

TEXAS TECH

Research & Innovation

Women's Health Webinar

March 7, 2025 11:00 am - 1:15 pm







Agenda

11:00 - 11:10 AM

Welcome by ORI Directors

Naïma Moustaïd-Moussa, Ph.D., FTOS, FAHA

Executive Director of the Institute for One Health Innovation Paul W. Horn Distinguished Professor, Department of Nutritional Sciences, TTU Professor, Department of Cell Biology & Biochemistry, TTUHSC

Kembra Albracht-Schulte, Ph.D., Assistant Professor, Department of Kinesiology & Sport Management, TTU

Jannette Dufour, Ph.D., University Distinguished Professor and Chair, Department of Cell Biology & Biochemistry, School of Medicine, TTUHSC

11:10 - 11:25 AM

Endocrine Disruptors: The Silent Risk to Women's Health Jaclyn E. Cañas-Carrell, Ph.D., Chair and Professor, Department of Environmental Toxicology, TTU

Introduced by **Hushyar Azari, M.D., Ph.D. Candidate**, Department of Kinesiology and Sport Management, TTU

11:25 - 11:40 AM

Obesogenic Toxicants in Breast Milk of Lactating Women
Bibha Gautam, Ph.D., R.N., CNE, Professor, School of Nursing, TTUHSC &
Mary Madeline Rogge, Ph.D., R.N., FNP, Associate Professor, School of Nursing,
TTUHSC

Introduced by **Alexis Rodriguez, Ph.D. Student**, Department of Cell Biology and Biochemistry, TTUHSC

11:40 - 12:00 PM

Q&A - Moderated by Hushyar Azari & Alexis Rodriguez

12:00 -1:05 PM

Panel Discussion - One Health Approach: Bridging Public Health and Food Safety

Panel Chair: Angela Walla, Ph.D., Professor of Food Microbiology, Davis College of Agricultural Sciences and Natural Resources, TTU

Panelists:

- Ron Cook, D.O., MS, MBA, Professor, Department of Family Medicine, and Chief Health Officer, TTUHSC
- **Shalene McNeill, Ph.D., RDN**, Executive Director, Nutrition Science, Health & Wellness National Cattlemen's Beef Association
- Steve M. Presley, Ph.D., Professor and Director, Biological Threat Research Laboratory (BTRL), and Director of The Institute of Environmental and Human Health, TTU
- Maria Salazar, MSc., Ph.D. Student, Graduate Research Assistant at the School of Veterinary Medicine, TTU

1:05 - 1:15 PM

Closing Remarks by ORI Directors Naïma Moustaïd-Moussa, Ph.D., FTOS, FAHA Kembra Albracht-Schulte, Ph.D. Jannette Dufour, Ph.D.



Naïma Moustaïd-Moussa, Ph.D., FTOS, FAHA Founding Director, Obesity Research Institute

Executive Director of the Institute for One Health Innovation; Paul W. Horn Distinguished Professor, Department of Nutritional Sciences, Texas Tech University; Professor, Department of Cell Biology & Biochemistry, Texas Tech University Health Sciences Center

Professor Naïma Moustaïd-Moussa is the Inaugural Executive Director of the system-wide Institute for One Health Innovation (IOHI) and Founding Director of the Obesity Research Institute (ORI). She is a Paul W. Horn Distinguished

Professor in Nutritional Sciences and Professor of Cell Biology and Biochemistry. She leads Nutrigenomics, Inflammation and Obesity Research (NIOR), conducting basic and integrated nutrition and obesity research, with emphasis on the role of the endocrine function of adipose tissue (renin angiotensin system), heat shock proteins, and nutrient-gene interactions in metabolic diseases, breast cancer, and aging-related diseases, namely Alzheimer's disease. Current research focuses on bioactive compounds (including fish oil, tart cherry anthocyanins, curcumin, and other polyphenols) that reduce obesity-associated white fat inflammation, activate brown fat, reduce systemic, adipose- and neuro-inflammation and aging-related metabolic dysfunctions, using cells, rodents, and model organisms (C. elegans). She published over 190 peer-reviewed papers from research funded by federal agencies, foundations, as well as industry (NIH, USDA, the American Heart Association (AHA), the American Diabetes Association (ADA), an international Foundation (Qatar Foundation's National Research Funds, Empirical Foods, Inc).

Professor Moustaïd-Moussa is a Fellow of AHA (FAHA), a Fellow of TOS (FTOS), and a Fellow of the National Academy of Inventors (NAI). She received several awards sponsored by the American Society for Nutrition (ASN), including the 2012 Outstanding Investigator Award, the 2015 Pfizer Consumer Healthcare Nutritional Sciences award, 2020 Korean Nutrition Society Award). She has been very dedicated to mentoring early career investigators and was awarded mentoring and scholarship awards by TTU including the 2018 Nancy J Bell Outstanding Mentor Award, 2019 Outstanding Faculty Mentor for Undergraduate Research, 2020 Outstanding Researcher Award, 2021 Barnie E. Rushing J. Distinguished Faculty Research Award in STEM and in 2023, the COHS Wolfe International Scholars Award. She also provided significant outreach and professional services and served for several years as the Region 1 representative on the statewide Live Smart Texas committee dedicated to obesity prevention and resources and served previously in a similar role on the state of Tennessee Obesity Task Force (TOT). In 2022, she was appointed to and continues to serve on the Board on Agriculture & Natural Resources (BANR) of the National Academies of Sciences, Engineering & Medicine (NASEM). She currently serves as Vice President-Elect for ASN (A four-year term in the presidential line; she will become President of ASN from June 2025 to Jul 2026).

Kembra Albracht-Schulte, Ph.D. Director, Obesity Research Institute

Assistant Professor, Department of Kinesiology & Sport Management, Director of the Nutrition, Exercise, & Translational (NExT) Medicine Laboratory, Texas Tech University

Dr. Kembra Albracht-Schulte is an Assistant Professor and Director of the Nutrition, Exercise, & Translational (NExT) Medicine Lab in the Kinesiology & Sport Management Department and Director of the Obesity Research Institute (ORI). She earned her B.S. in Exercise Science at Lubbock Christian University, M.S. in Exercise Science at Texas Tech University, and



Ph.D. in Nutritional Sciences at Texas Tech University. Her research focuses on the mechanistic and synergistic effects of exercise and nutrition interventions, with an emphasis on translational research to bridge basic and clinical sciences. She aims to develop targeted lifestyle interventions to reduce the burden of metabolic diseases through precision medicine approaches. Her work integrates multiomics, microbiome analysis, and biomarker discovery to explore the effects of exercise, dietary components, and bioactive compounds on metabolic health. Most recently, Dr. Albracht-Schulte led a USDA-funded clinical trial investigating the combined effects of omega-3 polyunsaturated fatty acids and high-intensity interval training on inflammation and metabolic health in individuals with overweight or obesity. She also conducts research on the role of turmeric in reducing obesity-associated inflammation through gut microbiome modulation. Committed to mentorship and education, she serves as a scientific mentor for the USDA REEU Nutrition BEST Undergraduate Training Grant at TTU.



Jannette M. Dufour, Ph.D. Co-Director, Obesity Research Institute

University Distinguished Professor and Chair in the Cell Biology & Biochemistry Department, School of Medicine, Texas Tech University Health Sciences Center

Dr. Jannette M. Dufour is a University Distinguished Professor and Chair of the Department of Cell Biology and Biochemistry in the School of Medicine at Texas Tech University Health Sciences Center and Associate Director of the Obesity Research Institute. She received her PhD in Genetics and Cell Biology from Washington State University in 1999 and

trained as a postdoctoral fellow with the Islet Transplantation Group in the Surgical Medical Research Institute, Department of Surgery at the University of Alberta, Edmonton, Canada, from 1999-2005. The focus of her research is to explore the therapeutic potential of immune-privileged Sertoli cells as a means to improve outcomes of transplantation. Specifically, her lab tests the feasibility of using immune privileged Sertoli cells for cell-based gene therapy and examining the mechanism(s) of Sertoli cell immune protection to improve the survival of insulin-expressing cells as a treatment for diabetes. Her research has been funded by several national and local agencies, including the NIH, American Diabetes Association, and Texas ARP, and has been selected for the cover photo for Cell Transplantation (2008). Spermatogenesis (2012) and DNA and Cell Biology (2018) and highlighted in Biology of Reproduction (2014) and Nature Medicine (2018). She has been invited to give seminars at several universities as well as at national and international meetings, including the American Society for Reproductive Immunology (2022, 2024), American Society of Andrology (ASA; 2007, 2016, 2023), Society for the Study Reproduction; 2012, 2016), NIAID (2017) and NIEHS (2017). She has received the TTUHSC President's Young Investigator Award (2011), the Outstanding Women Leader (OWL) Award from the West Texas Association for Women in Science (2013), the Harry M. Weitlauf Anatomy Teaching Award (2013), the Dean's Basic Science Teaching Award (2017, 2024) and the President's Team Teaching Award (2019, 2020), and the Graduate School of Biomedical Sciences Dean's Teaching Award (2023).

Presentation Moderators



Hushyar Azari, M.D., Ph.D. Candidate
Research Assistant, Kinesiology and Sport Management,
Texas Tech University

Hushyar Azari is a third-year Ph.D. candidate in Exercise Physiology at the Department of Kinesiology and Sport Management, Texas Tech University, holding an M.D. degree from Urmia University of Medical Sciences, Iran.

He is currently a research assistant at the Nutrition, Exercise, and Translational Medicine lab (NExT med) under the supervision of Dr. Kembra Albracht-Schulte. His research passion lies in clinical studies on the effects of combined interventions, integrating exercise and nutrition to combat obesity and its associated comorbidities with a specific focus on gut microbiota dysbiosis and Metabolic Dysfunction Associated Steatotic Liver Disease (MASLD). Before joining Texas Tech, Hushyar practiced as a family physician in Kurdistan, Iran, for 4 years. His dissertation project explores the combined effectiveness of High-Intensity Interval Training (HIIT) and omega-3 supplementation in improving obesity-associated gastrointestinal dysbiosis and its implications for liver health.

Alexis R. Rodriguez, M.S., Ph.D. Student Cell Biology and Biochemistry, Texas Tech University Health Sciences Center

Alexis R. Rodriguez is currently a PhD student in the Department of Cell Biology and Biochemistry at Texas Tech University Health Sciences Center. Received her BSA in Biology at the University of Texas at Austin in 2020 and MS in Biotechnology from Texas Tech University Health

Sciences Center in 2022. She is a TTUHSC GSBS Dean's Scholar recipient and is currently serving as the Vice-Director of Marketing for Student Research Week 2025.. Her current research focuses on studying the immune privilege of Sertoli cells to improve the outcomes of allo- and xeno-transplantation. Additionally, she is studying the mechanism by which transplanted Sertoli cells protect co-transplanted islet cells as a treatment for diabetes. Research interests include studying Sertoli cell immune privilege and immunoprotection of transplanted cells and examining the use of Sertoli cells to protect co-transplanted islet cells. Future research collaboration interests are transplantation, immune regulation and diabetes.

Presenters



Jaclyn E. Cañas-Carrell, Ph.D.
Chair and Professor, Department of Environmental Toxicology
Texas Tech University

Dr. Cañas-Carrell started as an Assistant Professor in 2006, received tenure and promotion to Associate Professor in 2012, and was promoted to Professor in 2018. Since fall 2021, she has been serving as the Department Chair in the Department of Environmental Toxicology. As an environmental

toxicologist, her research interests are focused on emerging contaminants and include determining the fate of chemicals in the environment. She is particularly interested in determining the fate and effects of emerging contaminants, such manufactured nanomaterials, microplastics, and nanoplastics, in terrestrial and aquatic systems. Dr. Cañas-Carrell has also been heavily involved in STEM Education. She has published over 48 peer-reviewed journal articles. She has secured nearly \$10 million in funding from various federal agencies, such as NIH, NSF, and USDA, to conduct research and run STEM education programs/research. Dr. Cañas-Carrell received the Chancellor's Council Distinguished Research Award in 2013 and was awarded a President's Excellence in Research Professorship at Texas Tech University in 2019.

Presenters



Bibha Gautam, Ph.D., R.N., CNE
Professor at the School of Nursing
Texas Tech University Health Sciences Center

Dr. Gautam is a nurse faculty and researcher at Texas Tech University Health Sciences Center, School of Nursing. She teaches in an accelerated BSN program. She has been a nurse since 1993. She is passionate about nursing research and has been involved in many research studies nationally

and internationally. Major areas of Dr. Gautam's research interests are the Developmental origins of obesity, the Biology of Obesity, Antecedents of Obesity, and Time Restricted Eating. Some of her completed research studies include: 1) Prevention of HIV-1 transmission via breast milk, 2) Obesogenic Toxins in Breast Milk of Lactating Women, 3) Post-partum Sleep and Weight, and 4) Accelerated BSN Program Coaching Model.

Within the School of Nursing, she has demonstrated her leadership in planning, coordinating, and conducting educational research studies aimed at promoting evidence-based teaching. Some of the key educational research studies she contributed to within the School of Nursing are the use of Point-of-care technology in nursing, assessing the needs of Accelerated BSN Program second-degree clinical coaches, and use of deliberate practice in nursing education.

Dr. Gautam is an active member of several professional nursing organizations: the international nursing honor society Sigma Theta Tau, the American Nurses Association, and the Texas Nurses Association. She serves on the advisory board of the Texas Tech University Obesity Research Institute (ORI) and of the Society of American Nepalese Nurses (SANN). Dr. Gautam also serves on the Non Resident Nepali Association, USA Science Technology, and Innovation (STI) Committee.

Presenters



Mary Madeline Rogge, Ph.D., R.N., FNP Associate Professor at the School of Nursing Texas Tech University Health Sciences Center

Dr. Rogge is a part-time faculty member and researcher for the Texas Tech University Health Sciences Center, where she teaches graduate courses in the advanced practice nursing programs. She earned her baccalaureate degree in nursing from Texas Woman's University, a master of arts degree in

nursing with a second major in anatomy and physiology from Ball State University, and her Ph.D. in nursing from the University of Texas. She earned her post-masters nurse practitioner certificate from Texas Tech University.

Obesity became Dr. Rogge's field of research and scholarship when she encountered frequent weight loss recidivism while practicing as a family nurse practitioner in an inner-city clinic in Indianapolis, where she discovered weight gain after successful weight loss was a general problem, not just her own moral failure. Since 2000, she has studied the pathophysiology of obesity, including adipogenesis and metabolic adaptation to weight loss. She is fascinated by the non-dietary origins of obesity and has developed a functional taxonomy of non-dietary antecedents of obesity. She has completed research on the lived experience of obesity, women's perinatal sleep, and weight gain, and with Dr. Bibha Gautam, has completed research on environmental pollutants in the breast milk of obese vs. nonobese women and the effect of low environmental temperature on excess weight gain in adults. She also conducted a case study of the effect of three-minute light movement for weight loss in an obese, postmenopausal woman.

Dr. Rogge is an active member of several professional nursing organizations, including the Texas and American Nurses Associations, the National Association of Nurse Practitioners, the Obesity Society, and Sigma Theta Tau, an international nursing honor society.

Panel Discussion

One Health Approach: Bridging Public Health and Food Safety



Angela Walla, Ph.D Panel Chair

Professor of Food Microbiology, Davis College of Agricultural Sciences and Natural Resources, Texas Tech University

Dr. Angela Walla is a Professor in the Department of Animal and Food Sciences at Texas Tech University. As a trained microbiologist and food scientist, Dr. Walla is deeply committed to advancing food safety and

Introduced protecting the food supply. She collaborates with farmers, distributors, grocery stores, and restaurants to implement effective food-handling practices that minimize the risk of foodborne outbreaks. Additionally, she supports food companies in navigating complex food safety regulations and delivers educational workshops and courses on food safety. Her research focuses on developing innovative intervention strategies to control and prevent foodborne pathogens, ensuring a safer and more reliable food supply chain. Dr. Walla earned her Bachelor of Science in Animal Science and her Master of Science in Meat Science from Iowa State University, followed by a Ph.D. in Animal Science (Food Microbiology) from Texas Tech University. Before joining Texas Tech in Fall 2022, she served as a faculty member at Iowa State University for 12 years. To date, Dr. Walla has authored 105 peer-reviewed journal and extension articles and has secured over \$27 million in grants as PI or co-PI.



Ron Cook, D.O., MS, MBA
Professor, Department of Family Medicine and Chief Health
Officer, Texas Tech University Health Sciences Center

Ronald L. Cook, DO, MBA, is a Professor in Family Medicine and serves as the Chief Health Officer at Texas Tech University Health Sciences Center. He earned his undergraduate degree in Microbiology (1985) and a Master's in Zoology (1989) from Texas Tech University, followed by his

medical degree from Texas College of Osteopathic Medicine in 1993. Dr. Cook completed his residency in Family Medicine in 1996 and an MBA from Rawls College of Business in 2005. He served as the Braddock Chair of Family Medicine from 2011 to 2023.

Recognized for his leadership and service, Dr. Cook has been the City of Lubbock Health Authority since 2009 and was named the 2023 Family Physician of the Year by the Texas Academy of Family Physicians. His distinguished career includes numerous awards, including the Paul Harris Fellow Award, and impactful contributions during the COVID-19 pandemic, where he delivered over 80 press conferences to guide public health efforts.

National Cattlemen's Beef Association



Shalene McNeill, PhD, RDN Executive Director, Nutrition Science, Health & Wellness

Shalene H. McNeill, Ph.D., RDN is an internationally recognized expert on the role of meat in the human diet. As a nutrition scientist and registered dietitian, Dr. McNeill has dedicated her career to advocating

for the science behind livestock's role in healthy, sustainable food systems.

Growing up on a cow-calf ranch in rural South Texas, Dr. McNeill developed an early interest in the intersection of food, health, and agriculture. She earned a B.S. in Biomedical Science and a Ph.D. in Agriculture and Life Sciences from Texas A&M University, where she researched ways to enhance the healthfulness of poultry products. She also completed a 1200-hour dietetic internship to become a Registered Dietitian.

In 1997, Dr. McNeill joined the Texas Beef Council, developing science-based educational initiatives that reached millions. She forged partnerships with organizations such as Texas AgriLife and the American Heart Association, and served as President of the Texas Dietetic Association, earning recognition as a Texas Distinguished Dietitian.

Since 2005, Dr. McNeill has served as Executive Director of Nutrition Research at the National Cattlemen's Beef Association, leading health and wellness initiatives. She has directed over \$30 million in research funding to advance the scientific understanding of beef's role across the lifespan. Beyond beef-focused research, she champions increased funding and transparency in nutrition research.

Dr. McNeill is a respected scientific voice, frequently invited to speak at scientific and public forums, and has conducted over 200 media interviews. She is an active member of the American Society for Nutrition, where she currently serves as Sustaining Partner Chair.

Dr. McNeill and her husband Scott live in Pleasanton, Texas, and have two college-aged daughters.



Steven M. Presley, Ph.D

Director of the Biological Threat Research Laboratory (BTRL) Director of The Institute of Environmental and Human Health, Texas Tech University

Professor Presley serves as the Director of the Biological Threat Research Laboratory (BTRL) and the director of The Institute of Environmental and Human Health at Texas Tech University.

He earned his B.S. degree in Animal Sciences from Texas Tech University, his M.S. and Ph.D. degrees in Entomology (medical and veterinary focus) from Oklahoma State University. He then completed a Postdoctoral Fellowship at the University of Kentucky studying the physiological effects of biting flies on beef cattle.

Dr. Presley served on active duty as a United States Navy Medical Service Corps Officer before joining Texas Tech in 2002. His career research focus has been to gain better understanding of biotic and abiotic environmental factors that influence the prevalence, transmission, maintenance, and persistence of zoonotic and other arthropod-vectored infectious pathogens that threaten human and animal health. Research and contracted service capabilities within Dr. Presley's lab group includes a BSL-3 Federal Select Agent Program- registered academic research and CLIA-certified public health diagnostic facility that serves as a regional U.S. Centers for Disease Control and Prevention Laboratory Response Network Reference Laboratory for bioterrorism response.

Additionally, the BTRL Group includes the Vector-borne Zoonoses Lab, the Genomic Sequencing Lab, and an FDA/Texas Department of State Services Milk and Dairy Product Quality Assurance Laboratory. Dr. Presley currently serves as the Southcentral U.S. Regional Director for the Society for Vector Ecology and is the Chairman of the Editorial Board for the Journal of Vector Ecology. Dr. Presley received the United States Navy and Marine Corps Rear Admiral Charles S. Stephenson Award for Excellence in Preventive Medicine. He was awarded the Texas Tech University President's 2010 Book Award for a book entitled Advances in Biological and Chemical Terrorism Countermeasures. He has provided invited testimony during a hearing of the U.S. House of Representatives Committee on Science, Space and Technology entitled Science of Zika: The DNA of an Epidemic.



Maria Salazar, MSc.

Graduate Research Assistant at the School of Veterinary Medicine, Texas Tech University

Maria Salazar is a Ph.D. student in One Health Sciences at Texas Tech University's School of Veterinary Medicine in Amarillo, Texas. Originally from Neiva, Colombia, she earned her bachelor's degree in industrial microbiology from Pontificia Universidad Javeriana in Bogotá, Colombia.

Maria completed her master's in food science at the Texas Tech University, Department of Animal and Food Sciences. During this time, she recognized the connection between food microbiology, public health, and the One Health approach.

Maria's doctoral research focuses on understanding the impact of food microbiology and food safety on human, animal, and ecosystem health. She is particularly interested in bacterial pathogen's control within food production. Her current research focuses on conducting a microbial challenge study on the aging process of hard cheese made from unpasteurized milk. Her work assesses the effectiveness of this process in inhibiting foodborne pathogens, along with chemical analyses over time, to ensure product safety and quality in accordance with industry standards.

By integrating microbiology and food safety, Maria aims to develop strategies that enhance public health and reduce the risks of foodborne diseases.

Acknowledgements



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A Special Thank You to:

Webinar Presenters:

Dr. Jaclyn E. Cañas-Carrell
Dr. Bibha Gautam
Dr. Mary Madeline Rogge
Moderators:

Hushyar Azari & Alexis Rodriguez

Webinar Panel:

Dr. Ron Cook
Dr. Shalene McNeill
Dr. Steven M. Presley
Maria Salazar
Panel Chair: Dr. Angela Walla

Organizing Committee:

Dr. Naïma Moustaïd-Moussa Dr. Kembra Albracht-Schulte Dr. Jannette Dufour Dr. aretha marbley Dr. Lisa Garner Dr. Leslie Thompson

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Alexis Rodriguez
Dr. Hushyar Azari
OR&I, ORDC, COHHS,
and CBB

POST-MEETING SURVEY for ORI Women's Health Webinar

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CALL FOR ABSTRACTS ORI 10TH ANNUAL MEETING 2025 FATTY LIVER DISEASE

Submission Deadline: MARCH 31 by 5:00 PM

Abstract Submission Form

https://www.research.net/r/2025_ORI_Abstract_Submission or scan QR Code to submit your abstract



Abstract length: 250 word limit

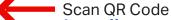
Eligibility: Undergraduate, Graduate students, Postdocs & Medical students broadly working in obesity and related metabolic or chronic

diseases are encouraged to submit!



Meeting Date: May 7th, 2025 (Wednesday) **Location:** TTUHSC Lubbock (in person)

Register for the ORI Annual Meeting by April 21st



https://www.surveymonkey.com/r/2025 ORI Annual Mtg





