

86 - Carlos Montes, Rudy Santos, Denisse Velazquez, “Is the Star Trek U.S.S. Enterprise Ship Possible?”
Co-Authors: Yarmilla Reyes, Rosemary John, Jonathan Martin, Irvin Romero
UHD Faculty Mentor: Ms. Mitsue Nakamura
Project Sponsors: Brown Foundation, Inc. and U.S. Department of Education
Project Location: University of Houston-Downtown

Graduate Level Projects
Poster Presentation Session (2:45PM - 4:00PM):

88 - Ihtesama Baig, “Perspectives from the Immigrant Population towards U.S. Financial Institutions”
UHD Faculty Mentors: Drs. Whitney Morgan and Sarah Walker
Project Sponsor: Minorities and Retirement Security Program
Project Location: University of Houston-Downtown

90 - Danielle LaChapelle, “Relation Between Financial Events and Workplace Productivity: An Experienced Sampling Method”
UHD Faculty Mentors: Drs. Whitney Morgan and Sarah Walker
Project Sponsor: Minorities and Retirement Security Program
Project Location: University of Houston-Downtown

92 - Lucha Morales, “Plain Language in Government Communications: Misconceptions, Proven Benefits, and Oversight”
UHD Faculty Mentor: Dr. Natalia Matveeva
Project Location: University of Houston-Downtown

94 - Catherine Sampson, “The use of plain language in the government and businesses: Why is plain language beneficial?”
UHD Faculty Mentor: Dr. Natalia Matveeva
Project Location: University of Houston-Downtown

96 - Sonia Sanchez, “Improving Health Literacy in the U.S.: Writing and Design Strategies for PR Specialists”
UHD Faculty Mentor: Dr. Natalia Matveeva
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 Science Foundation Noyce Program (0934913), U.S. Department of Education MSEIP (P120A130040), U.S. Nuclear Regulatory Commission (NRC-27-10-1121, NRC-HQ-12-G-38-0006), The Brown Foundation, Inc., Welch Foundation (BJ-0027), 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 14th 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:

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UHD College of Business
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