

Sponsored by the UHD Scholars Academy
Funded by the National Science Foundation (0336612), U.S. Army Research Office (W911NF-04-1-0024),
U.S. Department of Education (P120A050068), and UHD.

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 20, 2007

8:30 - 9:30 am	Registration and Continental Breakfast, Coffee House
9:30 am	<i>Dr. Larry Spears, Co-Director, UHD Scholars Academy</i> Welcoming Remarks, Auditorium
9:40 - 10:10 am	<i>Dr. Bryan Williams, Honors Faculty Member</i> <i>Hampton University</i> Keynote Speaker, Auditorium
10:15 - 11:15 am	Oral Presentations, Session I, Auditorium
11:20 - 12:20 pm	Oral Presentations, Session II, Auditorium Introductions by <i>Dr. Vicky Estrera, Director, UHD Scholars Academy and Lecturer in Biology</i>
12:20 - 1:30 pm	Lunch break
1:30 - 3:30 pm	Open Poster Sessions, Room A300

Conference Co-Chairs:

Mr. Rene Garcia, Program Manager, UHD Scholars Academy
Dr. Akif Uzman, Chair of Natural Sciences Department, UHD

Conference Planning Committee:

Dr. Richard Alo, Executive Director, UHD Center for Computational Science, Professor of Mathematics
Dr. Ermelinda DeLaVina, Associate Professor of Mathematics, UHD
Dr. Vicky Estrera, Director, UHD Scholars Academy
Dr. Weining Feng, Associate Professor of Engineering Technology, UHD
Dr. Kenneth Johnson, Visiting Assistant Professor of Geology, UHD
Dr. Madeline Johnson, Professor of Marketing, UHD
Dr. Marilyn McShane, Professor of Criminal Justice and Director of the Institute for Community Justice, UHD
Dr. Lisa Morano, Assistant Professor of Biology and Microbiology, UHD
Dr. George Pincus, Dean, UHD College of Sciences and Technology
Dr. Gene Preuss, Assistant Professor of History, UHD
Dr. Herbert Rebhun, Associate Dean, College of Business, UHD
Dr. Aimee Roundtree, Assistant Professor of English, UHD
Ms. Anne Sherman, Director, UHD Office of Sponsored Programs
Dr. Larry Spears, Professor of Chemistry and Director of UHD Urban Center for Student Success in Science, Technology, Engineering and Mathematics
Dr. Jeong-Mi Yoon, Assistant Professor of Mathematics, UHD
Ms. Celeste Zamora, Media Relations Coordinator, Communications and Marketing, UHD

Oral and Poster Presentations:

Adolfo Aranzales and Michelle Chatman, "Concretes with High Content of Fly Ash"

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

Christopher Bowes, "Knowledge Representation and Semantic Networking using Dependency Parser (MINIPAR)"

Co-Authors: **Liem Luong**
UHD Faculty Mentor: **Dr. Ping Chen**
Project Location: University of Houston-Downtown

Joel D. Henderson and Norma Ascencio, "Experimental Simulation of Weathering of Sulfide Ores by Rainwater in an Arid Environment"
UHD Faculty Mentor: **Dr. Kenneth Johnson**
Project Location: University of Houston-Downtown

William Holtkamp, Jonathan Keele, Troy Mason, "Intelligent Traffic Controllers"
UHD Faculty Mentor: **Dr. Ongard Sirisaengtaksin**
Project Location: University of Houston-Downtown

Vien Lam, "Do Retinal Müller Glia Aerobically Produce ATP? Mitochondrial Expression Analysis Using Laser-Scanning Confocal Microscopy in Adult C57/BL6 Mouse Retina"
UHD Faculty Mentor: **Dr. Jerry Johnson**
Project Location: University of Houston-Downtown

Mesias Pedroza, "The Role of the 30s 'GP' Motif in Interleukin-8 Stability, Structure, Function, and In Vivo Physiology"
Co-Authors: **Aishwarya Ravindran, Pavani Gangavarapu, Sai Hari Gandham, Prem Raj Joseph, Dept. of Biochemistry and Molecular Biology, UTMB; Gregg Nagle, Greg Prado, Dept. of Neuroscience and Cell Biology, UTMB; Roberto Garofalo, Dept. of Pediatrics, UTMB**
UHD Faculty Mentor: **Krishna Rajarathnam**
Project Location: University of Texas Medical Branch (UTMB)

Demitrios V. Perezous, "The BWC Trouble-Ticket System"
UHD Faculty Mentor: **Dr. Shohreh Hashemi**
Project Location: University of Houston-Downtown

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

1 - Zaher Abdo, Hien Nguyen, Hugo Peralta, Ali Abedi, "Thermal Decompositions of Metal Amines Containing Oxo-nitrogen Moieties Either in the Coordination Sphere or as Charge Compensating Anions"

Co-Authors: **Dr. Ivan Bernal, Chemistry Department, University of Houston-Central**
UHD Faculty Mentor: **Dr. Janusz Grebowicz**
Project Location: University of Houston-Downtown

3 - Jennifer Abrams, "Analysis of Coastal Prairie Soil Fungi by Denaturing Gradient Gel Electrophoresis"
UHD Faculty Mentor: **Dr. Phil Lyons**
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).

- 5 - Memling Altamirano**, "A Study of Natural Zeolite Outgassing by Simultaneous Thermal Analysis/Quadrupole Mass Spectrometry"
Co-Authors: **Dr. Haraldur R. Karlsson, Department of Geosciences, Texas Tech Univ**
UHD Faculty Mentor: **Drs. Janusz Grebowicz and Kenneth Johnson**
Project Location: University of Houston-Downtown
- 7 - Adolfo Aranzales and Michelle Chatman**, "Concretes with High Content of Fly Ash"
UHD Faculty Mentor: **Dr. Jorge Tito-Izquierdo**
Project Location: University of Houston-Downtown
- 9 - Elise Balhoff**, "Dynamic Web Design"
UHD Faculty Mentor: **Dr. Hong Lin**
Project Location: University of Houston-Downtown
- 11 - Conota Beasley and Chavey Fisher**, "Relations of Self-Esteem and Body Shame with Media Pressure, Body Satisfaction and Eating Pathology in College Females."
UHD Faculty Mentor: **Dr. Christine Bachman**
Project Location: University of Houston-Downtown
- 13 - Adrian Berry, Flor Castro, Micaela Gilbert, Laura Sanchez, Kulsoom Shah**, "The Evolution of Informed Consent as a Result of Clinical Trials"
Co-Authors: **Moses Osoro**
UHD Faculty Mentor: **V. Estrera, R. Garcia, M. Nakamura, L. Spears**
Project Location: University of Houston-Downtown
- 15 - Megan Ann Brewer**, "Current and Retrospective Relationships Between Birthmothers and Birthfathers"
UHD Faculty Mentor: **Drs. Susan Henney, Ruth McRoy*, Harold Grotevant****
Project Location: University of Houston-Downtown, *University of Texas, **University of Minnesota
- 17 - Denise Buitron**, "School Property Taxes: Who Agrees to School Property Tax Redistribution?"
UHD Faculty Mentor: **Dr. David Branham**
Project Location: University of Houston-Downtown
- 19 - Michael Carolan and Jonathan Barchus**, "Evaluation of Microbial Communities within Potatoes with and without Zebra Chip Symptoms to Determine Causal Disease Organism"
UHD Faculty Mentor: **Dr. Lisa Morano**
Project Location: University of Houston-Downtown
- 21 - Juan Cavazos, Nirmal John, Pantea Mohammadi, Daniel Osakue**, "Space Forest: A Study on Maintaining CO2 Levels in a Biosphere from the movie "Silent Running"
Co-Authors: **William Holtkamp and Jan Simon**
UHD Faculty Mentor: **V. Estrera, R. Garcia, M. Nakamura, L. Spears**
Project Location: University of Houston-Downtown
- 23 - Tiffanie Chatman**, "Arcellacean Taphonomy of Anahuac National Wildlife Refuge"
UHD Faculty Mentor: **Dr. Brad Hoge**
Project Location: University of Houston-Downtown
- 25 - David Cherian**, "Identification of essential transcription factor sites of the ashwin gene in *Xenopus laevis*"
UHD Faculty Mentor: **Dr. Akif Uzman**
Project Location: University of Houston-Downtown
- 27 - Adam Drake**, "Primordial Black Holes and Supermassive Black Hole Seeds"
UHD Faculty Mentor: **Dr. Youn-Sha Chan**
Project Location: University of Houston-Downtown
- 29 - Dennis Garcia and Shermel Maddox**, "Genetic Diversity of *Xylella fastidiosa* in and around Texas Vineyards"
UHD Faculty Mentor: **Dr. Lisa Morano**
Project Location: University of Houston-Downtown
- 31 - Dennis Golden**, "Mobility as an Indicator of Student Success: Testing an Inversion to Student Performance"
UHD Faculty Mentor: **Dr. David Branham**
Project Location: University of Houston-Downtown
- 33 - Joel D. Henderson and Norma Ascencio**, "Experimental Simulation of Weathering of Sulfide Ores by Rainwater in an Arid Environment"
UHD Faculty Mentor: **Dr. Kenneth Johnson**
Project Location: University of Houston-Downtown
- 35 - Tahisha Hilaire and Hugo Peralta**, "Thermal Analysis of Selected α -amino Acids Crystallized with Different Morphologies"
Co-Authors: **Dr. Ivan Bernal, Chemistry Department, University of Houston-Central**
UHD Faculty Mentor: **Dr. Janusz Grebowicz**
Project Location: University of Houston-Downtown
- 37 - William Holtkamp, Jonathan Keele, Troy Mason**, "Intelligent Traffic Controllers"
UHD Faculty Mentor: **Dr. Ongard Sirisaengtaksin**
Project Location: University of Houston-Downtown
- 39 - Linda Marie Knippel**, "The Big Three Factors in Education Attitudes: Gender, Income, and Ideology"
UHD Faculty Mentor: **Dr. David Branham**
Project Location: University of Houston-Downtown
- 41 - Nguyen Lam and Melissa Fellers**, "Comparative Genome Sequencing of Grapes and Non-grape Strains of *Xylella fastidiosa*"
UHD Faculty Mentor: **Dr. Lisa Morano**
Project Location: University of Houston-Downtown
- 43 - Connie Larsson and Lisa Weigle**, "The Impact of Channelization on the Population Biology of the Common Snapping Turtle (*Chelydra serpentina*) and the Red-eared Slider (*Trachemys scripta*) in the White Oak Bayou Watershed"
UHD Faculty Mentor: **Dr. Aaron Krochmal**
Project Location: University of Houston-Downtown
- 45 - Aaron Lewis, Victor Martinez, Cindy Menendez, Anisa Saleh, Ibiene Tamuno**, "Investigation of Microgravity's Role in Cancer Research and its Effect on Cancer Patients"
Co-Authors: **Vien Lam**
UHD Faculty Mentor: **V. Estrera, R. Garcia, M. Nakamura, L. Spears**
Project Location: University of Houston-Downtown
- 47 - Shawn Allen Luce**, "Acrylate-Functional Polyester-Based Formulations Containing Single-Walled Carbon Nanotubes (SWNTs)"
UHD Faculty Mentor: **Dr. Byron Christmas**
Project Location: University of Houston-Downtown
- 49 - Jamilyn Marie Mack**, "A Look Inside an Adoption Relationship: Birthmothers, Adopted Persons, and Birthmothers' Parented Children"
UHD Faculty Mentor: **Drs. Susan Henney, Ruth McRoy*, Harold Grotevant****
Project Location: University of Houston-Downtown, *University of Texas, **University of Minnesota
- 51 - Elizabeth Magreola**, "The Structure of Basidiomycete communities on Roots and Rhizospheres of Native Coastal Prairie Grasses"
Co-Authors: **Mesias Pedroza**
UHD Faculty Mentor: **Dr. Philip Lyons**
Project Location: University of Houston-Downtown
- 53 - Merlin Mathews**, "The Functionalization and Esterification of MWNT"
UHD Faculty Mentor: **Dr. Byron Christmas**
Project Location: University of Houston-Downtown
- 55 - Robin May and Floribel Beiza**, "An Alpha-Taxonomic Study of the Early Summer flora of Buffalo Bayou"
UHD Faculty Mentor: **Dr. Deanna McCullough**
Project Location: University of Houston-Downtown
- 57 - Dawn H. Moses**, "Challenges Associated with Applying to the University of Houston-Downtown's Committee for the Protection of Human Subjects"
UHD Faculty Mentor: **Dr. Aimee Roundtree**
Project Location: University of Houston-Downtown
- 59 - Binh Nguyen**, "Nickel-Base Sensor Study"
UHD Faculty Mentor: **Dr. Mian Jiang**
Project Location: University of Houston-Downtown
- 61 - Shajeer Noorudeen**, "Fabrication Of A New Surface Adhesive Polyaniline-Carbon Nanotube Composite Material"
UHD Faculty Mentor: **Dr. Mian Jiang**
Project Location: University of Houston-Downtown
- 63 - Chukwuma H. Okeke**, "Diatom Succession and Assemblage in the Greens Bayou Wetland Mitigation Bank"
UHD Faculty Mentor: **Dr. Brad Hoge**
Project Location: University of Houston-Downtown

65 - Kristopher Overholt, “Evaluating Smoke Detector Spacing Using Fire Modeling and Simulation”

UHD Faculty Mentor: **Dr. Alberto Gomez-Rivas**

Project Location: University of Houston-Downtown

67 - Mesias Pedroza, “The Role of the 30s ‘GP’ Motif in Interleukin-8 Stability, Structure, Function, and In Vivo Physiology”

Co-Authors: **Aishwarya Ravindran, Pavani Gangavarapu, Sai Hari Gandham, Prem Raj Joseph, Dept. of Biochemistry and Molecular Biology, UTMB; Gregg Nagle, Greg Prado, Dept. of Neuroscience and Cell Biology, UTMB; Roberto Garofalo, Dept. of Pediatrics, UTMB**

UHD Faculty Mentor: **Krishna Rajarathnam**

Project Location: University of Texas Medical Branch (UTMB)

69 - Stacey Candice Ramirez, “The Disciplinary Culture of African American Teachers: No Favoritism Here!”

UHD Faculty Mentor: **Dr. David Branham**

Project Location: University of Houston-Downtown

71 - Juan Carlos Romero and Gloria Matta-Aldana, “Test of 3" X 9" Beam with Stirrups”

UHD Faculty Mentor: **Dr. Jorge Tito-Izquierdo**

Project Location: University of Houston-Downtown

73 - Oluwadamilola Seriki, “A Study of the Genetic Variability Within and Between Populations of *Hymenoxys texana* (Coult. & Rose) Cockill.”

UHD Faculty Mentor: **Dr. Deanna McCullough**

Project Location: University of Houston-Downtown

75 - Brandi Smith-Irving, “Medical Illustrations: Adjustment or Manipulation”

UHD Faculty Mentor: **Dr. Aimee Roundtree**

Project Location: University of Houston-Downtown

77 - Steven Steiner, Tiffini Jones, Wendy Bradford-Green, Alicia Alvarado, Ana Macias, “Sex Differences in Perceptions of Blame and Responsibility”

UHD Faculty Mentor: **Drs. Cindy Stewart*, Deborah Rhatigan**, Todd Moore****

Project Location: *University of Houston-Downtown, **University of Tennessee - Knoxville

79 - Antonio Tito, “Characterization of New Fly Ash – Polyaniline Composites”

Co-Authors: **Juan Tito, Dr. Larry Spears, Dr. Jorge Tito-Izquierdo**

UHD Faculty Mentor: **Dr. Mian Jiang**

Project Location: University of Houston-Downtown

81 - Julie Marian Vaught, “BalloonSat Programs Launch Low-cost, Hands-on Science Learning”

UHD Faculty Mentor: **Dr. Penny Morris-Smith**

Project Location: University of Houston-Downtown

83 - Avani Verma and Hiba Zwiya, “Genome Annotation and Analysis of Spacecraft Assembly Facility Isolated *Bacillus pumilus*, SAFR-032”

UHD Faculty Mentor: **Dr. Akif Uzman**

Project Location: University of Houston-Downtown

85 - Amanda P. Walker, “Extraction and Analysis of Salicin from Willow Trees”

UHD Faculty Mentor: **Dr. Tyra Montgomery**

Project Location: University of Houston-Downtown

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

2 - Ali Abedi, Betsy Escobar, Edgar Gatica, German Ramirez, “Sinister Enemy: A Glimpse into the Study of Asteroids”

Co-Authors: **Adolfo Aranzales and Abel Solano**

UHD Faculty Mentor: **V. Estrera, R. Garcia, M. Nakamura, L. Spears**

Project Location: University of Houston-Downtown

4 - Anisah Adam, “The Impact of Gender and Language Barriers on Disciplinary Action in Elementary Schools”

UHD Faculty Mentor: **Dr. David Branham**

Project Location: University of Houston-Downtown

6 - Karla Alvarez, “Using STELLA Software to Model Blood Glucose Levels in Response to Daily Meals and Exercise”

UHD Faculty Mentor: **Dr. Akif Uzman and Ms. Mitsue Nakamura**

Project Location: University of Houston-Downtown

8 - Adolfo Aranzales and Grantley Christie, “Active Control of Structures using Electromagnetic Damping”

UHD Faculty Mentor: **Drs. Alberto Gomez-Rivas and Weining Feng**

Project Location: University of Houston-Downtown

10 - Eugenia D. Bassi, “User Centered Design”

UHD Faculty Mentor: **Dr. Aimee Roundtree**

Project Location: University of Houston-Downtown

12 - Semhar Bekit, Ajla Colic, Ashley Kimich, Jordan Reeder, “A Public Policy Solution Plan for Reversing Air Pollution Levels in Cairo”

Co-Authors: **Sylvia Slawson**

UHD Faculty Mentor: **Dr. Ruth Robbins**

Project Location: University of Houston-Downtown

14 - Christopher Bowes, “Knowledge Representation and Semantic Networking using Dependency Parser (MINIPAR)”

Co-Authors: **Liem Luong**

UHD Faculty Mentor: **Dr. Ping Chen**

Project Location: University of Houston-Downtown

16 - Dustin Bryant, “Comparison of rDNAs from Ascomycete Fungi Cultured from Coastal Prairie Soils with Ascomycete rDNAs Amplified Directly from Soil”

UHD Faculty Mentor: **Dr. Phil Lyons**

Project Location: University of Houston-Downtown

18 - Daniel Burnham, “Does Racial and Ethnic Status and Educational Attainment have an Impact on School Equity Importance?”

UHD Faculty Mentor: **Dr. David Branham**

Project Location: University of Houston-Downtown

20 - Francisco Castillas, Erika Escandon, Brenda Marquez, Rocio Martinez, Christian Montez, Farrah Montez, Jessica Munoz, Angelica Najera, Erick Hernandez, Juan Rodriguez, “Transportation and its relation to Air Pollution in Mexico City”

Co-Authors: **Sylvia Slawson**

UHD Faculty Mentor: **Dr. Ruth Robbins**

Project Location: University of Houston-Downtown

22 - Michelle Chatman and Mirella Alonzo, “Repairing of a Post-Tensioned Beam”

UHD Faculty Mentor: **Dr. Jorge Tito-Izquierdo**

Project Location: University of Houston-Downtown

24 - Anish Chavda, Brendon Bingwa, Amanda Walker, “Empirical Tests of the Antibiotic Properties of Snake Venom: A New Twist on an Old Tale”

UHD Faculty Mentor: **Drs. Aaron Krochmal and Lisa Morano**

Project Location: University of Houston-Downtown

26 - Michelle Cohen, “Perceptions of Racial and Socioeconomic Biases in Government Response Times Following Hurricane Katrina”

UHD Faculty Mentor: **Drs. Derek de la Pena and Christine Bachman**

Project Location: University of Houston-Downtown

28 - Elena Espino, Audrey Gonzalez, Eric LeDoux, Mohamedwesam Mohamed, Jose Trinidad, “How Significant is Geographical Location in Forming Prosperous Civilization”

Co-Authors: **Patricia Ramon**

UHD Faculty Mentor: **V. Estrera, R. Garcia, M. Nakamura, L. Spears**

Project Location: University of Houston-Downtown

30 - Cynthia Gabriela Garza, “A Penul based Sensor for Environmental Remediation and Monitoring”

Co-Authors: **Ambar Cancino**

UHD Faculty Mentor: **Drs. Mian Jiang and Larry Spears**

Project Location: University of Houston-Downtown

32 - Brittany Hanly, “Chronology and sedimentology of Holocene (post-glacial) lacustrine sediments at Lower Lily Pad Lake, southern Uinta Mountains, Utah”

UHD Faculty Mentor: **Dr. Eric Carson, San Jacinto College North**

Project Location: Uinta Mountains (Utah), San Jacinto College North and University of Houston-Downtown

34 - Moses Hernandez, “Virtual 3D Modeling”

UHD Faculty Mentor: **Dr. Ongard Sirisaengtaksin**

Project Location: University of Houston-Downtown

36 - Brandy J. Hinojosa, “Hispanic Approval Rating of the Way George W. Bush is Handling Education”

UHD Faculty Mentor: **Dr. David Branham**

Project Location: University of Houston-Downtown

- 38 - Claudia Jimenez-Lopez**, “Analysis of Extrapolymeric Substances of *Pseudomonas aeruginosa* and *Staphylococcus aureus*”
Co-Authors: **Benedict Khoo, Jannie Dilber, Martina Maier, Janusz Madaj, Andrzej Nowacki, and Monika Kuzma**
UHD Faculty Mentor: **Dr. Poonam Gulati**
Project Location: University of Houston-Downtown
- 40 - Nguyen Lam**, “Development of a Novel Dispersion Technique for the Preparation of UV-Polymerizable SWNT/Acrylate Composite Materials”
Co-Authors: **Josh Wolfe**
UHD Faculty Mentor: **Dr. Byron Christmas**
Project Location: University of Houston-Downtown
- 42 - Vien Lam**, “Do Retinal Müller Glia Aerobically Produce ATP? Mitochondrial Expression Analysis Using Laser-Scanning Confocal Microscopy in Adult C57/BL6 Mouse Retina”
UHD Faculty Mentor: **Dr. Jerry Johnson**
Project Location: University of Houston-Downtown
- 44 - To-Kwok Wilfred Lau**, “Molecular Modeling of Green Chemistry-Related Materials”
UHD Faculty Mentor: **Dr. Maria Benavides**
Project Location: University of Houston-Downtown
- 46 - Tao Lu, Matthew Nguyen, Cynthia Odika, Ashley Proctor**, “Public Transportation in Asian Megalopolises”
Co-Authors: **Sylvia Slawson**
UHD Faculty Mentor: **Dr. Ruth Robbins**
Project Location: University of Houston-Downtown
- 48 - Liem Thanh Luong**, “Manage Large Set of Text Mining and Its Application”
Co-Authors: **Christopher Bowes**
UHD Faculty Mentor: **Dr. Ping Chen**
Project Location: University of Houston-Downtown
- 50 - Anna Magdalena Jeszka and Krzysztof Zgolak**, “The Study of the Interactions Between Ketoprofen and N-Acetyl-L-Tyrosine Ethyl Ester”
UHD Faculty Mentor: **Dr. Hab Stanislaw Wysocki**
Project Location: Poland Technical University of Lodz
- 52 - Ruth Marcom**, “The Cain Project in Engineering and Professional Communication at Rice University: Successful Implementation of "Writing in the Disciplines" Theory”
UHD Faculty Mentor: **Dr. Aimee Roundtree**
Project Location: University of Houston-Downtown
- 54 - Stefanie Matta**, “The Accessible Web: Standards Alone Are Not the Answer”
UHD Faculty Mentor: **Dr. Aimee Roundtree**
Project Location: University of Houston-Downtown
- 56 - Mary Beth McGraw**, “Dominating Sets in Bipartite Graphs”
UHD Faculty Mentor: **Dr. Ermelinda DeLaVina**
Project Location: University of Houston-Downtown
- 58 - David Nanyes, Steven Manak, Claudia Moreno**, “Population Dynamics of Vector Mosquitoes in Hollywood Cemetery, Houston, TX”
UHD Faculty Mentor: **Dr. Jeffrey Flosi**
Project Location: University of Houston-Downtown
- 60 - Janmy Nguyen**, “Are Graduates of Undergraduate Technical Communication Programs Adequately Prepared for the Workplace?”
UHD Faculty Mentor: **Dr. Aimee Roundtree**
Project Location: University of Houston-Downtown
- 62 - Shafeeq Noorudeen and Henia Abid**, “Biofilm Formation of *Staphylococcus Aureus* In Vitro and Inhibition with Antibiotics”
UHD Faculty Mentor: **Dr. Poonam Gulati**
Project Location: University of Houston-Downtown
- 64 - Enriquez Omar**, “The Percentage of Space that is Temporary Buildings in relation to the Ethnic Make-Up of schools in the Houston Independent School District”
UHD Faculty Mentor: **Dr. David Branham**
Project Location: University of Houston-Downtown
- 66 - Nicole Patterson**, “Thermal Characterization of Ionic Liquids”
UHD Faculty Mentor: **Dr. Maria Benavides**
Project Location: University of Houston-Downtown
- 68 - Demitrios V. Perezous**, “The BWC Trouble-Ticket System”
UHD Faculty Mentor: **Dr. Shohreh Hashemi**
Project Location: University of Houston-Downtown
- 70 - Brian Rodriguez, Ernesto Ramirez, Si Nguyen**, “An Investigation of Reactivity Rates in Polymerizable Films”
UHD Faculty Mentor: **Dr. Byron Christmas**
Project Location: University of Houston-Downtown
- 72 - Timothy Saludo**, “Bridging the Industry Subject-Matter Gap between Software Documentation and End Users of Specialized Software”
UHD Faculty Mentor: **Dr. Aimee Roundtree**
Project Location: University of Houston-Downtown
- 74 - Mark Anthony Smithers**, “Analyzing the Hepatic Function Using Tc – GSA”
UHD Faculty Mentor: **Dr. Jeong-Mi Yoon**
Project Location: University of Houston-Downtown
- 76 - Nicolas Spaminato, Trisha Pfluger, Thomas Kincard**, “Confirmation of the Insertion of the ATF yeast genes in pTRC-His expression vectors for the production of isoamyl acetate in *Escherichia coli*”
UHD Faculty Mentor: **Dr. Catherine Horton**
Project Location: University of Houston-Downtown
- 78 - Brian Terry**, “Analysis of Fire Protection Sprinklers Practices using Fluid Science”
UHD Faculty Mentor: **Dr. Alberto Gomez-Rivas**
Project Location: University of Houston-Downtown
- 80 - Nghia Tran and Gabriel Williams**, “Password Security Methods”
UHD Faculty Mentor: **Dr. Ping Chen**
Project Location: University of Houston-Downtown
- 82 - Luz Vela, Avani Verma, Moriam Ojelade**, “Arrhenius Analysis and Western Blot Detection of Oxidative Damage in Poisoned Bovine Heart Mitochondria”
UHD Faculty Mentor: **Dr. Jerry Johnson**
Project Location: University of Houston-Downtown
- 84 - An Vo and Thu Nguyen**, “Facile Fabrication of Cobalt Hydroxide Thin Film and its Application in the Selective Sugar Sensing”
UHD Faculty Mentor: **Drs. Mian Jiang and Larry G. Spears**
Project Location: University of Houston-Downtown

Acknowledgements

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In addition, we thank the UHD faculty and staff who've worked tirelessly to support undergraduate research experiences as well as the administrators who've helped make this event a reality. We especially thank Drs. Richard Alo, Alberto Gomez-Rivas, Kenneth Oberhoff, Dennis Rodriguez, Larry Spears, Akif Uzman, as well as Dean Susan Ahern, Dean Donald Bates, Dean Elizabeth Pelz, Dean George Pincus, and UHD President Max Castillo.