



Friday, APRIL 21, 2023
The University of Texas at Tyler
University Center

Breakfast

7:00–7:45 a.m.

Welcome

Steve Idell, M.D., Ph.D.

Kirk A. Calhoun, M.D.

8:00–8:30 a.m.

Keynote Address

Brigham C. Willis, M.D.

8:30–9:15 a.m.

Morning Breakout Sessions

Morning Session 1: 9:30–10:15 a.m.

Morning Session 2: 10:30–11:30 a.m.

Poster Session and Lunch

11:30 a.m.–1:00 p.m.

Student Poster Awards

1:00 -1:15 p.m.

Afternoon Breakout Sessions

Afternoon Session 3: 1:30–2:30 p.m.

Afternoon Session 4: 2:45–3:45 p.m.

Networking and Reception

4:00–5:00 p.m.

Breakout Sessions

Morning Session 1: 9:30–10:00 a.m.

Session 1A: University Center 3140			
9:30	Veterans as Emerging Entrepreneurs in Economic Development: Intentions, Challenges, and Impact	Marilyn Young, Ph.D. John Cater III, Ph.D. Blaine Allen-Casey Pace, M.B.A.	UT Tyler
9:50	Ethnic Minority Entrepreneurship: Intentions, Challenges and Barriers	Marilyn Young, Ph.D. John Cater III, Ph.D. Lei Hua, Ph.D. Timothy Morgan, Ph.D.	UT Tyler

Session 1B: University Center 3422			
9:30	How a University Tutorial Practicum Course Has Been Adapted to Meet the Literacy Needs of Students in a Post-Covid Era	Joanna L. Neel, Ph.D.	UT Tyler
9:50	COVID-19 Academic Integrity Violations and Trends: A Rapid Review	Jessica Alvarado, Ph.D.	UTHSCT

Session 1C: University Center Mabry Theater			
9:30	Computational Study of the Structure of APC-Induced Protease Activated Receptor 1 Signaling Complex	Alexei Iakhsiaev, Ph.D.	Texas College
9:50	Beneficial and Adverse Effects of Convalescent Plasma in the Treatment of COVID-19 Patients from CONTAIN Clinical Trial	Baojin Yao	UTHSCT

Morning Break: 10:15–10:30 a.m.

Breakout Sessions

Morning Session 2: 10:30–11:30 a.m.

Session 2A: University Center 3140			
10:30	Analysis of Fatigue and Stresses Applied to the Wings of the Space Shuttle Columbia	Ethan Wild Thomas Willingham Erik Vazquez Ruben Cerna Ryan Willis	UT Tyler
10:50	Hydrothermal Liquefaction of the Brown Macroalgae, <i>Saccharina latissima</i> for the Production of Biofuels and Other Value-Added Chemicals	Mayokun Oke	UT Tyler
11:10	Novel Approach into the Tracking of Multiple Points of a Joint to Improve Gait Motions in Robot-Assisted Rehabilitation	Jonathan McMullen	UT Tyler

Session 2B: University Center 3422			
10:30	Update on the Current Status and Distribution of Three Rare Louisiana Freshwater Mussels	Neil Ford, Ph.D.	UT Tyler
10:50	Conducting Behavioral Health Research in a Rural Community in Northeast Texas	Nelly Yuen, Ph.D. Eman Nabulsi, M.S. Nicholas Sims-Rhodes, B.S.	UT Tyler
11:10	Investigating Needs, Concerns, and Quality of Life in Working-Age Informal Caregivers of Stroke Survivors	Dixie Rose, Ph.D., RN, ACUE	UT Tyler

Session 2C: University Center Mabry Theater			
10:30	Role of Histone Deacetylases in Regulation of Macrophage Phagocytosis of <i>Mycobacterium tuberculosis</i>	Benjamin Esiesimua	UTHSCT
10:50	Bacteriophage Therapy for the Treatment of <i>Mycobacterium tuberculosis</i> Infections in Humanized Mice	Danish Ansari	UTHSCT
11:10	HIV Infection Increases Plasma Metabolite N-Acetyl-L-Alanine Levels to Dysregulate Human Natural Killer Cell Responses to <i>Mycobacterium tuberculosis</i> Infection	Sahana John	UTHSCT

Lunch and Poster Session

11:30 a.m.–1:00 p.m.

Student Poster Awards

1:00-1:15 p.m.

Breakout Sessions

Afternoon Session 3: 1:30–2:30 p.m.

Session 3A: University Center 3140			
1:30	Smart Grid Technology Option: Static Var Compensator (SVC): Configuration Technique to Address Power Oscillation Damping at Steelworks and Railway Feeder Connected to the Public Grid	Tariq Masood, Ph.D.	UT Tyler
1:50	Failure Due to Overpressurization in the RN-50 Serbu Rifle	Tristan Frazier Brandon Frazier Rigoberto Martinez Charles Marable Connor Morgan Toni Brannan	UT Tyler
3:25	Predicting Credit Card Delinquency Using a Data-Augmented Ensemble Learning Approach	Ahmed Syed	UT Tyler

Session 3B: University Center 3422			
1:30	#TeacherQuitTok: A Content Analysis of How Teachers Navigate Quitting on Social Media	Forrest Kaiser, Ed.D.	UT Tyler
1:50	Open Music Theory Volume 2: A Multi-Institutional Model for Developing Open Online Textbooks	Kyle Gullings, D.M.A.	UT Tyler
2:10	Utilizing Improvement Science to Improve Students' Outcomes in K-12 Education and Higher Education	Michael Odell, Ph.D.	UT Tyler

Session 3C: University Center Mabry Theater			
1:30	Molecular Target and Biomarkers in Pleural Empyema: Plasminogen Activator Inhibitor 1 (PAI-1) and the Fibrinolytic Potential	Andrey Komissarov, Ph.D.	UTHSCT
1:50	An Intact Amber-Free HIV-1 System for In-Virus Protein Bioorthogonal Click Labeling that Delineates Envelope Conformational Dynamics	Yuanynun Ao, Ph.D.	UTHSCT
2:10	Imipenem-relebactam with potential to restore the efficacy of first-line drugs and develop combination regimens to treat drug-resistant tuberculosis	Vanessa Bermudez Vogensen	UTHSCT

Afternoon Break: 2:30–2:45 p.m.

Breakout Sessions

Afternoon Session 4: 2:45–3:45 p.m.

Session 4B: University Center 3422			
2:45	Virtual Reality as a Research Tool: An Interdisciplinary Approach to Researching in Kinesiology	Jordan A. Schools	Le Tourneau University
3:05	Attack of the Bots: Researchers Beware	Dixie Rose, Ph.D., RN, ACUE	UT Tyler

Session 4C: University Center Mabry Theater			
2:45	Functional Impact of Etyl-Beta-D-Glucuronide on Gamma Irradiated Mycobacterium tuberculosis Stimulated Lung Macrophages	Charles Inaku	UTHSCT
3:05	Combating Passive Vaccine Hesitancy in East Texas	Kimberly Elliott, Ph.D.	UTHSCT
3:25	The Community Scientist Program: Utilizing a Multi-Site Rapid Feedback Approach to Facilitate Community Engagement in Research in East Texas	Jessica Alvarado, Ph.D.	UTHSCT

Networking and Reception

4:00–5:00 p.m.

University Center Ballroom

Poster Key

Posters #5-54 are Student Contest Posters

University Center – Top Floor			
#	Presenter	Title	Institution
1	Gunavanthi Boorgula	Optimizing Drug Susceptibility Testing for Mycobacterium abscessus	UTHSCT
2	Sepideh Farahiniya	Launching a Knowledge, Attitudes, and Behaviors-Based Survey to Assess Nutritional Levels in Texas Immigrants Who Suffer from Cardiovascular Disease (CVD) or Diabetes	UT Tyler
3	Tariq Masood, Ph.D.	Smart Grid, Technology Option to Resolve Operations and Control Challenges of Electrical Power System from Generation, Transmission, Distribution up to Consumer Levels	UT Tyler
4	Mahnoor Shaikh	A Phylogenetic Analysis of Crayfish Species Found in Central and East Texas	UT Tyler
5	Prashanta Kumar Acharjee	Artificial Neural Network-Based Dynamic Modulus Prediction Models for Colombian Mixtures Similar to Witczak and Hirsch Models	UT Tyler
6	Bisola Adepoju	Reverse Mentoring for Learning Transfer in a Multigenerational Workplace: An Integrative Literature Review	UT Tyler
7	Joy Adewumi	BRD4 as a Potential Target in Pleural Fibrosis	UTHSCT
8	Micheal Asama	Process Simulation and Yield Optimization of Hydrothermal Liquefaction of Macroalgae (Kelp) Using Mixtures of Model Compounds	UT Tyler
9	Diala Bani Mustafa	Controlled Drug Delivery Through the Hierarchical Design of Microfibers	UT Tyler
10	Robert Beaudoin	The Effect of Nicotinic Receptor Potentiators on Human Lung Cell Viability	UT Tyler
11	Myah Beylotte	Exploring the Advantages of Virtual Reality in Occupational Therapy for Visual Motor Integration Improvement	Le Tourneau
12	Savannah Breeding	Dissociation and Creativity	UT Tyler
13	Sean Brobston	Comparisons of Measured Chalcone Toxicity to Modeled Values and Currently Marketed UV Filters	Le Tourneau
14	Jodi Bullard	Commitment to Collaboration: Development of a School Nursing Collaboration Instrument	UT Tyler

15	Giovanni Cerrato	The Acceleration of Volatile Organic Compounds by Photocatalytic Oxidizers in a Residential Home	UT Tyler
16	Jeanné Dube	Factor Structure of the Texas Functional Living Scale Among Older Adults	UT Tyler
17	Jeanné Dube	The Impact of Task Novelty on a Virtual Reality-Based Procedural Learning Task	UT Tyler
18	Amna Elbadawi	Implementation of Next Generation Sequencing of SARS-CoV-2 in a Rural Wastewater-Based Epidemiology Program	UTHSCT
19	Rachel Emerine	Delivery of Poorly Water-Soluble Drugs using Polymer Fibers and Microparticles	UT Tyler
20	Josue Gaona	Examining the Effect of a Substituted Carbamate Positive Allosteric Modulator on the (α 4)3(β 2)2 and (α 4)2(β 2)3 Nicotinic Acetylcholine Receptors	UT Tyler
21	Kezia Happy	Hypochlorous Acid Efficacy and Toxicity Studies to Support a Patent Application	Le Tourneau
22	Ethan Hester	The Benefits of Virtual Reality Training for Quarterbacks	Le Tourneau
23	Ethan Hester	The Benefits of Mental Imagery and Performance Visualization	Le Tourneau
24	Justin Hunt	Ecology of East Texas Salamanders Across a Heterogenous Landscape in Smith County, Texas	UT Tyler
25	Gaini Ibrasheva	Investigation of HK97 Virus-Like Particles Toward Applications and Drug Delivery	UT Tyler
26	Megan Jameson	Heat Transfer Analysis of an SSD Heatsink	UT Tyler
27	Rami Khalifah	Developing a Model to Predict Bleeding Areas in Asphalt Pavements Using an Artificial Neural Network	UT Tyler
28	Md Irfan Khan	Parametric Study of CO2 Sequestration in Deep Saline Aquifers using data-driven models	UT Tyler
29	Derek Killingsworth	Relationship Between Subjective Cognitive Decline and Episodic Memory Among Older Adults With and Without Neurocognitive Impairment	UT Tyler
30	Kaleigh Kimminau	Thermal Conductivity Measurements of Cryogenic Insulation	Le Tourneau
31	Pratik Lama	Rutting Prediction Model based on Environmental and Traffic condition in Texas State Using Artificial Neural Network	UT Tyler
32	Chase Long	Analysis of the Heat Transfer of a Water-Cooled Chiller	UT Tyler
33	Oluwanisola Makinde	Catalytic Fast Pyrolysis of Beetle Killed Trees-Pine (<i>Pinus taeda</i>), Ash (<i>Fraxinus</i>) and Redbay (<i>Persea borbonia</i>) for the Production of Transportation Biofuels	UT Tyler

34	Danyel Manteufel	Liposomal Formulation of IR820 Photoactive Dye for Localized Photothermal Therapy of Cancer	UT Tyler
35	Mo'ath Massad	Design and Analysis for Portable Power and Desalination Unit	UT Tyler
36	Jonathan McMullen	Novel Research into the Collapse of the Florida International University Pedestrian Foot Bridge	UT Tyler
37	Peter Nsiah	PPAR- γ Regulation of Induction of Inflammatory Mediators by Organic Dust in THP-1 Macrophage Cells	UT Tyler
38	Angel Perez	Bioprinting of Human Breast Cancer Cell Infused Hydrogel in a Three Dimensional Scaffold to Study the Formation of Tumoroids	UT Tyler
39	Shah Zayed Riam	Flexible Screen-printed Electrochemical Sensor for Underwater Nitrate Detection	UT Tyler
40	Alma Robles	Developing Psychological Capital in Frontline Workers: A Strategy for Increasing Engagement and Retention Amidst the Ongoing Great Resignation	UT Tyler
41	Adrian Romero	Larval Expression of Dopaminergic Neurons Markers for a Parkinson's Disease-Like State in Zebrafish	UT Tyler
42	Hope Sabella	Application of Stem Cell Therapy for Osteoarthritis Pain Management	UT Tyler
43	Emily Shea	Development of an Aquaponics System to Provide High Quality Food Using a Small Area Footprint	Le Tourneau
44	Brent Stenberg	The Effects of Cookware Material Type on Efficiency of Heat Transfer	UT Tyler
45	Sarah Stokke	Developing the Phi6 VLP as a Biotechnology Platform	UT Tyler
46	Jacob Stroud	Minimum Screw and Placement Necessary for Proper Hip Implant Security	UT Tyler
47	Alexander Summers	Research into 3D-Printed Flow Photochemistry - A Closer Look at the "Think and Print" Approach	Le Tourneau
48	Skylar Weiss	Synthesis of Chalcone UV Filters and Development of Aquatic Toxicity QSARs	Le Tourneau
49	Louisa Wildman	Empirical Methods of Stormwater Runoff Estimation	Le Tourneau
50	Amro Zahrawi	Optimal Design and Planning for Fixed Photovoltaic System	UT Tyler
51	Md Fahim Shahriar	Visualization and Investigation of CO2 Density-Driven Convective Transport in a Vertical Hele-Shaw Cell: Implications for Long-Term CO2 Sequestration	UT Tyler
52	Austin Kea	Sensitivity Study of Enhanced Oil Recovery Techniques in Unconventional Reservoirs	UT Tyler
53	Sergio Sola	Impact of Purified and Characterized CelB Enzyme from <i>Pyrococcus furiosus</i> on Starch Conversion and Yeast Attenuation in Craft Beer Production	UT Tyler
54	Octavio Gomes	Design of Smart Zoning Control for Air Conditioning Systems	UT Tyler