

*UTRGV College of Health Professions*  
**HEALTH FORWARD**  
**CONFERENCE**



**April 11 & 12, 2024**  
**Brownsville, TX**

**UTRGV**™



**UT Health**  
Rio Grande Valley

.....  
*College of Health Professions*

# Health Forward

*Dean of the College of Health Professions*

*Michael Lehker, PhD*



Dr. Michael Lehker, Founding Dean of the College of Health Professions, is a professor of microbiology in the Department of Health and Biomedical Sciences at The University of Texas Rio Grande Valley. Dr. Lehker is committed to enhancing and promoting allied health professional students' education, research, and clinical practice at the College of Health Professions.

A particular focus is on innovative educational approaches in healthcare education to enhance student engagement and effectiveness and the establishment of new programs to increase participation of Rio Grande Valley students in the allied health, medical and biomedical workforce. Building research capacity is another passion of Dr. Lehker.

## Why Health Forward?

Welcome to Health Forward 2024! It is the mission of the College of Health Professions to be the leading institution of excellence in health and human services, education, health care and research, producing highly skilled practitioners, educators, and researchers through high quality educational programs, meaningful experiential learning opportunities and the development of scientific and intellectual inquiry for the promotion of health equity in the Rio Grande Valley and beyond.

Health Forward brings together the South Texas Community to explore, share and motivate the health professionals and communities in the region to review current health research, disperse innovative health pedagogy techniques for all, train in the best practices of interprofessional education that leads to interprofessional practice and bring together the community to move **Health Forward!**

# Conference Agenda

## Overview

Thursday, April 11, 2024

7:30 a.m.	Registration Opens & Poster Set Up	BSTUN 2.36
7:30 a.m.	Social and Light Breakfast	BSTUN 2.36
8:30 a.m.	Opening Remarks Michael Lehker, PhD - <i>Dean College of Health Professions</i> Guy Bailey, PhD - <i>President</i> Luis H. Zayas, PhD - <i>Provost &amp; Senior Vice President for Academic Affairs</i>	BSTUN 2.36
9:00 a.m.	Research Keynote Speaker	BSTUN 2.36
10:30 a.m.	Research, Teaching Innovations, and Interprofessional Education Poster Session	BSTUN 2.36
11:30 a.m.	Lunch ( <i>on your own</i> )	BSTUN 2.36 & BSTUN 1.00
12:30 p.m.	Breakout Presentations Research Teaching Innovations Interprofessional Education	BSTUN 2.36 BSTUN 2.224 BSTUN 2.22A
1:45 p.m.	Breakout Presentations Research Teaching Innovations Interprofessional Education	BSTUN 2.36 BSTUN 2.224 BSTUN 2.22A
3:00 p.m.	Breakout Presentations Research Teaching Innovations Interprofessional Education	BSTUN 2.36 BSTUN 2.224 BSTUN 2.22A

# Conference Agenda

Overview

Friday, April 12, 2024

7:30 a.m.	Registration Opens & Poster Set Up	BSTUN 2.36
7:30 a.m.	Social and Light Breakfast	BSTUN 2.36
8:00 a.m.	Student Research Poster Session	BSTUN 2.36
9:00 a.m.	Teaching Innovations Keynote Speaker	BSTUN 2.36
10:30 a.m.	Breakout Presentations Research Teaching Innovations Interprofessional Education	BSTUN 2.36 BSTUN 2.224 BSTUN 2.22A
11:45 a.m.	Lunch ( <i>on your own</i> ) Interprofessional Education Student Competition	BMAIN 1.224 BSABH 1.108
12:30 p.m.	Breakout Presentations Student Research Presentations and Student Research Awards Teaching Innovations Interprofessional Education Student Competition	BMAIN 1.224 BMAIN 1.502 BSABH 1.108
1:45 p.m.	Interprofessional Education Student Competition	BSABH 1.108
3:00 p.m.	Closing Session & IPE Award Presentations	BMAIN 1.224

# Conference Map

The University of Texas  
**Rio Grande Valley**<sup>TM</sup>  
 Brownsville Campus

UTRGV Brownsville parking permits are valid in the following ZONES:

Student - Zone 1 & Zone 2 (Zone 3 after 5pm)  
 Faculty/Staff - Zone 1, Zone 2 & Zone 3



All vehicles parked on campus must be registered with UTRGV Parking & Transportation and must properly display an appropriate permit.

1. Main Building	BMAIN	11. Vocation Trades Shops	BVOTS	21. The Arts Center	BTACB
2. Sabal Hall	BSABH	12. Cortez Hall	BCRTZ	22. University Police	BUNPB
3. University Library	BLIBR	13. Cavalry Hall	BCAVL	23. Recreation, Education and Kinesiology Center	BUREK
4. Biomedical Research & Health	BBRHB	14. Rusteberg Hall	BRUST	24. Portable Buildings	BPOB1
5. Luis V. Colom Biomedical Research Facility	BLCBR	15. Bookstore	BSTOR	25. UHealth Houston RAHC	BPOB2
6. Life & Health Sciences Biology Wing	BLHSB	16. Intramural Fields	BIMFD	26. North Office Building	BRAHC
7. Life & Health Science	BLHSB	17. Academic Support Facilities	BASFC	27. Vaquero Plaza (Buildings A,B & C)	BNOBL
8. Student Union	BSTUN	18. Gymnasium Annex	BGYMA	28. Music Science & Learning Center	BVAQP
9. Casa Bella	BCASA	19. Garza Gymnasium	BGYMN	29. Interdisciplinary Academic Building	BMSLC
10. Science, Engineering & Technology	BSETB	20. Research Office Building	BROBL		BINAB

# Research Keynote

**See the person, not the patient: The art and science of occupation**

***Laura Novak, OTD, OTR***



This presentation will explore existing evidence and current trends in research for people living with dementia and their caregivers. The presenter will specifically discuss evidence-based, non-pharmacological interventions which address behavioral and psychological symptoms of dementia. The presenter will discuss how occupational engagement through client-centered care can be utilized to address these symptoms.

Laura Novak, OTD, OTR, BCG Assistant Professor at University of Mary Hardin-Baylor Short Bio: Dr. Novak her received her Doctor of Occupational Therapy from Creighton University in Nebraska. She is board certified in gerontology with the American Occupational Therapy Association (AOTA). In her 22 years of practice as an occupational therapist, she has become an expert in productive aging and in working with people with dementia and their caregivers. She received the Presidential Clinical Excellence Award while working with people living with dementia and their caregivers at the UT Health San Antonio Glenn Biggs Institute for Alzheimer's and Neurodegenerative Diseases.

# Conference Agenda

Research Sessions

April 11, 2024

10:30 a.m.

## Research Poster Session

BSTUN – 2.36

**1. An Evaluation of the Effect of Goalsetting on Student Performance** *Samuel Buchanan, Health & Human Performance*

**2. Cluster Analyses of Biomarkers Differentiate Metabolic Risk in Hispanic Adolescents of South Texas** *Saraswathy Nair, Noor Karkoutly, Michelle Covarrubias, Anne Rentfro, Tania Vargas, & Kristina Vatcheva, Health & Biomedical Sciences*

12:30 p.m.

## Research Breakout 1

BSTUN – 2.36

*Moderators – Ivan Figueroa Monsivais & Wen-Pin Chang*

**Perceived Discrimination, Genetic Liability and Mental Health; An Example of All of Us Data Use** *Bassent Abdelbary, Physician Assistant Studies*

**PLGA Scaffolds Fabricated with an Easy and Economical Mold-Less Technique for the Treatment of Cancer** *Marco Arriaga & Dean Michael Enriquez, Health & Biomedical Sciences*

**Impact of COVID-19 on the Mental Health and Emotional Well-being of UTRGV Students** *Suad Ghaddar, Sheila Mordan, Elizabeth Asonye, Abby Davila, Debra Murray, & Ashley Butler, Health & Biomedical Sciences*

1:45 p.m.

## Research Breakout 2

BSTUN – 2.36

*Moderator – Fidencio Mercado*

**Healthy Aging: Exploring Different Perspectives for Improving Quality of Life** *Kim Nguyen-Finn, Ruth Crutchfield & Murat Karabulut*

3:00 p.m.

## Research Breakout 3

BSTUN – 2.36

*Moderator – Ruth Crutchfield*

**Cross-Generational Collaboration: Bridging Junior and Senior Faculty in Research Excellence** *Panelists: Suad Ghaddar, Jean McLaughlin & Gladys Maestre*

# Conference Agenda

Research Sessions

April 12, 2024

8:00 a.m.

## Student Research Poster Session

BSTUN – 2.36

**1. Alteration of the Interferon Alpha Signaling Pathway Significantly Affects Alzheimer's Disease Pathology in APP/PS1 Mouse Model** *Ranjit Kumar Das, Deepa Roy, Nirakar Sahoo, Chun Xu, Hansapani Rodrigo, Michael Paul Murphy, & Upal Roy*

**2. Effect of Spaceflight on Inflammasome Signaling and Neuroinflammation** *Angel Rodriguez, Erika Cabrera Ranaldi, Alen Saju, Deepa Roy, Mario Gil, Xiao Mao, Juan Pablo de Rivero Vaccari, Upal Roy*

**3. Evaluating the Impact of the Supplemental Nutrition Assistance Program on Food Insecurity and Health Outcomes in the United States: A Comprehensive Review** *Miguel Trevino*

**4. In Female Patients with Polycystic Ovary Syndrome (PCOS), is a Low-Glycemic Index (LGI) Diet More Effective Than Birth Control, for the Reduction of Polycystic Ovary Syndrome (PCOS) Signs and Symptoms** *Monica Vadillo*

**5. Ferrous Sulfate Supplementation in Women During Pregnancy Has a Positive Correlation with Fetal Neurodevelopment Within the First 1,000 Days** *Daniela Rodriguez*

**6. Injectable Alginate Scaffolds for the Delivery of Minocycline for the Treatment of Glioblastoma** *Serenade Trevino, Kaitlyn D. Ybanez, Theresia Rookstool, Rene N. Rico, Marco A. Arriaga & Sue Anne Chew*

**7. Applying Dosage for Type 1 Diabetes Through Reinforcement Learning** *Youmna Galal & Youssef Galal*

**8. The Application of Porous Polycaprolactone Scaffolds for Bone Tissue Engineering** *Clara Elliott, Paola Aguirre, Lauren Serra, Shainah Vidal, Dean Michael Enrique, Marco A. Arriaga, & Sue Anne Chew*

**9. Evaluating the Combination of Y15 and Metformin for the Treatment of Platinum-Resistant Ovarian Cancer** *Kristal Garcia, Manuel Duarte, Isabela Mendez, Marco A. Arriaga, Arkene Levy, & Sue Anne Chew*

**10. Electrospayed Minocycline and Temozolomide-loaded PLGA Microparticles with PEG for the Treatment of Glioblastoma** *Alma Rodriguez, Juan Amieva, Marco A. Arriaga, Jaqueline Quintanilla, Ivan Davila, Karen S. Martirosyan, & Sue Anne Chew*

# Conference Agenda

Research Sessions

April 12, 2024

8:00 a.m.

Student Research Poster Session

BSTUN – 2.36

**11. Unraveling the Impact of Familism, Lifestyles and APOE Gene on Risk Alzheimer's Diseases in Low-Resource Ethnic Hispanic Community** *Daniela Ollervides Charles, Daniela Gamez, Jaime Miguel Saveron, Erika Guajardo, Luis Aguillon, KeSheng Wang, Gladys Maestre, & Chun Xu*

**12. Exploring Neuroplasticity Changes in Neurotoxin-induced Parkinson's Disease: A Preliminary Analysis using Transcranial Magnetic Stimulation** *Tomas Gomez, Kelsey Baker, Nawaz Hack, Daniel Salinas, & Vadukapuram Ramu*

**13. Nutrition Education in Supplemental Nutritional Assistance Program (SNAP) and Effect on Adherence to Reference Daily Intake (RDI) to macronutrients** *Jacqueline Reyes*

**14. Exploring the Impact of Social Stimulation and Deprivation on Neuronal Activity in the *Monodelphis Domestica* Brain** *Cristian Botello, Mariela Garcia, Esperanza Alaniz, Jatziry Escobedo, John VandeBerg, & Mario Gil*

**15. Analysis of Muscle Imbalance in Females who have Undergone ACL Reconstruction** *Rebekah Schlatter, Jorge Bejar, Jennifer Lopez, & Murat Karabulut*

**16. Development of Liposomes Using Microfluids for Delivery of miR-205** *Victoria Herrera, Murali Yallapu, Rahul Tiwari, Meghana Kolli, Amber Garza, Eswara Naga Hanuma Kumar Ghali, & Neeraj Chauhan*

**17. Effects of Psychological Stress on Lifestyle In Hispanic College Students** *Jordan Escobar & Hongxing Lu*

**18. The Relationship Between Arterial Elasticity and Anthropometric Variables in Hispanic Population** *Bryan Mixumi, Alaynna Ramos, Christian Solis, Nidia Salinas, Martha Villanueva, Ulku Karabulut, & Murat Karabulut*

# Conference Agenda

Research Sessions

April 12, 2024

10:30 a.m.

## Research Breakout 4

BSTUN – 2.36

**Empowering Tomorrow's Researchers: Student-Faculty Collaborative Research Initiatives** – *Session leader: Sue Anne Chew; Panelists: Murat Karabulut, Alejandro Lopez Juarez, Kim Finn, John Luna, Samar Alanis, Carlos (Tony) Cisneros, Neidy Garza, & Rebekah Schlatter*

12:30 p.m.

## Research Breakout 5

BMAIN – 1.224

### Student Research and Awards Presentation

*Moderators – Rocio Cavazos & Ruth Crutchfield*

**Utilizing Fluorescent Nanodiamonds for Targeted Drug Delivery Toward Microglial Cells** *Ebenezer Owusu, Deepa Roy, Shizue Mito, Masoud Zarei, Elena A. Rozhkova, & Upal Roy.*

**Dolutegravir-Induced NLRP3 Inflammasome Activation in GALT-Derived HIV-Infected and Combination Antiretroviral Drugs Treated Human T&B Cells** *Blessed Ofori & Yonghong Zhang*

**Bangladeshi International Graduate Students' Perspectives on Physical Disabilities: An In-depth Exploration** *Md Mozadded Hossen*

# Teaching Innovations Keynote

***Bettyjo Bouchey, Ed.D., MBA***



As the pace of introduction and adoption of artificial intelligence (AI) continues at an unprecedented pace, it is critical for educators to both understand its promise and its downsides. Applications related to teaching, learning, and student support could revolutionize how we teach and improve student success, so too is it our responsibility to educate our students on the responsible and ethical use of AI in their areas of study. This session will provide an overview of opportunities to incorporate AI into teaching, learning, and student support and will also allow time for group dialog on applications related to the health professions as we seek to better prepare our students for a future where AI will likely proliferate their intended careers.

Dr. Bouchey is Chief Officer of Professional and Continuing Education (PACE) at University of Vermont. As one of the longest-standing PACE units in higher education, the team serves the institution offering high-quality online and hybrid non- and degree offerings in collaboration with the university's academic units and institutes, workforce development, and lifelong learning opportunities to Vermont residents and beyond. She was most previously Associate Professor and Vice Provost of Digital Strategy and Operations at National Louis University where she was responsible for standards of quality and service for online programming across the institution, alternative graduation pathways, learning experience design, and academic innovation, overall.

Dr. Bouchey holds a B.A. in Psychology from the University at Albany, an M.B.A. in Entrepreneurship from Rensselaer Polytechnic Institute, and a Doctorate in Education from Northeastern University. She is a co-founder of the CORAL Research collaborative focused on online leadership and scholarship; her personal research interests include the nature and future of organizational structures of online units in institutions of higher education, as well as inventive and high-impact pedagogical practice in online teaching, inclusive of artificial intelligence and machine learning. Dr. Bouchey writes and is widely quoted in the academic and popular press; her articles and curriculum vitae can be accessed here: [www.drbouchey.com](http://www.drbouchey.com).

# Conference Agenda

Teaching Innovations Sessions

April 11, 2024

10:30 a.m.

**Teaching Innovations Poster Session**

**BSTUN – 2.36**

**3. Diagnosing the Future: AI-Driven Clinical Scenarios in PA Education** *Christina Gonzales & Lisa Kuhn, Physician Assistant Studies*

**4. Transitioning Into Higher Ed: How Universities Can Welcome Students on the Spectrum** *Jennifer Martinez, Curriculum & Instruction*

12:30 p.m.

**Teaching Innovations Breakout 1**

**BSTUN – 2.24**

*Moderators – TBD*

**Creative Movement Arts for All Bodies** *Zelma Mata, Health & Human Performance*

**Games as a Learning Tool in the Online Environment: Evidence From an Introductory Epidemiology Course** *Cherity Ysquierdo & Suad Ghaddar, Health & Biomedical Sciences*

# Conference Agenda

Teaching Innovations Sessions

April 11, 2024

1:45 p.m.

## Teaching Innovations Breakout 2

BSTUN – 2.24

*Moderators – TBD*

### **Creating a Student-centered, Inclusive Classroom Using Research-based Instructional Strategies**

*Saraswathy Nair, Sue Anne Chew, Alyssa Cavazos, Lorena Lopez, Daniel Hanley & Shannon Warren, Health & Biomedical Sciences*

**An Interdisciplinary Approach to Teaching Scientific Writing for Undergraduate Students** *Sue Anne Chew, Saraswathy Nair & Randall Monty, Health & Biomedical Sciences*

3:00 p.m.

## Teaching Innovations Breakout 3

BSTUN – 2.24

*Moderators – TBD*

**A Guide To Chatgpt (AI) For Medical And Health Educators** *Frank Ambriz & Cassandra Whetstone, Physician Assistant Studies*

**Enhancing Critical Thinking in Physician Assistant Education: Leveraging AI for Test Question Creation** *Nathalie Chacon & Hilda Baesa, Physician Assistant Studies*

# Conference Agenda

Teaching Innovations Sessions

April 12, 2024

10:30 a.m.

## Teaching Innovations Breakout 4

BSTUN – 2.22A

*Moderators – TBD*

**Increasing Diversity of the Future Public Health Informatics and Technology (PHIT) Workforce: Tailored Approaches to Training Students at UTRGV** *Suad Ghaddar & Tracia Forman, Health & Biomedical Sciences*

**UTRGV Sports Science Initiative: Engaging the RGV Community Using Redlight Therapy While Teaching Student to Bridge the Gap Between Theory in the Classroom and Application to Health Disparities in the RGV** *Juan Gonzalez, Alayna Mora & Yuliana Trinidad, Health & Human Performance*

12:30 p.m.

## Teaching Innovations Breakout 5

BMAIN – 1.502

*Moderators – TBD*

**Large Language Models Assisting Large Learning Methods: Gen AI as your Own Personal TA** *James (Art) Brownlow & George Handley, Faculty/Senior Fellow for Academic Innovation*

**Assessing Students Service Learning** *Phillip Conatser, Health & Human Performance*

# Conference Agenda

Interprofessional Education  
Sessions

April 11, 2024

10:30 a.m.

**Interprofessional Education Poster Session**

**BSTUN – 2.36**

**5. Preliminary Findings: Impact of AHEC Program on Exercise Science Seniors' Perceptions of Interprofessional Education** *Guillermo Perez, Health & Human Performance*

**6. Interprofessional Teams and Effective Communication: A Hospital Simulation Activity** *Shirley Wells, Occupational Therapy*

**7. Healthcare Professional's Attitudes Towards Interprofessional Collaboration** *Martin Ekoumou & Jerome Fisher, Physician Assistant Studies*

12:30 p.m.

**Interprofessional Education Breakout 1**

**BSTUN 2.22A**

*Workshop*

**Creating an effective IPE Activity Using a Practical Template** *Workshop Leaders: Eva-Maria Anger & Diana Paz*

1:45 p.m.

**Interprofessional Education Breakout 2**

**BSTUN – 2.22A**

**Developing Simulations for IPE** *Session Leader: John Luna*

3:00 p.m.

**Interprofessional Education Breakout 3**

**BSTUN – 2.22A**

**STEPS Through an IPE Lens** *Session Leader: Zasha Romero*

# Conference Agenda

Interprofessional Education  
Sessions

April 12, 2024

10:30 a.m.	<b>Interprofessional Education Session</b>  <b>The Evolution of Healthcare Professions for Collaborative Practice</b> Elizabeth Garcia-DeMore, PharmD, Juan A Aguilera, MD, & Lydia Aguilera, PharmD	<b>BSTUN – 2.24</b>
11:45 a.m.	<b>Interprofessional Education Student Competition Presentations</b>	<b>BSABH – 1.108</b>
3:00 p.m.	<b>Student Research Award, Student Poster Competition Award and Interprofessional Education Student Competition Award Presentation</b>	<b>BMAIN – 1.224</b>

# Conference Planning Committees

## Planning Committee

Michael Lehker - Dean  
Christopher M. Ledingham - Sr. Assoc. Dean  
Lydia Aguilera - Assoc. Dean IPE  
Murat Karabulut - Assoc. Dean Research  
Lin Wang - Assoc. Dean Student Success  
Zelma Mata - Assoc. Dean Assessment,  
Affiliations & Accreditation  
Sandra Guajardo - College Administrator  
Rosalinda Rubio - Administrative Associate  
Dominga Delgado - Senior Office Assistant  
Janey Pizana - Administrative Coordinator  
Adriana Vela Roman - Accountant  
Bianca Farrell – Program Specialist  
Romeo Ortega - Administrative Assistant I  
Jean McLaughlin - Grant Proposal Writer  
Jennifer Martinez - Research Services  
Coordinator

## College of Health Professions Office of the Dean

Edinburg - Health Affairs Building West - EHABW 2.230  
Brownsville - Biomedical Research & Health Building -  
BBRHB 2.101

Email: [cohpinfo@utrgv.edu](mailto:cohpinfo@utrgv.edu)

Phone: 956-665-2291 (Edinburg campus)

Phone Alt: 956-882-5000 (Brownsville campus)

## College Research Committee

Bassent Abdelbary  
Wen-Ping Chang  
Ivan Figueroa Monsivais  
Upal Roy  
Ruth Crutchfield  
Kim Nguyen-Finn

## Innovations in Teaching Committee

Thelma Ochoa  
Lorena Lopez  
Denise Silcox  
Janet Martinez  
Sandy Magallan  
Juliann Garza-Castillo

## Interprofessional Education Committee

Eva Anger  
Blanca Robles  
Leonardo Longoria  
Norma Beardwood-Roper  
Guillermo Perez  
Sonio Garcia  
Diana Paz  
Doreen Garza

UTRGV College of Health Professions  
**HEALTH FORWARD  
CONFERENCE**



# College of Health Professions

The College of Health Professions prepares students to contribute to improving the health and well-being of the Rio Grande Valley, the state, the nation, and the world.

*Learn more*



*Make A Gift*



1. Click "Give Today"
2. Select "View other giving opportunities"
3. Scroll to College of Health Professions or one of our schools/departments for your gift.

For more information,  
please contact  
[cohpinfo@utrgv.edu](mailto:cohpinfo@utrgv.edu)  
or visit [utrgv.edu/coha](http://utrgv.edu/coha)

**UTRGV**<sup>TM</sup>  
 **UT Health**  
Rio Grande Valley  
.....  
College of  
Health Professions