



**Center of Excellence for Integrative Health
(CEIH)
Annual Report
2022**

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Summary

- By December 2022, over 48 faculty members had joined the Center. The Center website was established (<https://www.ttuhsu.edu/centers-institutes/integrated-health-research/default.aspx>) and includes member profiles, funded grant awards, etc.
- Among 48 members, 46 members submitted their 2022 annual report. These reports indicated important metrics for the Center: 254 peer-referred publications, 119 published abstracts, 74 poster presentations, 121 oral presentations, and 70 grants (totaling \$34,384,733 covering the year of 2022 and related years). 7 awards were received by members. Detailed scholarly activities of these 46 members are in the appendix.
- Hosted 4th Annual Integrative Medicine Symposium on October 21, 2022, in-person and virtual poster. Two *Keynote speakers of CEIH*: (1) **Dr. Barrie Tan**, PhD. CEO of American River Nutrition, LLC, Hadley, MA. Topic: *A Unique Plant-based Vitamin E Tackles Chronic Conditions* and (2) **Dr. Deborah Clegg**, Vice President of Research, Texas Tech University Health Sciences Center at El Paso, El Paso, TX. Topic: *Dose the Food we Eat and Its Processing Impact Our Hormonal Balance and Cancer Risk?* ~ 250 participants joined this meeting.

ELEVENTH ANNUAL
GENDER-SPECIFIC MEDICINE
AND WOMEN'S HEALTH
SYMPOSIUM

FOURTH ANNUAL
INTEGRATIVE
MEDICINE SYMPOSIUM

Academic Classroom Building, Room 100 • Lubbock, Texas 79430
9:00 AM - 1:00 PM

OCTOBER 21, 2022

DR. DEBORAH CLEGG
Guest Speaker
Vice President of Research
TTUHSU El Paso

KEISA MATHIS, PH.D.
Keynote Speaker
Assistant Professor, Physiology & Anatomy
Executive Director, Black in Physiology
University of North Texas Health Science Center

DR. BARRIE TAN
Guest Speaker
CEO of American River Nutrition

Registration: <https://tinyurl.com/lwbsymposium22>
Poster Submission Deadline: October 12, 2022
To submit abstracts and posters, please visit: <https://tinyurl.com/lwbposter>
Join online by visiting <https://ttuhsu.zoom.us/j/27298359387>
pwd=VjZlVjRlUWksa1hYQn6d3jNVkIsQY99

Laura W. Bush
INSTITUTE FOR WOMEN'S HEALTH
WWW.LAURABUSHINSTITUTE.ORG

A SPECIAL THANK YOU TO THE CENTER OF
EXCELLENCE FOR INTEGRATIVE MEDICINE
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CEIH invited speakers:

Barrie Tan, PhD.
*A Unique Plant-based Vitamin E Tackles
Chronic Conditions*

Deborah Clegg, PhD.
*Does the Food we Eat and Its Processing
Impact Our Hormonal Balance and Cancer
Risk?*

Registration: <https://tinyurl.com/lwbsymposium22>

Poster Submission Deadline: **October 12, 2022**

To submit abstracts and posters, please visit:

<https://tinyurl.com/lwbposter>

- The 2022 Annual Membership Meeting was hosted in-person and via Zoom on October 7, 2022. A total of 9 CEIH members (7 in-person and 5 via zoom) presented their research highlights and interest areas at the meeting. This annual membership meeting was recorded. We shared the meeting minutes and the Zoom recording with members who had time conflicts and noted their feedback. At the same meeting, we invited TTU Honors College Undergraduate Research Scholars (URS) to attend in-person. The two parties (CEIH members and URS) communicated directly for future mentor-mentee opportunities. There were 33 total attendees (28 in-person and 5 via zoom) at the meeting.

- To promote Center visibility locally and nationally.
Locally: To organize the 2023 CEIH symposium planning committee for upcoming annual CEIH meetings.
Nationally: To present our Center progress/update at the upcoming 2022 Integrative Medicine & Health Symposium, Hosted by the Academic Consortium, Pheonix, AZ, May 23-26, 2022.

Vision/Mission

VISION

- To improve the health of individuals through integrative health research discoveries and high-quality education.

MISSION

- To support the strategic objectives and academic mission of School of Medicine and TTUHSC in enhancing research and research-related education.
- To foster and facilitate synergistic, interdisciplinary, trans-disciplinary, and inter-professional collaboration among researchers/colleagues committed to integrative health research and to assist the professional development of new researchers.
- To promote thoughtful and compassionate healthcare in the broad field of integrative health through innovative and rigorous research at basic, translational, clinical, and population levels, and assist and support researchers in conducting cutting edge research that will grow the empirical evidence base for integrative approaches to health.
- To promote research-associated educational opportunities for medical students.

Strategic Plan

The key goals for the Center are:

1. Establish a critical mass of outstanding faculty with an emphasis on those doing integrative health research through basic, translational, clinical, community, and health service research.
2. Promote and establish collaborations in basic, translational, clinical, community, and health service research in integrative health among TTUHSC campuses, TTU, and other institutions.
3. Enable a significant increase in peer-reviewed integrative health research funding (i.e. foundations, federal funding, industries) to TTUHSC and other TTU Systems.
4. Participate in consortium member meeting of the Academic Consortium for Integrative Medicine and Health to report Center activities, increase research collaboration, and improve medical education in the area of integrative health.

Membership

- Over 48 faculty members have joined the Center, including 3 different schools (School of Medicine, School of Health Professions, and School of Nursing) from TTUHSC and 4 colleges (College of Arts & Sciences, College of Human Sciences, College of Engineering, and College of Education) from TTU. Detailed member profiles can be found in the Center website <https://www.ttuhs.edu/centers-institutes/integrated-health-research/default.aspx>
- Current Steering Committee Members include Dr. Volker Neugebauer, Dr. Michael Blanton, Dr. Betsy Jones, Dr. Naima Moustaid-Moussa, and Dr. Yan Zhang.
- In the past year, 6 members have left TTUHSC or TTU. 9 new members have joined the Center.

MEMBER PROFILE
Center of Excellence for Integrative Health

Name/department /school	Contact Information	Research Interest/Expertise	Research Keywords
Al-Rahawan, Mohamad MD, MPH/Pediatric Hematology Oncology TTUHSC	m.al@ttuhsc.edu Office: (806) 775-8600	Pediatric Cancer treatment and prevention. Vitamin deficiency and supplementation in survivors of childhood cancer.	
Bennett-Brown, Maggie PhD, Communication Studies, College of Media & Communication	Margaret.bennett@ttu.edu	Sexual health communication, patient-provider communication, sexual health behavior interventions, women's healthcare	Sexual health communication, women's healthcare
Blanton, Michael P. PhD/ Pharmacology & Neuroscience/ SOM-Lubbock, TTUHSC	michael.blanton@ttuhsc.edu Office: (806) 743-3496 Cell: (806) 319-1778	Structure/function of neuronal nicotinic acetylcholine receptors; development of smoking cessation agents and PAMs (positive allosteric modulators) for the treatment of Alzheimer's, Parkinsonism, and other disorders of the nervous system. http://legacy.ttuhsc.edu/medicine/pharmacology/faculty/blanton.aspx	
Brismée, Jean-Michel PT, ScD/ Rehabilitation Sciences-SHP- Lubbock, TTUHSC	Jm.brismee@ttuhsc.edu Office: (806)743-3243 Cell: (806) 789-0387	Clinical trials, intervertebral disc hydration/height, musculoskeletal health including, osteoarthritis, osteoporosis, diagnostics, manipulative therapy, mind-body therapies including yoga, meditation, Tai Chi.	
Chyu, Ming-Chien PhD/Mechanical Engineering/TTU	m.chyu@ttu.edu Office: (806) 834-8982	Non-pharmacological approaches in musculoskeletal issues-healthcare engineering approach- biomechanics.	
Coman, Ioana A PhD/Public Relations/College of Media and Communication	ioana.coman@ttu.edu Cell: 865-607-5406 Office: 806.834.0936	Health communication & promotion (vaccines, outbreaks/pandemics, health issues) in risk and crisis contexts, different levels (local, national, international) and different platforms (media, social media, visuals, etc). Stigma, advocacy and health communication/promotion.	Health promotion Social Media Vaccines Outbreaks Mis/disinformation Stigma Advocacy
Dennis, Jeff PhD/Public Health	Jeff.Dennis@ttuhsc.edu	Social epidemiology, including racial and ethnic disparities in health outcomes, immigrant health, and disparities in birth outcomes. Complementary and alternative medicine, mental health diversion in correctional facilities, sleep disturbance, and life satisfaction among medical students	population health and demography
Dufour, Jannette PhD/Cell Biology and Biochemistry/SO	jannette.dufour@ttuhsc.edu Office: (806) 743-2616	Use of immunoprotective Sertoli cells in transplantation. Specifically, mechanisms of Sertoli cell immune privilege, transplantation of genetically modified, immune privileged Sertoli	Sertoli cells, Immune privilege, Transplantation, Diabetes,

M-Lubbock, TTUHSC		cells and co-transplantation of Sertoli cells and pancreatic islets.	Islets, Gene therapy, Cell Therapy
Enakpene, Christopher A MD / Maternal-Fetal Medicine / Obstetrics & Gynecology / SOM, TTUHSC Midland/Permian Basin	christopher.a.enakpene@ttuhsc.edu Cell: 347 217 5127	Diabetes in pregnancy and obesity. On going clinical trial on randomization of early diabetes screening in obese pregnant women. Impact of gestational diabetes and impaired glucose tolerance on short and long-term maternal and child health. Multimodal approach in the prevention of preterm birth.	Clinicaltrial.gov. REDSOAP Study: NCT03116009. Clinicaltrial.gov ARABIN Study NCT03052270
Figueroa, Arturo MD, PhD/ Kinesiology and Sport Management/TTU	arturo.figueroa@ttu.edu Office: (806) 834-5587	Arterial function and skeletal muscle health (mass and strength) in middle-aged and older adults, especially in women. Aging, hypertension, obesity, type 2 diabetes, sarcopenia/dynapenia, and cardiovascular diseases. Resistance exercise training and dietary supplements with vascular effects.	Arterial stiffness, aortic hemodynamics, wave reflection, blood flow, endothelial function, L-citrulline supplementation, resistance exercise, muscle metaboreflex
Garner, Christine PhD, RD/InfantRisk Center, Pediatrics/SOM TTUHSC Amarillo	christine.garner@ttuhsc.edu Office: (806) 414-9587	Maternal and child nutrition, Breastfeeding, Lactation, Obesity, Food insecurity, Maternal mental health, Mixed methods research, Clinical research	Nutrition, breastfeeding, food insecurity
Jitkajornwanich, Kulsawasd			
Jones, Betsy PhD/Medical Education/TTUHSC	Betsy.jones@ttuhsc.edu	Medical education	
Jung, Kwanghee PhD/Educational Psychology/TTU	kwanghee.jung@ttu.edu Office: (806) 834-0023	Multivariate Statistics and Functional Data Analysis, Psychological Measurement and Testing Theory, Data Analytics and Big Data Analytics, Bio-medical Data and Patient-Reported Outcomes Research, Human Brain and Mental Health Research, Statistical Software Development, Virtual Reality/Augmented Reality Development	
Kahathuduwa, Chanaka MBBS, MPhil, PhD/Laboratory Sciences & Primary Care-SHP/Psychiatry-	chanaka.kahathuduwa@ttuhsc.edu ; chanaka.kahathuduwa@ttu.edu	Neurophysiological mechanisms underlying human cognitive and neurophysiological mechanisms. Obesity and metabolic derangements-related human ingestive behavior. Developmental disorders such as ADHD and autism spectrum disorders.	

SOM-Lubbock, TTUHSC			
Kaur, Gurvinder PhD/Medical Education/SOM- Lubbock, TTUHSC	gurvinder.kaur@ttuhsc.edu	1) Diabetes (both type 1 and type 2) 2) Transplantation immunology (allo and xeno-transplantation, rodents) 3) Islet isolation (from rodents and pigs) 4) Immune cell (T cells, macrophages and dendritic cells) analysis by immunostaining and flow cytometry 5) Amyloid formation in beta cells	
Kee, Kerk PhD/Professional Communication/TTU	Kerk.Kee@ttu.edu	Technological innovations (e.g., collaborative cyberinfrastructure, social media). Behavioral innovations (e.g., health prevention, water conservation)	Corporate & organizational, health, science, social media
Lawrence, J Josh PhD/Pharmacology & Neuroscience/SOM- Lubbock, TTUHSC	John.lawrence@ttuhsc.edu	nutritional deficiencies, excitation/inhibition balance in disease states, hippocampal neuromodulation, aging, Alzheimer's disease, epilepsy, autism	Autism Epilepsy Late onset of AZ
Lee, Jaehoon (Jason) PhD/ Educational Psychology/TTU	Jaehoon.lee@ttu.edu Office: (806) 834-5907	high dimensional data analysis, experimental design and sample size calculation, as well as multiple testing adjustments	
Lee, Sue Ann S. PhD, CCC- SLP/Speech- Language- Hearing Sciences, SHP, TTUHSC	sueann.lee@ttuhsc.edu Office (806) 743-9051	Speech and language in children with hearing loss and cleft palate, Bilingual speech and language development, treatment effectiveness using ultrasound and telepractice	Speech-language impairment, bilingualism, speech-language intervention, speech-language instrumentation, ultrasound, telepractice
Luk, Hui Ying PhD/Kinesiology & Sport Management/TTU	Huiying.luk@ttu.edu Office: 806-834-0827	Immunoendocrine response on skeletal muscle regeneration and hypertrophy	Musculoskeletal recovery and growth/strength and conditioning/inflammation/hormones/muscle mass
Lyford, Conrad PhD Agricultural & Applied Economics, TTU	Conrad.lyford@ttu.edu Office: (806) 834-6881	Behavioral change towards healthy behavior and disease prevention. Community/school interventions for obesity prevention. Cost-benefit analysis. Developing country food security and health systems	
Narasimhan, Madhusudhanan PhD/Pharmacology & Neuroscience/SO	madhu.narasimhan@ttu.edu Office: (806) 743-4079	Molecular mechanisms underlying fetal alcohol developmental toxicity, Neuropathic pain mechanisms and treatments, Oncogenic signaling in cancer progression and metastasis and oncogene-directed treatment options	

M-Lubbock, TTUHSC			
Mello, Inola DNP, APRN, FNP-C Family Practice/SON TTUHSC	inola.mello@ttuhsc.edu Office: (806) 743-7282	Vitamin D, sexual health, sleep patterns/anxiety, recreation drug use/misuse in college health	
Moustaid-Moussa, Naima PhD/Nutritional Sciences /TTU	naima.moustaid-moussa@ttu.edu Office: (806) 834-7946	Basic and integrated nutrition and obesity research. Endocrine function of adipose tissue and nutrient- gene interactions in metabolic diseases. Beta cell function in diabetes and childhood obesity	
Murimi, Mary PhD RD: Nutritional Sciences/TTU	Mary.murimi@ttu.edu Office : (806)834-1812	Investigates the effects of the community environment on the nutrition status of the residents, and coping strategies for food insecure households especially among low-income populations. Applies Community based participatory research. Dr. Murimi has collaborative relationship with institutions in both Ethiopia and Kenya.	Food security, maternal and child nutrition, Nutrition education
Nair, Nandini PhD. MD. /Cardiology/ SOM- Lubbock, TTUHSC	Nandini.nair@ttuhsc.edu	Basic/translational/clinical research in heart failure. Proteomics and genomics. cardia transplant and mechanical assist device.	
Neugebauer, Volker MD,PhD/Pharmac ology & Neuroscience/SO M-Lubbock, TTUHSC	Volker.neugebauer@ttuhs.c.edu Office: (806) 743-3880	Neurobiological mechanisms of brain dysfunction in preclinical setting related to chronically relevant disorders, such as chronic pain, comorbid conditions of anxiety, depression, alcohol use disorder, and epileptogenesis.	
Oldewage-Theron, Wilna PhD, RD (SA)/Nutritional Sciences/TTU	wilna.oldewage@ttu.edu Office: (806) 834-0567	Investigating the impact of community nutrition programs (food fortification, supplementation, nutrition education, food product development and implementation, school nutrition, vegetable and soy gardening) on food insecurity and the double burden of disease of women, children and the elderly	
Palmer, Ty PhD/Kinesiology and Sport Management/TTU	Ty.palmer@ttu.edu Office: (806) 834-7884	Impact of age-related disparities on muscular function. Interventional strategies to improve functional performance in older adults	
Park, Oak-Hee PhD/Nutritional Sciences/TTU	Oak-hee.park@ttu.edu	Community nutrition. Food environment.	
Pelly, John MBA, PhD/Medical Education/SOM- Lubbock, TTUHSC	John.pelly@ttuhsc.edu	Mindfulness strategies in learning and mind-body wellness, integrative medicine education	education
Phy, Jennifer MD/ Obstetrics & Gynecology/SOM-	Jennifer.phy@ttuhsc.edu Office: (806) 743-4256	Polycystic ovary syndrome and weight loss by dietary modification. Acupuncture on vascular tone and stress levels in infertile women undergoing in vitro fertilization.	

Lubbock, TTUHSC			
Narissra M. Punyanunt-Carter, PhD Communication, College of Media & Communication TTU	n.punyanunt@ttu.edu Office: (806)834-3273	Health communication; health advocacy, the crafting of messages about health, and strategies for the promotion of health-care services.	
Rahman, Rakhshanda, MD, FRCS, FACS	rakhshanda.rahman@ttuhsc.edu	Comprehensive Breast Cancer Care Risk Assessment and Prevention of Breast Cancer Breast Cancer Survivors Quality of Life Ultrasound guided percutaneous diagnosis and treatment of breast disease Oncoplastic management of Breast Cancer	
Shen, Leslie PhD, CCRP/ Pathology/ SOM-Lubbock, TTUHSC	Leslie.Shen@ttuhsc.edu Office: (806) 743-2815 Cell: (806) 787-6971	Clinical trials and animal studies – dietary supplement/phytochemicals in musculoskeletal health and obesity. Mind-body exercise (clinical only) in musculoskeletal health and obesity.	Clinical trials - obesity-related chronic diseases (diabetes, metabolic syndrome).
Shin, Andrew PhD / Nutritional Sciences / TTU	andrew.shin@ttu.edu Office: 806-834-1713	Neurobiology of appetite control, body weight regulation, nutrient metabolism. Behavioral neuroscience, Mechanisms underlying bariatric surgery	Branched-chain amino acids, Roux-en-Y gastric bypass, brain, Alzheimer's disease, obesity, diabetes
Singh, Sharda PhD TTUHSC	Sharda.singh@ttuhsc.edu Office: (806) 743-1540	Clinical trials and animal studies – dietary supplement/phytochemicals in prevention of doxorubicin induced cardiotoxicity. Molecular mechanisms involved in protein-protein interaction that prevents cancer development.	
Sizer, Phillip S. Jr. PT, PhD, OCS, FAAOMPT/Rehabilitation Sciences/SHP-Lubbock, TTUHSC	Phil.sizer@ttuhsc.edu Office: (806) 743-3902	Clinical pathoanatomy, sensorimotor control and functional biomechanics of the spine and extremities Tissue and movement screening	
Huaxin Song PhD/School of Nursing TTUHSC	Huaxin.song@ttuhsc.edu Office: 806-743-2661	Chronic Disease Management through interprofessional collaborative practice; Childhood obesity prevention; Big Data and measurement matrix for research and quality improvement programs for healthcare system.	Chronic Disease Management / Geriatric care/ Childhood obesity
St. John, Julie DrPH, MPH, MA, CHWI/Dept. of	julie.st-john@ttuhsc.edu Office: 325.696.0473 Cell: 325.513.4943	Health status and quality of life improvement among diverse and rural populations through community health development and partnership approaches; scope of practice and training of	Community based participatory research;

Public Health, GSBS, TTUHSC		Community Health Workers; addressing human trafficking through community capacity building; health disparities; community health status assessments; program evaluation; intervention development	Public health; Community health workers; Partnerships Health disparities; Program evaluation
Sun, Grace DNP, APRN, FNP-BC TTUHSC/School of Nursing/TTU Student Health and Wellness	Grace.sun@ttuhsc.edu Office: (806) 743-9246	University Student Health and Wellness; Gastroenterology/Hepatology; Interprofessional education; Nutrition, Physiology, Metabolism	
Tinsley, Grant PhD/Kinesiology & Sport Management/TTU	Grant.tinsley@ttu.edu Office: (806) 834-5895	Body composition assessment methodology, lifestyle interventions to improve body composition, intermittent fasting, dietary supplementation, resistance training	Body composition assessment; intermittent fasting; fat mass; muscle mass; resistance training
Zhang, Fangyuan PhD/Mathematics and Statistics/TTU	fangyuan.zhang@ttu.edu Office: (806) 834-2587	Developing statistical methods to detect genetic effects, epigenetic effects, and interaction effects between genes and environment associated with human complex diseases. Application of biostatistical methods to real data analysis.	Statistical genetics, biostatistics
Zhang, Yan PhD, LAc/Texas Christian University	Yan.zhang@tcu.edu Office: 806-743-6056	Clinical trials-acupuncture and mind-body intervention Health services research-secondary data analysis (NHIS) on CAM related topics, patient-outcome study Complementary and integrative health education	Clinical trials-acupuncture and mind-body intervention, integrative pain management study Health services research-secondary data analysis, patient-outcome study
Zook, Julie PhD/Architecture/TTU	Julie.zook@ttu.edu Office: (806) 834-0699	Environmental determinants of health related to architectural and urban/community design; use of EHR data to better understand functioning of healthcare architecture	Architecture Healthcare workers Patient experience
Zu, Yujiao	Yujiao.zu@ttu.edu	Dietary components and obesity-associated metabolic disorders in cells and animals	Obesity Aging

PhD/Nutritional Sciences/TTU			Inflammation Mechanisms
Zumwalt, Mimi MD/Orthopedic Surgery/ Sports Medicine TTUHSC	mimi.zumwalt@ttuhsc.edu Office: (806) 743-2465	Female athletes/Injury prevention Exercise techniques/training Rx Natural/alternative nutrition Sex/Gender differences	female athletes sex/gender musculoskeletal injury/ strength & conditioning

Achieved Goals and Objectives

Summarize goals, objectives, and success toward meeting goals and objectives. Describe any changes to goals and objectives with explanation. (Please include the matrix submitted with the center's original application. If not included in original application, please include a matrix that can be used to assess how well the mission and goals of the Center are being met.)

The following are the Center Goals, Objectives, and Matrix submitted with the center's original application:

GOALS and OBEJCTIVES:

Research:

- To foster transdisciplinary/multi-disciplinary collaborations for high quality basic, translational, and clinical research in integrative health within TTUHSC, TTU, and beyond.
- To assist and support researchers in conducting cutting edge research that will grow the empirical evidence base for integrative approaches to healthcare.
- To collaborate with basic scientists to develop biological correlates of integrative health clinical outcomes and explore potential mechanisms of action in effectiveness and efficacy studies.
- To build academic and community research partnerships.
- To rigorously test the safety and effectiveness of integrative health approaches for treatment and management of diseases.
- To present, publish, and disseminate reliable information in integrative health using public and professional outlets.

Education:

- To provide research opportunities for medical students.
- To develop a month-long research elective for 4th-year medical students.
- To host research and education integrative health conference.

METRICS

Achievement of mission and goals will be assessed using the following outcome measures:

- Attendance rate of activities/events organized by the Center.
- Presentations by members (especially invited speaking engagements).
- Publications (abstracts, case-report, full-length manuscripts): joint publications by two or more center members on projects funded by the Center.
- Joint grant applications and new individual applications based on Center projects. These would be expected to be applications to regional and national organizations.
- Participation of number of medical students in research activity related to integrative health.

Based on the Metrics, the following denotes our achieved goals and objectives:

Attendance rate of activities/events organized by the Center.

- We hosted our 2022 Center Membership Meeting in-person. 9 members presented their research interests, their 2022 scholarly activity highlights, and actively participated in discussion.

- Al-Rahawan, MD. Professor, Pediatric Hematology Oncology, TTUHSC
- Maggie Bennett-Brown, PhD. Assistant Professor, Communication Studies, TTU
- Martin Binks, PhD. Professor, Nutritional Sciences, TTU
- Jannette Dufour, PhD. Professor, Cell Biology & Biochemistry, TTU
- Christine Garner, PhD, RD. Assistant VP Research, Assistant Professor of Pediatrics, TTUHSC, Amarillo, TX
- Josh Lawrence, PhD. Associate Professor of Pharmacology & Neurosciences, TTUHSC
- Volker Neugebauer, MD, PhD. Chair/Professor of Pharmacology & Neurosciences, TTUHSC
- Leslie Shen, PhD. CCRP, Professor of Pathology, TTUHSC
- Andrew Shin, PhD. Assistant Professor, Nutritional Sciences, TTU

- At our Membership meeting, we also discussed the following:
 - How to promote CEIH function
 - How to highlight the achievements of CEIH members
 - How to utilize CEIH fund of \$17,000 – annual membership meeting expense, potentially use for MSSRP student stipends, etc.
 - How to work with the Clinical Research Institute for members that run clinical trials.
- Encouraged members to collaborate for manuscript (review or research study) and grant proposal application through offering member profiles and research grant table.

Presentations by members (especially invited speaking engagements):

- Based on 48 member reports, there was a total of 195 presentations including 121 oral and 74 poster presentations at local, national, and international symposiums in 2022. Please see more detailed presentation list in appendix.

Publications (abstracts, case-reports, full-length manuscripts, joint publications by two or more Center members on projects funded by the Center):

- Based on 48 member reports, there were 254 peer-reviewed article publications and 119 published abstracts by Center members in 2022. Please see more detailed publication and abstracts list in the appendix.

Number of grant awards by Center members:

- Approximately 70 grants received by the members in the year of 2022 and related years. Please see more detailed publication and abstracts list in the appendix.

Awards

- A total of 7 awards were received by the members in the year of 2022. Please see more detailed publication and abstracts list in the appendix.

Others

- Center members are active in teaching medical students, graduate students, and undergraduate students from TTUHSC and TTU.

Descriptions of Center Progress and Activities

Include training activities, meetings sponsored, research, education, services, ongoing research projects, and intellectual property development.

Listed are the following activities that were not included in the Achieved Goals and Objectives section above:

- Center members have met once in 2022 at the Annual Membership Meeting and presented/shared research highlights.
- TTUHSC is an active member of the Academic Consortium for Integrative Medicine and Health.
<https://imconsortium.org/>

Publications, Presentations, and Other Scholarly Activity

Please see attached appendix for list of publications (254 peer-referred journal articles, 119 published abstracts) presentations (121 oral and 74 poster), and other scholarly activity from our 46 Center members who provided this information to include in our 2022 report.

Funding

List grants submitted, grants funded, endowments, program project/center grants, and contracts.

Please see attached appendix for the list of 70 grant awards with a total amount of \$34 million (covering the year of 2022 and related years) from our 48 Center members who provided this information to include in the 2022 report.

Future Plans

Include areas in need of improvement and detailed, proposed solutions.

The following areas are our 2023 plans:

- To promote Center visibility locally and nationally. To organize the 2023 CEIH symposium planning committee for upcoming annual CEIH meetings.
- To host the 2023 Center Steering Committee Meeting in spring-summer 2023 regarding the future direction of CEIH.
- To host the 2023 Center Membership Meeting in summer-fall 2023.
- To increase research collaboration/discussion among center members as evidenced by increased collaborative grant proposal submissions and manuscript publications.
- To promote integrative health/medicine in medical student education.
- To continue public and professional integrative health/medicine education.
- To continue professional training in Integrative Medicine Education for medical student electives and clubs.
- To provide research opportunities for medical students or trainees.
- To provide seed funding for center members in collecting preliminary data for future proposal submission.
- To provide/exchange information at the Academic Consortium for Integrative Medicine and Health with center members for career development/growth in the area of Integrative Medicine and Health.

Other Highlights

Provide any other information not already covered in this report.

None.

Budget

Include itemized expenses, and proposed budget for upcoming fiscal year.

2022 & Current:

- There is currently no budget designated from the School of Medicine for CEIH.
- The Center currently has available fund ~ \$16,800.

CEIH Reports 2022

Al-Rahawan, MohamedPublications:

1. Chyu J, Ali Z, **Al-Rahawan MM**. Comments on evaluation of an oral sodium bicarbonate protocol for high-dose methotrexate urine alkalinization. *Support Care Cancer*. 2022 Dec;30(12):9699-9700.
2. **Al-Rahawan MM**, Barr EK, Yang J, West N, Hinds P. Comments on Quality of life in Ewing sarcoma patients treated with combination chemotherapy. *Medicine (Baltimore)*. 2022 <https://journals.lww.com/md-journal/Blog/MedicineCorrespondenceBlog//pages/post.aspx?PostID=164>

Presentations:

1. October 2022 Poster: Vitamin D levels in pediatric patients undergoing chemotherapy; Blood Supplement; Texas Tech University Health Science Center; CEIH Annual Symposium; Lubbock TX; Presented by, Madison Schoeberl, MS-III. https://www.ttuhschool.edu/medicine/medical-education/dome_lwbiwh_symposium2022.aspx
2. October 2022 Poster: Report on Toxicity of Cancer Therapy in Children from West Texas Enrolled on ACCESS Study; Texas Tech University Health Science Center; CEIH Annual Symposium; Lubbock TX; Presented by, Katherine Mitchell, MS-III. https://www.ttuhschool.edu/medicine/medical-education/dome_lwbiwh_symposium2022.aspx

Abstracts:

1. Schoeberl M, Prabhakar N, Mikkelsen M, Urias E, Scott C, Lee J, Shen CL, Al-Rahawan MM; Vitamin D levels in pediatric patients undergoing chemotherapy; *Blood* 2022; 140 (Supplement 1): 11600

Bennett, MargaretPublications:

1. **Bennett-Brown, M.**, Gesselman, A.N., & Miller, W.R. (2022-online first). Constructive communication patterns as related to relationship satisfaction, seizure severity, and patient activation among people with epilepsy. *Epilepsy & Behavior*. <https://doi.org/10.1016/j.yebeh.2022.108957>
2. **Bennett-Brown, M.** & Denes, A. (2022-online first). Testing the communication during sexual activity model: An examination of personality characteristics and their relationship with sexual communication outcomes. *Communication Research*. <https://doi.org/10.1177/00936502221124390>
3. **Bennett-Brown, M.** & Wright, P.J. (2022). Pornography consumption and partnered sex: A review of pornography use and satisfaction in romantic relationships. *Current Addiction Reports*. doi: 10.1007/s40429-022-00412-z
4. Campbell, J.T., Adams, O.R., **Bennett-Brown, M.**, Woodward, B., Gesselman, A.N., & Carter, G. (2022). PrEP familiarity, interest, and usage among 364 Black and Hispanic adults in Indiana. *Frontiers in Public Health*. <https://doi.org/10.3389/fpubh.2022.810042>
5. **Bennett-Brown, M.**, Adams, O.R., Campbell, J.T., Moscovici, Z., & Gesselman, A.N. (2022). Chronic vulvovaginal pain in patients of color: Benefits of partner supportiveness in relation to sexual dissatisfaction and distress. *International Journal of Environmental Research and Public Health*. <https://doi.org/10.3390/ijerph19073975>
6. Denes, A., Crowley, J.P, Dhillon, A., **Bennett-Brown, M.**, Stebbins, J.L., & Granger, S.W (2022). Exploring the role of oxytocin in communication processes: A test of the post sex disclosures model. *Communication Monographs*. <https://doi.org/10.1080/03637751.2021.1957490>

Presentations:

1. **Bennett-Brown, M.**, Campbell, J.T., & Gesselman, A.N., (2022, November). Do personality traits matter in sexual comfortability: Examining predictors of sexual self-esteem. Paper/Poster presented at the annual meeting of The Society for the Scientific Study of Sexuality in Vancouver, Canada.
2. Gesselman, A.N., Kaufman, E.M., Marcotte, A.S., **Bennett-Brown, M.**, & Campbell, J.T. (2022, November). Building intimacy on camera: Emotional intimacy between consumers and performers on erotic webcamming platform. Paper presented at the annual meeting of The Society for the Scientific Study of Sexuality in Vancouver, Canada.
3. Gesselman, A.N., Campbell, J.T., **Bennett-Brown, M.**, Kaufman, E. M., Fredrick, D.A., Garcia, J.R., & Mark, K.P. (2022, July). What a touch implies: body image as a mediator of nonverbal affection and relationship well-being. Paper presented at the annual meeting of the International Association for Relationship Research in London, England (online conference due to COVID-19).
4. Blumenstock, S. & **Bennett-Brown, M.** (2022, July). Romantic attachment and dyadic sexual desire: The role of partner type. Paper presented at the annual meeting of the International Association for Relationship Research in London, England (online conference due to COVID-19).
5. **Bennett-Brown, M.**, Kaufman, E.M., Marcotte, A.S., & Gesselman, A.N (2022, May) Benefits of using erotic webcam sites: Clients' and models' improvement in communication skill related to emotional and sexual needs fulfillment. Paper presented at the annual meeting of the International Communication Association in Paris, France.

Binks, Martin

Publications:

1. Chirico Scheele S, Hartmann C, Siegrist M, **Binks M**, Egan PF. Consumer Assessment of 3D-Printed Food Shape, Taste, and Fidelity Using Chocolate and Marzipan Materials. *3D Print Addit Manuf.* 2022 Dec 1;9(6):473-482. doi: 10.1089/3dp.2020.0271. Epub 2022 Dec 13. PMID: 36660745; PMCID: PMC9831564.
2. Zhu Y, Bailey D, Childress A, Dawson JA, **Binks M**, Dhurandhar NV. Greater protein quality of an egg breakfast may be inadequate to induce satiety during weight loss, compared with a cereal breakfast of equal protein quantity. *Int J Food Sci Nutr.* 2022 Dec;73(8):1096-1103. doi: 10.1080/09637486.2022.2133097. Epub 2022 Oct 13. PMID: 36237122.

Book chapters:

1. Chirico-Scheele, S., **M. Binks**, and P. Egan. "3D Printing Food: Manufacturing, Mechanics, and Validation." *Materials Science and Engineering in Food Product Development*. Wiley Publishing (in press).
2. **Binks M**. The Role of the Food Industry in Obesity. In: Bray GA, Bouchard C, eds, *Handbook of Obesity*, V. 1, 5th edn. CRC Press; 2022: Ch 43 (in press).

Abstract:

1. Chirico-Scheele, S., G. Christopher, **M. Binks**, and P. Egan. "Effects of cricket and pea protein addition on the firmness, taste preference, and printability of 3D printed mashed potatoes." First annual event and expo, Institute of Food Technologists Conference. Chicago, IL, 2022.

Outreach & Engagement:

1. TTU-Health Sciences Center Rural and Community Engagement Division, TTUHSC – Permian Basin and Office of Continuing Medical Education: Motivational Health Coaching. Online 01/11/2023.
2. Live Smart Texas. World Obesity Day Open House (March 4 2022)
3. NMHI High School Experience – A summer educational "camp" in Nutrition and Metabolic Diseases for High School students

Brismee, JM

Publications:

1. Samson JY, Anderson DN, Hooper TL, Sizer PS, Hando BR, **Brismée JM**. Safe Administration and Low Healthcare Utilization Following Musculoskeletal Corticosteroid Injections by U.S. Military Physical Therapists. *Military Medicine*. 2022 Sep 22:usaa556.
2. Campbell DF, **Brismée J**, Allen B, Hooper TL, Domenech MA, Manella KJ. Ethnicity Does Not Impact Physical Therapy Students' Clinical Readiness and Performance, a United States Exploratory Study. *The Internet Journal of Allied Health Sciences and Practice*. 2023;21(1), Article 9. <https://nsuworks.nova.edu/ijahsp/vol21/iss1/9/>
3. **Brismée JM**, Froment FP, Bellot N, Mambriani A, Chauvet G, Chevrier S, Desjardins T, Riquier S, Rakotoarivelo LH, Datoussaid K, Pitance L. OMT-France publishes the first French physiotherapy guide for triage of patients with neuromusculoskeletal conditions - a step toward direct access in French speaking countries. *Journal of Manual and Manipulative Therapy*. 2022;30(5):259-260.
4. Dice JL, Dendy D, Sizer PS, Cook CE, Feuling S, **Brismée JM**. Author Response to Shear et al. *Physical Therapy*. 2022:pzac115.
5. Ennis K, Sizer PS, Sargent E, **Brismée JM**, Drusch A, Kapila J, Hooper TL. Abdominal Bracing Changes Lower Quarter Muscle Activity but Not Reach Distances During Active Forward Reach on an Unstable Surface. *Journal of Bodywork and Movement Therapies*. 2021;28:391-396.
6. Denny B, **Brismée JM**. Manual therapy and upper quarter training in an adolescent quarterback with chronic clinically suspected thoracic outlet syndrome: A case report with 1-year follow up. *International Journal of Sports and Exercise Medicine*. 2022;8(2):217. <https://clinmedjournals.org/articles/ijsem/international-journal-of-sports-and-exercise-medicine-ijsem-8-217.pdf?jid=ijsem>
7. Shen CL, Watkins BA, Kahathuduwa C, Chyu MC, Zabet M, Elmassry MM, Luk HY, **Brismée JM**, Knox A, Lee J, Zumwalt M, Wang R, Wager TD, Neugebauer V. Tai Chi Improves Brain Functional Connectivity and Plasma Lysophosphatidylcholines in Postmenopausal Women with Knee Osteoarthritis: An Exploratory Pilot Study. *Frontiers in Medicine, section Rheumatology*. 2022;8:775344. <https://www.frontiersin.org/articles/10.3389/fmed.2021.775344/full>

Presentations:Oral:

1. Annual AAOMPT Conference 2022. Crawford M*, **Brismée JM**, St-Pierre MO, Bellot N, Sizer PS, Sobczak S. "Cervical Intradiscal Pressure Responses To Supine Sagittal Plane End-Range Postures: A Cadaveric Investigation." San Diego, California, 10/29/2022
2. Annual AAOMPT Conference 2022. Kapila J*, Hooper TL, **Brismée JM**, Sobczak S, Munger L, Likness A, Sizer PS. "Cervical Multifidus Muscle Stiffness During Active Neck Movements: A Shear Wave Elastography Study." San Diego, California, 10/29/2022
3. Annual AAOMPT Conference 2022. Pugliese M*, Allen B, Tammany J, Riley S, **Brismée JM**. "Mentorship Participation Is Associated With Lower Burnout Levels In Physical Therapists Practicing In The United States." San Diego, California, 10/29/2022
4. Annual AAOMPT Conference 2022. Thompson J*, Page P, Hooper TL, Sobczak S, Rosendahl-Garcia K, Anderson D, **Brismée JM**. "Novel musculoskeletal ultrasound methodology to measure cervical intervertebral disc height found reliable and valid against MRI." San Diego, California, 10/29/2022
5. Annual AAOMPT Conference 2022. Kearns G*, **Brismée JM**, Riley SP, Wang-Price SS, Denninger T, Vugrin M. "Lack Of Standardization In Dry Needling Dosage And Adverse Event Documentation Limits Outcome And Safety Reports: A Scoping Review Of Randomized Clinical Trials" San Diego, California, 10/29/2022

Poster:

1. Educational Leadership Conference of the American Physical Therapy Association (2022). Campbell DF, **Brismée JM**, Allen B, Hooper TL, Domenech TA, Manella KJ. “Effectiveness of Flex vs. Residential Program in Clinical Experience Outcomes”. Milwaukee, Wisconsin, 10/28/2022
2. Educational Leadership Conference of the American Physical Therapy Association (2022). Campbell DF, **Brismée JM**, Allen B, Hooper TL, Domenech TA, Manella KJ. “Effectiveness of Integrated Simulation compared to Integrated Clinical Experience in Development of DPT Students’ Clinical Decision-Making Skills”. Milwaukee, Wisconsin, 10/29/2022
3. Ohio Physical Therapy Fall Conference 2022 – Best Poster Award. Crawford M*, **Brismée JM**, St-Pierre MO, Bellot N, Sizer PS, Sobczak S. “Sagittal Plane End-Range Posture Effects on Cervical Intradiscal Pressure: A Cadaveric Investigation.” Westerville, Ohio, 09/16/2022
4. 34th Annual Student Research Week at Texas Tech University Health Sciences Center. Matthijs A, Matthijs OC, Windisch G, Streitmayer B, Kerner A, Sizer PS, **Brismée JM**. “Neck Sidebent Pre-Positioning Isolates Atlanto-Axial Joint Rotation by Locking the Other Cervical Segments: A Cadaveric Study”. Lubbock, Texas, 03/09/2022
5. 34th Annual Student Research Week at Texas Tech University Health Sciences Center. Pugliese MS, **Brismée JM**, Allen B, Riley SP, Tammany J. “The Impact of Mentorship and Self-efficacy on Burnout in Physical Therapists”. Lubbock, Texas, 03/09/2022
6. 34th Annual Student Research Week at Texas Tech University Health Sciences Center. Thompson JA, Page PA, Hooper TL, Sobczak S, Rosendahl-Garcia KM, **Brismée JM**. “Reliability and Validity of Cervical Disc Height Measurements Using Magnetic Resonance Imaging and Musculoskeletal Ultrasound”. Lubbock, Texas, 03/09/2022
7. Combined Section Meeting of the American Physical Therapy Association (2022). Campbell DF, **Brismée JM**, Allen B, Hooper TL, Domenech TA, Manella KJ. “Clinical Reasoning Self-Efficacy and Confidence of DPT Students with PT Interventions Using Telehealth”. San Antonio, Texas, 02/05/2022
8. Combined Section Meeting of the American Physical Therapy Association (2022). Atkins LT, James CR, Yang HS, Sizer PS, **Brismée JM**, Sawyer S, Powers CM. “Sagittal Plane Movement Training to Improve Use of Gluteus Maximus Reduces Patellofemoral Pain”. San Antonio, Texas, 02/03/2022

Abstracts:

- Lodhi M, **Brismée JM**. Effects of hip joint mobilizations using a mobilization belt on hip range of motion and functional outcomes: A Case Series.
- Brun A, Sandrey M. The effect of hip joint mobilizations using a mobilization belt on hip range of motion and functional outcomes. *Journal of Sports Rehabilitation*. 2021; 30:559-567.
- In IAOM-US Commons, 08/15/2022 <https://iaom-us.com/effects-of-hip-joint-mobilizations-using-a-mobilization-belt-on-hip-range-of-motion-and-functional-outcomes-a-case-series/>

Grant Awards:

1. Investigators: Yasrebi, Brismée, Sizer, Crawford, Sobczak/ Agency: CH Foundation Pain Science Scholar Development Award. Amount: \$5,000. Awarded: December, 2022. Title: Cervical Intradiscal Pressure During Sitting End-Range Neck Postures: A Cadaveric Investigation. Submitted: November, 2022. Period: 01/10/2023 – 12/15/2025

Chyu, Ming-Chien

Publications:

1. Masud AA, Shen CL, Luk HY, **Chyu MC**. Impact of Local Vibration Training on Neuromuscular Activity, Muscle Cell, and Muscle Strength: A Review. *Crit Rev Biomed Eng*. 2022;50(1):1-17. doi: 10.1615/CritRevBiomedEng.2022041625. PMID: 35997107.
2. Shen CL, Watkins BA, Kahathuduwa C, **Chyu MC**, Zabet-Moghaddam M, Elmassry MM, Luk HY, Brismée JM, Knox A, Lee J, Zumwalt M, Wang R, Wager TD, Neugebauer V. Tai Chi Improves Brain

Functional Connectivity and Plasma Lysophosphatidylcholines in Postmenopausal Women With Knee Osteoarthritis: An Exploratory Pilot Study. *Front Med (Lausanne)*. 2022 Jan 3;8:775344. doi: 10.3389/fmed.2021.775344. PMID: 35047525; PMCID: PMC8761802.

- Masud, A. A., Shen, C.-L., Chyu, M.-C. (2022). On the Optimal Whole-Body Vibration Protocol for Muscle Strength. *Biomechanics*, 2(4), 547–561. <https://www.mdpi.com/2673-7078/2/4/43>

Coman, Ioana

Publications:

- Coman, I.A.**, Xu, S., & Yamamoto, M. (2022). COVID-19 Vaccine Hesitancy: Disadvantaged Groups' Experience with Perceived Barriers, Cues to Action, and Attitudes. *American Journal of Health Promotion*. <https://doi.org/10.1177/08901171221136113>
- Xu S., **Coman I.A.**, Yamamoto M., & Najera, C. (2022). Exposure Effects or Confirmation Bias?: Examining Reciprocal Dynamics of Misinformation, Misperceptions, and Attitudes toward COVID-19 Vaccines. *Health Communication*. <https://doi.org/10.1080/10410236.2022.2059802>
- Ittefaq, M., Abwao, M., **Coman, I.A.**, & Ejaz, W. (Accepted Dec. 2022 – Print/published 2023). A Systematic Literature Review of Research From 2010 to 2020 Addressing User-Generated Online Comments Related to Health Issues and Recommendations for Future Research. *International Journal of Communication*. 17: 256-280.
- Coman, I.A.**, Cooper-Norris C., Longing, S., & Perry G. It Is a Wild World in the City: Urban Wildlife Conservation and Communication in the Age of COVID-19. *Diversity*. 14(7), 539, 1-20. Special Issue Human Wildlife Conflict across Landscapes. Special Editor: Dr. Thomas Göttert. <https://doi.org/10.3390/d14070539>
- Coman, I.A.**, Yuan, S., & Tsai, J.Y. (2022). Toward an Audience-Centric Framework of Corporate Social Advocacy Strategy: A survey of Generation Z. *Sustainability*. Special Issue: Corporate Social Responsibility, Corporate Social Advocacy, and Societal Change. Special Editors: Dr. Hyejoon Rim & Dr. Holly Overton. 14(7), 4099. <https://doi.org/10.3390/su14074099>
- Gearhart, S., **Coman, I.A.** & Moe, A. (2022). Facebook Comments Influence Perceptions of Journalistic Bias: Testing Hostile Media Bias in the COVID-19 Social Media Environment. *Electronic News Journal*. 17(1): 3-18. <https://doi.org/10.1177/19312431221103127>

Presentations: (Conference presentations, moderator/discussant, workshops, etc.)

- Coman, I.A.**, Xu, S., Yamamoto, M. (May 2022). COVID-19 vaccine hesitancy among disadvantaged groups: Explicating barriers and cues to action in the Health Belief Model. ICA. Paris, France. (peer reviewed)
- Coman, I.A.**, Swed, O., Sreepada, N. & Dang, T. (August 2022). What's in a footprint? An exploration of Twitter real versus fake news accounts during the 2016 electoral campaign. AEJMC, Detroit, MI.
- Coman, I.A.**, Cooper-Norris, C., Longing, S., Perry, G. (May 2022). It's a wild world here in the city: Media representations of urban biodiversity during the COVID-19 pandemic. ICA Preconference. Aix-En-Provence, France/virtual (peer reviewed).
- Coman, I.A.** (September 2022). Romanian COVID-19 Digital Communication: A Failure Never-Ending Story. Part of the Panel Disinformation, counter-audiences, and vaccination: COVID-19 crisis communication and adversarial ideologies in social media. European Public Relations Education and Research Association (EUPRERA), Vienna, Austria (notes - I presented online; invited to be part of the panel, and then the panel proposal was peer reviewed).
- Coman, I.A.** (April 2022). When virality helps: pro-active doctors on social media – the American experience. Part of the course/workshop for doctors - "Medical Communication." Conference of the College of Doctors from the Municipality of Bucharest CMB (10th Edition). (invited).
- Coman, I.A.**, Swed, O., Dang, T., Sreepada, N., Baza, U. (March 2022). What's in an account? Identifying patterns in real news versus fake news Twitter accounts. AEJMC Midwinter. (peer reviewed)

7. Tsai, J., **Coman, I.A.**, Yuan, S. (May 2022). Testing the Impact of Attributions of Solution Responsibility, Issue Identification and Advocacy Fit on Audience Responses to CSA efforts. ICA, Paris, France (peer reviewed)
8. Xu, S., **Coman, I.A.**, Yamamoto, M. (May 2022). Exposure Effects or Confirmation Bias?: Examining Reciprocal Dynamics of Misinformation, Misperceptions, and Attitudes toward COVID-19 Vaccines. ICA (peer reviewed)
9. Gearhart, S., **Coman, I.A.**, Moe, A. (August 2022). Hostile Media Bias in Vaccine News: The Influence of Facebook Comments & Topic on Perceptions. AEJMC, Detroit, MI. (peer reviewed)
10. **Coman, I.A.** (August 2022). *Building an audience-centric framework of situational corporate social advocacy strategy: A mixed-method approach*. [presentation on grant research insights]. Co-presenters: Jiun-Yi Tsai; Shupeiyuan. Page Center Research Roundtable, Session #2 - Corporate Social Advocacy. Pre-AEJMC. Detroit, MI. (Invited Presenter).
11. **Coman, I.A.** (June 2022). *From greenwashing to saving the planet: An exploration of how mainstream, Hispanic and Black media and their public spheres portray and judge organizations' environmental sustainability risk communication and (in)actions*. [presentation on grant research plan and direction]. Co-Presenter: Gabriel Partida Dominguez. Page Center Research Roundtable. Virtual. (Invited Presenter).
12. **Coman, I.A.** (August 2022). *PRD Doug Newsom, Public Relations History, Race & Public Relations Awards and DEI Papers*. AEJMC, Detroit, MI. (Invited Discussant)
13. **Coman, I.A.** (April 2022). PRD virtual mentorship panel. (Invited panelist).
14. **Coman, I.A.** (March 2022). *User engagement with online content*. AEJMC Midwinter, Norman, OK. (Invited Moderator & Discussant)
15. **Coman, I.A.** (March 2022). *The role of social media on audience behavior*. AEJMC Midwinter, Norman, OK. (Invited Moderator & Discussant)

Grants:

Date Submitted	Cayuse Proposal No.	Source	Proposal Total	Investigator role % Credit	Investigator Total	Status
5/2022	22-0491	Page/Johnson Legacy Scholar	\$5,000	Lead PI 100%	\$5,000	Funded/Awarded
4/2022	22-0504	Page/Johnson Legacy Scholar	\$5,000	Co-PI	\$5,000	Funded/Awarded

Award:

1. Awards 2022 - TTU College of Media & Communication Billy I. Ross Faculty Achievement

Culberson, John

Publications:

1. Selman A, Burns S, Reddy AP, **Culberson J**, Reddy PH. The Role of Obesity and Diabetes in Dementia. *Int J Mol Sci*. 2022 Aug 17;23(16):9267. doi: 10.3390/ijms23169267. PMID: 36012526; PMCID: PMC9408882.
2. George M, Tharakan M, **Culberson J**, Reddy AP, Reddy PH. Role of Nrf2 in aging, Alzheimer's and other neurodegenerative diseases. *Ageing Res Rev*. 2022 Dec;82:101756. doi: 10.1016/j.arr.2022.101756. Epub 2022 Oct 13. PMID: 36243357.
3. Rawat P, Sehar U, Bisht J, Selman A, **Culberson J**, Reddy PH. Phosphorylated Tau in Alzheimer's Disease and Other Tauopathies. *Int J Mol Sci*. 2022 Oct 25;23(21):12841. doi: 10.3390/ijms232112841. PMID: 36361631; PMCID: PMC9654278.

- Eshak N, Abdelnabi M, Benjanuwattra J, Ismail A, Leelaviwat N, Elharabi Z, **Culberson J**. Refractory Shock Secondary to Denosumab-induced Severe Hypocalcaemia. *Eur J Case Rep Intern Med*. 2022 Dec 23;9(12):003706. doi: 10.12890/2022_003706. PMID: 36632534; PMCID: PMC9829022.
- Sehar U, Rawat P, Choudhury M, Boles A, **Culberson J**, Khan H, Malhotra K, Basu T, and Reddy H. Comprehensive Understanding of Hispanic Caregivers: Focus on Innovative Methods and Validations. *Journal of Alzheimer's Disease Reports*. 2022 December, In Press.

Abstracts:

- American Geriatrics Society Annual Scientific Meeting. Ashcraft A, Owen D, **Culberson J**. Technology Guided Assessment for Urinary Tract Infection: Creating a Common Interprofessional Language. *J Am Geriatr Soc* 2022 April;70(Suppl 1): S66
- American Geriatrics Society Annual Scientific Meeting. Ashcraft A, Owen D, **Culberson J**, and Song H. Communication and Workflow on a Typical Day in NH Versus a Change in Resident Condition. *Innovation in Aging* 2022, Vol 6(S1);700-701.

Dennis, Jeff

Publications:

- Chen JN, **Dennis JA**, St John JA, Shen CL. Self-Reported Patient Compliance With Physician Advised Lifestyle Behavior Changes Among Adults With Musculoskeletal Conditions. *Front Public Health*. 2022 Feb 24;10:821150. doi: 10.3389/fpubh.2022.821150. PMID: 35284362; PMCID: PMC8907563.

Dufour, Jannette

*Collaboration with CEIH member

Publications:

- *Washburn RL, Hibler T, Thompson LA, Kaur G, **Dufour JM**. 2022 Therapeutic application of Sertoli cells for treatment of various diseases. *Seminars in Cell and Developmental Biology* 121: 10-23. doi: 10.1016/j.semcd.2021.04.007.
- *Washburn RL, Hibler T, Kaur G, **Dufour JM**. 2022 Sertoli cell immune regulation: a double-edged sword. *Frontiers in Immunology* 13:913502. doi: 10.3389/fimmu.2022.913502
- *Wang R, Santos JM, **Dufour JM**, Stephens E, Miranda JM, Washburn RL, Hibler T, Kaur G, Lin D, Shen CL. 2022 Ginger root extract improves GI health in diabetic rats via improving intestinal integrity and mitochondrial function. *Nutrients*. Oct 19;14(20):4384. doi: 10.3390/nu14204384.
- *Washburn RL, Kaur G, **Dufour JM**. 2022 Mouse Sertoli cells inhibit humoral-based immunity. *International Journal of Molecular Sciences*. 2022 Oct 23;23(21):12760. doi: 10.3390/ijms232112760
- Dufour JM**. 2022 What are the multiple roles of the Sertoli cell? Supporting spermatogenesis and immune regulation. *Handbook of Andrology, American Society of Andrology* (in press)
- *Washburn RL, Hibler T, Kaur G, Sabu-Kurian A, Landefeld A, **Dufour JM**. 2022 Immunoregulatory Sertoli cell allografts engineered to express human insulin survive humoral-mediated rejection. *International Journal of Molecular Sciences*. 2022 Dec 14;23(24):15894. doi: 10.3390/ijms232415894.
- *Shen CL, **Dufour JM**, Miranda JM, Kaur G, Chung E, Ramalingam L, Moustaid-Moussa N, Cao JJ. Effect of dietary geranylgeraniol and green tea polyphenols on glucose homeostasis, bone turnover biomarkers and bone microstructure in obese mice. *International Journal of Molecular Sciences* (in press)

Abstracts:

- Jansen M, Pressley TA, Bobulescu IA, Villalobos A, **Dufour JM**. Interactive virtual small group sessions using Zoom breakout rooms with Google Slides. *STFM 2022 Conference on Medical Student Education*. (San Antonio, Texas, January 27-30, 2022)
- Washburn RL, Kaur G, Chilton B, Reilly B, **Dufour JM**. Seq'ing the Sertoli cell complement inhibitory signature: Paving the pathway to prolong transplant survival. *Innate Immunity: Complement and Beyond, Keystone Symposia*, (Snowbird, UT, April, 3-6, 2022)

3. Jansen M, Pressley TA, Bobulescu IA, Villalobos A, **Dufour JM**. Design of virtual team-based learning sessions. 2022 SGEA Virtual Regional Meeting Finding Creativity for Complex Challenges (March 28-29, 2022)
4. Taylor H, Kaur G, **Dufour JM**. Tregs: The Sertoli cell's secret weapon in transplant survival. Annual Meeting for the American Association of Immunologists. Immunology2022 (Portland, OR May 6-10, 2022).
5. Washburn RL, Kaur G, Chilton B, Reilly B, **Dufour JM**. Seeking the Sertoli cell complement inhibitory signature to prolong transplant survival. Annual Meeting for the American Association of Immunologists. Immunology2022 (Portland, OR May 6-10, 2022).
6. **Dufour JM**, Washburn RL, Taylor H, Kaur G. Immunosuppressive functions of Sertoli cells. Male Reproductive Immunology. American Society for Reproductive Immunology. (Nashville, TN, May 22-26, 2022).
7. Hussain S, McCabe P, Lee V, Hewetson A, Webster D, **Dufour JM**, Schneider B, Kaur G. Highlighting key elements of the pre-med program at TTUHSC that prepares the students to be successful in Medical school. Virtual Pathway Programs and Bridges conference. (July 21, 2022).
8. Anna Sabu-Kurian, Hibler H, Washburn RL, Boothe K, Kaur G, **Dufour JM**. The Role of Macrophages in Sertoli Cell Transplant Survival Without the Use of Immunosuppressive Drugs. American College of Surgeons Clinical Congress 2022. (San Diego, CA October 16-20, 2022, accepted)

Presentations:

1. Immunosuppressive functions of Sertoli cells. Male Reproductive Immunology. American Society for Reproductive Immunology. (Nashville, TN, May 22-26, 2022).
2. The Sertoli cell immune microenvironment. "Immune Function in Reproductive Biology" 2022 Mammalian Reproduction, Gordon Research Conference, Mount Snow, West Dover, Vermont (Moved due to COVID-19 from August 2020 to August 14-19, 2022)

Grant Awards

1. CH Foundation Seed Grant, "The role of TGF-Beta and retinoic acid in Sertoli cell induction of Tregs." (\$72,400, 1/2022-12/2022). Dufour (Principal Investigator), Kaur (Co- Investigator)
2. Research and Extension Experiences for Undergraduates, Agriculture and Food Research Initiative, (NIFA, USDA), "Nutrition Bench-to-Community Engaged Scholars in Texas (Nutrition BEST) REEU Program." (\$500,000, 5/2021 to 4/2026). Dufour (Collaborating Mentor), Moustaid-Moussa (Director)

Grants Submitted

1. NIH R01 September 1, 2022 - August 31, 2027, Dufour JM (Principal Investigator), Kaur G (Co-Investigator), Sertoli cell inhibition of the complement system: a path to improve xenograft survival. \$1,250,000 (Direct Cost), \$ 1,912,500 (Total Amount)
2. NIH R01 April 1, 2023 - March 31, 2028, Dufour JM (Principal Investigator), Kaur G (Co-Investigator), Creation of a tolerogenic environment to protect pancreatic islets from autoimmune diabetes. \$1,250,000 (Direct Cost), \$ 1,912,500 (Total Amount)
3. NIH Faculty Institutional Recruitment for Sustainable Transformation (FIRST) Program Moustaid-Moussa N (Director) Dufour JM (mentor) Recruiting and Mentoring Partnerships for University Progress (RAMP UP).
4. USDA NIFA AFRI Sustainable Agricultural Systems June 1, 2023 – May 31, 2028 Moustaid-Moussa N (Project Director), Dufour JM (SubPI), GRow and EAT Leafy GREENS (GREAT GREENS): Sustainable Production of Leafy Greens for Health and Nutrition Security. \$10 million total, \$366,621 Sub contract
5. NIH NCCIH R01 June 1, 2023 – May 31, 2028 Moustaid-Moussa N (Principal Investigator), Dufour JM (SubPI), Protective Metabolic Effects of Omega-3 Fatty Acids, Independent of UCP1. \$184,546 Sub contract.

- JDRF Strategic Research Agreement, Realignment of Established Targets and Mechanisms for Delaying or Reversing T1D, Dufour JM (Principal Investigator), Bhutia Y (Co-Investigator), Ganapathy V (Co-Investigator). Carbidopa, a novel immune modulator to prevent or reverse type 1 diabetes. \$750,000

Figueroa, Arturo

Publications:

- Maharaj A, Fischer SM, Dillon KN, Kang Y, Martinez MA, **Figueroa A**. Effects of L-citrulline supplementation on endothelial function and blood pressure in hypertensive postmenopausal women. *Nutrients* 2022; 14(20):4396.
- Kang Y, Maharaj A, Dillon KN, Fischer SM, **Figueroa A**. Menopause influences aortic pulse pressure and pressure wave responses to metaboreflex activation in women. *Menopause* 29(12): 1423-1429, 2022.
- Barzanjeh SP, Pescatello LS, **Figueroa A**, Ahmadizad S. The effects of alpha-Glycerolphosphorylcholine on heart rate variability and hemodynamic variables following sprint interval exercise in overweight and obese women. *Nutrients* 2022; 14(19):3970.
- Volino-Souza M, de Oliveira GV, Conte-Junior CA, **Figueroa A**, Alvares TS. Current Evidence of Watermelon (*Citrullus lanatus*) Ingestion on Vascular Health: A Food Science and Technology Perspective. *Nutrients*. 2022; 14(14):2913. <https://doi.org/10.3390/nu14142913>.
- Jaime SJ, Nagel J, Maharaj A, Fischer SM, Schwab E, Martinson C, Radtke K, Mikat RP, **Figueroa A**. L-Citrulline supplementation attenuates aortic pulse pressure and wave reflection responses to cold stress in older adults. *Exp Gerontol* 2022; 159:111685.
- Maharaj A, Fischer SM, Dillon KN, Kang Y, Martinez MA, **Figueroa A**. Acute citrulline bunts aortic systolic pressure during exercise and sympathoactivation in hypertensive postmenopausal women. *Med Sci Sports Exerc.* 54(5):761-768, 2022.
- Mason J, Tenenbaum GT, Jaime SJ, Roque N, Maharaj A, **Figueroa A**. Arterial Stiffness and Cardiorespiratory Fitness are Associated with Cognitive Function in Older Adults. *Behavioral Medicine.* 48(1):54-65, 2022.
- Shiraseb F, Asbaghi O, Bagheri R, Wong A, **Figueroa A**, Mirzaei K. The effect of L-arginine supplementation on blood pressure in adults: A systematic review and dose-response meta-analysis of randomized clinical trials. *Adv Nutr* 13 (4): 1226-1242, 2022.

Abstracts:

- Kang Y, Maharaj A, Dillon KN, Fischer SM, **Figueroa A**. Impact of Age on Aortic Pressure and Pressure Waves Responses to Metaboreflex Activation in Women. 2022 ACSM Annual Meeting and World Congresses.
- Dillon, K.N., Maharaj, A., Fischer, S. M., Kang, Y., Martinez, M. A., **Figueroa, A**. Antihypertensive Medication Attenuates Aortic Blood Pressure Responses to Metaboreflex Activation in Postmenopausal Women. 2022 ACSM Annual Meeting and World Congresses.

Galyean, Shannon

Publications:

- Galyean S**, Syn D, Subih HS, Boylan M. Improving vitamin D status in bariatric surgery subjects with monthly high-dose ergocalciferol. *Int J Vitam Nutr Res.* 2022 Mar;92(2):109-117. doi: 10.1024/0300-9831/a000728. Epub 2021 Sep 15. PMID: 34521264.
- Salas-Groves E, **Galyean S**, Alcorn M, Childress A. Behavior Change Effectiveness Using Nutrition Apps in People With Chronic Diseases: Scoping Review. *JMIR Mhealth Uhealth.* 2023 Jan 13;11:e41235. doi: 10.2196/41235. PMID: 36637888; PMCID: PMC9883741.

Presentation:

1. Galyean, S. (September, 2022). What's Cooking? Healthy Aging Lecture Series. (Stand-Up Presentation) Lean beef consumption among older adults can improve muscle quality.

Grants:

1. "Actions of dietary tocotrienols on obesity: ARN supplemental fund". American River Nutrition, Inc., Hadley, MA. **Shen CL (PI, 3%)**. The goal of study is to test the hypothesis that tocotrienol supplementation improve lipid profiles and modify endocannabinoid and oxylipins in obese postmenopausal women. \$70,000. 11/1/2018-10/31/2023.
2. American Society for Nutrition Foundation Status: Active. Budget: \$10,000. Title: Increasing Vegetable Intake Using Monosodium Glutamate: A Reduced-Effort Intervention. Role on project Principal Investigator. Dates of entire project: 09/01/2022-12/31/2023. Specific aims of project: To investigate a reduced-effort intervention to increase vegetable intake with MSG as a sodium lowering approach while maintaining acceptability.
3. National Science Foundation Status: Active (Data collection). Budget: \$50,000. Title: I-Corps: A virtual culinary medicine software program for patients with chronic disease. Role on project Principal Investigator. Dates of entire project: 04/01/2022-09/30/2023. Specific aims of project: To conduct customer discovery and develop a solution using a virtual culinary medicine program (eCulinary Medicine, eCM) for patients with chronic disease through electronic platforms to create new opportunities for nutritional and disease management.'
4. Texas Tech University President's Innovation Startup Award. Date submitted: 2022. Funded amount: \$ 25,000.
5. Texas Tech University Human Sciences Supplemental Funding. Date submitted: 2022. Funded amount: \$ 16,000
6. Texas Tech University Innovation Hub at Research Park Accelerator Program Award. Date submitted: 2022. Funded amount: \$ 25,000
7. Texas Tech University Innovation Hub at Research Park Accelerator Program Award. Date submitted: 2022. Funded amount: \$ 25,000

Garner, ChristinePublications:

1. **Garner CD**, Kendall-Tackett K, Young C, Baker T, Hale TW. Mode of cannabis use and factors related to frequency of cannabis use among breastfeeding mothers: results from an online survey. *Breastfeed Medicine*. 2022 Mar;17(3):269-276. doi: 10.1089/bfm.2021.0151. PubMed PMID: 34870449.

Manuscripts in progress:

2. **Garner CD**. Nutrition in Pregnancy. *Nutrition in Health and Disease*, 13th Edition. Burlington, MA: Jones & Bartlett Learning. Textbook chapter in publication.
3. Regalado D, Connolly M, Krusch K, Stark A, **Garner CD**. Psychiatric Medication Use among Pregnant and Breastfeeding Mothers Who Used Cannabis for Mental Health Concerns: A Cross-Sectional Survey Study. *Women's Health*. Submitted for peer review.
4. Natha C, Baker T, **Garner CD**. Maternal beliefs about cannabis use while pregnant or breastfeeding. Manuscript in progress.
5. **Garner CD**, Setterquist H, Hecox EE, Chan J, McLaurin-Jiang S. Providing breastfeeding care during the COVID-19 pandemic: Experiences of healthcare professionals. Manuscript in progress.

Abstracts:

1. **Garner CD**, Setterquist H, Hecox EE, Chan J, McLaurin-Jiang S. Providing breastfeeding care in a rural community during the COVID-19 pandemic: Experiences of healthcare professionals. *Academy of Breastfeeding Medicine*. Presented as poster. September 2022. Baltimore, MD.

2. **Garner CD**, Setterquist H, Hecox EE, Chan J, McLaurin-Jiang S. Providing Breastfeeding Care in a Rural Community During the COVID-19 Pandemic: Experiences of Healthcare Professionals. Pediatric Academic Societies Meeting. Presented as poster. April 2022. Denver, CO.
3. Natha C, Baker T, **Garner CD**. Maternal beliefs about cannabis use while breastfeeding. Annual Research Day for Students, Residents, and Faculty. TTUHSC School of Medicine. April 2022. Amarillo, TX. Second Place Research Poster
4. Regalado D, Connolly M, Baker T, Hale T, **Garner CD**. Pregnant and breastfeeding mothers' use of cannabis and mood disorder medications. Annual Research Day for Students, Residents, and Faculty. TTUHSC School of Medicine. April 2022. Amarillo, TX. Third Place Research Poster

Invited Presentations and Guest Lectures:

1. Social Determinants of Health and Nutrition & Food Insecurity. Invited presentation at P3: Patients, Physicians, & Populations, MS1 Series, TTUHSC. October 17, 2022. Via Zoom in Lubbock, TX.
2. Addressing Food Insecurity to Improve Maternal and Infant Health. Invited presentation at Grand Rounds, Department of Pediatrics, TTUHSC. April 29, 2022. Amarillo, TX.
3. Nutrition in Pregnancy and Disease Risk. Invited presentation at Boston University, Graduate level course: Nutrition in Disease Prevention. February 9, 2022. Via Zoom for Boston, MA.

Grant Awards:

1. Academic Pediatric Association Young Investigator Grant – \$14k (2022)
2. United Way – \$25k (2022)
3. Amarillo Area Foundation Discretionary Grant - \$200k (2022)

Jones, Betsy

Publications:

1. Leong SL, Gillespie C, **Jones B**, Fancher T, Coe CL, Dodson L, Hunsaker M, Thompson BM, Dempsey A, Pallay R, Crump W, Cangiarella J. Accelerated 3-Year MD Pathway Programs: Graduates' Perspectives on Education Quality, the Learning Environment, Residency Readiness, Debt, Burnout, and Career Plans. *Acad Med.* 2022 Feb 1;97(2):254-261. doi: 10.1097/ACM.0000000000004332. PMID: 34380931; PMCID: PMC8781222.

Jung, Kwanghee

Publications:

1. Eko, S.* & **Jung, K.** (2022). Instructor Perceptions of Technology Integration in the Emerging Corequisite Model of Developmental Mathematics, *MathAMATYC Educator*, 13, 1-11.
2. Ortiz-Del-Valle, B. L., Gupta, V., Chong, J., **Jung, K.** & Dallas, T. (2022). User Authentication Recognition Process Using Long Short-Term Memory Model. *Multimodal Technologies and Interaction*, 6, 107.
3. Ortiz-Del-Valle, B. L. Chong, J. Shoushan, M. Gupta, V., **Jung, K.** & Dallas, T (2022). A Biometric Authentication Technique Using Smartphone Fingertip Photoplethysmography Signals. *IEEE Sensors Journal*, 14, 14237-14249.

Grants:

1. Innovating and advancing in STEM education, Wahi (PI), ED P031C210026, 10/01/2021–9/30/2026, \$4,783,323
2. Speech intervention via telepractice for children with repaired cleft palate: Randomized Controlled Trial and Assessment of Speech Production and Perception Skills, Lee (PI), NIH 1UG3DE030869-01. 09/1/2021–8/31/2022, \$399,247

Award:

1. The 2021 winner of the Quantitative Methods Research Award, The Canadian Psychological Association, 2022

Kahathuduwa, Chanaka

Publications:

1. Pan S, Ali K, **Kahathuduwa C**, Baronia R, Ibrahim Y. Meta-Analysis of Positive Psychology Interventions on the Treatment of Depression. *Cureus*. 2022 Feb 5;14(2):e21933. doi: 10.7759/cureus.21933. PMID: 35273874; PMCID: PMC8901085.
2. Menikdiwela KR, **Kahathuduwa C**, Bolner ML, Rahman RL, Moustaid-Moussa N. Association between Obesity, Race or Ethnicity, and Luminal Subtypes of Breast Cancer. *Biomedicines*. 2022 Nov 15;10(11):2931. doi: 10.3390/biomedicines10112931. PMID: 36428500; PMCID: PMC9687751.
3. Dassanayake TL, **Kahathuduwa CN**, Weerasinghe VS. L-theanine improves neurophysiological measures of attention in a dose-dependent manner: a double-blind, placebo-controlled, crossover study. *Nutr Neurosci*. 2022 Apr;25(4):698-708. doi: 10.1080/1028415X.2020.1804098. Epub 2020 Aug 11. PMID: 32777998.
4. Blume J, **Kahathuduwa C**, Mastergeorge A. Intrinsic Structural Connectivity of the Default Mode Network and Behavioral Correlates of Executive Function and Social Skills in Youth with Autism Spectrum Disorders. *J Autism Dev Disord*. 2022 Feb 9. doi: 10.1007/s10803-022-05460-y. Epub ahead of print. PMID: 35141816.
5. Dhanasekara CS, Marschke B, Morris E, **Kahathuduwa CN**, Dissanaik S. Regional Variations in Microbiology and Outcomes of Necrotizing Soft Tissue Infections: A Systematic Review and Meta-Analysis. *Surg Infect (Larchmt)*. 2022 Sep;23(7):634-644. doi: 10.1089/sur.2022.142. Epub 2022 Jul 29. PMID: 35904966.
6. Dassanayake TL, Wijesundara D, **Kahathuduwa CN**, Weerasinghe VS. Dose-response effect of L-theanine on psychomotor speed, sustained attention, and inhibitory control: a double-blind, placebo-controlled, crossover study. *Nutr Neurosci*. 2022 Oct 20:1-9. doi: 10.1080/1028415X.2022.2136884. Epub ahead of print. PMID: 36263942.
7. Dhanasekara CS, Ancona D, Cortes L, Hu A, Rimu AH, Robohm-Leavitt C, Payne D, Wakefield SM, Mastergeorge AM, **Kahathuduwa CN**. Association Between Autism Spectrum Disorders and Cardiometabolic Diseases: A Systematic Review and Meta-analysis. *JAMA Pediatr*. 2023 Jan 30. doi: 10.1001/jamapediatrics.2022.5629. Epub ahead of print. PMID: 36716018.

Kaur, Gurvinder

Publications:

1. *Shen CL, Dufour JM, Miranda JM, **Kaur G**, Chung E, Ramalingam L, Moustaid-Moussa N, Cao JJ. 2023 Effect of dietary geranylgeraniol and green tea polyphenols on glucose homeostasis, bone turnover biomarkers, and bone microstructure in obese mice. *Int J Mol Sci* 24(2): 979, doi: 10.3390/ijms24020979.
2. *Washburn RL, **Kaur G**, Dufour JM. 2022 Mouse Sertoli cells inhibit humoral-based immunity. *Int J Mol Sci* 23(21): 12760, doi: 10.3390/ijms232112760.
3. *Washburn RL, Hibler T, **Kaur G**, Sabu-Kurian A, Landefeld A, Dufour JM. 2022 Immunoregulatory Sertoli cell allografts engineered to express human insulin survive humoral-mediated rejection. *Int J Mol Sci* 23(24): 15894, doi: 10.3390/ijms232415894.
4. *Wang R, Santos JM, Dufour JM, Stephens ER, Miranda JM, Washburn RL, Hibler T, **Kaur G**, Lin D, Shen CL. 2022 Ginger root extract improves GI health in diabetic rats by improving intestinal integrity and mitochondrial function. *Nutrients* 14(20): 4384, doi: 10.3390/nu14204384.
5. *Washburn RL, Hibler T, **Kaur G**, Dufour JM. 2022 Sertoli cell immune regulation: A double-edged sword. *Front Immunol* 13: 913502, doi: 10.3389/fimmu.2022.913502

Invited speaker:

1. Webster D, Jones B, **Kaur G**, Kruczek C, Brower G, Villalobos A. Engaged learning: Integrating simulations, ultrasound and small group discussions into large-group. TTUHSC-Medical Education Faculty Development Course, (Lubbock, Tx, February 25th 2022).

Presentations:

1. **Kaur G**, Bishop KN, Webster D, Dufour JM, Schneider B. How a medical education master's program promotes student resiliency and success in medical school. Anatomy Connected (Washington DC, March 25-27, 2023). Selected for Platform Presentation.
2. Bishop KN, Webster D, **Kaur G**, Villalobos A, Schneider B. Assessing the impact of curricular redesign: Student performance in a foundational anatomy course with added cell biology and histology. Anatomy Connected (Washington DC, March 25-27, 2023). Selected for Platform Presentation.
3. Dufour JM, Washburn RL, **Kaur G**, Hibler T, Miranda JM, Rodriguez AR, Martinez-Marin D, Sabu-Kurian A, Chilton BS. Immunoprotective Sertoli cells in Transplantation. Session: Women in Andrology Lecture, 48th Annual Conference of American Society of Andrology (Boston, MA, April 19-23, 2023).
4. **Kaur G**, Brower G, Lee V, Mitchell J, Cook R, Jones B. Integration of Point of Care Ultrasound into Pre-clerkship curriculum and the Family Medicine Accelerated Program. Society of Teachers of Family Medicine (New Orleans, LA, Jan 26-29, 2023). Selected for Lecture Discussion.
5. **Kaur G**, Webster D, Kruczek C. Effect of pre-clerkship curriculum restructuring and pass-fail grading on student mental wellness. Society of Teachers of Family Medicine (New Orleans, LA, Jan 26-29, 2023).
6. Sabu-Kurian A, Hibler H, Washburn RL, Boothe K, **Kaur G**, Dufour JM. The role of macrophages in Sertoli cell transplant survival without the use of immunosuppressive drugs. American College of Surgeons Clinical Congress (San Diego, CA, Oct 16-20, 2022). Selected for Platform Presentation
7. Hussain S, McCabe P, Lee V, Hewetson A, Webster D, Dufour JM, Schneider B, **Kaur G**. Highlighting key elements of the pre-med program at TTUHSC that prepares the students to be successful in Medical School. Pathway Programs & Bridges 1st Annual Conference (Virtual). Selected for Roundtable Discussion
8. **Kaur G**, Bishop K, Schneider B. Highlighting the benefits of cadaveric dissection in the era of digital world. 39th Annual Meeting of the American Association of Clinical Anatomists (Fort Worth, TX, June 13-17, 2022). Selected for Platform Presentation
9. Brower G, Matejka CN, Zeitouni F, Boomer M, **Kaur G**. Benefits of incorporating ultrasound and clinical simulations in medical pre-clerkship curriculum. 39th Annual Meeting of the American Association of Clinical Anatomists (Fort Worth, TX, June 13-17, 2022). Selected for Tech Fair Presentation
10. Zeitouni F, **Kaur G**, Schneider B. Instructional videos improve academic performance and reduce anxiety in learning clinical anatomy. 39th Annual Meeting of the American Association of Clinical Anatomists (Fort Worth, TX, June 13-17, 2022).
11. Webster D, Jones B, **Kaur G**, Kruczek C, Brower G, Villalobos A. Engaged learning: Integrating simulations, ultrasound and small groups into large-group courses. International Association of Medical Science Educators (IAMSE) Meeting-Pre conference workshop (Denver, CO, June 4-7, 2022).
12. Dufour JM, Washburn RL, Taylor H, **Kaur G**. Immunosuppressive functions of Sertoli cells. Male Reproductive Immunology. American Society for Reproductive Immunology (Nashville, TN, May 22-26, 2022).
13. Washburn RL, **Kaur G**, Chilton B, Reilly B, Dufour JM. Seeking the Sertoli cell complement inhibitory signature to prolong transplant survival. Annual Meeting for the American Association of Immunologists. Immunology2022 (Portland, OR, May 6-10, 2022).
14. Taylor H, **Kaur G**, Dufour JM. Tregs: The Sertoli cell's secret weapon in transplant survival. Annual Meeting for the American Association of Immunologists. Immunology2022 (Portland, OR, May 6-10, 2022).
15. Kruczek C, **Kaur G**. Curriculum restructuring at Texas Tech University Health Sciences Center Medical School: Evaluation and lessons learned. Experimental Biology (Philadelphia, April 2-5, 2022).

Lawrence, John**Grants:**

1. Transcriptional Dysfunction in Dentate Gyrus Cell Types: Roles of Retinoic Acid Responsive Genes in Protection Against Alzheimer's Disease Pathogenesis. NIH R01 AG071859-01A1. Lawrence (PI). 1/1/2022-12/31/2026. Total costs: \$1,872,220
2. The hippocampal dentate gyrus in aging and Alzheimer's disease: boosting transcription of retinoic acid-sensitive genes through HDAC inhibition and vitamin A supplementation. NIH R01 AG073826-01A1. Lawrence (PI). 8/1/2022-4/30/2027. Total costs: \$3,158,615

Lee, Jaehoon**Publications:**

1. Al-hihi, E. M., Gibson, C. A., **Lee, J.**, Mount, R. R., Irani, N., & McGowan, C. (2022). Improving appropriate imaging for non-specific low back pain. *BMJ Open Quality*, 11, e001539.
2. Arensberg, L. C., Kalender-Rich, J., **Lee, J.**, & Gibson, C. A. (2022). Millennials seeking healthcare: Examining the degree to which patients utilize online resources. *Kansas Journal of Medicine*, 15, 347–351.
3. Assimonye, S., **Lee, J.**, Smith, S., Glenn, J., Kennedy, M., & Ramaswamy, M. (in press). Understanding the changing social and health circumstances of women leaving jail: A social bonds analysis. *Women & Criminal Justice*.
4. Backes, J. M., Gibson, C. A., Mount, R. R., & **Lee, J.** (2022). Identifying patient perceptions and attitudes regarding statin-associated diabetes mellitus. *Future Cardiology*, 18(10), 817–828.
5. Binti Mohamad Ismail, F.-N., Chu, S.-Y., Gan, K.-B., Park, H.-R., **Lee, J.**, Barlow, S. M., & A. Razak, R. (2022). Speech performance among healthy Malay female speakers during dual-task and sentence complexity. *Folia Phoniatrica et Logopaedica*, 74, 112–121.
6. Carter, S., Crews, C., **Lee, J.**, Noble, N., & Li, X. (2022). Acceptability of school shooting prevention procedures among parents. *The Journal of Primary Prevention*, 43, 359–374.
7. Carter, S., Noble, N., **Lee, J.**, Li, X., & Crews, C. (in press). Acceptability of active shooter prevention strategies on college and university campuses. *Journal of Prevention*.
8. Chu, S.-Y., Binti Mohamed Rafi, A., **Lee, J.**, Fierro, V., Gan, C.-H., Singh, S.-J., Hersh, D., & Lin, L.-Y. (in press). The relationship between affiliate stigma, stress and quality of life for parents of individuals with cerebral palsy in Malaysia. *Disability and Rehabilitation*.
9. Chu, S.-Y., **Lee, J.**, Wong, W.-Y., Gan, C.-H., Fierro, V., & Hersh, D. (in press). Knowledge mediates attitude in Autism spectrum disorders? Data from Malaysia. *International Journal of Developmental Disabilities*.
10. Chu, S.-Y., Unicomb, R., **Lee, J.**, Cho, K.-S., St. Louis, K. O., & Harrison, E. (2022). Public attitudes toward stuttering in Malaysia. *Journal of Fluency Disorders*, 74, 105942.
11. Froehlick-Grobe, K., **Lee, J.**, Ochoa, C., Lopez, A. M., Sarker, E., Driver, S., Shegog, R., & Lin, S.-J. (2022). Effectiveness and feasibility of the Workout on Wheels Internet Intervention (WOWii) for individuals with spinal cord injury: A randomized controlled trial. *Spinal Cord*, 60, 862–874.
12. Gibson, C. A., Harvey, S. P., Valentine, H., Landfried, L., & **Lee, J.** (2022). Food insecurity and health-related quality of life among SNAP nutrition incentive participants. *Journal of Hunger & Environmental Nutrition*, 17(4), 540–552.
13. Kim, J.-H., **Lee, J.**, Richardson, T. V., Lee, D.-H., McMahon, B. T., Kim, H., & Sametz, R. R. (2022). Psychometric validation of Adapted Inventory of Virtues and Strengths. *Rehabilitation Counseling Bulletin*, 65(4), 322–334.
14. Kim, S.-Y., **Lee, J.**, & Boone, D. (2022). Protective and risk factors at the intersection of chronic pain, depression, anxiety, and somatic amplification: A latent profile approach. *Journal of Pain Research*, 15, 1107–1121.

15. Molina, A. H., Harvey, J., Pitt, K. M., **Lee, J.**, & Barlow, S. M. (2022). Effects of real-time iEMG biofeedback on facial muscle activation patterns in a child with congenital unilateral facial palsy. *Biomedical Journal of Scientific & Technical Research*, 47(1), 38074–38088.
16. Moon, H., Cheon, J., **Lee, J.**, Banda, D. R., Griffin-Shirley, N., & Ajuwon, P. M. (2022). Factors influencing the intention of persons with visual impairment to adopt mobile applications based on the UTAUT model. *Universal Access in the Information Society*, 21(1), 93–107.
17. O'Brien, B., **Lee, J.**, Kim, S., Nandra, G. S., Pannu, P., Swann, A. C., Murphy, N., Tamman, A. J. F., Amarneh, D., Lijffijt, M., Averill, L. A., & Mathew, S. J. (2023). Replication of distinct trajectories of antidepressant response to intravenous ketamine. *Journal of Affective Disorders*, 321, 140–146.
18. Oh, H., **Lee, J.**, Patriquin, M. A., Oldham, J. M., & Salas, R. (in press). Reward processing in psychiatric inpatients with depression. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*.
19. Pandey, Y., **Lee, J.**, Banda, D., Griffin-Shirley, N., Nguyen, T., & Othun, V. (in press). A survey of mobile app use among university students with visual impairment in India. *British Journal of Visual Impairment*.
20. Park, S., Kim, S., **Lee, J.**, & Heo, B. (2022). Evolving norms: Social media data analysis on parks and greenspaces perception changes before and after the COVID 19 pandemic using a machine learning approach. *Scientific Reports*, 12, 13246
21. Ptomey, L. T., Helsel, B. C., White, D. A., **Lee, J.**, Sherman, J. R., Washburn, R. A., Gorczyca, A. M., & Donnelly, J. E. (2022). Intrapersonal, interpersonal and environmental correlates of moderate to vigorous physical activity and sedentary time in adolescents with intellectual and developmental disabilities. *Journal of Intellectual Disability Research*, 66(6), 503–516.
22. Ptomey, L. T., **Lee, J.**, White, D. A., Helsel, B. C., Washburn, R. A., & Donnelly, J. E. (2022). Changes in physical activity across a 6-month weight loss intervention in adolescents with intellectual and developmental disabilities. *Journal of Intellectual Disability Research*, 66(6), 545–557.
23. Sandfort E. C., **Lee, J.**, Hozan, M., Greenwood, J., & Barlow, S. M. (2022). Orofacial and digit force dynamics in neurotypical children. *Biomedical Journal Scientific Technical Research*, 44(3), 35478–35490.
24. Salyer, C., **Lee, J.**, Lorvick, J., Comfort, M., Cropsey, K., Smith, S., Emerson, A., & Ramaswamy, M. (2022). Cervical cancer prevention behaviors among criminal-legal involved women from three U.S. cities. *Journal of Women's Health*, 31(4), 533–545.
25. Shen, C.-L., Watkins, B. A., Kahathuduwa, C., Chyu, M.-C., Zabet-Moghaddam, M., Elmassry, M. M., Luk, H.-Y., Brismee, J.-M., Knox, A., **Lee, J.**, Zumwalt, M., Wang, R., Wager, T. D., & Neugebauer, V. (2022). Tai Chi improves brain functional connectivity and plasma lysophosphatidylcholines in postmenopausal women with knee osteoarthritis: An exploratory pilot study. *Frontiers in Medicine*, 8, 775344.
26. Shepard, C. A., Rufino, K. A., **Lee, J.**, Tran, T., Paddock, K., Wu, C., Oldham, J. M., Mathew, S. J., & Patriquin, M. A. (in press). Nighttime sleep quality and daytime sleepiness predicts suicide risk in adults admitted to an inpatient psychiatric hospital. *Behavioral Sleep Medicine*.
27. Smith, P., **Lee, J.**, & Chang, R. (2022). Characterizing competing tensions in Black immigrant literacies: Beyond partial representations of success. *Reading Research Quarterly*, 57(1), 59–90.
28. Yi, M., Wang, J., Flores, R., & **Lee, J.** (2022). Measuring preservice elementary teachers' geometry knowledge for teaching 2-dimensional shapes. *Eurasia Journal of Mathematics, Science and Technology Education*, 18(8), 2137.

Presentations:

1. Gibson, C. A., Gupta, A., Naik, A., Sullivan, D. K., **Lee, J. H.**, Backes, J., Harvey, S., Shaffer, K., Mount, R., American Society for Nutrition, "Using formative research to develop a healthy lifestyle program for recent kidney transplant recipients," Orland, FL. (November 2022).

2. Veronica, F., Chu, S.-Y., Rafi, A., **Lee, J. H.**, Gan, C., Singh, S., Hersh, D., Lin, L.-Y., American Speech-Language-Hearing Association, "We can't die first: The impact on parents caring for children with cerebral palsy," New Orleans, LA. (November 2022).
3. Moon, H., Kim, S., **Lee, J. H.**, Association for Educational Communications and Technology, "Mining Twitter to analyze faculty perceptions of online teaching and learning over time: Challenges and opportunities," Las Vegas, NV. (October 2022).
4. Kim, Y., **Lee, J. H.**, American Educational Research Association, "A Monte Carlo comparison of handling missing covariates in SEM-based meta-analysis," San Diego, CA. (April 2022).
5. Yi, S., Shin, S., **Lee, J. H.**, Siwatu, K., American Educational Research Association, "Development of the College Cultural Fit Scale (CCFS): Predicting college adjustment and achievement," San Diego, CA. (April 2022).
6. **Lee, J. H.**, Kim, S., Anxiety and Depression Association of America, "Person-centered approach of identifying trajectories of patient response to treatment over time: Longitudinal mixture modeling and machine learning," Denver, Colorado. (March 2022).
7. **Lee, J.**, Jung, K., Texas Association for Institutional Research, "Funding and building developmental math and academic support services: Identifying successes and challenges for Hispanic and low-income students," Dallas, TX. (February 2022).
8. Bhusal, A., Jung, K., **Lee, J.**, Texas Association for Institutional Research, "Google Data Studio as an alternative institutional research and reporting tool," Dallas, TX. (February 2022).
9. Jung, K., **Lee, J.**, Li, X., Texas Association for Institutional Research, "Predicting college student purge using a classification tree model," Dallas, TX. (February 2022).

Grant Awards:

1. Localized mHealth approach to boosting COVID-19 testing and vaccine literacy, access, and uptake among women with criminal legal system involvement, Ramaswamy (PI), NIMHD U01MD017415, 01/01/2022–11/30/2026, \$2,458,129, Co-I
2. Innovating and advancing in STEM education, Wahi (PI), ED P031C210026, 10/01/2021–9/30/2026, \$4,783,323, Co-I.
3. Curcumin and retinal amyloid-beta pilot study, Shen (PI), Sabinsa Corporation, 01/01/2022–12/31/2022, \$94,991, Co-I.
4. Effect of annatto-derived geranylgeraniol (GG) on statin-associated myopathy, Shen (PI), American River Nutrition, 01/01/2022–12/31/2023, \$266,294, Co-I.
5. Oral diadochokinesis among Malaysian-Malay speakers: A comparative study of neurotypical adults and individuals with Parkinson's disease, Chu (PI), Universiti Kebangsaan Malaysia, 10/01/2022–09/31/2023, \$22,000, Co-I.

Grant Applications: 20+ applications to federal and state agencies

Lee, Sueann

Publications:

1. Liu, Y., & **Lee, S.A.S.** (2022). A study adopting a motor-based hierarchically structured intervention for remediating nasal fricatives in children with normal velopharyngeal function requires a better experimental design (Commentary paper). *Evidence-Based Communication Assessment and Intervention*, 16, 29-34.
2. **Lee, S.A.S.** (2022). The feasibility of telepractice intervention using animated illustrations for treating prepositions: A pilot study. *Online Journal of Otolaryngology and Rhinology*, 5, 1-8.

3. Becker, B., Harvey, B., **Lee, S.A.S.**, & Demke, J. (2022). Intelligence of children with repaired cleft palate: A retrospective chart review study. *Online Journal of Otolaryngology and Rhinology*, 5,
4. Liu, Y., **Lee, S.A.S.** & Chen, W. (2022). The correlation between perceptual ratings and nasalance scores in individuals with oral-nasal balance disorders: A systematic review. *Journal of Speech, Language, Hearing Research*, 65, 2215-2234.

Invited workshop:

1. **Lee, S.A.S.** (2022). Aural Rehabilitation. 6 Hour workshop at Hue University of Medicine and Pharmacy, Hue, Vietnam, December, 2022
2. **Lee, S.A.S.** (2022). Speech Sound Disorders: Assessment & Intervention. 6 Hour workshop at Medical University, Ho Chi Minh City, Vietnam, December 2022
3. **Lee, S.A.S.** (2022). Introduction to Communication Science and Disorders. 3 Hour workshop at National University of Health Science, Vientiane, Laos, December, 2022
4. **Lee, S.A.S.** (2022). Speech Sound Disorders: Assessment & Intervention. 6 Hour workshop at Hanoi Medical University, Department of Rehabilitation, Hanoi, Vietnam, December, 2022

Presentations:

Oral:

1. **Lee, S.A.S.** (2022). Introduction of ultrasound technology in speech intervention for children with cleft palate. A paper accepted for oral presentation at American Craniofacial Association's 78th Annual Meeting, Forth Worth, TX.
2. **Lee, S.A.S.**, Jakielski, K., Seung, H.K., & Koul, R. (2022). Global outreach experiences as a Fulbright US Scholar. 1 Hour seminar at the Annual Convention of the American Speech-Language-Hearing Association, New Orleans, LA
3. **Lee, S.A.S.** (2022). Benefit of animated illustrations for children's visual attention and word learning: An eye-tracking study. 30-minute technical oral presentation at the Annual Convention of the American Speech-Language-Hearing Association, New Orleans, LA
4. Byrd, A., **Lee, S.A.S.**, Matthews, J., Henman, K., Write, M., Fannin, D. (2022). Leframing professionalism in CSD to address diversity, equity, inclusion and access. 1-hour seminar at the Annual Convention of the American Speech-Language-Hearing Association, New Orleans, LA.

Posters:

5. Liu, L*, **Lee, S.A.S.**, Chen, W. (2022). The correlation between perceptual ratings and nasalance scores in resonance disorders: A systematic review. A paper accepted for oral presentation at American Craniofacial Association's 78th Annual Meeting, Fort Worth, TX.
6. **Lee, S.A.S.**, Ortega, F., Slayton, K., & Marley, M. (2022). The effect of animated stimuli and executive function on online language learning. A poster presentation at the Annual Convention of the American Speech-Language-Hearing Association, New Orleans, LA

Grant:

1. 2021-2027. \$3,199,247.00. National Institute of Dental and Craniofacial Research (NIDCR), UG3-UH3 Grant. Project title: Speech intervention via telepractice for children with repaired cleft palate: Randomized controlled trial and assessment of speech production and perception skills. Role: Principle Investigator

Luk, HuiYing

Publications:

1. Jiwan, NC., Appell, C., Wang, Rui., Shen, CL., **Luk, HY.** (2022). Geranylgeraniol Supplementation Mitigates Soleus Muscle Atrophy via Changes in Mitochondrial Quality in Diabetic Rats, *In Vivo*, 36(6):2638-2649, DOI: 10.21873/invivo.12998. Epub 2022 Oct 29
2. Al Masud, A. **Luk, HY.**, Shen, CL., Chyu, MC. (2022). Impact of Local Vibration Training on Neuromuscular Activity, Muscle Cell, and Muscle Strength: a Review. *Critical Reviews in Biomedical Engineering*; DOI: 10.1615/CritRevBiomedEng.2022041625
3. **Luk, HY.**, Jiwan, NC., Appell, CR., Levitt, DE., Vingren, JL. (2022). Sex Specific Mitochondrial Dynamics and Mitophagy Response to Muscle Damage, *Physiological Reports*, 10(10), DOI: 10.14814/phy2.15230.
4. Shen, CL., Watkins, BA., Kahathuduwa, C., Chyu, MC., Zabet-Moghaddam, M., Elmassry, MM., **Luk, HY.**, Brismee, JM., Knox, A., Lee, J., Zumwalt, M., Wang, R., Wager, TD., Neugebauer, V. (2022). Tai Chi Improves Brain Functional Connectivity and Plasma Lysophosphatidylcholines in Postmenopausal Women with Knee Osteoarthritis: An Exploratory Pilot. *Frontiers in Medicine*, 8:3775344, doi: 10.3389/fmed.2021.775344
5. Vingren, JL., Boyett, JC., Lee, EC., Levitt, DE., **Luk, HY.**, McDermott, BP., Munoz, CX., Ganio, MS., Armstrong, LE., Hill, DW (2022). Effect of Ibuprofen on Circulating Cytokine and Leukocyte Subset Responses to 164-km Road Cycling Event in a Hot Environment. *Research Quarterly for Exercise and Sport*; <https://doi.org/10.1080/02701367.2021.1981539>

Grants:

National Strength and Conditioning Association, Young Investigator. Title: The Effect of Dehydration on Sleep and Anabolism

Lyford, Conrad

Publications:

1. Gong, Zijan and **Conrad Lyford**. "Using Social Media for More Engaged Users and Enhanced Health Communication in Diabetes Care," *American Journal of Lifestyle Medicine*, January 2022. doi:10.1177/15598276211064832
2. Sienso, Gifty, **Conrad Lyford**, Wilna Oldewage-Theron. "Using instrumental variables to establish the relationship between household production diversity and household dietary diversity in northern Ghana," October 2022, *African Journal of Food, Agriculture, Nutrition and Development* 22(112):21036-21055 DOI: 10.18697/ajfand.112.20255

Book chapter:

1. Antwi, Kwaku, **Conrad Lyford** and Patricia Solis." Rural Household Food Insecurity and Child Malnutrition in Northern Ghana," chapter 4 in *Open Mapping towards Sustainable Goals*, pp. 47-56., Springer, 2022. https://link.springer.com/chapter/10.1007/978-3-031-05182-1_4

Presentations:

1. Uche Samuel, Janani Rajbhandari-Thapa and **Conrad Lyford**. "Medicaid Expansion and its Impacts on Low-Income Adults Health Care Access by Chronic Disease Status" Selected paper presented at the Southern Agricultural Economics Association (SAEA) 54th Annual Meeting in New Orleans, LA, February 12-15, 2022.

Grants:

1. "OIA 2022 Mandela Washington Fellowship", January 2022 to September 2022, Department of State, Bureau of Educational and Cultural Affairs (\$147,950, my share \$49,317)
2. "Bridging the Gap Towards Successful Vegetable Introduction: Proof in Concept for Early Head Start", Texas Tech University, 2022 Engaged Scholarship Collaboration Seed Grant (\$6,000, my share \$2,000)

Award:

Fulbright Scholar, University for Development Studies, Tamale, Ghana, August 2022 – January 2023

Moustaid-Moussa, NaimiPublications:

1. Coates PM, Allen LH, Belury M, Schalinske K, Booth SL, Stull A, Lyle B, Bailey RL, Krebs N, McBurney MI, **Moustaid-Moussa N**, West KP, MacFarlane A. A New Chapter for the American Society for Nutrition's Journal Portfolio. *J Nutr.* 2022 Apr 1;152(4):1175-1176. doi: 10.1093/jn/nxab371. PMID: 35142826; PMCID: PMC8971002.
2. Khan F, Khan H, Khan A, Yamasaki M, **Moustaid-Moussa N**, Al-Harrasi A, Rahman SM. Autophagy in adipogenesis: Molecular mechanisms and regulation by bioactive compounds. *Biomed Pharmacother.* 2022 Nov;155:113715. doi: 10.1016/j.biopha.2022.113715. Epub 2022 Sep 21. PMID: 36152415.
3. Mubtasim N, **Moustaid-Moussa N**, Gollahon L. The Complex Biology of the Obesity-Induced, Metastasis-Promoting Tumor Microenvironment in Breast Cancer. *Int J Mol Sci.* 2022 Feb 24;23(5):2480. doi: 10.3390/ijms23052480. PMID: 35269622; PMCID: PMC8910079.
4. Islam T, Albracht-Schulte K, Ramalingam L, Schlabritz-Lutsevich N, Park OH, Zabet-Moghaddam M, Kalupahana NS, **Moustaid-Moussa N**. Anti-inflammatory mechanisms of polyphenols in adipose tissue: role of gut microbiota, intestinal barrier integrity and zinc homeostasis. *J Nutr Biochem.* 2022 Nov 26;115:109242. doi: 10.1016/j.jnutbio.2022.109242. Epub ahead of print. PMID: 36442715.
5. Chen YT, Ramalingam L, Garcia CR, Ding Z, Wu J, **Moustaid-Moussa N**, Li W. Engineering and Characterization of a Biomimetic Microchip for Differentiating Mouse Adipocytes in a 3D Microenvironment. *Pharm Res.* 2022 Feb;39(2):329-340. doi: 10.1007/s11095-022-03195-0. Epub 2022 Feb 15. PMID: 35166994.
6. Rodriguez-Irizarry VJ, Schneider AC, Ahle D, Smith JM, Suarez-Martinez EB, Salazar EA, McDaniel Mims B, Rasha F, Moussa H, **Moustaid-Moussa N**, Pruitt K, Fonseca M, Henriquez M, Clauss MA, Grisham MB, Almodovar S. Mice with humanized immune system as novel models to study HIV-associated pulmonary hypertension. *Front Immunol.* 2022 Aug 5;13:936164. doi: 10.3389/fimmu.2022.936164. PMID: 35990658; PMCID: PMC9390008.
7. Menikdiwela KR, Kahathuduwa C, Bolner ML, Rahman RL, **Moustaid-Moussa N**. Association between Obesity, Race or Ethnicity, and Luminal Subtypes of Breast Cancer. *Biomedicines.* 2022 Nov 15;10(11):2931. doi: 10.3390/biomedicines10112931. PMID: 36428500; PMCID: PMC9687751.
8. Menikdiwela KR, Guimarães JPT, Scoggin S, Gollahon LS, **Moustaid-Moussa N**. Dietary pH Enhancement Improves Metabolic Outcomes in Diet-Induced Obese Male and Female Mice: Effects of Beef vs. Casein Proteins. *Nutrients.* 2022 Jun 22;14(13):2583. doi: 10.3390/nu14132583. PMID: 35807769; PMCID: PMC9268221.
9. Regmi A, Singh S, **Moustaid-Moussa N**, Coldren C, Simpson C. The Negative Effects of High Rates of Biochar on Violas Can Be Counteracted with Fertilizer. *Plants (Basel).* 2022 Feb 11;11(4):491. doi: 10.3390/plants11040491. PMID: 35214822; PMCID: PMC8875082.
10. Guimarães JPT, Menikdiwela KR, Ramalho T, Queiroz LAD, Kalupahana NS, Jancar S, Ramalingam L, Martins JO, **Moustaid-Moussa N**. Effects of captopril on glucose metabolism and autophagy in liver and muscle from mice with type 1 diabetes and diet-induced obesity. *Biochim Biophys Acta Mol Basis Dis.* 2022 Oct 1;1868(10):166477. doi: 10.1016/j.bbadis.2022.166477. Epub 2022 Jun 30. PMID: 35780942.
11. Schuster C, Wolpert N, **Moustaid-Moussa N**, Gollahon LS. Combinatorial Effects of the Natural Products Arctigenin, Chlorogenic Acid, and Cinnamaldehyde Commit Oxidation Assassination on Breast Cancer Cells. *Antioxidants (Basel).* 2022 Mar 20;11(3):591. doi: 10.3390/antiox11030591. PMID: 35326241; PMCID: PMC8945099.
12. Soto PL, Ramalingam L, George B, **Moustaid-Moussa N**. Long-term effects of adolescent exposure to olanzapine in C57BL/6 J mice and the impact of dietary fish oil supplementation. *Psychopharmacology*

(Berl). 2022 Oct;239(10):3117-3131. doi: 10.1007/s00213-022-06193-7. Epub 2022 Jul 27. PMID: 35896725.

13. Camfield E, Bowman A, Choi J, Gwinn K, Labbe N, Rajan K, Ownley B, **Moustaid-Moussa N**, D'Souza DH. Switchgrass extractives to mitigate Escherichia coli O157:H7 and Salmonella enterica serovar Typhimurium contamination of romaine lettuce at pre- and postharvest. *J Food Sci.* 2022 Aug;87(8):3620-3631. doi: 10.1111/1750-3841.16249. Epub 2022 Jul 14. PMID: 35836257.
14. Shen CL, Dufour JM, Miranda JM, Kaur G, Chung E, Ramalingam L, **Moustaid-Moussa N**, Cao JJ. Effect of Dietary Geranylgeraniol and Green Tea Polyphenols on Glucose Homeostasis, Bone Turnover Biomarkers, and Bone Microstructure in Obese Mice. *Int J Mol Sci.* 2023 Jan 4;24(2):979. doi: 10.3390/ijms24020979. PMID: 36674494; PMCID: PMC9866936.

Grant Awards

1. Co-I USDA NIFA AFRI REEU\$500,000. 09/01/2021 –08/31/2024 Nutrition Bench-to-Community Engaged Scholars in Texas (Nutrition BEST) REEU Program (PI: Dr. Naima Moustaid-Moussa)
2. Chanaka Kahathuduwa (Psychiatry Lbk). Title: Texas Child Mental Health Consortium CPAN, TCHATT, CPWE, and CAP Fellowship (Contract grant – University of Texas System). Funded by Texas Higher Education Coordinating. \$500,000 for 1 year.

Murimi, Mary

Publications:

1. **Murimi M.** What is the Place of Beef in a Healthful Sustainable Homo sapiens Diet? *Am J Health Promot.* 2022 Jun;36(5):898-900. doi: 10.1177/08901171221088661c. PMID: 35531995.
2. Kiteessa DA, Bacha K, Tola YB, **Murimi M**, Smith E, Gershe S. Nutritional compositions and bioactive compounds of "Shameta", A traditional home made fermented porridge provided exclusively to lactating mothers in the western part of Ethiopia. *Heliyon.* 2022 Feb 17;8(2):e08990. doi: 10.1016/j.heliyon.2022.e08990. PMID: 35243103; PMCID: PMC8866073.
3. Moyeda-Carabaza AF, Githinji P, Nguyen B, **Murimi M.** The influence of frequent consumption of foods-away-from-home on the total diet quality and weight status among faculty and staff. *J Am Coll Health.* 2023 Jan;71(1):292-299. doi: 10.1080/07448481.2021.1891081. Epub 2021 Mar 24. PMID: 33759716.

Nair, Nandini

Publications:

1. Mittal N, Pawar D, Parmar K, Sly Z, Del Rio-Pertuz G, Ansari MM, **Nair N.** Covaxin-Induced Lymphocytic Myocarditis. *Cureus.* 2022 Jul 11;14(7):e26759. doi: 10.7759/cureus.26759. PMID: 35967168; PMCID: PMC9365502.
2. **Nair N.** Vascular rejection in cardiac allograft vasculopathy: Impact on graft survival. *Front Cardiovasc Med.* 2022 Aug 4;9:919036. doi: 10.3389/fcvm.2022.919036. PMID: 35990962; PMCID: PMC9386065.
3. Abdelnabi M, ElNawaa S, Benjanuwattra J, Elmassry M, **Nair N.** Ustekinumab-Induced Fatal Acute Heart Failure in a Young Female: A Case Report. *Methodist Debakey Cardiovasc J.* 2022 Jul 12;18(1):54-58. doi: 10.14797/mdcvj.1076. PMID: 35891701; PMCID: PMC9284982.
4. **Nair N.** Use of machine learning techniques to identify risk factors for RV failure in LVAD patients. *Front Cardiovasc Med.* 2022 Sep 14;9:848789. doi: 10.3389/fcvm.2022.848789. PMID: 36186964; PMCID: PMC9515379.
5. Del Rio-Pertuz G, **Nair N.** Gastrointestinal bleeding in patients with continuous-flow left ventricular assist devices: A comprehensive review. *Artif Organs.* 2023 Jan;47(1):12-23. doi: 10.1111/aor.14432. Epub 2022 Nov 5. PMID: 36334280.
6. **Nair N**, Du D, Hu Z, Gongora E. Risk Prediction Model for Survival of Wait-List Patients on Axial CF-LVAD: A UNOS Database Analysis. *Transplant Proc.* 2022 Sep;54(7):1894-1901. doi: 10.1016/j.transproceed.2022.04.029. Epub 2022 Aug 2. PMID: 35927087.

Neugebauer, VolkerPublications:

1. Presto, P., Ji, G., Junell, R., Griffin, Z., **Neugebauer, V.** Fear extinction based inter-individual and sex differences in pain-related vocalizations and anxiety-like behaviors but not nocifensive reflexes. *Brain Sci.* 11: 1339 (19 pp.), 2021. PMID: 34679403. PMC8533751.
2. Avila, M., **Neugebauer, V.**, DeToledo, J. Gender differences in MS related pain, correlation with MRI lesion localization and burden of disease. *Pharm. Pharmacol. Int. J.* 9:258–261, 2021.
3. Shen, C.-L., Wang, R., Ji, G., Elmassry, M.M., Zabet-Moghaddam, M., Vellers, H., Hamood, A.N., Gong, X., Mirzaei, P., Sang, S., **Neugebauer, V.** Dietary supplementation of gingerols- and shogaols-enriched ginger root extract attenuate pain-associated behaviors while modulating gut microbiota and metabolites in rats with spinal nerve ligation. *J. Nutr. Biochem.* 100: 108904 (12 pp.), 2022. PMID: 34748918; PMC8794052.
4. Shen, C.-L., Watkins, B., Kahathuduwa, C., Chyu, M.-C., Zabet, M., Elmassry, M.M., Luk, H.-Y., Brismee, J.-M., Knox, A., Lee, J., Zumwalt, M., Wang, R., Wager, T.D., **Neugebauer, V.** Tai Chi improves brain functional connectivity and plasma lysophosphatidylcholines in postmenopausal women with knee osteoarthritis: an exploratory pilot study. *Front. Med.* 8: 775344 (16 pp.), 2022. PMID: 35047525. PMC8761802.
5. Ashraf-Uz-Zaman, M., Ji, G., Tidwell, D., Yin, L., Burugu, D., Thakolwiboon, S., Pan, J., Junell, R., Griffin, Z., Shahi, S., Barthels, D., Sajib, M.S., Trippier, P.C., Mikelis, C.M., Das, H., Avila, M., **Neugebauer, V.**, German, N.A. Evaluation of Urea-Based Inhibitors of the Dopamine Transporter Using the Experimental Autoimmune Encephalomyelitis Model of Multiple Sclerosis. *ACS Chem. Neurosci.* 13: 217–228, 2022. PMID: 34978174.
6. Shen, C.-L., Castro, L., Fang, C.-Y., Castro, M., Sherali, S., White, S., Wang, R., **Neugebauer, V.** Bioactive compounds for neuropathic pain: an update on preclinical studies and future perspectives. *J. Nutr. Biochem.* 104: 108979 (29 pp.), 2022. PMID: 35245654.
7. Presto, P., Mazzitelli, M., Junell, R., Griffin, Z., **Neugebauer, V.** Sex differences in pain along the neuraxis. *Neuropharmacology* 210: 109030 (14 pp.), 2022. PMID: 35331712. PMC9354808.
2. Mazzitelli, M., Yakhnitsa, V., Neugebauer, B., **Neugebauer, V.** Optogenetic manipulations of CeA-CRF neurons modulate pain- and anxiety-like behaviors in neuropathic pain and control rats. *Neuropharmacology* 210: 109031 (12 pp.), 2022. PMID: 35304173. PMC9352141
3. Shen, C.-L., Schuck, A., Tompkins, C., Dunn, D.M., **Neugebauer, V.** Bioactive compounds for fibromyalgia-like symptoms: a narrative review and future perspectives. *Int. J. Environ. Res. Public Health* 19: 4148 (17 pp), 2022. PMID: 35245654. PMC8998198.
4. Ito, H., Navratilova, E., Vagnerova, B., Watanabe, M., Kopruszinski, C., Moreira de Souza, L.H., Yue, X., Ikegami, D., Moutal, A., Patwardhan, A., Khanna, R., Yamazaki, M., Guerrero, M., Rosen, H., Roberts, E., **Neugebauer, V.**, Dodick, D.W., Porreca, F. Chronic pain recruits hypothalamic dynorphin/kappa opioid receptor signaling to promote wakefulness and vigilance. *Brain* 153, 2022. PMID: 35485490.
5. Yakhnitsa, V., Ji, G., Hein, M., Presto, P., Griffin, Z., Ponomareva, O., Navratilova, E., Porreca, F., **Neugebauer, V.** Kappa opioid receptor blockade in the amygdala mitigates pain like-behaviors by inhibiting CRF neurons in a rat model of functional pain. *Front. Pharmacol.* 13: 903978 (16 pp.), 2022. PMID: 35694266. PMC9177060.
6. Presto, P., **Neugebauer, V.** Sex differences in CGRP regulation and function in the amygdala in a rat model of neuropathic pain. *Front. Mol. Neurosci.* 15: 928587 (14 pp.), 2022. PMID: 35726298. PMC9206543.
7. Shen, C.-L., Wang, R., Yakhnitsa, V., Santos, J., Watson, C., Kiritoshi, T., Ji, G., Hamood, A., **Neugebauer, V.** Gingerol-enriched ginger supplementation mitigates neuropathic pain via mitigating intestinal permeability and neuroinflammation: gut-brain connection. *Front. Pharmacol.* 13: 912609 (10 pp.), 2022. PMID: 35873544. PMC9305072

8. Kopruszinski, C.M., Watanabe, M., Martinez, A.L., de Souza, L.H.M., Dodick, D.W., Moutal, A., **Neugebauer, V.**, Porreca, F., Navratilova, E. Kappa opioid receptor agonists produce sexually dimorphic and prolactin-dependent hyperalgesic priming, *Pain*, 2022.
9. Mazzitelli, M., Presto, P., Antenucci, N., Meltan, S., **Neugebauer, V.** Recent Advances in the Modulation of Pain by the Metabotropic Glutamate Receptors. *Cells* 11: 2608 (40 pp), 2022. PMID: 36010684; PMC9406805.

Meeting Abstracts and Presentations (* denotes peer-reviewed):

1. *Pan, J., Thakolwiboon, S., German, N., **Neugebauer, V.**, Avila, M. Neuroprotective effect of AZ257, a novel urea-based dopamine transporter inhibitor, in the experimental autoimmune encephalitis (EAE) mouse model. American Academy of Neurology 2022 Annual Meeting, #2267, 2022.
2. Azzam, S., Manczak, M., **Neugebauer, V.** Studying the effect of mitochondrial dysfunction and other hallmarks of Alzheimer's. 34rd Annual Student Research Week, p. 124, 2022.
3. Griffin Z., Yakhnitsa, V., Hein, M., Navratilova, E., Presto, P., Porreca, F., **Neugebauer, V.** Kappa opioid receptor blockade reduces pain-like behaviors and restores inhibition of amygdala CRF neurons in a functional pain model in rats. 34rd Annual Student Research Week, p. 130, 2022.
4. Junell, R., Presto, P., Ponomarev, I., **Neugebauer, V.** Subacute silencing of HMGB1 in the amygdala inhibits pain-related behaviors in a rat model of chronic neuropathic pain. 34rd Annual Student Research Week, p. 133, 2022.
5. Watson, C., Wang, R., Yakhnitsa, V., Santos, J., Kiritoshi, T., Ji, G., **Neugebauer, V.**, Shen, C.-L. Ginger root extract improves mitochondrial dysfunction in NP model animals. 34rd Annual Student Research Week, p. 146, 2022.
6. Nia, S.S., Hossain, M.A., Ji, G., Obeng, S., Nozohouri, S., Patel, D., Kalem, R., Jonnalagadda, S., Sifat, A.E., Hiranita, T., Abbruscato, T.J., Trippier, P.C., Putnam, W.T., **Neugebauer, V.**, German, N.A. Selective KOR Antagonists, Novel Candidates For Treatment of Neuropathic Pain. 34rd Annual Student Research Week, p. 159, 2022.
7. Presto, P., **Neugebauer, V.** CGRP1 receptor blockade in the amygdala in neuropathic pain: cellular and behavioral outcomes. 34rd Annual Student Research Week, p. 161, 2022.
8. Shahi, S., Ashraf-Uz-Zaman, M.D., Ji, G., Tidwell, D., Yin, L., Thakolwiboon, S., Pan, J., Trippier, P.C., Avila, M., **Neugebauer, V.**, German, N.A. Novel class of DAT inhibitor for the treatment of addiction. 34rd Annual Student Research Week, p. 163, 2022.
9. Presto, P., **Neugebauer, V.** CGRP1 receptor blockade in the amygdala in neuropathic pain: Cellular and behavioral effects. 6th Annual CTNT Symposium, p. 28, 2022.
10. *Shen, C.-L., Newman, J.W., Elmassry, M.M., Borkowski, K., Chyu, M.-C., Kahathuduwa, C., **Neugebauer, V.**, Watkins, B.A. Tai Chi improves plasma levels of oxylipins and endocannabinoids in postmenopausal women with knee osteoarthritic pain. International Congress on Integrative Medicine and Health, 1866, 2022.
11. *Shen C.-L., Elmassry, M.M., Santos, J., Wang, R., Yakhnitsa, V., Kiritoshi, T., Ji, G., Lovett, J., Hamood, A., **Neugebauer, V.** Two Curcumin extracts modify composition of gut microbiota, tight junction protein, and neuroinflammation in rats with neuropathic pain: microbiota-gut-brain axis, *Nutrition*, PO19-25-22, ID 1201566 2022.
12. *Shen C.-L., Wang, R., Yakhnitsa, V., Santos, J., Watson, C., Kiritoshi, T., Ji, G., Kim, N., Lovett, J., Hamood, A., **Neugebauer, V.** Ginger root extract mitigates neuropathic pain via suppressing neuroinflammation: gut-brain connection. *Nutrition*, PO19-24-22, ID 1201512, 2022.
13. * Santos, J.M., Wang, R., Driver, Z., Bhakta, V., Contreras, J., Yakhnitsa, V., Kiritoshi, T., Ji, G., **Neugebauer, V.**, Shen, C.-L. Curcumin and Curcuminoid effects modulating chronic mechanical sensitivity in spinal nerve ligation model revert mitochondria dysfunction and oxidative stress. *Nutrition*, PO07-63-22, ID 1209117, 2022.

14. *Presto, P., Ponomarev, I., **Neugebauer, V.** Subacute Silencing of HMGB1 in the Amygdala Reduces Pain-Related Behaviors in a Rat Model of Chronic Neuropathic Pain. 19th World Congr. Pain, IASP, PFR189, 2022.
15. *Mazzitelli, M., **Neugebauer, V.** Group II mGluR agonists decrease CeA neuronal excitability via astrocytic mGluR3 activation in an arthritis pain model. 19th World Congr. Pain, IASP, PTH80, 2022.
16. John, J., **Neugebauer, V.** Chemogenetic modulation of the amygdala in pain. Transformative Undergraduate Experiences Symposium, 55, 2022.
17. Santos, J.M., Wang, R., **Neugebauer, V.**, Shen, L. Curcumin effects modulating chronic pain in spinal nerve ligation (SNL) model by reverting mitochondria dysfunction and oxidative stress in spinal cord and amygdala. 4th Integrative Medicine Symposium and 11th Gender-Specific Medicine and Women's Health Symposium, LWBIWH, 2022.
18. *Welch, G.S., Presto, P., Mendoza, B., **Neugebauer, V.** Role of exogenously induced neuroimmune activation in the rodent right and left central amygdala. Soc. Neurosci. Abstr. 51: 047.01, 2022.
19. *Kiritoshi, T., Yakhnitsa, V., **Neugebauer, V.** Differential pain-related synaptic and excitability changes in amygdala CRF and non-CRF neurons in acute and chronic phases of a neuropathic pain model. Soc. Neurosci. Abstr. 51: 047.02, 2022.
20. *Ji, G., Kiritoshi, T., Yakhnitsa, V., Navratilova, E., Porreca, F., **Neugebauer, V.** Chemogenetic manipulation of amygdala kappa opioid receptor neurons modulates amygdala neuronal activity. Soc. Neurosci. Abstr. 51: 047.03, 2022.
21. *Mazzitelli, M., **Neugebauer, V.** mGluR2 and mGluR3 activation mediate different neuronal and synaptic functions of CeA neurons in an arthritis pain model. Soc. Neurosci. Abstr. 51: 047.04, 2022.
22. *Mendoza, B., Presto, P., Ponomarev, I., **Neugebauer, V.** Hmgb1 silencing in the amygdala inhibits pain-related behaviors in a sex-specific manner in a rat neuropathic pain model. Soc. Neurosci. Abstr. 51: 047.05, 2022.
23. *Yakhnitsa, V., Ponomareva, O., Thompson, J., Pruitt, K., **Neugebauer, V.** Reduced SK2-channel expression in central nucleus of amygdala in chronic neuropathic pain. Evidence for epigenetic mechanism. Soc. Neurosci. Abstr. 51: 047.06, 2022.
24. *Presto, P., Ji, G., Ponomarev, I., **Neugebauer, V.** Transcriptomic profiling of the central and basolateral amygdala in a rat model of chronic neuropathic pain. Soc. Neurosci. Abstr. 51: 047.07, 2022.
25. *Antenucci, N., Ji, G., Kiritoshi, T., Navratilova, E., Porreca, F., **Neugebauer, V.** Chemogenetic manipulation of amygdala kappa opioid receptor neurons modulates neuropathic pain behaviors. Soc. Neurosci. Abstr. 51: 047.08, 2022.
26. **Neugebauer, V.**, Mazzitelli, M. Amygdala mGluR2 and mGluR3 modulate different aspects of arthritis pain-related behaviors. Soc. Neurosci. Abstr. 51: 047.09, 2022.
27. *Kopruszinski, C.M., Stratton, H.J., Watanabe, M., Martinez, A.L., Moreida De Souza, L., Dodicks, D.W., Moutal, A., **Neugebauer, V.**, Porreca, F., Navratilova, E. Kappa opioid receptor agonists produce sexually dimorphic and prolactin-dependent hyperalgesic priming. Soc. Neurosci. Abstr. 51: 541.16, 2022.
28. *Manczak, M., Yib, X., Burugu, D., Lawrence, J.J., **Neugebauer, V.** The role of mitochondrial fission protein Drp1 in mitophagy process in transgenic mouse model (Tau-P301L). Soc. Neurosci. Abstr. 51: 705.19, 2022.
29. *Shen, C.-L., Elmassry, M.M., Santos, J.M., **Neugebauer, V.** Effects of two curcumin extracts on lipid and amino acid metabolites in amygdala and colon of rats with neuropathic pain. 4th Asia-Pacific Nutrigenomics & Nutrigenetics Organisation APNNO22 Conference, Taipei, Taiwan.

Invited Lectures during reporting period:

1. 09-21-2022 "Role of Amygdala Neuro-Immune Signaling in Chronic Neuroplasticity and Pain Behaviors". Topical Workshop - Session: The Amygdala as a Master Generator of Pain Plasticity - from Nociceptive Amygdala to Nociplastic Amygdala, IASP 2022 World Congress on Pain, Toronto, Canada.

2. 09-19-2022 “Amygdala Neuroplasticity and Pain Behaviors with a Focus on CRF Neurons”. Refresher Course - Session: The central amygdala in chronic pain - circuit, neuropeptides, and nociplasticity, IASP 2022 World Congress on Pain, Toronto, Canada.
3. 06-16-2022 “Emotional aspects of pain – preclinical studies. Behavioral assessment”. Neuroscience School of Advanced Sciences, Venice, Italy.
4. 06-16-2022 “Emotional aspects of pain – preclinical studies. Neuroplasticity”. Neuroscience School of Advanced Sciences, Venice, Italy.
5. 06-01-2022 “Amygdala CRF neurons and pain modulation”. Pain Mechanisms and Therapeutics Conference. Verona, Italy
6. 04-30-2022 “Mentoring Early Career Faculty and How to Deal with Senior Inactive / Unfunded Faculty?” AMSNDC, Long Beach, CA.
7. 03-22-2022 “Brain mechanisms of pain”. Biology of Pain course, UTHSC, San Antonio, TX (virtual)
8. 01-21-2022 “Amygdala modulation of pain behaviors”. Texas Gulf Coast Consortium for Translational Pain Research, Houston, TX, Virtual Workshop.
9. 10-04-2021 “Differential roles of mGluR2 and mGluR3 in the amygdala in pain modulation”. 10th mGlu Meeting, Taormina, Italy.

News Releases - Educational Activities for the Lay Public

1. “TTUHSC Event Seeks to Spread the Word About Alzheimer’s Disease”. In: TTUHSC Statline Daily Dose, by Mark Hendricks, November 4, 2022; <https://dailydose.ttuhs.edu/2022/november/garrison-alzheimers-awareness.aspx>
2. “TTUHSC researchers receive new NIH grant to continue studying amygdala-pain link”. In: EurekAlert, a service of the American Association for the Advancement of Science. Media Contact: Suzanna Cisneros, February 1, 2022. <https://www.eurekalert.org/news-releases/941989>.
3. “TTUHSC Researchers Receive New NIH Grant to Continue Studying Amygdala-Pain Link”. In: TTUHSC Statline Daily Dose, by Mark Hendricks, January 31, 2022; <https://dailydose.ttuhs.edu/2022/january/researchers-receive-nih-grant-amygdala-pain-link.aspx>.

Grants:

TTUHSC SOM, CTNT, GIA Seed Fund Program

01/01/23 – 12/31/23

“Mental Health Telemedicine for Caregivers of People with Alzheimer’s Disease and Related Dementias in Rural West Texas”

The goal of this study is to implement a telehealth program to expand our mental health services to individuals living in rural counties in West Texas. We will also examine the dyadic relationship between family caregivers receiving telehealth services and the person with Alzheimer’s disease (AD) and related dementias (ADRD) and underlying biopsychosocial mechanisms.

PI (Contact), Volker Neugebauer

MPI, Jonathan Singer (TTU)

Total costs: \$30,000

Davis Foundation

11/10/22 – 10/31/23

“Ginger extract in anxi-depressive disorders: gut-brain-axis”

The goal of this study is to test candidate genes associated with neuroinflammation-, neuroimmune-, neuroplasticity-, neurotransmitters-, and neurotoxicity in anxi-depressive disorders on brain samples from GEG-supplemented animals and to use gut microbiome analysis to explore the association between gut microbiome and anxi-depressive disorder-related gene expression.

PI (Contact), Chwan-Li (Leslie) Shen (TTUHSC)

MPI, Volker Neugebauer

Total costs: \$10,000

R01 NS129552 – NIH/NINDS

09/20/22 – 07/31/27

“Brain Circuits of Migraine Pain”

The goal of this study is to determine the potential relevance of a central CGRP circuit from parabrachial nucleus to amygdala as a common pathway of migraine pain that can be engaged by CGRP-dependent and CGRP-independent peripheral mechanisms, which may ultimately lead to development of improved therapies.

PI (Contact), Frank Porreca (University of Arizona), MPI, Edita Navratilova (University of Arizona)
MPI, Volker Neugebauer

Total costs: \$3,118,625 (TTUHSC subcontract \$1,235,720)

Diversity, Equity and Inclusion (DEI) research grant

09/01/22 – 08/31/23

Office of Diversity, Equity and Inclusion, the Office of the Provost, and the Office of Research and Innovation

“Implementing Individual Mental Health Treatment and Respite for Hispanic Informal Caregivers of Individuals with Dementia”.

The overall goal of this project is to implement individual mental health services for Hispanic informal caregivers of Alzheimer’s Disease and Related Dementia (ADRD) patients and provide both respite care and weekly therapeutic recreation (e.g., music, arts, and crafts) for individuals with ADRD.

PI, Jonathan Singer, TTU

MPI, Volker Neugebauer

Total costs: \$14,500

Garrison Family Foundation

01/25/22 – 01/31/23

“Increasing Mental Health Services for Low Income and Minority Informal Caregivers of Dementia Patients: A GIA and TTU Collaboration”

The goal of this study is to provide mental health healthy services and stress busting program for informal caregivers of patients with dementia.

PI, Volker Neugebauer

Total costs: \$75,000

R01 NS038261 - NIH/NINDS

12/15/21 - 11/30/26

“Amygdala Pain Mechanisms”

The overall goal of this project funded since 1999 is to determine role and mechanisms of amygdala plasticity in pain and its interactions with cortical-cognitive control centers, using electrophysiology, pharmacology, behavioral assays, gene transfer and optogenetic strategies. The focus of this project period is on neuroimmune signaling as a mechanism of neuroplasticity and neuropathic pain.

PI, Volker Neugebauer

MPI, Igor Ponomarev

Total costs: \$2,757,940

R01 NS120395 – NIH/NINDS

Impact score: 10, Percentile: 1.0 08/01/21 – 07/31/26

“A prolactin-mediated neuroendocrine link between stress-induced latent sensitization and female-selective pain”

The goal of this study is to identify a previously unknown stress-related neuroendocrine link between hypothalamic kappa opioid receptors and prolactin/prolactin receptor signaling in nociceptors as a basis for female selective pain syndromes.

PI (Contact), Frank Porreca (University of Arizona), MPI, Edita Navratilova (University of Arizona)

MPI, Volker Neugebauer

Total costs: \$2,297,350 (TTUHSC subcontract \$ 921,815)

2021-67017-34026 - USDA/NIFA

"Ginger root extract for neuropathic pain"

01/01/21 - 12/31/23

The goal of this study is to evaluate the effects of ginger root extract on neuropathic pain-associated sensory and affective behaviors, gut health, and neuroinflammation in animals.

PI (Contact), Chwan-Li (Leslie) Shen (TTUHSC)

MPI, Volker Neugebauer

Total costs: \$500,000

R01 NS118731 – NIH/NINDS

08/01/20 – 07/31/25

"Trans-Synaptic Signaling Complex in Amygdala Pain Mechanisms"

The goal of this project is to determine the role of the trans-synaptic signaling complex centered on cerebellin 1 and glutamate delta 1 receptor in the regulation of amygdala plasticity and pain mechanisms.

PI (Contact), Shashank Dravid (Creighton University)

MPI, Volker Neugebauer

Total costs: \$2,674,615 (TTUHSC Subcontract \$ 733,450)

R01 NS109255 – NIH/NINDS

08/15/19 – 06/30/24

"Pronociceptive and Antinociceptive Opioid Mechanisms in the Central Nucleus of the Amygdala"

The goal of this project is to determine cellular mechanisms and behavioral consequences of differential functions of mu and kappa opioid systems in the amygdala in neuropathic pain.

PI (Contact), Edita Navratilova (University of Arizona), PI, Guangchen Ji

Co-I, Volker Neugebauer

Total costs: \$2,544,148 (TTUHSC subcontract \$ 1,253,415)

R01 AA027096 – NIH/NIAAA

07/01/19 - 06/30/23

"The Neuroimmune Model of Excessive Alcohol Consumption: Transition to Alcohol Use Disorder"

The goal of this project is to determine cell type-specific molecular mechanisms of immune activation, its role and effects on the brain in the development of alcohol use disorder (AUD).

PI, Igor Ponomarev (TTUHSC)

Co-I, Volker Neugebauer

Total costs: \$2,868,750 (original start date, 09/10/2018; transferred to TTUHSC on 07/01/19)

R01 NS106902 – NIH/NINDS

04/01/18 - 03/31/23

"Stress-Induced Descending Facilitation from Amygdala Kappa Opioid Receptors in Functional Pain"

The overall goal of this project is to determine the role of KOR in amygdala plasticity and behaviors in a functional pain model. A key hypothesis is that blockade of stress-induced endogenous amygdala KOR signaling reduces pain responses following priming-induced latent sensitization.

PI (Contact), Frank Porreca (University of Arizona)

MPI, Volker Neugebauer

Total costs: \$ 2,740,180 (TTUHSC subcontract \$ 1,295,245)

PN-CTNT 2018-12 LSVNBAW

12/01/18 - 12/31/21

Center of Excellence for Translational Neurosciences and Therapeutics, TTUHSC.

"Tai Chi for Pain Management: A Pilot Mechanistic Study".

The goal of this study is to collect preliminary data on how Tai Chi (pre and post design) may help with pain management of postmenopausal women with knee osteoarthritis and explore the molecular mechanism.

PI (Contact), Chwan-Li (Leslie) Shen (TTUHSC)

PI, Volker Neugebauer

Total costs: \$18,000

COHS AD Seed Grant - TTU

03/01/21 – 12/31/21

“Global gene expression profiling of high fat and fish oil effects in a mouse model of Alzheimer’s disease”

The goal of this study is to test if fish oil has protective effects in an Alzheimer’s disease mouse model by reducing brain, adipose tissue and systemic inflammation and decreasing amyloid beta accumulation.

PI (Contact), Naima Moustaid-Moussa (TTU)

PI, Volker Neugebauer

Total costs: \$10,000

Awards

1. University Distinguished Faculty Award, President, TTUHSC, 2022
2. Chancellor’s Distinguished Research Award, Texas Tech University System, 2021

Oldewage, Wilna

Publications:

1. **OLDEWAGE-THERON W** & GROBLER C. 2022. Vitamin D status of the elderly in the Vaal region, South Africa. South African Journal of Clinical Nutrition, 2 pages. <https://doi.org/10.1080/16070658.2022.2041887>.
2. MOYO G, STICKLEY Z, LITTLE T, DAWSON J, THOMAS-JACKSON S, NGOUNDA J, JORDAAN M, ROBB M, WALSH C & **OLDEWAGE-THERON W**. 2022. Effects of nutritional and social factors on favorable fetal growth conditions using structural equation modelling. Nutrients, 14: 4642. <https://doi.org/10.3390/nu14214642>
3. # SIENSO G, LYFORD C & **OLDEWAGE-THERON W**. 2022. Using instrumental variables to establish the relationship between household production diversity and household dietary diversity in Northern Ghana. African Journal of Food, Agriculture, Nutrition and Development, 22(7): 21036-21055. <https://doi.org/10.18697/ajfand.112.20255>
4. LEE H, MOYO G, IBIYEMI T, PENG LL, NAJAM W & **OLDEWAGE-THERON W**. 2022. Impact of COVID-19 on food security status of college students in West Texas. Epidemiology International Journal, 6 (special issue 1): 12 pages. <https://medwinpublishers.com/EIJ/impact-of-covid-19-on-food-security-status-of-college-students-in-west-texas.pdf>
5. MUSA AO, CARPIO CE & **OLDEWAGE-THERON W**. 2022. Who uses food banks and other private food charities? A comparison with SNAP users. Journal of Hunger & Environmental Nutrition, 17: 14 pages. <https://doi.org/10.1080/19320248.2022.2058333>
6. MOYO G, EGAL AA & **OLDEWAGE-THERON, W**. 2022. Exploring the prevalence of multiple forms of malnutrition in children 6-18 years living in the Eastern Cape, South Africa. South African Journal of Clinical Nutrition, 5 pages. <https://doi.org/10.1080.16070658.2022.2061109>
7. MKHIZE X, **OLDEWAGE-THERON W**, NAPIER, C, DUFFY K & MTHEMBU BE. 2022. Introducing grain legumes for crop diversification and sustainable food production systems amongst urban small-holder farmers: a food and nutrition security project in KwaZulu-Natal, South Africa. Agroecology and Sustainable Food Systems. 46(6): 791-814. . <https://www.tandfonline.com/doi/full/10.1080/21683565.2022.2070814>

8. ABU BAZ, TAVAREZ S & **OLDEWAGE-THERON W.** 2022. University students suggest solutions to campus food insecurity: A mixed methods study. *Journal of Hunger & Environmental Nutrition*. 17(1): 16 pages. <https://doi.org/10.1080/19320248.2022.2055437>
9. IBIYEMI TE & **OLDEWAGE-THERON W.** 2022. A review of food and nutrition security in Nigeria. *African Journal of Food, Agriculture, Nutrition and Development*, 22(1): 16 pages. <https://ajfand.net/Volume22/No1/Commentary-Temitope.pdf>
10. MOYO G, THOMAS-JACKSON S, CHILDRESS A, DAWSON J, THOMPSON L & **OLDEWAGE-THERON W.** 2022. Chrononutrition and breast milk: a review of the circadian variation of hormones present in human milk. *Clinical Lactation*, 12(3): 7-17.
11. MALCZYK S, STEYN NP, NEL JH, EKSTEEN G, DRUMMOND L, **OLDEWAGE-THERON W.**, FABER M, VAN STUIJVENBERG ME & SENEKAL M. 2022. Mean \pm standard deviation intake values for 1- <10-year old South African children for application in the assessment of the inflammatory potential of their diets using the DII® method: Developmental research. *Nutrients*, 14: 11. <https://doi.org/10.3390/nu14010011>

Abstracts:

1. IBIYEMI T, NAJAM W & **OLDEWAGE-THERON W.** 2022. Interplay between food insecurity and stress among international students at a university in West Texas. *Current Developments in Nutrition*, 6(Suppl 1): 116. https://academic.oup.com/cdn/article/6/Supplement_1/116/6606832
2. NAJAM W, WALSH C & **OLDEWAGE-THERON W.** Nutrition knowledge, attitudes, beliefs, and practices among adults in urban and rural areas in the Free State, South Africa. *Journal of Nutrition Education and Behavior*, 54(7)(Sppl): S24.
3. IBIYEMI T, ANDREWS P & **OLDEWAGE-THERON W.** 2022. Perceived stress levels and eating habits of college students at a West Texas University. *Journal of the American Academy of Nutrition and Dietetics*, 122(9)(Suppl 1): A64.

Presentations:

1. Academy of Nutrition and Dietetics Food & Nutrition Conference 8-11 October 2022, Orlando, FL
IBIYEMI T, ANDREWS P & **OLDEWAGE-THERON W.** 2022. Perceived stress levels and eating habits of college students at a West Texas University (poster).
2. Society of Nutrition Education and Behavior Conference July 2022, Atlanta, GA
NAJAM W, WALSH C & **OLDEWAGE-THERON W.** Nutrition knowledge, attitudes, beliefs, and practices among adults in urban and rural areas in the Free State, South Africa (poster).
3. Nutrition 2022 Conference 8 June 2022 (virtual): IBIYEMI T, NAJAM W & **OLDEWAGE-THERON W.** 2022. Interplay between food insecurity and stress among international students at a university in West Texas (poster).

Palmer, Ty

Publications:

1. **Palmer, T. B.**, Farrow, A. C.* (2022). Correcting for subcutaneous fat: does it improve the correlation between vastus lateralis echo intensity and physical performance in older women? *Clinical Physiology and Functional Imaging*, 42(5), 372-379.
2. **Palmer, T. B.**, Akehi, K. (2022). Rate of torque development as a discriminator of playing level in collegiate female soccer players. *Journal of Musculoskeletal and Neuronal Interactions*, 22(3), 326-335.
3. **Palmer, T. B.**, Blinch, J., Farrow, A. C.*, Agu-Udemba, C. C.†, Mitchell, E. A.† (2022). The acute effects of fast-paced walking on isometric peak torque and rate of torque development in regularly exercising and inactive older women. *Journal of Aging and Physical Activity*, 30(3), 397-403.

4. Akehi, K., **Palmer, T. B.**, Conchola, E. C., Thompson, B. J., Kasl, A., Bice, M., Unruh, S. (2022). Changes in knee extension and flexion maximal and rapid torque characteristics during a collegiate women's soccer season. *Journal of Strength and Conditioning Research*, 36(5), 1389-1395.
5. **Palmer, T. B.**, Farrow, A. C.*, Agu-Udemba, C. C.†, Mitchell, E. A.† (2022). The time course of passive stiffness responses following an acute bout of static stretching in healthy, elderly men. *Physiotherapy Theory and Practice*, 38(5), 695-703.

Note: * indicates graduate student author; † indicates undergraduate student author.

Abstracts:

Posters:

1. Farrow, A. C.*, **Palmer, T. B.**, Texas ACSM Regional Meeting, Texas ACSM, Waco, TX, "Acute effects of static stretching on passive stiffness of the hamstrings in healthy young and older women," Regional, peer-reviewed/refereed, published in proceedings. (February 2022).
2. Riley, W. N.†, Akehi, K., Rowley, M. S.†, Farrow, A. C.*, **Palmer, T. B.**, Texas ACSM Regional Meeting, Texas ACSM, Waco, TX, "Vertical jump performance as a discriminator of playing ability in collegiate female soccer players," Regional, peer-reviewed/refereed, published in proceedings. (February 2022).

Note: * indicates graduate student author; † indicates undergraduate student author.

Park, Oak Hee

Publications:

1. Islam T, Albracht-Schulte K, Ramalingam L, Schlabritz-Lutsevich N, **Park OH**, Zabet-Moghaddam M, Kalupahana NS, Moustaid-Moussa N. Anti-inflammatory mechanisms of polyphenols in adipose tissue: role of gut microbiota, intestinal barrier integrity and zinc homeostasis. *J Nutr Biochem*. 2022 Nov 26;115:109242. doi: 10.1016/j.jnutbio.2022.109242. Epub ahead of print. PMID: 36442715.

Conference Presentations/Proceedings: Note: * indicates student authors/presenters.

1. Wang, H*, Moustaid-Moussa, N, Oldewage-Theron, W., Thompson, L., Albracht-Schulte, K., Lee, J., & **Park, O.** (2022). Social Cognitive Theory-based Nutrition Intervention to Improve Healthy Eating and Active Lifestyle among Rural Texas High School Students. 7th Annual Meeting Poster Competition, Obesity Research Institute, Innovation Hub, Lubbock, Texas.
2. Phy, S.* & **Park, O.** (2022). Impact of polyphenol and carotenoid intakes on mental health and diet quality in a food insecure undergraduate student sample. 7th Annual Meeting Poster Competition, Obesity Research Institute, Innovation Hub, Lubbock, Texas. **Outstanding Undergraduate Presenter (1st Place)**
3. Akra, E.*, Driver, J.*, Phy, S*, Wang, H.*, & **Park, O.** (2022). Food insecurity: Risk factors, characteristics, and lifestyle changes among university students during COVID pandemic. 2022 Fall TrUE Transformers Showcase, TTU-HSC, Lubbock Texas.
4. Phy, S.* & **Park, O.** (2022). Impact of polyphenol and carotenoid intakes on mental health and diet quality in a food insecure undergraduate student sample. 2022 Texas Tech University Undergraduate Research Conference, Lubbock, Texas.
5. Ganjegunte, D.*, Wang, H.*, Thompson, L., Moustaid-Moussa, N. & **Park, O.** (2022). Examine U.S. consumers' perceptions of sorghum grain as regular diet. 2022 Texas Tech University Undergraduate Research Conference, Lubbock, Texas.
6. Akra, E.*, Wang, H.*, & **Park, O.** (2022). The association between financial literacy and food insecurity in a college student sample. 2022 Texas Tech University Undergraduate Research Conference, Lubbock, Texas. **Outstanding Presenter (3rd Place in Economic Impact Category)**

7. Driver, J.*, Wang, H.*, & **Park, O.** (2022). Comparison of health and academic well-being between food secure and food insecure college students during COVID pandemic. 2022 Texas Tech University Undergraduate Research Conference, Lubbock, Texas.

Grants Not Funded (I do not have funded grants in 2022, but below are submissions, just in case FYI)

1. USDE-PN; Lubbock Improving Families Together (LIFT); 5-year project (01/01/2023-12/31/2027); Total Amount Requested: \$55,892,150; Role: Co-PI (6% Credit); PI: Shirley Matteson
2. USDA-Sustainable Agriculture Systems; GRow and EAT Leafy GREENS (GREAT GREENS): Sustainable Production of Leafy Greens for Health and Nutrition Security; 5-year project (06/01/2023-05/31/2028); Total Amount Requested: \$10 Million; Role: Co-PI (8% Credit); PI: Naima Moustaid-Moussa; Invited Resubmission
3. USDA-NNF; SUSTAINN: Skill development in Urban Horticultural Systems thru Training using Agricultural Interdisciplinary Networks in Nutrition, Food and Plants; 4-year project. (01/01/2023-12/31/2026); Total Amount Requested: \$262,500; Role: Co-PI (12% Credit); PI: Catherine Simpson
4. National Cattlemen's Beef Association; Does Beef Consumption Impact the Metabolome and Systemic Inflammatory Status in Human Subjects? A Study Across Different Weight Spectra; 2-year project (01/01/2023- 12/31/2025); Total Amount Requested: \$175,829; Role: Co-PI (20% Credit); PI: Clarissa Strieder Barboza; Invited Resubmission

Phy, Jennifer

Publications:

1. Mathew M, Sivaprakasam S, Phy JL, Bhutia YD, Ganapathy V. Polycystic ovary syndrome and iron overload: biochemical link and underlying mechanisms with potential novel therapeutic avenues. *Biosci Rep.* 2023 Jan 31;43(1):BSR20212234. doi: 10.1042/BSR20212234. PMID: 36408981.
2. Williams A, Buschmann B, Rimu A, **Phy JL.** Addison's disease presenting as shortness of breath and hypertension in early pregnancy. *The Southwest Respiratory and Critical Care Chronicles*, (45): 54-58, October 2022.
3. **Phy JL.** Spontaneous Pregnancies in Polycystic Ovary Syndrome Patients with a Low Starch/Low Dairy Diet: A Retrospective Case Series. *J Community Med Public Health*, 6:242., April 6, 2022.

Grants and Contracts Awarded

1. Exploring the Effects of a Dietary Education Program on Gut Microbiome Composition and Management of Polycystic Ovary Syndrome (PCOS), August 30, 2021 - Present, Laura W Bush Institute for Women's Health. **Phy JL** . Total Amount: \$20,000.

Punyanunt, Narissra

Publications:

1. *Brammer, S. E., **Punyanunt-Carter, N. M.**, & Duffee, R.S. (2022). Oversharing on social networking sites: A contemporary communication phenomenon. *Computers in Human Behavior Reports*, 8,100236-100240. <https://doi.org/10.1016/j.chbr.2022.100236> [Elsevier Publishing Company, IF: 6.829]
2. Wagner, T.R., & **Punyanunt-Carter, N. M.** (2022). Rules, reciprocity, and emojis: An exploratory study on flirtatious texting communication. *Southern Communication Journal*, 87 (5), 461-475. <https://doi.org/10.1080/1041794X.2022.2108889> [Taylor & Francis Company, 2022 Q2, IF: 1.10]
3. Charoensap-Kelly, P., Preddis, D., & **Punyanunt-Carter, N. M.** (2022). Needs assessment of national communication conference presentations: Members' perceptions of presentation effectiveness, values, and challenges. *Journal of Communication Pedagogy*, 6 (1), 100-127. <https://doi.org/10.31446/JCP.2022.1.10>. [Scimago: 2021 IF: .90]
4. **Punyanunt-Carter, N. M.**, LaFreniere, J. R., Norman, M. S., Brammer, S. E., & Colwell, M. J. (2022). From stepmonsters to the family's saving grace: Viewer perceptions of stepfamilies, stepfathers and

- stepmothers in media. *Media Watch*. <https://doi.org/10.1177/09760911221113444>. [Scimago: 2021 IF: .53]
5. *Brammer, S. E., *Martinez, R. J., & **Punyanunt-Carter, N. M.** (2022). Practical tools for the teacher-scholar: Four ways to advance racial justice through transformative learning. *Communication Education*, 71(4), 356-358. <https://doi.org/10.1080/03634523.2022.2105919>. [Taylor & Francis Company, 2022 Q1: IF: 1.79]
 6. Riggs, R.E., Melhem, S., *Perez, C., Smith, C., & **Punyanunt-Carter, N.M.** (2022). Understanding American College Students' Perceptions of Asians in the Media. *Media Asia*. <https://doi.org/10.1080/01296612.2022.2116535>. [Taylor & Francis Company, 2022 IF: 1.67]
 7. Preddis, D., Charoensap-Kelly, P., & **Punyanunt-Carter, N. M.** (2022). Practice What We Preach: National Communication Association Members Define Effective Conference Presentations and Provide Suggestions for their Improvement. *Texas Speech Communication Journal*, 46, 11-30. <https://ttu-ir.tdl.org/handle/2346/90297>. [Scimago: 2021 IF: .09]
 8. Wagner, T. R. & **Punyanunt-Carter, N.M.** (2022, June). Understanding Communication, Social Presence, and Dialectical Tensions of Pandemic Learning. *Ohio Communication Journal*, 60, 164-169. <https://www.ohiocomm.org/wp-content/uploads/2022/06/Wagner.pdf>. [Scimago: 2021 IF: .29]
 9. Levine, T. R., Serota, K., & **Punyanunt-Carter, N.M.** (2022). Lie frequency and motives from the sender and receiver perspectives: Testing predictions from truth-default theory. *Southern Communication Journal*. <https://doi.org/10.1080/1041794X.2022.2052745>. [Taylor & Francis Company, 2022 Q2 IF: 1.10]
 10. *Brammer, S. E. & **Punyanunt-Carter, N. M.** (2022). Getting the Attention of Online Learners. *Communication Education*, 71(2), 155-157. <https://doi.org/10.1080/03634523.2021.2022732>. [Taylor & Francis Company, 2022 Q1 IF: 1.79]
 11. Charoensap-Kelly, P., & **Punyanunt-Carter, N. M.** (2022). Changing the Graduate Student Socialization Process for the Future. *Communication Education*, 71(1), 67-70. <https://doi.org/10.1080/03634523.2021.1995767>. [Taylor & Francis Company, 2022 Q1 IF: 1.79]

Book chapters:

1. **Punyanunt-Carter, N. M.** (2022). Chapter 25: Serving as Chair: Different Perspectives. In Andrew T. Kemp & Nicholas D. Hartlep (Eds). *What the Hell was I Thinking? Reflections, Ruminations, and Revelations on Becoming a Department Chair*. DIO Press, United States.
2. Dibble, J. L., **Punyanunt-Carter, N. M.** (2022). Chapter 13: A New Look for the "Little Black Book": Back Burner Relationships, and Modern Communication Technology. In Jimmie Manning & Cary Marie Noland (Editors). *Contemporary Studies of Sexuality & Communication* 2nd. Edition. Dubuque, IA: Kendall Hunt.
3. *Alfonsin, B., & **Punyanunt-Carter, N.M.** (2022). Chapter 3: College students' perceptions of online learning during the pandemic. In Micheal Strawser (Ed). *Higher Education Implications for Teaching and Learning during COVID-19*. Rowman & Littlefield: Washington, DC.
4. **Punyanunt-Carter, N. M.** (2022). Chapter 8: Persuasion in Interpersonal Contexts. In Shawn Wahl (Ed.) *Persuasion in Your Life* (3rd. Edition). Pearson Press. (pp. 177-194).

Instructional Publication:

1. Arias, V. S., **Punyanunt-Carter, N.M.**, & *Martinez, R. J. (2022). Incorporating the Social Media App for Civil Engagement. *Texas Speech Communication Journal*, 46, 80-82.

* Indicates a publication with a current TTU graduate student

Presentations:

1. Martinez, R. J., Brammer, S. E., & **Punyanunt-Carter, N. M.** (2022, November 17). "I can spend forever on it without getting bored": Analyzing what college students like and dislike about TikTok. Paper will be presented at the annual meeting of the National Communication Association, New Orleans, LA.
2. Martinez, R. J., **Punyanunt-Carter, N. M.**, & Levine, T. R. (2022, November 17). How People Detect Lies On and Offline. Paper will be presented at the annual meeting of the National Communication Association, New Orleans, LA.
3. Brammer, S. E., Martinez, R. J., & **Punyanunt-Carter, N. M.** (2022, November 18). Examining College Students' Perceptions Regarding Self-Disclosure Behaviors on TikTok. Paper will be presented at the annual meeting of the National Communication Association, New Orleans, LA.
4. Balota, I. K., Wagner, T. R., Bowman, N. D., & **Punyanunt-Carter, N.M.** (2022, November 17). Understanding Relationship Maintenance Behaviors and Video Game Use Effects in Romantic Relationships. Paper will be presented at the annual meeting of the National Communication Association, New Orleans, LA.
5. Martinez, R. J., **Punyanunt-Carter, N. M.**, & Arias, V. S. (2022, November 19). Incorporating The Social Media App for Civic Engagement. Paper will be presented at the annual meeting of the National Communication Association, New Orleans, LA.
6. Riggs, R., Melhem, S., Perez, C., Smith, C., & **Punyanunt-Carter, N.M.** (2022, November 20). Understanding American College Students' Perceptions of Asians in the Media. Paper will be presented at the annual meeting of the National Communication Association, New Orleans, LA.
7. Arias, V.S., **Punyanunt-Carter, N.M.**, Dibble, J.; Drouin, M. Ouystel, J. V., & Martinez, R. J. (2022, April 9). College Students' Motivations to Engage in Back Burner Relationships. Paper will be presented at the annual meeting of the Eastern Communication Association, Philadelphia, PA.
8. **Punyanunt-Carter, N.M.**, & Martinez, R. J. (2022, April 6). Power in the Classroom: Exploring the Connections Between Graduate Teaching Assistant's Deployment of Power in Public Speaking Courses and College Students' Communication Apprehension. Paper will be presented at the annual meeting of the Eastern Communication Association, Philadelphia, PA.
9. Brammer, S. E., **Punyanunt-Carter, N. M.**, & Duffee, R. S. (2022, April 2). Oversharing on Social Networking Sites: A New-Age Communication Phenomenon. Paper will be presented at the annual meeting of the Central States Communication Association, Madison, WI.

GRANTS (Texas Tech University, Internal Funding Opportunities) N= 5

1.	2022	Institutional Diversity, Texas Tech University	\$10,000
2.	2022	Open Educational Resources, Texas Tech University	\$4,000
3.	2022	TRU Undergraduate Research Mentoring Grant	\$750
4.	2022	Online Course Design Academy Grant	\$2,500
5.	2022	MACRO TRU Funding	\$12,000

Rahman, Rakhshanda

Publications:

1. **Rahman RL.** Wisdom is in the eye of the beholder. *Am J Surg.* 2022 Jul;224(1 Pt A):6-7. doi: 10.1016/j.amjsurg.2022.04.013. Epub 2022 Apr 18. PMID: 35450747.
2. Menikdiwela KR, Kahathuduwa C, Bolner ML, **Rahman RL**, Moustaid-Moussa N. Association between Obesity, Race or Ethnicity, and Luminal Subtypes of Breast Cancer. *Biomedicines.* 2022 Nov 15;10(11):2931. doi: 10.3390/biomedicines10112931. PMID: 36428500; PMCID: PMC9687751.
3. Macha SJ, Koneru B, Burrow TA, Zhu C, Savitski D, **Rahman RL**, Ronaghan CA, Nance J, McCoy K, Eslinger C, Reynolds CP. Alternative Lengthening of Telomeres in Cancer Confers a Vulnerability to Reactivation of p53 Function. *Cancer Res.* 2022 Sep 16;82(18):3345-3358. doi: 10.1158/0008-5472.CAN-22-0125. PMID: 35947641; PMCID: PMC9566554.
4. Whitworth PW, Beitsch PD, Murray MK, Richards PD, Mislowsky A, Dul CL, Pellicane JV, Baron PL, **Rahman RL**, Lee LA, Dupree BB, Kelemen PR, Ashikari AY, Budway RJ, Lopez-Penalver C, Dooley

- W, Wang S, Dauer P, Menicucci AR, Yoder EB, Finn C, Blumencranz LE, Audeh W. Genomic Classification of HER2-Positive Patients With 80-Gene and 70-Gene Signatures Identifies Diversity in Clinical Outcomes With HER2-Targeted Neoadjuvant Therapy. *JCO Precis Oncol.* 2022 Sep;6:e2200197. doi: 10.1200/PO.22.00197. PMID: 36108259; PMCID: PMC9489196.
5. Whitworth P, Beitsch PD, Pellicane JV, Baron PL, Lee LA, Dul CL, Nash CH 3rd, Murray MK, Richards PD, Gittleman M, Budway R, **Rahman RL**, Kelemen P, Dooley WC, Rock DT, Cowan K, Lesnikoski BA, Barone JL, Ashikari AY, Dupree B, Wang S, Menicucci AR, Yoder EB, Finn C, Corcoran K, Blumencranz LE, Audeh W; NBRST Investigators Group. Age-Independent Preoperative Chemosensitivity and 5-Year Outcome Determined by Combined 70- and 80-Gene Signature in a Prospective Trial in Early-Stage Breast Cancer. *Ann Surg Oncol.* 2022 Apr 4;29(7):4141–52. doi: 10.1245/s10434-022-11666-2. Epub ahead of print. PMID: 35378634; PMCID: PMC9174138.
 6. Whitworth PW, Beitsch PD, Pellicane JV, Baron PL, Lee LA, Dul CL, Murray MK, Gittleman MA, Budway RJ, **Rahman RL**, Kelemen PR, Dooley WC, Rock DT, Cowan KH, Lesnikoski BA, Barone JL, Ashikari AY, Dupree BB, Wang S, Menicucci AR, Yoder EB, Finn C, Corcoran K, Blumencranz LE, Audeh W; NBRST Investigators Group. Distinct Neoadjuvant Chemotherapy Response and 5-Year Outcome in Patients With Estrogen Receptor-Positive, Human Epidermal Growth Factor Receptor 2-Negative Breast Tumors That Reclassify as Basal-Type by the 80-Gene Signature. *JCO Precis Oncol.* 2022 Apr;6(1):e2100463. doi: 10.1200/PO.21.00463. PMID: 35476550; PMCID: PMC9200401.

Shen, Chwan-Li (Leslie)

Publications:

1. **Shen CL**, Dufour JM, Miranda JM, Kaur G, Chung E, Cao JJ. Effect of dietary geranylgeraniol and green tea polyphenols on glucose homeostasis, bone turnover biomarkers, and bone microstructure in obese mice. *International Journal of Molecular Sciences*. Special Issue: Bioactive Compounds: From Diet to Therapeutic Use. (in press)
2. Dhanasekara C, Payberah D, Chyu JY, **Shen CL**, Kahathuduwa C. The Effectiveness of Botulinum Toxin in the Prevention and Treatment of Chronic Tension-Type Headaches: A Systematic Review and Meta-Analysis. *Cephalalgia* (in press)
3. Masud AA, **Shen CL**, Chyu MC. On the Optimal Whole-Body Vibration Protocol for Muscle Strength. "Biomechanics". Special Issue: "Effect of Neuromuscular Deficit on Gait". 2022. (in press).
4. Wang R, Santos JM, Dufour JM, Stephens ER, Miranda JM, Washburn RL, Hibler T, Kaur G, Lin D, **Shen CL** (corresponding author). Ginger root extract improves GI health in diabetic rats by improving intestinal integrity and mitochondrial dysfunction. *Nutrients.* 2022 Oct 19;14(20):4384. doi: 10.3390/nu14204384.
5. **Shen CL**, Elmassry MM, Grue K, Joiner HE, Jacobo AU, Hamood A, Chung E, Geranylgeraniol and green tea polyphenols mitigate negative effects of a high-fat diet on skeletal muscle and the gut microbiome. *Metabolites.* 2022 Sep 27;12(10):913. doi: 10.3390/metabo12100913.
6. Jiwan NC, Appell CR, Wang R, **Shen CL**, Luk H-Y, Geranylgeraniol Supplementation Mitigates Soleus Muscle Atrophy via Changes in Mitochondrial Quality in Diabetic Rats. *In Vivo.* Nov-Dec; 36(6):2638-2649.
7. **Shen CL**, Wang R, Yakhnitsa V, Santos J, Watson C, Kiritoshi T, Ji C, Hamood A, Neugebauer V. Gingerol-enriched ginger supplementation mitigates neuropathic pain via mitigating intestinal permeability and neuroinflammation: gut-brain connection. *Frontiers in Pharmacology.* 2022. Jul 8;13:912609. doi: 10.3389/fphar.2022.912609. eCollection 2022.
8. **Shen CL**, Schuck A, Tompkins C, Dunn DM, Neugebauer V. Bioactive compounds for fibromyalgia-like symptoms: a narrative review and future perspectives. *International Journal of Environment Research and Public Health*, Special Issue: "Individual Difference in Pain in Various Populations". 2022, 19(7):4148.

9. Masud AA, **Shen CL**, Luk HY, Chyu MC. Impact of local vibration training on neuromuscular activity, muscle cell, and muscle strength: a review. *Critical Reviews in Biomedical Engineering*, 2022; 50(1):1-17.
10. **Shen CL**, Castro L, Fang C-Y, Castro M, Sherali S, White S, Wang R, Neugebauer V. Bioactive compounds for neuropathic pain: an update on preclinical studies and future perspectives. *Journal of Nutritional Biochemistry*. 2022; 104:108979. doi: 10.1016/j.jnutbio.2022.108979. Online ahead of print.
11. Chen JN, St-John JA, **Shen CL**, Dennis JA. Self-reported patient compliance with physician advised lifestyle behavior changes among adults with musculoskeletal conditions. *Frontiers in Public Health*. 2022; 10:821150.
12. **Shen CL**, Wang R, Ji G, Elmassry MM, Zabet-Moghaddam M, Vellers H, Hamood AN, Gong X, Mirzaei P, Sang S, Neugebauer V. Dietary supplementation of gingerols- and shogaols-enriched ginger root extract attenuate pain-associated behaviors while modulating gut microbiota and metabolites in rats with spinal nerve ligation. *Journal of Nutritional Biochemistry, Special Issues: Precision nutrition – individual nutrient needs for optimal health throughout the lifespan*. 2022; 100:108904. Online ahead of print.
13. **Shen CL**, Watkins BA, Kahathuduwa C, Chyu MC, Zabet-Moghaddam M, Elmassry MM, Luk H-Y, Brismee J-M, Knox A, Lee J, Zumwalt M, Wang R, Wager TD, Neugebauer V. Tai Chi improves brain functional connectivity and plasma lysophosphatidylcholines in postmenopausal women with knee osteoarthritis: an exploratory pilot study. *Frontiers in Medicine*. 2022; 8:775344.
14. Dhanasekara CS, Nelson A, Spradley M, Wynn A, Robohm-Leavitt C, **Shen CL**, Kahathuduwa C. Effects of Consumption of Coconut Oil or Coconut on Glycemic Control and Insulin Sensitivity: A Systematic Review and Meta-Analysis of Interventional Trials. *Nutrition, Metabolism and Cardiovascular Disease*. 2022; 32(1):53-68.

Abstracts: for internal or external conferences: * peer-reviewed

1. ***Shen CL**, Elmassry MM, Santos JM, Neugebauer V. Effects of two curcumin extracts on lipid and amino acid metabolites in amygdala and colon of rats with neuropathic pain. Asia-Pacific Nutrigenomics and Nutrigenetics Organization (APNNO) 2022.
2. ***Shen CL**, Elmassry MM, Santos J, Wang R, Yakhnitsa V, Kiritoshi T, Ji G, Lovett J, Hamood A, Neugebauer V. Two curcumin extracts modify composition of gut microbiota, tight junction protein, and neuroinflammation in rats with neuropathic pain: microbiota-gut-brain axis. *Nutrition* 2022.
3. *Santos JM, Wang R, Driver Z, Bhakta V, Contreras J, Yakhnitsa V, Kiritoshi T, Ji G, Neugebauer V, **Shen CL**. Curcumin and curcuminoid effects modulating chronic mechanical sensitivity in spinal nerve ligation model revert mitochondria dysfunction and oxidative stress. *Nutrition* 2022.
4. *Stephens ER, Santos JM, Wang R, **Shen CL**. Effects of dietary gingerol-enriched ginger supplementation on distribution of colon function markers in rats with diabetic neuropathic pain. *Nutrition* 2022.
5. ***Shen CL**, Wang R, Yakhnitsa V, Santos J, Watson C, Kiritoshi T, Ji G, Kim N, Lovett J, Hamood A, Neugebauer V. *Nutrition* 2022. Ginger root extract mitigates neuropathic pain via suppressing neuroinflammation: gut-brain connection. *Nutrition* 2022.
6. *Meister ML, **Shen CL**, Feresin RG. Dietary geranylgeraniol and statins may act synergistically to mitigate oxidative stress in obese mice. *Nutrition* 2022.
7. Bassett A, Hall R, Rodaniche A, Stephens E, Dhanasekara CS, Robohm-Leavitt C, **Shen CL**, Kahathuduwa CN. Effects of Repetitive Transcranial Magnetic Stimulation on Immediate Post-Intervention Chronic Daily Headache Intensity: A Systematic Review and Meta-Analysis. *CTNT* 2022
8. ***Shen CL**, Newman JW, Elmassry MM, Borkowski K, Chyu MC, Kahathuduwa C, Neugebauer V, Watkins BA. Tai Chi improves plasma levels of oxylipins and endocannabinoids in postmenopausal women with knee osteoarthritic pain. Presented at International Congress on Integrative Medicine and Health, Phoenix, AZM 2022.

9. ***Shen CL**, Casey Appell C, Jiwan NC, Wang R, Luk HY. Ginger root extract supplementation attenuated mitochondrial fusion and improved skeletal muscle size in type 2 diabetic rats. Internal Conference on Frailty and Sarcopenia Research, Boston, MA, 2022.
10. Stephens E, Bassett A, Hall R, Rodaniche A, Dhanasekara CS, Robohm-Leavitt C, **Shen CL**, Kahathuduwa CN. Effects of repetitive transcranial magnetic stimulation on intensity and frequency of chronic daily headaches: a systematic review and meta-analysis. TTUHSC Student Research Week 2022.
11. Watson C, Wang R, Yakhnitsa V, Santos JM, Kiritoshi T, Ji G, Neugebauer V, **Shen CL**. Ginger root extract improves mitochondrial dysfunction in NP model animals. TTUHSC Student Research Week 2022.
12. Viren Bhakta V, Santos JM, Wang R, Yakhnitsa V, Kiritoshi T, Ji G, Neugebauer V, **Shen CL**. Gingerol-Enriched ginger administration modifies mRNA gene expression in colon and spinal cord of animals with neuropathic pain. TTU Student Research Week 2022.
13. Driver Z, Santos JM, Wang R, Yakhnitsa V, Kiritoshi T, Ji G, Neugebauer V, **Shen CL**. Effect of gingerol-enhanced ginger on gut-brain-associated mitochondrial gene expression in animals with neuropathic pain. TTU Student Research Week 2022.
14. Contreras J, Santos JM, Stephens E, Driver Z, Bhakta V, Lovett J, Wang R, **Shen CL**. Effect of curcumin on the protein expression of MFN1 and GFAP proteins in colon of rat with neuropathic pain. TTU Student Research Week 2022.

Presentations:

1. **Shen CL**. Invited. My career path in integrative health. Asian Pacific American Medical Student Association (APAMSA). Region IX conference. 9/10/2022. Virtual oral presentation.
2. **Shen, CL**. Invited. Health Impacts of Green Tea in Musculoskeletal Health. Alzheimer's Awareness Month. 11/9/2022. Lubbock, TX.

Grants:

1. "Curcumin and Retinal Amyloid-beta Pilot Study". **Shen CL (PI)**. Kelly Mitchell (Co-I), Dale Dunn (Co-I), Jaehoon Lee (Co-I). The goal of this study is to test how two weeks of curcumin supplementation would cross the blood brain barrier (BBB) and attach to amyloid beta proteins, to assess the feasibility (safety and bioavailability), and to explore the resulting abundance/composition of gut microbiota. Sabinsa Corporation, East Windsor, NJ. 1/1/2022-12/31/2023. \$94,991.
2. "Effect of annatto-derived geranylgeraniol (GG) on statin-associated myopathy". **Shen CL (PI)**. Mohammad (Mac) Ansari (Co-I), Dale Dunn (Co-I), Scott Shurmur (consultant), Jaehoon Lee (Co-I), Hui-Ying Luk (Co-I), Martin Binks (Co-I). The goal of this study is to evaluate the effects of 3-months annatto-derived geranylgeraniol (GG) supplementation on statin-associated skeletal muscle health. Funded by American River Nutrition, LLC. \$266,294. 1/1/2022-12/31/2023.
3. "Ginger root extract for neuropathic pain". **Shen CL (PI-contact, 4%)**, Neugebauer, Volker (MPI). USDA/NIFA. Award no: 2021-67017-34026. The goal of this study is to evaluate the effects of ginger root extract on neuropathic pain-associated sensory and affective behaviors, gut health, and neuroinflammation in animals. \$500,000. 1/1/2021-8/31/2023.
4. "Medication Development for the Treatment of Alcohol Use Disorder". Bergeson S (PI-contact), **Shen CL (MPI, 33%)**. NIH/NIAAA. U01-AA028957. The goal of this study is to complete studies to prepare the chemically modified minocycline analogs for completion of investigational new drug (IND) enabling approval by the FDA and to begin a Phase I clinical trial. \$7,251,682. 9/20/2020-8/31/2025.
5. "Tai Chi for pain management: a pilot mechanistic study". Center of Excellence for Translational Neurosciences and Therapeutics, TTUHSC. **Shen CL (PI, 3%)**. The goal of this study is to collect preliminary data on how Tai Chi may help with pain management of postmenopausal women with knee osteoarthritis and explore the molecular mechanism. \$18,000 from CTNT. \$6,000 matching fund Texas Tech University Neuroimaging Institute (TTNI). 12/1/2018-11/30/2023.

6. “Actions of dietary tocotrienols on obesity: ARN supplemental fund”. American River Nutrition, Inc., Hadley, MA. **Shen CL (PI, 3%)**. The goal of study is to test the hypothesis that tocotrienol supplementation improve lipid profiles and modify endocannabinoid and oxylipins in obese postmenopausal women. \$70,000. 11/1/2018-10/31/2023.
7. “Dietary tocotrienol (vitamin E isomer) supplement for postmenopausal women: aspects of metabolomics and gut microbiome”. Laura W. Bush Institute for Women’s Health. **Shen CL (PI, 3%)**. The goal of this study is to test dietary tocotrienol supplementation on metabolites and gut microbiome of obese women. \$10,000. 8/1/2018-3/31/2023.

Shin, Andrew

Publications:

1. Shah H, Kramer A, Mullins CA, Mattern M, Gannaban RB, Townsend RL, Campagna SR, Morrison CD, Berthoud HR, **Shin AC**. Reduction of plasma BCAAs following Roux-en-Y gastric bypass surgery is mediated by FGF21. *Frontiers in Endocrinology*, 2022 (under review)
2. Shah H, Haque Z, Ramezan M, Dehghani F, Gannaban RB, Rahimi F, Abbasi S, **Shin AC**. Revisiting the role of vitamins and minerals in Alzheimer’s disease. *Antioxidants*, 2022 (under review)
3. Zhou C, Ruiz H, Ling L, Maurizi G, Sakamoto K, Butera M, Libernini C, Wang L, Stanley A, **Shin AC**, Egritag H, Sanz S, Lindtner C, Buettner C. Adipose tissue lipolysis is a major driver of alcohol-induced fatty liver. *Hepatology*, 2022 (under review)
4. Benko S, Zhang F, **Shin AC**, Gillespie V, Zhang G, Gingold J, Andino B, Aguilo F, Chen CH, Li S, Lemischka I, Zhang WJ, Buettner C, Zhou MM, Walsh MJ. BRD4 regulates the enhancer landscape to modulate selective cell type-specific lipid metabolism. *Cell Reports*, 2022 (under review)
5. Siddik MAB, Mullins CA, Kramer A, Shah H, Gannaban RB, Zabet-Moghaddam M, Huebinger RM, Hegde VK, MohanKumar SMJ, MohanKumar PS, **Shin AC**. Branched-chain amino acids are linked with Alzheimer’s disease-related pathology and cognitive deficits. *Cells*, 2022 11(21): 3523
6. Della Guardia L, **Shin AC**. PM2.5-induced adipose tissue dysfunction can trigger metabolic disturbances. *Trends in Endocrinology & Metabolism*, 2022 Sep 26, Online ahead of print
7. Della Guardia L, **Shin AC**. The role of adipose tissue dysfunction in PM2.5-induced vascular pathology. *American Journal of Physiology – Heart Circ Physiol*, 2022 Jun 1; 322(6): H971-972
8. Della Guardia L, **Shin AC**. White and brown adipose tissue functionality is impaired by fine particulate matter (PM2.5) exposure. *Journal of Molecular Medicine*, 2022 Mar 14, Online ahead of print

Grants:

1. NIH R21 AG069140-01. BCAAs as a novel biomarker and treatment for Alzheimer’s disease, Sep 2020 – Dec 2022. (PI: Andrew C. Shin)
2. NIH R01 AG071560-01A1. Serotonin-modulated mitochondrial dysfunction in dementia, depression and diabetes, Feb 2022 – Jan 2027. (PI: Arubala Reddy; Co-I: Andrew C. Shin)
3. NIH R01 1R01AG073826-01A1. The hippocampal dentate gyrus in aging and Alzheimer’s disease: boosting transcription of retinoic acid-sensitive genes through vitamin A supplementation and HDAC inhibition, Aug 2022 – Apr 2027. (PI: John J. Lawrence; Co-I: Andrew C. Shin)
4. College of Human Sciences, TTU. The role of synbiotics in metabolic health and muscle tone in elder people, Oct 2022 – August 2023. (PI: Andrew C. Shin)
5. College of Human Sciences, TTU. Effects of BT2 on AD-related pathology in the brain, April 2022 – April 2023. (PI: Andrew C. Shin)
6. Wylie Briscoe Fund, College of Human Sciences, TTU. Serum metabolomics in women with Alzheimer’s disease, Dec 2021 – Feb 2023. (PI: Andrew C. Shin)
7. Scientific & Technological Research Council of Turkey. The effects of central and systemic irisin on glucose homeostasis in diet-induced obese mice, Nov 2020 – Dec 2022. (PI: Hale E. Egritag; Co-PI: Andrew C. Shin)

Awards:

1. Apple Polishing Award, TTU Mortar Board, 2022
2. Open Access Initiative Award – Office of Research & Innovation, TTU, 2022
3. Nominated for Texas Tech Alumni Association New Faculty Award, 2022

Presentations: INVITED TALKS/LECTURES:

1. 2022 Seminar, Seoul National University, Department of Functional Neuroanatomy, Seoul, South Korea. Acute effects of BCAAs on glucose homeostasis and insulin sensitivity
2. 2022 Seminar, Seoul National University, Department of Medicine, Seoul, South Korea. A novel metabolic approach to treat Alzheimer's disease.
3. 2022 Seminar, 40th Annual US Foods: Food and Nutrition Seminar, Texas Tech University Weight control & the brain.

Conference talks:

1. Mullins CA, Shah H, Siddik MAB, Reddy PH, MohanKumar PS, **Shin AC**. Therapeutic effects of BT2 in the hippocampus of Alzheimer's disease mouse model. American Society for Nutrition (online conference), Jun 2022
2. Gannaban RB, Shah H, **Shin AC**. Acute exposure to branched-chain amino acids (BCAAs) impairs glucose homeostasis by promoting insulin resistance in mice. American Society for Nutrition (online conference), Jun 2022
3. Mullins CA, Shah H, Reddy PH, MohanKumar S, MohanKumar PS, **Shin AC**. A BCAA-lowering agent BT2 alleviates Alzheimer's disease-related pathology and delays cognitive decline in 5xFAD mouse model. Cold Spring Harbor Laboratory (CSHL) Conference, New York, Nov 2022
4. Mullins CA, Kramer A, Siddik MAB, Shah H, MohanKumar PS, **Shin AC**. BT2 alleviates brain pathology and improves neurotransmitter status in Alzheimer's disease mouse model. Center of Excellence for Translational Neuroscience and Therapeutics (CTNT) Annual Symposium, TTUHSC, Apr 2022

Conference posters:

1. Halbgewachs K, Buxton M, Zabet-Moghaddam M, Lawrence JJ, **Shin AC**. Blood-based lipidomic analyses in Alzheimer's disease: Investigating relationships between dysregulated lipid species and molecular mechanisms of oxidative stress. Center of Excellence for Translational Neuroscience and Therapeutics (CTNT) Annual Symposium, TTUHSC, Apr 2022
2. Kramer A, Shah H, Mattern M, Gannaban RB, Berthoud HR, **Shin AC**. FGF21 mediates restored BCAA metabolism following Roux-en-Y gastric bypass (RYGB) surgery in mice. Undergraduate Research Conference, TTU, Mar 2022
3. Mullins CA, Kramer A, Siddik MAB, Shah H, MohanKumar PS, **Shin AC**. BT2 alleviates brain pathology and improves neurotransmitter status in Alzheimer's disease mouse model. 21st Graduate Student Research Poster Competition, Mar 2022

Singh, Sharda**Publications:**

1. Hindle A, Singh SP, Pradeepkiran JA, Bose C, Vijayan M, Kshirsagar S, Sawant NA, Reddy PH. Rlip76: An Unexplored Player in Neurodegeneration and Alzheimer's Disease? *Int J Mol Sci.* 2022 May 29;23(11):6098. doi: 10.3390/ijms23116098. PMID: 35682775; PMCID: PMC9181721.

Song, Huaxin**Publications:**

1. Reyes AT, **Song H**, Bhatta TR, Kearney CA. Exploring the relationships between resilience, mindfulness, and experiential avoidance after the use of a mindfulness- and acceptance-based mobile

- app for posttraumatic stress disorder. *Perspect Psychiatr Care*. 2022 Apr;58(2):776-784. doi: 10.1111/ppc.12848. Epub 2021 May 20. PMID: 34018197.
- Masten Y, **Song H**, Esperat CR, McMurry LJ. A maternity care home model of enhanced prenatal care to reduce preterm birth rate and NICU use. *Birth*. 2022 Mar;49(1):107-115. doi: 10.1111/birt.12579. Epub 2021 Aug 24. PMID: 34427349.
 - Esperat, M.C., Hust, C., **Song H.**, Garcia,M., & McMurry, L. (*in press*). Interprofessional Collaborative Practice: Management of Chronic Disease and Mental Health Issues in Primary Care. *Public Health Reports*
 - Eldridge, T. T., Martin, N., Campbell, L., **Song, H.**, & Frazier, L. (2022). Quality Improvement Project to Reduce Opioid Use in Patients Undergoing Cesarean Birth. *AORN journal*, 115(4), 327-336.

Grants:

- HRSA-22-124 PI Linda McMurry 9/15/2023-9/14/2026. Community Health Worker Training Program (CHWTP)
Funding Agency: HRSA \$ 2,425,194. Role: Program evaluator/Statistician, Program Manager
- HRSA-20-012 PI Linda McMurry 07/2020-06/2023. Nurse Education, Practice, Quality and Retention (NEPQR) Interprofessional Collaborative Practice Program (IPCP): Behavioral Health Integration (BHI). Funding Agency: HRSA \$1,461,487. Role: Program evaluator/Statistician, Program Manager

St-John, Julie

Publications:

- St. John, J.** (2022, Fall). Public Health, Populations, Purpose, Priorities, and Passion. *Rural Health Quarterly*. 3: 20-23. <https://ruralhealthquarterly.com/home/2022/10/03/rural-health-quarterly-fall-2022/>
- Brooks T, **St. John J**, Gilbert K, & Guindon J (2022). Establishing a faculty development academy at a health sciences center: A needs assessment [Special Issue 15]. *Chronicle of Mentoring and Coaching*. 6(1).
- Chen, J., Dennis, J. A., **St. John, J.A.**, Shen, C.L. (2022, February 24). Self-reported Patient Compliance with Physician Advised Lifestyle Behavior Changes Among Adults with Musculoskeletal Conditions. *Frontiers in Public Health, Public Health Education and Promotion*. 10: 821150. <https://doi.org/10.3389/fpubh.2022.821150>
- St. John, J. A.**, Fox, D. J., Rosenthal, E. L., Lee, L. K. (2022). Editorial: Community Health Workers Practice from Recruitment to Integration. *Frontiers in Public Health, Public Health Education and Promotion*, 10: 841081. <https://doi.org/10.3389/fpubh.2022.841081>
- St. John JA**, Hernández-Gordon, W., Martínez, S., Hernández, I. (2022, January/March). Community health workers connecting communities during Covid-19: A case study from Chicago, USA. *Journal of Ambulatory Care*, 45(1): 2-12. DOI: 10.1097/JAC.0000000000000401 <https://journals.lww.com/ambulatorycaremanagement/pages/default.aspx>

Presentations:

- Applying Diffusion of Innovation to the Texas Mother Friendly Worksite Program: Does early adoption lead to lower rates of infant mortality? Jessyca Cripps, **Julie St. John**. Annual American Public Health Association Meeting, November 7, 2022, Boston, Massachusetts.
- How CHW Associations Strengthen and Support the CHW Workforce: Examples from the Texas Association of Promotores and CHWs. Ashley Rodriguez, **Julie St. John**. Annual American Public Health Association Meeting, November 6, 2022, Boston, Massachusetts.
- The C3 Project's next steps to an engaged national review of CHW roles and competencies. Lee Rosenthal, Paige Menking, **Julie St. John**, Lily Lee, & Durrell Fox. Annual American Public Health Association Meeting, November 6, 2022, Boston, Massachusetts.

4. Qualitative findings from a human trafficking community needs assessment conducted within a health sciences center. **Julie St. John**, Tiffany Hotchkiss, Abbey Weed. Annual American Public Health Association Meeting, November 7, 2022, Boston, Massachusetts.
5. Laughter Therapy (presenter). **Julie St. John**. Texas Association of Community Health Workers Annual Conference, Waco, Texas, September 20, 2022.
6. Determinantes sociales de la salud (Social Determinants of Health) (presenter). **Julie St. John**. Texas Association of Community Health Workers Annual Conference, Waco, Texas, September 19, 2022.
7. What CHWs told us about their experiences and needs during the COVID-19 pandemic. (speakers & panelist). **Julie St. John**, Venus Gines, Denise Hernandez, Rosalia Guerrero-Luera. UT Health School of Public Health, Texas Epidemic Public Health Institute (TEPHI) CHW Training Center Virtual Town Hall: "Supporting CHWs as part of the pandemic preparedness workforce: The role of the training centers in Texas." Webinar. August 25, 2022.
8. Human Trafficking is a Public Health Issue. (speaker). West Texas Pharmacy Association Annual Convention. Abilene, Texas, March 5, 2022.
9. Immigrants & Human Trafficking: Risk factors & Prevention. TTUHSC Human Trafficking and Social Justice Symposium: "Human Trafficking: Shining a Light on Vulnerable Populations." January 28, 2022, virtual.

FUNDED RESEARCH OR PRACTICE:

1. Health equity grant for Parmer, Deaf Smith, and Gray counties in Texas. Texas Department of State Health Services. Grant #: HHS00111770001. Role: Co-investigator, PI: Theresa Byrd. \$245,000 (December 17, 2021 – May 31, 2023).
2. Piloting a Composting Latrine Project in Pedregal Grande, Piura, Peru. TTUHSC Office of Global Health, \$10,000 (January 2021-December 2023).
3. International Rescue Committee, Abilene, Victims of Trafficking Program. OVC Fiscal Year (FY) 2019, Direct Services to Support Victims of Human Trafficking, Office for Victims of Crime, Office of Justice Programs, U.S. Department of Justice, CO-I & Evaluator, sub contracted, International Rescue Committee, \$28,168 (January 2020-December 2022).

Tinsley, Grant

Publications:

1. Santos HO, Genario R, **Tinsley GM**, Ribeiro P, Carteri RB, Coelho-Ravagnani CF, Mota JF. A scoping review of intermittent fasting, chronobiology, and metabolism. *Am J Clin Nutr.* 2022 Apr 1;115(4):991-1004. doi: 10.1093/ajcn/nqab433. PMID: 34978321.
2. Stratton MT, Albracht-Schulte K, Harty PS, Siedler MR, Rodriguez C, **Tinsley GM**. Physiological responses to acute fasting: implications for intermittent fasting programs. *Nutr Rev.* 2022 Feb 10;80(3):439-452. doi: 10.1093/nutrit/nuab094. PMID: 35142356.
3. **Tinsley GM**, Harty PS, Stratton MT, Siedler MR, Rodriguez C. Liposomal Mineral Absorption: A Randomized Crossover Trial. *Nutrients.* 2022 Aug 13;14(16):3321. doi: 10.3390/nu14163321. PMID: 36014827; PMCID: PMC9414097.
4. Graybeal AJ, Willis JL, Morales-Marroquin E, **Tinsley GM**, Messiah SE, Shah M. Emerging evidence of the relationship between fat-free mass and ghrelin, glucagon-like peptide-1, and peptide-YY. *Nutrition.* 2022 Nov-Dec;103-104:111815. doi: 10.1016/j.nut.2022.111815. Epub 2022 Aug 12. PMID: 36088864.
5. Harty PS, Friedl KE, Nindl BC, Harry JR, Vellers HL, **Tinsley GM**. Military Body Composition Standards and Physical Performance: Historical Perspectives and Future Directions. *J Strength Cond Res.* 2022 Dec 1;36(12):3551-3561. doi: 10.1519/JSC.0000000000004142. Epub 2021 Sep 29. PMID: 34593729.

6. Tesch JC, Papadopoulos P, Dolgener F, **Tinsley GM**. New Equations for Hydrostatic Weighing without Head Submersion. *J Funct Morphol Kinesiol*. 2022 Sep 16;7(3):70. doi: 10.3390/jfmk7030070. PMID: 36135428; PMCID: PMC9506326.
7. Blue MNM, Hirsch KR, Brewer GJ, Cabre HE, Gould LM, **Tinsley GM**, Ng BK, Ryan ED, Padua D, Smith-Ryan AE. The validation of contemporary body composition methods in various races and ethnicities. *Br J Nutr*. 2022 Feb 3:1-11. doi: 10.1017/S0007114522000368. Epub ahead of print. PMID: 35109945.
8. Ashtary-Larky D, Bagheri R, **Tinsley GM**, Asbaghi O, Salehpour S, Kashkooli S, Kooti W, Wong A. Betaine supplementation fails to improve body composition: a systematic review and meta-analysis. *Br J Nutr*. 2022 Sep 14;128(5):975-988. doi: 10.1017/S0007114521004062. Epub 2021 Oct 7. PMID: 34743773.
9. Santos HO, Cerqueira HS, **Tinsley GM**. The Effects of Dietary Supplements, Nutraceutical Agents, and Physical Exercise on Myostatin Levels: Hope or Hype? *Metabolites*. 2022 Nov 20;12(11):1146. doi: 10.3390/metabo12111146. PMID: 36422286; PMCID: PMC9695935.
10. Siedler MR, Rodriguez C, Stratton MT, Harty PS, Keith DS, Green JJ, Boykin JR, White SJ, Williams AD, DeHaven B, **Tinsley GM**. Assessing the Reliability and Cross-Sectional and Longitudinal Validity of 15 Bioelectrical Impedance Analysis Devices. *Br J Nutr*. 2022 Nov 21:1-29. doi: 10.1017/S0007114522003749. Epub ahead of print. PMID: 36404739.
11. Brandner CF, **Tinsley GM**, Graybeal AJ. Smartwatch-based bioimpedance analysis for body composition estimation: precision and agreement with a 4-compartment model. *Appl Physiol Nutr Metab*. 2022 Dec 3. doi: 10.1139/apnm-2022-0301. Epub ahead of print. PMID: 36462216.
12. **Tinsley GM**, Harty PS, Stratton MT, Smith RW, Rodriguez C, Siedler MR. Tracking changes in body composition: comparison of methods and influence of pre-assessment standardisation. *Br J Nutr*. 2022 Jun 14;127(11):1656-1674. doi: 10.1017/S0007114521002579. Epub 2021 Jul 30. PMID: 34325758.
13. Graybeal AJ, Brandner CF, **Tinsley GM**. Validity and reliability of a mobile digital imaging analysis trained by a four-compartment model. *J Hum Nutr Diet*. 2022 Nov 30. doi: 10.1111/jhn.13113. Epub ahead of print. PMID: 36451080.
14. **Tinsley GM**, Stratton MT, Harty PS, Williams AD, White SJ, Rodriguez C, Dellinger JR, Johnson BA, Smith RW, Trexler ET. Influence of Acute Water Ingestion and Prolonged Standing on Raw Bioimpedance and Subsequent Body Fluid and Composition Estimates. *J Electr Bioimpedance*. 2022 May 20;13(1):10-20. doi: 10.2478/joeb-2022-0003. PMID: 35646197; PMCID: PMC9124033.
15. Stratton MT, Siedler MR, Harty PS, Rodriguez C, Boykin JR, Green JJ, Keith DS, White SJ, DeHaven B, Williams AD, **Tinsley GM**. The influence of caffeinated and non-caffeinated multi-ingredient pre-workout supplements on resistance exercise performance and subjective outcomes. *J Int Soc Sports Nutr*. 2022 Apr 4;19(1):126-149. doi: 10.1080/15502783.2022.2060048. PMID: 35599920; PMCID: PMC9116396.
16. Bongiovanni T, **Tinsley G**, Martera G, Orlandi C, Genovesi F, Puleo G, Rossi A, Trecroci A. Regional Lean Soft Tissue and Intracellular Water Are Associated with Changes in Lower-Body Neuromuscular Performance: A Pilot Study in Elite Soccer Players. *Eur J Investig Health Psychol Educ*. 2022 Jul 22;12(8):882-892. doi: 10.3390/ejihpe12080064. PMID: 35893080; PMCID: PMC9332301.
17. Graybeal AJ, Brandner CF, **Tinsley GM**. Visual body composition assessment methods: A 4-compartment model comparison of smartphone-based artificial intelligence for body composition estimation in healthy adults. *Clin Nutr*. 2022 Nov;41(11):2464-2472. doi: 10.1016/j.clnu.2022.09.014. Epub 2022 Sep 29. PMID: 36215866.
18. Graybeal AJ, Brandner CF, **Tinsley GM**. Visual body composition assessment methods: A 4-compartment model comparison of smartphone-based artificial intelligence for body composition estimation in healthy adults. *Clin Nutr*. 2022 Nov;41(11):2464-2472. doi: 10.1016/j.clnu.2022.09.014. Epub 2022 Sep 29. PMID: 36215866.
19. Graybeal AJ, Brandner CF, **Tinsley GM**, Haynes H, Stavres J. Associations between visceral adipose tissue estimates produced by near-infrared spectroscopy, mobile anthropometrics, and traditional body

- composition assessments and estimates derived from dual-energy X-ray absorptiometry. *Br J Nutr.* 2022 Oct 21;1-11. doi: 10.1017/S0007114522003488. Epub ahead of print. PMID: 36268732.
20. Giro R, Matias CN, Campa F, Santos DA, Cavaca ML, Duque P, Oliveira M, Matos N, Vicente F, Pereira P, Santos HO, **Tinsley GM**, Teixeira FJ. Development and Validation of an Anthropometric Equation to Predict Fat Mass Percentage in Professional and Semi-Professional Male Futsal Players. *Nutrients.* 2022 Oct 27;14(21):4514. doi: 10.3390/nu14214514. PMID: 36364777; PMCID: PMC9655567.
21. Rodriguez C, Harty PS, Stratton MT, Siedler MR, Smith RW, Johnson BA, Dellinger JR, Williams AD, White SJ, Benavides ML, **Tinsley GM**. Comparison of Indirect Calorimetry and Common Prediction Equations for Evaluating Changes in Resting Metabolic Rate Induced by Resistance Training and a Hypercaloric Diet. *J Strength Cond Res.* 2022 Nov 1;36(11):3093-3104. doi: 10.1519/JSC.0000000000004077. Epub 2021 Jun 22. PMID: 34172636.
22. Barakat C, Escalante G, Stevenson SW, Bradshaw JT, Barsuhn A, **Tinsley GM**, Walters J. Can Bodybuilding Peak Week Manipulations Favorably Affect Muscle Size, Subcutaneous Thickness, and Related Body Composition Variables? A Case Study. *Sports (Basel).* 2022 Jul 5;10(7):106. doi: 10.3390/sports10070106. PMID: 35878117; PMCID: PMC9321665.
23. Graybeal AJ, Brandner CF, **Tinsley GM**. Evaluation of automated anthropometrics produced by smartphone-based machine learning: a comparison with traditional anthropometric assessments. *Br J Nutr.* 2023 Jan 12;1-29. doi: 10.1017/S0007114523000090. Epub ahead of print. PMID: 36632007.
24. Kord-Varkaneh H, Salehi-Sahlabadi A, **Tinsley GM**, Santos HO, Hekmatdoost A. Effects of time-restricted feeding (16/8) combined with a low-sugar diet on the management of non-alcoholic fatty liver disease: A randomized controlled trial. *Nutrition.* 2023 Jan;105:111847. doi: 10.1016/j.nut.2022.111847. Epub 2022 Sep 13. PMID: 36257081.

Abstracts:

1. P. Harty, M. Stratton, G. Escalante, M. Siedler, C. Rodriguez, J. Dellinger, A. Williams, S. White, R. Smith, B. Johnson, and **G. Tinsley**. "Isokinetic Squat Performance Is Associated With Leg Press One-Repetition Maximum but Not Repetitions to Fatigue". In: *Journal of strength and conditioning research* 35.12 (2021), pp. 291-446. DOI: 10.1519/JSC.0000000000004141.
2. M. Stratton, P. Harty, M. Siedler, C. Rodriguez, R. Smith, A. Williams, S. White, J. Dellinger, and **G. Tinsley**. "Comparison Between Changes in Muscular Performance and Dual-Energy X-Ray Absorptiometry Segmental Lean Mass after Overfeeding With Resistance Training". In: *Journal of strength and conditioning research* 35.12 (2021), pp. 291-446. DOI: 10.1519/JSC.0000000000004141. PROFESSIONAL ORGANIZATIONS|||SELECTED CONSULTING ACTIVITIES||ABSTRACTS
3. D. Keith, J. Boykin, C. Harrison, J. Zaragoza, J. Prather, M. Tinnin, L. Taylor, and **G. Tinsley**. "Relationship Between Changes in Upper Body Fat-Free Mass and Bench Press Performance in American Football Players". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 24. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/24>.
4. M. Siedler, C. Rodriguez, M. Stratton, P. Harty, D. Keith, J. Green, J. Boykin, S. White, A. D. Williams, B. DeHaven, and **G. Tinsley**. "A Between-sex Comparison of the Validity of Body Fat Percentage Estimates From Four Bioelectrical Impedance Analyzers". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 29. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/29>.
5. J. Boykin, D. Keith, C. Harrison, J. A. Zaragoza, J. Prather, M. Tinnin, L. W. Taylor Iv, and **G. Tinsley**. "Associations of Changes in Body Composition and Athletic Performance in Collegiate American Football Players". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 27. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/27>.
6. J. Green, A. Ambrosius, C. Dodge, B. Merfeld, C. Khurelbaatar, M. Carpenter, P. Harty, C. Rodriguez, M. Siedler, M. Stratton, D. Keith, J. Boykin, A. Jagim, and **G. Tinsley**. "Assessment of Youth Athlete

- Body Composition using Bioimpedance Techniques as Compared to a Three-Compartment Model". In: International journal of exercise science: conference proceedings 2.14 (2022), p. 18. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/18>.
7. G. DeHaven, M. Siedler, C. Rodriguez, S. White, A. Williams, P. Harty, M. T. Stratton, D. Keith, J. Green, J. Boykin, and **G. Tinsley**. "Comparison of Laboratory-Grade and Consumer-Grade Hand-to-Foot Bioelectrical Impedance Analyzers for Body Composition Estimation". In: International journal of exercise science: conference proceedings 2.14 (2022), p. 11. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/11>.
 8. C. Florez, **G. Tinsley**, J. Prather, J. Zaragoza, C. Teague, K. Glenn, J. Kelly, M. Bourque, M. Hockett, A. Gutierrez, M. Tinnin, K. Brennan, and L. Taylor. "Body Fluid Estimation Via Segmental Multi-Frequency Bioelectrical Impedance Analysis Following Acute Resistance Exercise". In: International journal of exercise science: conference proceedings 2.14 (2022), p. 5. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/5>.
 9. J. Prather, C. Harrison, A. Vargas, B. Soto, A. Harrison, M. Tinnin, **G. Tinsley**, D. Willoughby, and L. Taylor. "The Effects of a Thermogenic Supplement on Metabolic and Hemodynamic Variables and Subjective Mood States". In: International journal of exercise science: conference proceedings 2.14 (2022), p. 4. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/4>.
 10. S. White, M. Siedler, C. Rodriguez, A. Williams, G. DeHaven, P. S. Harty, M. Stratton, D. Keith, J. Green, J. Boykin, and **G. Tinsley**. "Validity of Hand-to-Foot and Foot-to-Foot Consumer Bioimpedance Analyzers: A Four-Compartment Model Comparison". In: International journal of exercise science: conference proceedings 2.14 (2022), p. 3. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/3>.
 11. C. Rodriguez, C. Harrison, J. Prather, J. A. Zaragoza, C. Teague, K. Glenn, J. Kelly, M. Bourque, M. Hockett, A. Gutierrez, M. Tinnin, K. Brennan, L. Taylor, and **G. Tinsley**. "Acute Resistance Exercise Influences Bioelectrical Impedance Analysis Segmental Fat Mass Estimates". In: International journal of exercise science: conference proceedings 2.14 (2022), p. 2. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/2>.
 12. P. Harty, A. Ambrosius, C. Dodge, B. Merfeld, C. Khurelbaatar, M. Carpenter, M. Siedler, M. Stratton, C. Rodriguez, J. Green, D. Keith, J. Boykin, A. Jagim, and **G. Tinsley**. "Body Composition Estimation in Youth Athletes: Agreement Between Two-Component Methods". In: International journal of exercise science: conference proceedings 2.14 (2022), p. 50. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/50>.
 13. J. Boykin, M. Stratton, M. Siedler, P. Harty, C. Rodriguez, J. Green, A. Williams, D. Keith, S. White, B. DeHaven, and **G. Tinsley**. "Acute Effects of Caffeinated and Non-Caffeinated Pre-Workout Supplement Consumption on Eccentric and Concentric Force Production During an Isokinetic Squat Exercise". In: Journal of the International Society of Sports Nutrition 19.S1 (2022), pp. 1-69. DOI:10.1080/15502783.2022.2056381.
 14. J. Green, P. Harty, M. Stratton, M. Siedler, C. Rodriguez, J. Boykin, D. Keith, S. White, B. DeHaven, A. Williams, and **G. Tinsley**. "Differential Effects of Caffeinated and Stimulant-Free Pre-Workout Supplements on Ratings of Perceived Energy, Focus, and Fatigue". In: Journal of the International Society of Sports Nutrition 19.S1 (2022), pp. 1-69. DOI:10.1080/15502783.2022.2056381.
 15. C. Rodriguez, M. Stratton, M. Siedler, P. Harty, J. Boykin, J. Green, D. Keith, S. White, A. Williams, B. DeHaven, and **G. Tinsley**. "Influence of Caffeinated and Non-Caffeinated Pre-Workout Supplements on Maximal and Rapid Isometric Strength Characteristics". In: Journal of the International Society of Sports Nutrition 19.S1 (2022), pp. 1-69. DOI:10.1080/15502783.2022.2056381.
 16. M. Siedler, M. Humphries, P. Lamadrid, G. Mastrofi ni, J. Gegenheimer, A. Ibrahim, A. Brooks, T. Smith, **G. Tinsley**, and B. Campbell. "Baseline Anthropometric, Dietary intake, and Behavioral Variables Do Not Predict Study Completion or Fat Loss Success in Young, Resistance-trained Females Undergoing a Dietary Intervention". In: Journal of the International Society of Sports Nutrition 19.S1 (2022), pp. 1-69. DOI:10.1080/15502783.2022.2056381.

17. M. Stratton, M. Siedler, P. Harty, C. Rodriguez, J. Boykin, J. Green, D. Keith, S. White, B. DeHaven, A. Williams, and **G. Tinsley**. "The Influence of Caffeinated and Non-Caffeinated Pre-Workout Supplements on Resistance Exercise Performance". In: *Journal of the International Society of Sports Nutrition* 19.S1 (2022), pp. 1-69. DOI:10.1080/15502783.2022.2056381.

Grants:

1. Chronic Thermogenic Dietary Supplement Consumption: Effects on Body Composition, Anthropometrics, Metabolism, and Subjective Variables (A23-0089-001). Sponsor: EHP Labs. 2022 - 2023. Role: Lead Principal Investigator Amount: \$85,378
2. Digital Anthropometry and Body Composition Estimation Using a Generation 2 Prototype 3-Dimensional Optical Scanner (A22-0305-001). Sponsor: Prism Labs. 2022 - 2023- Role: Lead Principal Investigator Amount: \$32,756
3. Metabolic Effects of a Novel Ready-to-drink Thermogenic Beverage (A22-0092-001). Sponsor: EHP Labs. 2021 - 2022. Role: Lead Principal Investigator. Amount: \$28,401
4. Pharmacokinetic Analysis of Nutrient Absorption from a Novel Liposomal Multivitamin/mineral Formulation (A21-0282-001). Sponsor: Nutraceutical International Corporation. 2021 - 2022 Role: Lead Principal Investigator. Amount: \$159,341
5. Evaluation of Novel Beverage Formulations for Hydration Enhancement in Humans (A21-0284-001). Sponsor: 8 POiNT, LLC. 2021 - 2022. Role: Lead Principal Investigator. Amount: \$35,000
6. Quantifying the Relationship Between Anthropometry, Body Composition, and Performance on the Army Combat Fitness Test (A21-0261-001). Sponsor: Texas Chapter of the American College of Sports Medicine [Doctoral Student Research Development Award: Patrick Harty]. 2021 - 2022. Role: Lead Principal Investigator Amount: \$1,750

Zhang, Fangyuan

Publications:

1. Shrestha, K., Li, H. F., Santos, A. P., Vaughan, J., **Zhang, F.**, Kurian, A. S., Couch, B., Bayouth, C. (2022). Local Infiltration of Liposomal Bupivacaine in Isolated Traumatic Rib Fractures. *Journal of the American College of Surgeon*, 235(5), S87-88.
2. Tian, S., Wang, J., **Zhang, F.**, Wang, D. (2022). Comparative analysis of microRNA binding site distribution and microRNA-mediated gene expression repression of oncogenes and tumor suppressor genes. *Genes*, 13(3), 481. 4 = Highly respected in field, refereed.
3. Neupane, J., Guo, W., Cao, G., **Zhang, F.**, Slaughter, L., Deb, S. (2022). Spatial patterns of soil microbial communities and implications for precision soil management at the field scale. *Precision Agriculture*, 23, 1008–1026. <https://doi.org/10.1007/s11119-021-09872-1> 4 = Highly respected in field, refereed.

Zu, Yujiao

Publication:

1. Pal, A., Sun, S., Armstrong, M., Manke, J., Reisdorph, N., Adams, V. R., Kennedy, A., Zu, Y., Moustaid-Moussa, N., Carroll, I., Shaikh, S. R. (2022). Beneficial effects of eicosapentaenoic acid on the metabolic profile of obese female mice entails upregulation of HEPEs and increased abundance of enteric *Akkermansia muciniphila*. *Molecular and Cell Biology of Lipids*, 1867(1).

Abstracts:

1. Zu, Y., Moustaid-Moussa, N. (2022). 8-Hydroxyeicosapentaenoic Acid Reduces Adipogenesis and Inflammation in 3T3-L1 Adipocytes (Issue Supplement_1 ed., vol. Volume 6, pp. Page 1100).
2. Zu, Y., Moustaid-Moussa, N. Temperature-Dependent Effects of Eicosapentaenoic Acid (EPA) on Browning of Subcutaneous Adipose Tissue in UCP1 Knockout Male Mice. *Molecular Metabolism*.

3. Yavari, M., Ramalingam, L., N., C., Chavira, A., Biltz, C., Mounce, I., Maldonado, K. A., Scoggin, S., Zu, Y., Kalupahana, N. S., Yosofvand, M., Moussa, H., Moustaid-Moussa, N. Eicosapentaenoic Acid Protects Against Metabolic Impairments in the APPswePS1dE9 Alzheimer's Disease Mouse Model. *The Journal of Nutrition*.

Presentation:

1. Zu, Y. (Presenter & Author), ObesityWeek, "Beneficial effects of eicosapentaenoic acid in glycerol 3-phosphate dehydrogenase 2 deficient mice," The Obesity Society, San Deigo, CA. (November 2022, Poster).
2. Zu, Y. (Presenter & Author), Nutrition 2022, "8-hydroxyeicosapentaenoic acid reduces adipogenesis and inflammation in 3t3-l1 adipocytes," American Society of Nutrition, online. (June 2022, Oral).

Grant awards:

Federal:

1. Zu, Yujiao, Moustaid-Moussa, Naima, "Novel prebiotic nanoparticles to enhance tart cherry anthocyanin bioavailability and improve gut health in obesity," USDA-AFRI New Investigator Seed Grant (Recommend to an award)

Internal:

1. Zu, Yujiao, "Healthy fats that fight body fats" TTU COHS Internal Grant (Awarded)
2. Zu, Yujiao, Moustaid-Moussa, Naima, "Protective effects of shogaol in obesity-related breast cancer", TTU COHS Internal Grant, (Awarded)

Zumwalt, Mimi

Publications:

1. Shen CL, Watkins BA, Kahathuduwa C, Chyu MC, Zabet M, Elmassry MM, Luk HY, Brismee JM, Knox A, Lee J, **Zumwalt M**, Wang R, Wager TD, Neugebauer V. Tai Chi Improves Brain Functional Connectivity and Plasma Lysophosphatidylcholines in Postmenopausal Women with Knee Osteoarthritis: An Exploratory Pilot Study. *Frontiers in Medicine*, section Rheumatology. 2022;8:775344. <https://www.frontiersin.org/articles/10.3389/fmed.2021.775344/full>
2. Petrie KA, Chen JN, Miers H, Grimes JS, **Zumwalt M**. Gender Differences in Seeking Health Care and Postintervention Pain Outcomes in Foot and Ankle Orthopedic Patients. *Womens Health Rep (New Rochelle)*. 2022 May 9;3(1):500-507. doi: 10.1089/whr.2021.0076. PMID: 35652003; PMCID: PMC9148655.
3. Hayward D, Dowdle TS, Steadman J, Froerer D, Perry C, **Zumwalt M**. Orthopaedic surgery residency match trends during COVID-19 pandemic: a cross-sectional study. *Curr Orthop Pract*. 2022 Jul 20;33(5):458-460. doi: 10.1097/BCO.0000000000001139. PMID: 36033129; PMCID: PMC9394201.
4. Caleb Hawkes, MBA; Dan Hayward, MBA; Cody Perry; Werner de Riese, MD, PhD; **Mimi Zumwalt, MD**. Potential Patient Bias by Insurance Coverage on CG-CAHPS Surveys and its Impact on Physician Reimbursement. *Journal of Orthopaedic Business* (2022) Vol 2, No.3. DOI: <https://doi.org/10.55576/job.v2i3.18>

Presentations:

Poster:

1. Nicolas Householder, Elwin Rutayomba, Kofi Agyare, **Mimi Zumwalt, MD**. Experimental intra-articular injections for the treatment of primary knee OA. TTUHSC Research Week, March 2022
2. Kristin Huseman, Adilene Chapina-Guizar, **Mimi Zumwalt, MD**. COVID-19's Impact on TTUHSC Graduate & Medical Students' Exercise Routines. TTUHSC Research Week, March 2022.
3. Nicolas Householder, Elwin Rutayomba, Kofi Agyare, **Mimi Zumwalt, MD**. Literature review - experimental intra-articular injections targeting reversal of OA pathology. Texas Surgical Society Conference, April 2022

Al-Rahawan, Mohamed

Publications:

1. Chyu J, Ali Z, **Al-Rahawan MM**. Comments on evaluation of an oral sodium bicarbonate protocol for high-dose methotrexate urine alkalinization. *Support Care Cancer*. 2022 Dec;30(12):9699-9700.
2. **Al-Rahawan MM**, Barr EK, Yang J, West N, Hinds P. Comments on Quality of life in Ewing sarcoma patients treated with combination chemotherapy. *Medicine (Baltimore)*. 2022 <https://journals.lww.com/md-journal/Blog/MedicineCorrespondenceBlog//pages/post.aspx?PostID=164>

Presentations:

1. October 2022 Poster: Vitamin D levels in pediatric patients undergoing chemotherapy; Blood Supplement; Texas Tech University Health Science Center; CEIH Annual Symposium; Lubbock TX; Presented by, Madison Schoeberl, MS-III. https://www.ttuhsu.edu/medicine/medical-education/dome_lwbiwh_symposium2022.aspx
2. October 2022 Poster: Report on Toxicity of Cancer Therapy in Children from West Texas Enrolled on ACCESS Study; Texas Tech University Health Science Center; CEIH Annual Symposium; Lubbock TX; Presented by, Katherine Mitchell, MS-III. https://www.ttuhsu.edu/medicine/medical-education/dome_lwbiwh_symposium2022.aspx

Abstracts:

1. Schoeberl M, Prabhakar N, Mikkelsen M, Urias E, Scott C, Lee J, Shen CL, Al-Rahawan MM; Vitamin D levels in pediatric patients undergoing chemotherapy; *Blood* 2022; 140 (Supplement 1): 11600

Bennett, Margaret

Publications:

1. **Bennett-Brown, M.**, Gesselman, A.N., & Miller, W.R. (2022-online first). Constructive communication patterns as related to relationship satisfaction, seizure severity, and patient activation among people with epilepsy. *Epilepsy & Behavior*. <https://doi.org/10.1016/j.yebeh.2022.108957>
2. **Bennett-Brown, M.** & Denes, A. (2022-online first). Testing the communication during sexual activity model: An examination of personality characteristics and their relationship with sexual communication outcomes. *Communication Research*. <https://doi.org/10.1177/00936502221124390>
3. **Bennett-Brown, M.** & Wright, P.J. (2022). Pornography consumption and partnered sex: A review of pornography use and satisfaction in romantic relationships. *Current Addiction Reports*. doi: 10.1007/s40429-022-00412-z
4. Campbell, J.T., Adams, O.R., **Bennett-Brown, M.**, Woodward, B., Gesselman, A.N., & Carter, G. (2022). PrEP familiarity, interest, and usage among 364 Black and Hispanic adults in Indiana. *Frontiers in Public Health*. <https://doi.org/10.3389/fpubh.2022.810042>
5. **Bennett-Brown, M.**, Adams, O.R., Campbell, J.T., Moscovici, Z., & Gesselman, A.N. (2022). Chronic vulvovaginal pain in patients of color: Benefits of partner supportiveness in relation to sexual dissatisfaction and distress. *International Journal of Environmental Research and Public Health*. <https://doi.org/10.3390/ijerph19073975>
6. Denes, A., Crowley, J.P, Dhillon, A., **Bennett-Brown, M.**, Stebbins, J.L., & Granger, S.W (2022). Exploring the role of oxytocin in communication processes: A test of the post sex disclosures model. *Communication Monographs*. <https://doi.org/10.1080/03637751.2021.1957490>

Presentations:

1. **Bennett-Brown, M.**, Campbell, J.T., & Gesselman, A.N., (2022, November). Do personality traits matter in sexual comfortability: Examining predictors of sexual self-esteem. Paper/Poster presented at the annual meeting of The Society for the Scientific Study of Sexuality in Vancouver, Canada.

- Gesselman, A.N., Kaufman, E.M., Marcotte, A.S., **Bennett-Brown, M.**, & Campbell, J.T. (2022, November). Building intimacy on camera: Emotional intimacy between consumers and performers on erotic webcamming platform. Paper presented at the annual meeting of The Society for the Scientific Study of Sexuality in Vancouver, Canada.
- Gesselman, A.N., Campbell, J.T., **Bennett-Brown, M.**, Kaufman, E. M., Fredrick, D.A., Garcia, J.R., & Mark, K.P. (2022, July). What a touch implies: body image as a mediator of nonverbal affection and relationship well-being. Paper presented at the annual meeting of the International Association for Relationship Research in London, England (online conference due to COVID-19).
- Blumenstock, S. & **Bennett-Brown, M.** (2022, July). Romantic attachment and dyadic sexual desire: The role of partner type. Paper presented at the annual meeting of the International Association for Relationship Research in London, England (online conference due to COVID-19).
- Bennett-Brown, M.**, Kaufman, E.M., Marcotte, A.S., & Gesselman, A.N (2022, May) Benefits of using erotic webcam sites: Clients' and models' improvement in communication skill related to emotional and sexual needs fulfillment. Paper presented at the annual meeting of the International Communication Association in Paris, France.

Binks, Martin

Publications:

- Chirico Scheele S, Hartmann C, Siegrist M, **Binks M**, Egan PF. Consumer Assessment of 3D-Printed Food Shape, Taste, and Fidelity Using Chocolate and Marzipan Materials. *3D Print Addit Manuf.* 2022 Dec 1;9(6):473-482. doi: 10.1089/3dp.2020.0271. Epub 2022 Dec 13. PMID: 36660745; PMCID: PMC9831564.
- Zhu Y, Bailey D, Childress A, Dawson JA, **Binks M**, Dhurandhar NV. Greater protein quality of an egg breakfast may be inadequate to induce satiety during weight loss, compared with a cereal breakfast of equal protein quantity. *Int J Food Sci Nutr.* 2022 Dec;73(8):1096-1103. doi: 10.1080/09637486.2022.2133097. Epub 2022 Oct 13. PMID: 36237122.

Book chapters:

- Chirico-Scheele, S., **M. Binks**, and P. Egan. "3D Printing Food: Manufacturing, Mechanics, and Validation." *Materials Science and Engineering in Food Product Development*. Wiley Publishing (in press).
- Binks M.** The Role of the Food Industry in Obesity. In: Bray GA, Bouchard C, eds, *Handbook of Obesity, V. 1*, 5th edn. CRC Press; 2022: Ch 43 (in press).

Abstract:

- Chirico-Scheele, S., G. Christopher, **M. Binks**, and P. Egan. "Effects of cricket and pea protein addition on the firmness, taste preference, and printability of 3D printed mashed potatoes." First annual event and expo, Institute of Food Technologists Conference. Chicago, IL, 2022.

Outreach & Engagement:

- TTU-Health Sciences Center Rural and Community Engagement Division, TTUHSC – Permian Basin and Office of Continuing Medical Education: Motivational Health Coaching. Online 01/11/2023.
- Live Smart Texas. World Obesity Day Open House (March 4 2022)
- NMHI High School Experience – A summer educational "camp" in Nutrition and Metabolic Diseases for High School students

Brismee, JM

Publications:

- Samson JY, Anderson DN, Hooper TL, Sizer PS, Hando BR, **Brismée JM.** Safe Administration and Low Healthcare Utilization Following Musculoskeletal Corticosteroid Injections by U.S. Military Physical Therapists. *Military Medicine.* 2022 Sep 22:usaa556.

2. Campbell DF, **Brismée J**, Allen B, Hooper TL, Domenech MA, Manella KJ. Ethnicity Does Not Impact Physical Therapy Students' Clinical Readiness and Performance, a United States Exploratory Study. *The Internet Journal of Allied Health Sciences and Practice*. 2023;21(1), Article 9. <https://nsuworks.nova.edu/ijahsp/vol21/iss1/9/>
3. **Brismée JM**, Froment FP, Bellot N, Mambriani A, Chauvet G, Chevrier S, Desjardins T, Riquier S, Rakotoarivelo LH, Datoussaid K, Pitance L. OMT-France publishes the first French physiotherapy guide for triage of patients with neuromusculoskeletal conditions - a step toward direct access in French speaking countries. *Journal of Manual and Manipulative Therapy*. 2022;30(5):259-260.
4. Dice JL, Dendy D, Sizer PS, Cook CE, Feuling S, **Brismée JM**. Author Response to Shear et al. *Physical Therapy*. 2022:pzac115.
5. Ennis K, Sizer PS, Sargent E, **Brismée JM**, Drusch A, Kapila J, Hooper TL. Abdominal Bracing Changes Lower Quarter Muscle Activity but Not Reach Distances During Active Forward Reach on an Unstable Surface. *Journal of Bodywork and Movement Therapies*. 2021;28:391-396.
6. Denny B, **Brismée JM**. Manual therapy and upper quarter training in an adolescent quarterback with chronic clinically suspected thoracic outlet syndrome: A case report with 1-year follow up. *International Journal of Sports and Exercise Medicine*. 2022;8(2):217. <https://clinmedjournals.org/articles/ijsem/international-journal-of-sports-and-exercise-medicine-ijsem-8-217.pdf?jid=ijsem>
7. Shen CL, Watkins BA, Kahathuduwa C, Chyu MC, Zabet M, Elmassry MM, Luk HY, **Brismee JM**, Knox A, Lee J, Zumwalt M, Wang R, Wager TD, Neugebauer V. Tai Chi Improves Brain Functional Connectivity and Plasma Lysophosphatidylcholines in Postmenopausal Women with Knee Osteoarthritis: An Exploratory Pilot Study. *Frontiers in Medicine, section Rheumatology*. 2022;8:775344. <https://www.frontiersin.org/articles/10.3389/fmed.2021.775344/full>

Presentations:

Oral:

1. Annual AAOMPT Conference 2022. Crawford M*, **Brismée JM**, St-Pierre MO, Bellot N, Sizer PS, Sobczak S. "Cervical Intradiscal Pressure Responses To Supine Sagittal Plane End-Range Postures: A Cadaveric Investigation." San Diego, California, 10/29/2022
2. Annual AAOMPT Conference 2022. Kapila J*, Hooper TL, **Brismée JM**, Sobczak S, Munger L, Likness A, Sizer PS. "Cervical Multifidus Muscle Stiffness During Active Neck Movements: A Shear Wave Elastography Study." San Diego, California, 10/29/2022
3. Annual AAOMPT Conference 2022. Pugliese M*, Allen B, Tammany J, Riley S, **Brismée JM**. "Mentorship Participation Is Associated With Lower Burnout Levels In Physical Therapists Practicing In The United States." San Diego, California, 10/29/2022
4. Annual AAOMPT Conference 2022. Thompson J*, Page P, Hooper TL, Sobczak S, Rosendahl-Garcia K, Anderson D, **Brismée JM**. "Novel musculoskeletal ultrasound methodology to measure cervical intervertebral disc height found reliable and valid against MRI." San Diego, California, 10/29/2022
5. Annual AAOMPT Conference 2022. Kearns G*, **Brismée JM**, Riley SP, Wang-Price SS, Denninger T, Vugrin M. "Lack Of Standardization In Dry Needling Dosage And Adverse Event Documentation Limits Outcome And Safety Reports: A Scoping Review Of Randomized Clinical Trials" San Diego, California, 10/29/2022

Poster:

1. Educational Leadership Conference of the American Physical Therapy Association (2022). Campbell DF, **Brismée JM**, Allen B, Hooper TL, Domenech TA, Manella KJ. "Effectiveness of Flex vs. Residential Program in Clinical Experience Outcomes"¹_{ISEP} Milwaukee, Wisconsin, 10/28/2022
2. Educational Leadership Conference of the American Physical Therapy Association (2022). Campbell DF, **Brismée JM**, Allen B, Hooper TL, Domenech TA, Manella KJ. "Effectiveness of Integrated Simulation compared to Integrated Clinical Experience in Development of DPT Students' Clinical Decision-Making Skills". Milwaukee, Wisconsin, 10/29/2022

3. Ohio Physical Therapy Fall Conference 2022 – Best Poster Award. Crawford M*, **Brismée JM**, St-Pierre MO, Bellot N, Sizer PS, Sobczak S. “Sagittal Plane End-Range Posture Effects on Cervical Intradiscal Pressure: A Cadaveric Investigation.” Westerville, Ohio, 09/16/2022
4. 34th Annual Student Research Week at Texas Tech University Health Sciences Center. Matthijs A, Matthijs OC, Windisch G, Streitmayer B, Kerner A, Sizer PS, **Brismée JM**. “Neck Sidebent Pre-Positioning Isolates Atlanto-Axial Joint Rotation by Locking the Other Cervical Segments: A Cadaveric Study”. Lubbock, Texas, 03/09/2022
5. 34th Annual Student Research Week at Texas Tech University Health Sciences Center. Pugliese MS, **Brismée JM**, Allen B, Riley SP, Tammany J. “The Impact of Mentorship and Self-efficacy on Burnout in Physical Therapists”. Lubbock, Texas, 03/09/2022
6. 34th Annual Student Research Week at Texas Tech University Health Sciences Center. Thompson JA, Page PA, Hooper TL, Sobczak S, Rosendahl-Garcia KM, **Brismée JM**. “Reliability and Validity of Cervical Disc Height Measurements Using Magnetic Resonance Imaging and Musculoskeletal Ultrasound”. Lubbock, Texas, 03/09/2022
7. Combined Section Meeting of the American Physical Therapy Association (2022). Campbell DF, **Brismée JM**, Allen B, Hooper TL, Domenech TA, Manella KJ. “Clinical Reasoning Self-Efficacy and Confidence of DPT Students with PT Interventions Using Telehealth”. San Antonio, Texas, 02/05/2022
8. Combined Section Meeting of the American Physical Therapy Association (2022). Atkins LT, James CR, Yang HS, Sizer PS, **Brismée JM**, Sawyer S, Powers CM. “Sagittal Plane Movement Training to Improve Use of Gluteus Maximus Reduces Patellofemoral Pain”. San Antonio, Texas, 02/03/2022

Abstracts:

- Lodhi M, **Brismée JM**. Effects of hip joint mobilizations using a mobilization belt on hip range of motion and functional outcomes: A Case Series.
- Brun A, Sandrey M. The effect of hip joint mobilizations using a mobilization belt on hip range of motion and functional outcomes. *Journal of Sports Rehabilitation*. 2021; 30:559-567.
- In IAOM-US Commons, 08/15/2022 <https://iaom-us.com/effects-of-hip-joint-mobilizations-using-a-mobilization-belt-on-hip-range-of-motion-and-functional-outcomes-a-case-series/>

Grant Awards:

1. Investigators: Yasrebi, Brismée, Sizer, Crawford, Sobczak/ Agency: CH Foundation Pain Science Scholar Development Award. Amount: \$5,000. Awarded: December, 2022. Title: Cervical Intradiscal Pressure During Sitting End-Range Neck Postures: A Cadaveric Investigation. Submitted: November, 2022. Period: 01/10/2023 – 12/15/2025

Chyu, Ming-Chien

Publications:

1. Masud AA, Shen CL, Luk HY, **Chyu MC**. Impact of Local Vibration Training on Neuromuscular Activity, Muscle Cell, and Muscle Strength: A Review. *Crit Rev Biomed Eng*. 2022;50(1):1-17. doi: 10.1615/CritRevBiomedEng.2022041625. PMID: 35997107.
2. Shen CL, Watkins BA, Kahathuduwa C, **Chyu MC**, Zabet-Moghaddam M, Elmassry MM, Luk HY, Brismée JM, Knox A, Lee J, Zumwalt M, Wang R, Wager TD, Neugebauer V. Tai Chi Improves Brain Functional Connectivity and Plasma Lysophosphatidylcholines in Postmenopausal Women With Knee Osteoarthritis: An Exploratory Pilot Study. *Front Med (Lausanne)*. 2022 Jan 3;8:775344. doi: 10.3389/fmed.2021.775344. PMID: 35047525; PMCID: PMC8761802.
3. Masud, A. A., Shen, C.-L., Chyu, M.-C. (2022). On the Optimal Whole-Body Vibration Protocol for Muscle Strength. *Biomechanics*, 2(4), 547–561. <https://www.mdpi.com/2673-7078/2/4/43>

Coman, Ioana

Publications:

1. **Coman, I.A.**, Xu, S., & Yamamoto, M. (2022). COVID-19 Vaccine Hesitancy: Disadvantaged Groups' Experience with Perceived Barriers, Cues to Action, and Attitudes. *American Journal of Health Promotion*. <https://doi.org/10.1177/08901171221136113>
2. Xu S., **Coman I.A.**, Yamamoto M., & Najera, C. (2022). Exposure Effects or Confirmation Bias?: Examining Reciprocal Dynamics of Misinformation, Misperceptions, and Attitudes toward COVID-19 Vaccines. *Health Communication*. <https://doi.org/10.1080/10410236.2022.2059802>
3. Ittefaq, M., Abwao, M., **Coman, I.A.**, & Ejaz, W. (Accepted Dec. 2022 – Print/published 2023). A Systematic Literature Review of Research From 2010 to 2020 Addressing User-Generated Online Comments Related to Health Issues and Recommendations for Future Research. *International Journal of Communication*. 17: 256-280.
4. **Coman, I.A.**, Cooper-Norris C., Longing, S., & Perry G. It Is a Wild World in the City: Urban Wildlife Conservation and Communication in the Age of COVID-19. *Diversity*. 14(7), 539, 1-20. Special Issue Human Wildlife Conflict across Landscapes. Special Editor: Dr. Thomas Göttert. <https://doi.org/10.3390/d14070539>
5. **Coman, I.A.**, Yuan, S., & Tsai, J.Y. (2022). Toward an Audience-Centric Framework of Corporate Social Advocacy Strategy: A survey of Generation Z. *Sustainability*. Special Issue: Corporate Social Responsibility, Corporate Social Advocacy, and Societal Change. Special Editors: Dr. Hyejoon Rim & Dr. Holly Overton. 14(7), 4099. <https://doi.org/10.3390/su14074099>
6. Gearhart, S., **Coman, I.A.** & Moe, A. (2022). Facebook Comments Influence Perceptions of Journalistic Bias: Testing Hostile Media Bias in the COVID-19 Social Media Environment. *Electronic News Journal*. 17(1): 3-18. <https://doi.org/10.1177/19312431221103127>

Presentations: (Conference presentations, moderator/discussant, workshops, etc.)

1. **Coman, I.A.**, Xu, S., Yamamoto, M. (May 2022). COVID-19 vaccine hesitancy among disadvantaged groups: Explicating barriers and cues to action in the Health Belief Model. ICA. Paris, France. (peer reviewed)
2. **Coman, I.A.**, Swed, O., Sreepada, N. & Dang, T. (August 2022). What's in a footprint? An exploration of Twitter real versus fake news accounts during the 2016 electoral campaign. AEJMC, Detroit, MI.
3. **Coman, I.A.**, Cooper-Norris, C., Longing, S., Perry, G. (May 2022). It's a wild world here in the city: Media representations of urban biodiversity during the COVID-19 pandemic. ICA Preconference. Aix-En-Provence, France/virtual (peer reviewed).
4. **Coman, I.A.** (September 2022). Romanian COVID-19 Digital Communication: A Failure Never-Ending Story. Part of the Panel Disinformation, counter-audiences, and vaccination: COVID-19 crisis communication and adversarial ideologies in social media. European Public Relations Education and Research Association (EUPRERA), Vienna, Austria (notes - I presented online; invited to be part of the panel, and then the panel proposal was peer reviewed).
5. **Coman, I.A.** (April 2022). When virality helps: pro-active doctors on social media – the American experience. Part of the course/workshop for doctors - "Medical Communication." Conference of the College of Doctors from the Municipality of Bucharest CMB (10th Edition). (invited).
6. **Coman, I.A.**, Swed, O., Dang, T., Sreepada, N., Baza, U. (March 2022). What's in an account? Identifying patterns in real news versus fake news Twitter accounts. AEJMC Midwinter. (peer reviewed)
7. Tsai, J., **Coman, I.A.**, Yuan, S. (May 2022). Testing the Impact of Attributions of Solution Responsibility, Issue Identification and Advocacy Fit on Audience Responses to CSA efforts. ICA, Paris, France (peer reviewed)
8. Xu, S., **Coman, I.A.**, Yamamoto, M. (May 2022). Exposure Effects or Confirmation Bias?: Examining Reciprocal Dynamics of Misinformation, Misperceptions, and Attitudes toward COVID-19 Vaccines. ICA (peer reviewed)
9. Gearhart, S., **Coman, I.A.**, Moe, A. (August 2022). Hostile Media Bias in Vaccine News: The Influence of Facebook Comments & Topic on Perceptions. AEJMC, Detroit, MI. (peer reviewed)
10. **Coman, I.A.** (August 2022). *Building an audience-centric framework of situational corporate social advocacy strategy: A mixed-method approach*. [presentation on grant research insights]. Co-

presenters: Jiun-Yi Tsai; Shupey Yuan. Page Center Research Roundtable, Session #2 - Corporate Social Advocacy. Pre-AEJMC. Detroit, MI. (Invited Presenter).

11. **Coman, I.A.** (June 2022). *From greenwashing to saving the planet: An exploration of how mainstream, Hispanic and Black media and their public spheres portray and judge organizations' environmental sustainability risk communication and (in)actions*. [presentation on grant research plan and direction]. Co-Presenter: Gabriel Partida Dominguez. Page Center Research Roundtable. Virtual. (Invited Presenter).
12. **Coman, I.A.** (August 2022). *PRD Doug Newsom, Public Relations History, Race & Public Relations Awards and DEI Papers*. AEJMC, Detroit, MI. (Invited Discussant)
13. **Coman, I.A.** (April 2022). PRD virtual mentorship panel. (Invited panelist).
14. **Coman, I.A.** (March 2022). *User engagement with online content*. AEJMC Midwinter, Norman, OK. (Invited Moderator & Discussant)
15. **Coman, I.A.** (March 2022). *The role of social media on audience behavior*. AEJMC Midwinter, Norman, OK. (Invited Moderator & Discussant)

Grants:

Date Submitted	Cayuse Proposal No.	Source	Proposal Total	Investigator role % Credit	Investigator Total	Status
5/2022	22-0491	Page/Johnson Legacy Scholar	\$5,000	Lead PI 100%	\$5,000	Funded/Awarded
4/2022	22-0504	Page/Johnson Legacy Scholar	\$5,000	Co-PI	\$5,000	Funded/Awarded

Award:

1. Awards 2022 - TTU College of Media & Communication Billy I. Ross Faculty Achievement

Culberson, John

Publications:

1. Selman A, Burns S, Reddy AP, **Culberson J**, Reddy PH. The Role of Obesity and Diabetes in Dementia. *Int J Mol Sci*. 2022 Aug 17;23(16):9267. doi: 10.3390/ijms23169267. PMID: 36012526; PMCID: PMC9408882.
2. George M, Tharakan M, **Culberson J**, Reddy AP, Reddy PH. Role of Nrf2 in aging, Alzheimer's and other neurodegenerative diseases. *Ageing Res Rev*. 2022 Dec;82:101756. doi: 10.1016/j.arr.2022.101756. Epub 2022 Oct 13. PMID: 36243357.
3. Rawat P, Sehar U, Bisht J, Selman A, **Culberson J**, Reddy PH. Phosphorylated Tau in Alzheimer's Disease and Other Tauopathies. *Int J Mol Sci*. 2022 Oct 25;23(21):12841. doi: 10.3390/ijms232112841. PMID: 36361631; PMCID: PMC9654278.
4. Eshak N, Abdelnabi M, Benjanuwattra J, Ismail A, Leelaviwat N, Elharabi Z, **Culberson J**. Refractory Shock Secondary to Denosumab-induced Severe Hypocalcaemia. *Eur J Case Rep Intern Med*. 2022 Dec 23;9(12):003706. doi: 10.12890/2022_003706. PMID: 36632534; PMCID: PMC9829022.
5. Sehar U, Rawat P, Choudhury M, Boles A, **Culberson J**, Khan H, Malhotra K, Basu T, and Reddy H. Comprehensive Understanding of Hispanic Caregivers: Focus on Innovative Methods and Validations. *Journal of Alzheimer's Disease Reports*. 2022 December, In Press.

Abstracts:

1. American Geriatrics Society Annual Scientific Meeting. Ashcraft A, Owen D, **Culberson J**. Technology Guided Assessment for Urinary Tract Infection: Creating a Common Interprofessional Language. *J Am Geriatr Soc* 2022 April;70(Suppl 1): S66

- American Geriatrics Society Annual Scientific Meeting. Ashcraft A, Owen D, **Culberson J**, and Song H. Communication and Workflow on a Typical Day in NH Versus a Change in Resident Condition. *Innovation in Aging* 2022, Vol 6(S1);700-701.

Dennis, Jeff

Publications:

- Chen JN, **Dennis JA**, St John JA, Shen CL. Self-Reported Patient Compliance With Physician Advised Lifestyle Behavior Changes Among Adults With Musculoskeletal Conditions. *Front Public Health*. 2022 Feb 24;10:821150. doi: 10.3389/fpubh.2022.821150. PMID: 35284362; PMCID: PMC8907563.

Dufour, Jannette

*Collaboration with CEIH member

Publications:

- *Washburn RL, Hibler T, Thompson LA, Kaur G, **Dufour JM**. 2022 Therapeutic application of Sertoli cells for treatment of various diseases. *Seminars in Cell and Developmental Biology* 121: 10-23. doi: 10.1016/j.semcdb.2021.04.007.
- *Washburn RL, Hibler T, Kaur G, **Dufour JM**. 2022 Sertoli cell immune regulation: a double-edged sword. *Frontiers in Immunology* 13:913502. doi: 10.3389/fimmu.2022.913502
- *Wang R, Santos JM, **Dufour JM**, Stephens E, Miranda JM, Washburn RL, Hibler T, Kaur G, Lin D, Shen CL. 2022 Ginger root extract improves GI health in diabetic rats via improving intestinal integrity and mitochondrial function. *Nutrients*. Oct 19;14(20):4384. doi: 10.3390/nu14204384.
- *Washburn RL, Kaur G, **Dufour JM**. 2022 Mouse Sertoli cells inhibit humoral-based immunity. *International Journal of Molecular Sciences*. 2022 Oct 23;23(21):12760. doi: 10.3390/ijms232112760
- Dufour JM**. 2022 What are the multiple roles of the Sertoli cell? Supporting spermatogenesis and immune regulation. *Handbook of Andrology, American Society of Andrology* (in press)
- *Washburn RL, Hibler T, Kaur G, Sabu-Kurian A, Landefeld A, **Dufour JM**. 2022 Immunoregulatory Sertoli cell allografts engineered to express human insulin survive humoral-mediated rejection. *International Journal of Molecular Sciences*. 2022 Dec 14;23(24):15894. doi: 10.3390/ijms232415894.
- *Shen CL, **Dufour JM**, Miranda JM, Kaur G, Chung E, Ramalingam L, Moustaid-Moussa N, Cao JJ. Effect of dietary geranylgeraniol and green tea polyphenols on glucose homeostasis, bone turnover biomarkers and bone microstructure in obese mice. *International Journal of Molecular Sciences* (in press)

Abstracts:

- Jansen M, Pressley TA, Bobulescu IA, Villalobos A, **Dufour JM**. Interactive virtual small group sessions using Zoom breakout rooms with Google Slides. *STFM 2022 Conference on Medical Student Education*. (San Antonio, Texas, January 27-30, 2022)
- Washburn RL, Kaur G, Chilton B, Reilly B, **Dufour JM**. Seq'ing the Sertoli cell complement inhibitory signature: Paving the pathway to prolong transplant survival. *Innate Immunity: Complement and Beyond, Keystone Symposia*, (Snowbird, UT, April, 3-6, 2022)
- Jansen M, Pressley TA, Bobulescu IA, Villalobos A, **Dufour JM**. Design of virtual team-based learning sessions. *2022 SGEA Virtual Regional Meeting Finding Creativity for Complex Challenges* (March 28-29, 2022)
- Taylor H, Kaur G, **Dufour JM**. Tregs: The Sertoli cell's secret weapon in transplant survival. *Annual Meeting for the American Association of Immunologists. Immunology2022* (Portland, OR May 6-10, 2022).
- Washburn RL, Kaur G, Chilton B, Reilly B, **Dufour JM**. Seeking the Sertoli cell complement inhibitory signature to prolong transplant survival. *Annual Meeting for the American Association of Immunologists. Immunology2022* (Portland, OR May 6-10, 2022).
- Dufour JM**, Washburn RL, Taylor H, Kaur G. Immunosuppressive functions of Sertoli cells. *Male Reproductive Immunology. American Society for Reproductive Immunology*. (Nashville, TN, May 22-26, 2022).

- Hussain S, McCabe P, Lee V, Hewetson A, Webster D, **Dufour JM**, Schneider B, Kaur G. Highlighting key elements of the pre-med program at TTUHSC that prepares the students to be successful in Medical school. Virtual Pathway Programs and Bridges conference. (July 21, 2022).
- Anna Sabu-Kurian, Hibler H, Washburn RL, Boothe K, Kaur G, **Dufour JM**. The Role of Macrophages in Sertoli Cell Transplant Survival Without the Use of Immunosuppressive Drugs. American College of Surgeons Clinical Congress 2022. (San Diego, CA October 16-20, 2022, accepted)

Presentations:

- Immunosuppressive functions of Sertoli cells. Male Reproductive Immunology. American Society for Reproductive Immunology. (Nashville, TN, May 22-26, 2022).
- The Sertoli cell immune microenvironment. "Immune Function in Reproductive Biology" 2022 Mammalian Reproduction, Gordon Research Conference, Mount Snow, West Dover, Vermont (Moved due to COVID-19 from August 2020 to August 14-19, 2022)

Grant Awards

- CH Foundation Seed Grant, "The role of TGF-Beta and retinoic acid in Sertoli cell induction of Tregs." (\$72,400, 1/2022-12/2022). Dufour (Principal Investigator), Kaur (Co- Investigator)
- Research and Extension Experiences for Undergraduates, Agriculture and Food Research Initiative, (NIFA, USDA), "Nutrition Bench-to-Community Engaged Scholars in Texas (Nutrition BEST) REEU Program." (\$500,000, 5/2021 to 4/2026). Dufour (Collaborating Mentor), Moustaid-Moussa (Director)

Grants Submitted

- NIH R01 September 1, 2022 - August 31, 2027, Dufour JM (Principal Investigator), Kaur G (Co- Investigator), Sertoli cell inhibition of the complement system: a path to improve xenograft survival. \$1,250,000 (Direct Cost), \$ 1,912,500 (Total Amount)
- NIH R01 April 1, 2023 - March 31, 2028, Dufour JM (Principal Investigator), Kaur G (Co-Investigator), Creation of a tolerogenic environment to protect pancreatic islets from autoimmune diabetes. \$1,250,000 (Direct Cost), \$ 1,912,500 (Total Amount)
- NIH Faculty Institutional Recruitment for Sustainable Transformation (FIRST) Program Moustaid-Moussa N (Director) Dufour JM (mentor) Recruiting and Mentoring Partnerships for University Progress (RAMP UP).
- USDA NIFA AFRI Sustainable Agricultural Systems June 1, 2023 – May 31, 2028 Moustaid-Moussa N (Project Director), Dufour JM (SubPI), GRow and EAT Leafy GREENS (GREAT GREENS): Sustainable Production of Leafy Greens for Health and Nutrition Security. \$10 million total, \$366,621 Sub contract
- NIH NCCIH R01 June 1, 2023 – May 31, 2028 Moustaid-Moussa N (Principal Investigator), Dufour JM (SubPI), Protective Metabolic Effects of Omega-3 Fatty Acids, Independent of UCP1. \$184,546 Sub contract.
- JDRF Strategic Research Agreement, Realignment of Established Targets and Mechanisms for Delaying or Reversing T1D, Dufour JM (Principal Investigator), Bhutia Y (Co-Investigator), Ganapathy V (Co-Investigator). Carbidopa, a novel immune modulator to prevent or reverse type 1 diabetes. \$750,000

Figuroa, Arturo

Publications:

- Maharaj A, Fischer SM, Dillon KN, Kang Y, Martinez MA, **Figuroa A**. Effects of L-citrulline supplementation on endothelial function and blood pressure in hypertensive postmenopausal women. *Nutrients* 2022; 14(20):4396.
- Kang Y, Maharaj A, Dillon KN, Fischer SM, **Figuroa A**. Menopause influences aortic pulse pressure and pressure wave responses to metaboreflex activation in women. *Menopause* 29(12): 1423-1429, 2022.

- Barzanjeh SP, Pescatello LS, **Figueroa A**, Ahmadizad S. The effects of alpha-Glycerolphosphorylcholine on heart rate variability and hemodynamic variables following sprint interval exercise in overweight and obese women. *Nutrients* 2022; 14(19):3970.
- Volino-Souza M, de Oliveira GV, Conte-Junior CA, **Figueroa A**, Alvares TS. Current Evidence of Watermelon (*Citrullus lanatus*) Ingestion on Vascular Health: A Food Science and Technology Perspective. *Nutrients*. 2022; 14(14):2913. <https://doi.org/10.3390/nu14142913>.
- Jaime SJ, Nagel J, Maharaj A, Fischer SM, Schwab E, Martinson C, Radtke K, Mikat RP, **Figueroa A**. L-Citrulline supplementation attenuates aortic pulse pressure and wave reflection responses to cold stress in older adults. *Exp Gerontol* 2022; 159:111685.
- Maharaj A, Fischer SM, Dillon KN, Kang Y, Martinez MA, **Figueroa A**. Acute citrulline bunts aortic systolic pressure during exercise and sympathoactivation in hypertensive postmenopausal women. *Med Sci Sports Exerc.* 54(5):761-768, 2022.
- Mason J, Tenenbaum GT, Jaime SJ, Roque N, Maharaj A, **Figueroa A**. Arterial Stiffness and Cardiorespiratory Fitness are Associated with Cognitive Function in Older Adults. *Behavioral Medicine.* 48(1):54-65, 2022.
- Shiraseb F, Asbaghi O, Bagheri R, Wong A, **Figueroa A**, Mirzaei K. The effect of L-arginine supplementation on blood pressure in adults: A systematic review and dose-response meta-analysis of randomized clinical trials. *Adv Nutr* 13 (4): 1226-1242, 2022.

Abstracts:

- Kang Y, Maharaj A, Dillon KN, Fischer SM, **Figueroa A**. Impact of Age on Aortic Pressure and Pressure Waves Responses to Metaboreflex Activation in Women. 2022 ACSM Annual Meeting and World Congresses.
- Dillon, K.N., Maharaj, A., Fischer, S. M., Kang, Y., Martinez, M. A., **Figueroa, A**. Antihypertensive Medication Attenuates Aortic Blood Pressure Responses to Metaboreflex Activation in Postmenopausal Women. 2022 ACSM Annual Meeting and World Congresses.

Galyean, Shannon

Publications:

- Galyean S**, Syn D, Subih HS, Boylan M. Improving vitamin D status in bariatric surgery subjects with monthly high-dose ergocalciferol. *Int J Vitam Nutr Res.* 2022 Mar;92(2):109-117. doi: 10.1024/0300-9831/a000728. Epub 2021 Sep 15. PMID: 34521264.
- Salas-Groves E, **Galyean S**, Alcorn M, Childress A. Behavior Change Effectiveness Using Nutrition Apps in People With Chronic Diseases: Scoping Review. *JMIR Mhealth Uhealth.* 2023 Jan 13;11:e41235. doi: 10.2196/41235. PMID: 36637888; PMCID: PMC9883741.

Presentation:

- Galyean, S. (September, 2022). What's Cooking? Healthy Aging Lecture Series. (Stand-Up Presentation) Lean beef consumption among older adults can improve muscle quality.

Grants:

- "Actions of dietary tocotrienols on obesity: ARN supplemental fund". American River Nutrition, Inc., Hadley, MA. **Shen CL (PI, 3%)**. The goal of study is to test the hypothesis that tocotrienol supplementation improve lipid profiles and modify endocannabinoid and oxylipins in obese postmenopausal women. \$70,000. 11/1/2018-10/31/2023.
- American Society for Nutrition Foundation Status: Active. Budget: \$10,000. Title: Increasing Vegetable Intake Using Monosodium Glutamate: A Reduced-Effort Intervention. Role on project Principal Investigator. Dates of entire project: 09/01/2022-12/31/2023. Specific aims of project: To investigate a reduced-effort intervention to increase vegetable intake with MSG as a sodium lowering approach while maintaining acceptability.
- National Science Foundation Status: Active (Data collection). Budget: \$50,000. Title: I-Corps: A virtual culinary medicine software program for patients with chronic disease. Role on project Principal Investigator.

Investigator. Dates of entire project: 04/01/2022-09/30/2023. Specific aims of project: To conduct customer discovery and develop a solution using a virtual culinary medicine program (eCulinary Medicine, eCM) for patients with chronic disease through electronic platforms to create new opportunities for nutritional and disease management.'

4. Texas Tech University President's Innovation Startup Award. Date submitted: 2022. Funded amount: \$ 25,000.
5. Texas Tech University Human Sciences Supplemental Funding. Date submitted: 2022. Funded amount: \$ 16,000
6. Texas Tech University Innovation Hub at Research Park Accelerator Program Award. Date submitted: 2022. Funded amount: \$ 25,000
7. Texas Tech University Innovation Hub at Research Park Accelerator Program Award. Date submitted: 2022. Funded amount: \$ 25,000

Garner, Christine

Publications:

1. **Garner CD**, Kendall-Tackett K, Young C, Baker T, Hale TW. Mode of cannabis use and factors related to frequency of cannabis use among breastfeeding mothers: results from an online survey. *Breastfeed Medicine*. 2022 Mar;17(3):269-276. doi: 10.1089/bfm.2021.0151. PubMed PMID: 34870449.

Manuscripts in progress:

2. **Garner CD**. Nutrition in Pregnancy. *Nutrition in Health and Disease*, 13th Edition. Burlington, MA: Jones & Bartlett Learning. Textbook chapter in publication.
3. Regalado D, Connolly M, Krusch K, Stark A, **Garner CD**. Psychiatric Medication Use among Pregnant and Breastfeeding Mothers Who Used Cannabis for Mental Health Concerns: A Cross-Sectional Survey Study. *Women's Health*. Submitted for peer review.
4. Natha C, Baker T, **Garner CD**. Maternal beliefs about cannabis use while pregnant or breastfeeding. Manuscript in progress.
5. **Garner CD**, Setterquist H, Hecox EE, Chan J, McLaurin-Jiang S. Providing breastfeeding care during the COVID-19 pandemic: Experiences of healthcare professionals. Manuscript in progress.

Abstracts:

1. **Garner CD**, Setterquist H, Hecox EE, Chan J, McLaurin-Jiang S. Providing breastfeeding care in a rural community during the COVID-19 pandemic: Experiences of healthcare professionals. *Academy of Breastfeeding Medicine*. Presented as poster. September 2022. Baltimore, MD.
2. **Garner CD**, Setterquist H, Hecox EE, Chan J, McLaurin-Jiang S. Providing Breastfeeding Care in a Rural Community During the COVID-19 Pandemic: Experiences of Healthcare Professionals. *Pediatric Academic Societies Meeting*. Presented as poster. April 2022. Denver, CO.
3. Natha C, Baker T, **Garner CD**. Maternal beliefs about cannabis use while breastfeeding. Annual Research Day for Students, Residents, and Faculty. TTUHSC School of Medicine. April 2022. Amarillo, TX. Second Place Research Poster
4. Regalado D, Connolly M, Baker T, Hale T, **Garner CD**. Pregnant and breastfeeding mothers' use of cannabis and mood disorder medications. Annual Research Day for Students, Residents, and Faculty. TTUHSC School of Medicine. April 2022. Amarillo, TX. Third Place Research Poster

Invited Presentations and Guest Lectures:

1. Social Determinants of Health and Nutrition & Food Insecurity. Invited presentation at P3: Patients, Physicians, & Populations, MS1 Series, TTUHSC. October 17, 2022. Via Zoom in Lubbock, TX.
2. Addressing Food Insecurity to Improve Maternal and Infant Health. Invited presentation at Grand Rounds, Department of Pediatrics, TTUHSC. April 29, 2022. Amarillo, TX.
3. Nutrition in Pregnancy and Disease Risk. Invited presentation at Boston University, Graduate level course: Nutrition in Disease Prevention. February 9, 2022. Via Zoom for Boston, MA.

Grant Awards:

1. Academic Pediatric Association Young Investigator Grant – \$14k (2022)

2. United Way – \$25k (2022)
3. Amarillo Area Foundation Discretionary Grant - \$200k (2022)

Jones, Betsy

Publications:

1. Leong SL, Gillespie C, **Jones B**, Fancher T, Coe CL, Dodson L, Hunsaker M, Thompson BM, Dempsey A, Pallay R, Crump W, Cangiarella J. Accelerated 3-Year MD Pathway Programs: Graduates' Perspectives on Education Quality, the Learning Environment, Residency Readiness, Debt, Burnout, and Career Plans. *Acad Med.* 2022 Feb 1;97(2):254-261. doi: 10.1097/ACM.0000000000004332. PMID: 34380931; PMCID: PMC8781222.

Jung, Kwanghee

Publications:

1. Eko, S.* & **Jung, K.** (2022). Instructor Perceptions of Technology Integration in the Emerging Corequisite Model of Developmental Mathematics, *MathAMATYC Educator*, 13, 1-11.
2. Ortiz-Del-Valle, B. L., Gupta, V., Chong, J., **Jung, K.** & Dallas, T. (2022). User Authentication Recognition Process Using Long Short-Term Memory Model. *Multimodal Technologies and Interaction*, 6, 107.
3. Ortiz-Del-Valle, B. L. Chong, J. Shoushan, M. Gupta, V., **Jung, K.** & Dallas, T (2022). A Biometric Authentication Technique Using Smartphone Fingertip Photoplethysmography Signals. *IEEE Sensors Journal*, 14, 14237-14249.

Grants:

1. Innovating and advancing in STEM education, Wahi (PI), ED P031C210026, 10/01/2021–9/30/2026, \$4,783,323
2. Speech intervention via telepractice for children with repaired cleft palate: Randomized Controlled Trial and Assessment of Speech Production and Perception Skills, Lee (PI), NIH 1UG3DE030869-01. 09/1/2021–8/31/2022, \$399,247

Award:

1. The 2021 winner of the Quantitative Methods Research Award, The Canadian Psychological Association, 2022

Kahathuduwa, Chanaka

Publications:

1. Pan S, Ali K, **Kahathuduwa C**, Baronía R, Ibrahim Y. Meta-Analysis of Positive Psychology Interventions on the Treatment of Depression. *Cureus.* 2022 Feb 5;14(2):e21933. doi: 10.7759/cureus.21933. PMID: 35273874; PMCID: PMC8901085.
2. Menikdiwela KR, **Kahathuduwa C**, Bolner ML, Rahman RL, Moustaid-Moussa N. Association between Obesity, Race or Ethnicity, and Luminal Subtypes of Breast Cancer. *Biomedicine.* 2022 Nov 15;10(11):2931. doi: 10.3390/biomedicine10112931. PMID: 36428500; PMCID: PMC9687751.
3. Dassanayake TL, **Kahathuduwa CN**, Weerasinghe VS. L-theanine improves neurophysiological measures of attention in a dose-dependent manner: a double-blind, placebo-controlled, crossover study. *Nutr Neurosci.* 2022 Apr;25(4):698-708. doi: 10.1080/1028415X.2020.1804098. Epub 2020 Aug 11. PMID: 32777998.
4. Blume J, **Kahathuduwa C**, Mastergeorge A. Intrinsic Structural Connectivity of the Default Mode Network and Behavioral Correlates of Executive Function and Social Skills in Youth with Autism Spectrum Disorders. *J Autism Dev Disord.* 2022 Feb 9. doi: 10.1007/s10803-022-05460-y. Epub ahead of print. PMID: 35141816.
5. Dhanasekara CS, Marschke B, Morris E, **Kahathuduwa CN**, Dissanaiké S. Regional Variations in Microbiology and Outcomes of Necrotizing Soft Tissue Infections: A Systematic Review and Meta-Analysis. *Surg Infect (Larchmt).* 2022 Sep;23(7):634-644. doi: 10.1089/sur.2022.142. Epub 2022 Jul 29. PMID: 35904966.

- Dassanayake TL, Wijesundara D, **Kahathuduwa CN**, Weerasinghe VS. Dose-response effect of L-theanine on psychomotor speed, sustained attention, and inhibitory control: a double-blind, placebo-controlled, crossover study. *Nutr Neurosci*. 2022 Oct 20:1-9. doi: 10.1080/1028415X.2022.2136884. Epub ahead of print. PMID: 36263942.
- Dhanasekara CS, Ancona D, Cortes L, Hu A, Rimu AH, Robohm-Leavitt C, Payne D, Wakefield SM, Mastergeorge AM, **Kahathuduwa CN**. Association Between Autism Spectrum Disorders and Cardiometabolic Diseases: A Systematic Review and Meta-analysis. *JAMA Pediatr*. 2023 Jan 30. doi: 10.1001/jamapediatrics.2022.5629. Epub ahead of print. PMID: 36716018.

Kaur, Gurvinder

Publications:

- *Shen CL, Dufour JM, Miranda JM, **Kaur G**, Chung E, Ramalingam L, Moustaid-Moussa N, Cao JJ. 2023 Effect of dietary geranylgeraniol and green tea polyphenols on glucose homeostasis, bone turnover biomarkers, and bone microstructure in obese mice. *Int J Mol Sci* 24(2): 979, doi: 10.3390/ijms24020979.
- *Washburn RL, **Kaur G**, Dufour JM. 2022 Mouse Sertoli cells inhibit humoral-based immunity. *Int J Mol Sci* 23(21): 12760, doi: 10.3390/ijms232112760.
- *Washburn RL, Hibler T, **Kaur G**, Sabu-Kurian A, Landefeld A, Dufour JM. 2022 Immunoregulatory Sertoli cell allografts engineered to express human insulin survive humoral-mediated rejection. *Int J Mol Sci* 23(24): 15894, doi: 10.3390/ijms232415894.
- *Wang R, Santos JM, Dufour JM, Stephens ER, Miranda JM, Washburn RL, Hibler T, **Kaur G**, Lin D, Shen CL. 2022 Ginger root extract improves GI health in diabetic rats by improving intestinal integrity and mitochondrial function. *Nutrients* 14(20): 4384, doi: 10.3390/nu14204384.
- *Washburn RL, Hibler T, **Kaur G**, Dufour JM. 2022 Sertoli cell immune regulation: A double-edged sword. *Front Immunol* 13: 913502, doi: 10.3389/fimmu.2022.913502

Invited speaker:

- Webster D, Jones B, **Kaur G**, Kruczek C, Brower G, Villalobos A. Engaged learning: Integrating simulations, ultrasound and small group discussions into large-group. TTUHSC-Medical Education Faculty Development Course, (Lubbock, Tx, February 25th 2022).

Presentations:

- Kaur G**, Bishop KN, Webster D, Dufour JM, Schneider B. How a medical education master's program promotes student resiliency and success in medical school. *Anatomy Connected* (Washington DC, March 25-27, 2023). Selected for Platform Presentation.
- Bishop KN, Webster D, **Kaur G**, Villalobos A, Schneider B. Assessing the impact of curricular redesign: Student performance in a foundational anatomy course with added cell biology and histology. *Anatomy Connected* (Washington DC, March 25-27, 2023). Selected for Platform Presentation.
- Dufour JM, Washburn RL, **Kaur G**, Hibler T, Miranda JM, Rodriguez AR, Martinez-Marin D, Sabu-Kurian A, Chilton BS. Immunoprotective Sertoli cells in Transplantation. Session: Women in Andrology Lecture, 48th Annual Conference of American Society of Andrology (Boston, MA, April 19-23, 2023).
- Kaur G**, Brower G, Lee V, Mitchell J, Cook R, Jones B. Integration of Point of Care Ultrasound into Pre-clerkship curriculum and the Family Medicine Accelerated Program. Society of Teachers of Family Medicine (New Orleans, LA, Jan 26-29, 2023). Selected for Lecture Discussion.
- Kaur G**, Webster D, Kruczek C. Effect of pre-clerkship curriculum restructuring and pass-fail grading on student mental wellness. Society of Teachers of Family Medicine (New Orleans, LA, Jan 26-29, 2023).
- Sabu-Kurian A, Hibler H, Washburn RL, Boothe K, **Kaur G**, Dufour JM. The role of macrophages in Sertoli cell transplant survival without the use of immunosuppressive drugs. American College of Surgeons Clinical Congress (San Diego, CA, Oct 16-20, 2022). Selected for Platform Presentation
- Hussain S, McCabe P, Lee V, Hewetson A, Webster D, Dufour JM, Schneider B, **Kaur G**. Highlighting key elements of the pre-med program at TTUHSC that prepares the students to be successful in

Medical School. Pathway Programs & Bridges 1st Annual Conference (Virtual). Selected for Roundtable Discussion

8. **Kaur G**, Bishop K, Schneider B. Highlighting the benefits of cadaveric dissection in the era of digital world. 39th Annual Meeting of the American Association of Clinical Anatomists (Fort Worth, TX, June 13-17, 2022). Selected for Platform Presentation
9. Brower G, Matejka CN, Zeitouni F, Boomer M, **Kaur G**. Benefits of incorporating ultrasound and clinical simulations in medical pre-clerkship curriculum. 39th Annual Meeting of the American Association of Clinical Anatomists (Fort Worth, TX, June 13-17, 2022). Selected for Tech Fair Presentation
10. Zeitouni F, **Kaur G**, Schneider B. Instructional videos improve academic performance and reduce anxiety in learning clinical anatomy. 39th Annual Meeting of the American Association of Clinical Anatomists (Fort Worth, TX, June 13-17, 2022).
11. Webster D, Jones B, **Kaur G**, Kruczek C, Brower G, Villalobos A. Engaged learning: Integrating simulations, ultrasound and small groups into large-group courses. International Association of Medical Science Educators (IAMSE) Meeting-Pre conference workshop (Denver, CO, June 4-7, 2022).
12. Dufour JM, Washburn RL, Taylor H, **Kaur G**. Immunosuppressive functions of Sertoli cells. Male Reproductive Immunology. American Society for Reproductive Immunology (Nashville, TN, May 22-26, 2022).
13. Washburn RL, **Kaur G**, Chilton B, Reilly B, Dufour JM. Seeking the Sertoli cell complement inhibitory signature to prolong transplant survival. Annual Meeting for the American Association of Immunologists. Immunology2022 (Portland, OR, May 6-10, 2022).
14. Taylor H, **Kaur G**, Dufour JM. Tregs: The Sertoli cell's secret weapon in transplant survival. Annual Meeting for the American Association of Immunologists. Immunology2022 (Portland, OR, May 6-10, 2022).
15. Kruczek C, **Kaur G**. Curriculum restructuring at Texas Tech University Health Sciences Center Medical School: Evaluation and lessons learned. Experimental Biology (Philadelphia, April 2-5, 2022).

Lawrence, John

Grants:

1. Transcriptional Dysfunction in Dentate Gyrus Cell Types: Roles of Retinoic Acid Responsive Genes in Protection Against Alzheimer's Disease Pathogenesis. NIH R01 AG071859-01A1. Lawrence (PI). 1/1/2022-12/31/2026. Total costs: \$1,872,220
2. The hippocampal dentate gyrus in aging and Alzheimer's disease: boosting transcription of retinoic acid-sensitive genes through HDAC inhibition and vitamin A supplementation. NIH R01 AG073826-01A1. Lawrence (PI). 8/1/2022-4/30/2027. Total costs: \$3,158,615

Lee, Jaehoon

Publications:

1. Al-hihi, E. M., Gibson, C. A., **Lee, J.**, Mount, R. R., Irani, N., & McGowan, C. (2022). Improving appropriate imaging for non-specific low back pain. *BMJ Open Quality*, 11, e001539.
2. Arensberg, L. C., Kalender-Rich, J., **Lee, J.**, & Gibson, C. A. (2022). Millennials seeking healthcare: Examining the degree to which patients utilize online resources. *Kansas Journal of Medicine*, 15, 347–351.
3. Assimonye, S., **Lee, J.**, Smith, S., Glenn, J., Kennedy, M., & Ramaswamy, M. (in press). Understanding the changing social and health circumstances of women leaving jail: A social bonds analysis. *Women & Criminal Justice*.
4. Backes, J. M., Gibson, C. A., Mount, R. R., & **Lee, J.** (2022). Identifying patient perceptions and attitudes regarding statin-associated diabetes mellitus. *Future Cardiology*, 18(10), 817–828.
5. Binti Mohamad Ismail, F.-N., Chu, S.-Y., Gan, K.-B., Park, H.-R., **Lee, J.**, Barlow, S. M., & A. Razak, R. (2022). Speech performance among healthy Malay female speakers during dual-task and sentence complexity. *Folia Phoniatrica et Logopaedica*, 74, 112–121.

6. Carter, S., Crews, C., **Lee, J.**, Noble, N., & Li, X. (2022). Acceptability of school shooting prevention procedures among parents. *The Journal of Primary Prevention*, 43, 359–374.
7. Carter, S., Noble, N., **Lee, J.**, Li, X., & Crews, C. (in press). Acceptability of active shooter prevention strategies on college and university campuses. *Journal of Prevention*.
8. Chu, S.-Y., Binti Mohamed Rafi, A., **Lee, J.**, Fierro, V., Gan, C.-H., Singh, S.-J., Hersh, D., & Lin, L.-Y. (in press). The relationship between affiliate stigma, stress and quality of life for parents of individuals with cerebral palsy in Malaysia. *Disability and Rehabilitation*.
9. Chu, S.-Y., **Lee, J.**, Wong, W.-Y., Gan, C.-H., Fierro, V., & Hersh, D. (in press). Knowledge mediates attitude in Autism spectrum disorders? Data from Malaysia. *International Journal of Developmental Disabilities*.
10. Chu, S.-Y., Unicomb, R., **Lee, J.**, Cho, K.-S., St. Louis, K. O., & Harrison, E. (2022). Public attitudes toward stuttering in Malaysia. *Journal of Fluency Disorders*, 74, 105942.
11. Froehlich-Grobe, K., **Lee, J.**, Ochoa, C., Lopez, A. M., Sarker, E., Driver, S., Shegog, R., & Lin, S.-J. (2022). Effectiveness and feasibility of the Workout on Wheels Internet Intervention (WOWii) for individuals with spinal cord injury: A randomized controlled trial. *Spinal Cord*, 60, 862–874.
12. Gibson, C. A., Harvey, S. P., Valentine, H., Landfried, L., & **Lee, J.** (2022). Food insecurity and health-related quality of life among SNAP nutrition incentive participants. *Journal of Hunger & Environmental Nutrition*, 17(4), 540–552.
13. Kim, J.-H., **Lee, J.**, Richardson, T. V., Lee, D.-H., McMahon, B. T., Kim, H., & Sametz, R. R. (2022). Psychometric validation of Adapted Inventory of Virtues and Strengths. *Rehabilitation Counseling Bulletin*, 65(4), 322–334.
14. Kim, S.-Y., **Lee, J.**, & Boone, D. (2022). Protective and risk factors at the intersection of chronic pain, depression, anxiety, and somatic amplification: A latent profile approach. *Journal of Pain Research*, 15, 1107–1121.
15. Molina, A. H., Harvey, J., Pitt, K. M., **Lee, J.**, & Barlow, S. M. (2022). Effects of real-time iEMG biofeedback on facial muscle activation patterns in a child with congenital unilateral facial palsy. *Biomedical Journal of Scientific & Technical Research*, 47(1), 38074–38088.
16. Moon, H., Cheon, J., **Lee, J.**, Banda, D. R., Griffin-Shirley, N., & Ajuwon, P. M. (2022). Factors influencing the intention of persons with visual impairment to adopt mobile applications based on the UTAUT model. *Universal Access in the Information Society*, 21(1), 93–107.
17. O'Brien, B., **Lee, J.**, Kim, S., Nandra, G. S., Pannu, P., Swann, A. C., Murphy, N., Tamman, A. J. F., Amareh, D., Lijffijt, M., Averill, L. A., & Mathew, S. J. (2023). Replication of distinct trajectories of antidepressant response to intravenous ketamine. *Journal of Affective Disorders*, 321, 140–146.
18. Oh, H., **Lee, J.**, Patriquin, M. A., Oldham, J. M., & Salas, R. (in press). Reward processing in psychiatric inpatients with depression. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*.
19. Pandey, Y., **Lee, J.**, Banda, D., Griffin-Shirley, N., Nguyen, T., & Othun, V. (in press). A survey of mobile app use among university students with visual impairment in India. *British Journal of Visual Impairment*.
20. Park, S., Kim, S., **Lee, J.**, & Heo, B. (2022). Evolving norms: Social media data analysis on parks and greenspaces perception changes before and after the COVID 19 pandemic using a machine learning approach. *Scientific Reports*, 12, 13246
21. Ptomey, L. T., Helsel, B. C., White, D. A., **Lee, J.**, Sherman, J. R., Washburn, R. A., Gorkczyca, A. M., & Donnelly, J. E. (2022). Intrapersonal, interpersonal and environmental correlates of moderate to vigorous physical activity and sedentary time in adolescents with intellectual and developmental disabilities. *Journal of Intellectual Disability Research*, 66(6), 503–516.
22. Ptomey, L. T., **Lee, J.**, White, D. A., Helsel, B. C., Washburn, R. A., & Donnelly, J. E. (2022). Changes in physical activity across a 6-month weight loss intervention in adolescents with intellectual and developmental disabilities. *Journal of Intellectual Disability Research*, 66(6), 545–557.
23. Sandfort E. C., **Lee, J.**, Hozan, M., Greenwood, J., & Barlow, S. M. (2022). Orofacial and digit force dynamics in neurotypical children. *Biomedical Journal Scientific Technical Research*, 44(3), 35478–35490.

24. Salyer, C., **Lee, J.**, Lorvick, J., Comfort, M., Cropsey, K., Smith, S., Emerson, A., & Ramaswamy, M. (2022). Cervical cancer prevention behaviors among criminal-legal involved women from three U.S. cities. *Journal of Women's Health*, 31(4), 533–545.
25. Shen, C.-L., Watkins, B. A., Kahathuduwa, C., Chyu, M.-C., Zabet-Moghaddam, M., Elmassry, M. M., Luk, H.-Y., Brismee, J.-M., Knox, A., **Lee, J.**, Zumwalt, M., Wang, R., Wager, T. D., & Neugebauer, V. (2022). Tai Chi improves brain functional connectivity and plasma lysophosphatidylcholines in postmenopausal women with knee osteoarthritis: An exploratory pilot study. *Frontiers in Medicine*, 8, 775344.
26. Shepard, C. A., Rufino, K. A., **Lee, J.**, Tran, T., Paddock, K., Wu, C., Oldham, J. M., Mathew, S. J., & Patriquin, M. A. (in press). Nighttime sleep quality and daytime sleepiness predicts suicide risk in adults admitted to an inpatient psychiatric hospital. *Behavioral Sleep Medicine*.
27. Smith, P., **Lee, J.**, & Chang, R. (2022). Characterizing competing tensions in Black immigrant literacies: Beyond partial representations of success. *Reading Research Quarterly*, 57(1), 59–90.
28. Yi, M., Wang, J., Flores, R., & **Lee, J.** (2022). Measuring preservice elementary teachers' geometry knowledge for teaching 2-dimensional shapes. *Eurasia Journal of Mathematics, Science and Technology Education*, 18(8), 2137.

Presentations:

1. Gibson, C. A., Gupta, A., Naik, A., Sullivan, D. K., **Lee, J. H.**, Backes, J., Harvey, S., Shaffer, K., Mount, R., American Society for Nutrition, "Using formative research to develop a healthy lifestyle program for recent kidney transplant recipients," Orland, FL. (November 2022).
2. Veronica, F., Chu, S.-Y., Rafi, A., **Lee, J. H.**, Gan, C., Singh, S., Hersh, D., Lin, L.-Y., American Speech-Language-Hearing Association, "We can't die first: The impact on parents caring for children with cerebral palsy," New Orleans, LA. (November 2022).
3. Moon, H., Kim, S., **Lee, J. H.**, Association for Educational Communications and Technology, "Mining Twitter to analyze faculty perceptions of online teaching and learning over time: Challenges and opportunities," Las Vegas, NV. (October 2022).
4. Kim, Y., **Lee, J. H.**, American Educational Research Association, "A Monte Carlo comparison of handling missing covariates in SEM-based meta-analysis," San Diego, CA. (April 2022).
5. Yi, S., Shin, S., **Lee, J. H.**, Siwatu, K., American Educational Research Association, "Development of the College Cultural Fit Scale (CCFS): Predicting college adjustment and achievement," San Diego, CA. (April 2022).
6. **Lee, J. H.**, Kim, S., Anxiety and Depression Association of America, "Person-centered approach of identifying trajectories of patient response to treatment over time: Longitudinal mixture modeling and machine learning," Denver, Colorado. (March 2022).
7. **Lee, J.**, Jung, K., Texas Association for Institutional Research, "Funding and building developmental math and academic support services: Identifying successes and challenges for Hispanic and low-income students," Dallas, TX. (February 2022).
8. Bhusal, A., Jung, K., **Lee, J.**, Texas Association for Institutional Research, "Google Data Studio as an alternative institutional research and reporting tool," Dallas, TX. (February 2022).
9. Jung, K., **Lee, J.**, Li, X., Texas Association for Institutional Research, "Predicting college student purge using a classification tree model," Dallas, TX. (February 2022).

Grant Awards:

1. Localized mHealth approach to boosting COVID-19 testing and vaccine literacy, access, and uptake among women with criminal legal system involvement, Ramaswamy (PI), NIMHD U01MD017415, 01/01/2022–11/30/2026, \$2,458,129, Co-I
2. Innovating and advancing in STEM education, Wahi (PI), ED P031C210026, 10/01/2021–9/30/2026, \$4,783,323, Co-I.
3. Curcumin and retinal amyloid-beta pilot study, Shen (PI), Sabinsa Corporation, 01/01/2022–12/31/2022, \$94,991, Co-I.

4. Effect of annatto-derived geranylgeraniol (GG) on statin-associated myopathy, Shen (PI), American River Nutrition, 01/01/2022–12/31/2023, \$266,294, Co-I.
5. Oral diadochokinesis among Malaysian-Malay speakers: A comparative study of neurotypical adults and individuals with Parkinson's disease, Chu (PI), Universiti Kebangsaan Malaysia, 10/01/2022–09/31/2023, \$22,000, Co-I.

Grant Applications: 20+ applications to federal and state agencies

Lee, Sueann

Publications:

1. Liu, Y., & **Lee, S.A.S.** (2022). A study adopting a motor-based hierarchically structured intervention for remediating nasal fricatives in children with normal velopharyngeal function requires a better experimental design (Commentary paper). *Evidence-Based Communication Assessment and Intervention*, 16, 29-34.
2. **Lee, S.A.S.** (2022). The feasibility of telepractice intervention using animated illustrations for treating prepositions: A pilot study. *Online Journal of Otolaryngology and Rhinology*, 5, 1-8.
3. Becker, B., Harvey, B., **Lee, S.A.S.**, & Demke, J. (2022). Intelligence of children with repaired cleft palate: A retrospective chart review study. *Online Journal of Otolaryngology and Rhinology*, 5,
4. Liu, Y., **Lee, S.A.S.** & Chen, W. (2022). The correlation between perceptual ratings and nasalance scores in individuals with oral-nasal balance disorders: A systematic review. *Journal of Speech, Language, Hearing Research*, 65, 2215-2234.

Invited workshop:

1. **Lee, S.A.S.** (2022). Aural Rehabilitation. 6 Hour workshop at Hue University of Medicine and Pharmacy, Hue, Vietnam, December, 2022
2. **Lee, S.A.S.** (2022). Speech Sound Disorders: Assessment & Intervention. 6 Hour workshop at Medical University, Ho Chi Minh City, Vietnam, December 2022
3. **Lee, S.A.S.** (2022). Introduction to Communication Science and Disorders. 3 Hour workshop at National University of Health Science, Vientiane, Laos, December, 2022
4. **Lee, S.A.S.** (2022). Speech Sound Disorders: Assessment & Intervention. 6 Hour workshop at Hanoi Medical University, Department of Rehabilitation, Hanoi, Vietnam, December, 2022

Presentations:

Oral:

1. **Lee, S.A.S.** (2022). Introduction of ultrasound technology in speech intervention for children with cleft palate. A paper accepted for oral presentation at American Craniofacial Association's 78th Annual Meeting, Fort Worth, TX.
2. **Lee, S.A.S.**, Jakielski, K., Seung, H.K., & Koul, R. (2022). Global outreach experiences as a Fulbright US Scholar. 1 Hour seminar at the Annual Convention of the American Speech-Language-Hearing Association, New Orleans, LA
3. **Lee, S.A.S.** (2022). Benefit of animated illustrations for children's visual attention and word learning: An eye-tracking study. 30-minute technical oral presentation at the Annual Convention of the American Speech-Language-Hearing Association, New Orleans, LA
4. Byrd, A., **Lee, S.A.S.**, Matthews, J., Henman, K., Write, M., Fannin, D. (2022). Reframing professionalism in CSD to address diversity, equity, inclusion and access. 1-hour seminar at the Annual Convention of the American Speech-Language-Hearing Association, New Orleans, LA.

Posters:

5. Liu, L*, **Lee, S.A.S.**, Chen, W. (2022). The correlation between perceptual ratings and nasalance scores in resonance disorders: A systematic review. A paper accepted for oral presentation at American Craniofacial Association's 78th Annual Meeting, Fort Worth, TX.

6. **Lee, S.A.S.**, Ortega, F., Slayton, K., & Marley, M. (2022). The effect of animated stimuli and executive function on online language learning. A poster presentation at the Annual Convention of the American Speech-Language-Hearing Association, New Orleans, LA

Grant:

1. 2021-2027. \$3,199,247.00. National Institute of Dental and Craniofacial Research (NIDCR), UG3-UH3 Grant. Project title: Speech intervention via telepractice for children with repaired cleft palate: Randomized controlled trial and assessment of speech production and perception skills. Role: Principle Investigator

Luk, HuiYing

Publications:

1. Jiwan, NC., Appell, C., Wang, Rui., Shen, CL., **Luk, HY.** (2022). Geranylgeraniol Supplementation Mitigates Soleus Muscle Atrophy via Changes in Mitochondrial Quality in Diabetic Rats, *In Vivo*, 36(6):2638-2649, DOI: 10.21873/invivo.12998. Epub 2022 Oct 29
2. Al Masud, A. **Luk, HY.**, Shen, CL., Chyu, MC. (2022). Impact of Local Vibration Training on Neuromuscular Activity, Muscle Cell, and Muscle Strength: a Review. *Critical Reviews in Biomedical Engineering*; DOI: 10.1615/CritRevBiomedEng.2022041625
3. **Luk, HY.**, Jiwan, NC., Appell, CR., Levitt, DE., Vingren, JL. (2022). Sex Specific Mitochondrial Dynamics and Mitophagy Response to Muscle Damage, *Physiological Reports*, 10(10), DOI: 10.14814/phy2.15230.
4. Shen, CL., Watkins, BA., Kahathuduwa, C., Chyu, MC., Zabet-Moghaddam, M., Elmassry, MM., **Luk, HY.**, Brismee, JM., Knox, A., Lee, J., Zumwalt, M., Wang, R., Wager, TD., Neugebauer, V. (2022). Tai Chi Improves Brain Functional Connectivity and Plasma Lysophosphatidylcholines in Postmenopausal Women with Knee Osteoarthritis: An Exploratory Pilot. *Frontiers in Medicine*, 8:3775344, doi: 10.3389/fmed.2021.775344
5. Vingren, JL., Boyett, JC., Lee, EC., Levitt, DE., **Luk, HY.**, McDermott, BP., Munoz, CX., Ganio, MS., Armstrong, LE., Hill, DW (2022). Effect of Ibuprofen on Circulating Cytokine and Leukocyte Subset Responses to 164-km Road Cycling Event in a Hot Environment. *Research Quarterly for Exercise and Sport*; <https://doi.org/10.1080/02701367.2021.1981539>

Grants:

National Strength and Conditioning Association, Young Investigator. Title: The Effect of Dehydration on Sleep and Anabolism

Lyford, Conrad

Publications:

1. Gong, Zijan and **Conrad Lyford**. "Using Social Media for More Engaged Users and Enhanced Health Communication in Diabetes Care," *American Journal of Lifestyle Medicine*, January 2022. doi:10.1177/15598276211064832
2. Sienso, Gifty, **Conrad Lyford**, Wilna Oldewage-Theron. "Using instrumental variables to establish the relationship between household production diversity and household dietary diversity in northern Ghana," October 2022, *African Journal of Food, Agriculture, Nutrition and Development* 22(112):21036-21055 DOI: 10.18697/ajfand.112.20255

Book chapter:

1. Antwi, Kwaku, **Conrad Lyford** and Patricia Solis." Rural Household Food Insecurity and Child Malnutrition in Northern Ghana," chapter 4 in *Open Mapping towards Sustainable Goals*, pp. 47-56., Springer, 2022. https://link.springer.com/chapter/10.1007/978-3-031-05182-1_4

Presentations:

1. Uche Samuel, Janani Rajbhandari-Thapa and **Conrad Lyford**. “Medicaid Expansion and its Impacts on Low-Income Adults Health Care Access by Chronic Disease Status” Selected paper presented at the Southern Agricultural Economics Association (SAEA) 54th Annual Meeting in New Orleans, LA, February 12-15, 2022.

Grants:

1. “OIA 2022 Mandela Washington Fellowship”, January 2022 to September 2022, Department of State, Bureau of Educational and Cultural Affairs (\$147,950, my share \$49,317)
2. “Bridging the Gap Towards Successful Vegetable Introduction: Proof in Concept for Early Head Start”, Texas Tech University, 2022 Engaged Scholarship Collaboration Seed Grant (\$6,000, my share \$2,000)

Award:

Fulbright Scholar, University for Development Studies, Tamale, Ghana, August 2022 – January 2023

Moustaid-Moussa, Naimi

Publications:

1. Coates PM, Allen LH, Belury M, Schalinske K, Booth SL, Stull A, Lyle B, Bailey RL, Krebs N, McBurney MI, **Moustaid-Moussa N**, West KP, MacFarlane A. A New Chapter for the American Society for Nutrition's Journal Portfolio. *J Nutr*. 2022 Apr 1;152(4):1175-1176. doi: 10.1093/jn/nxab371. PMID: 35142826; PMCID: PMC8971002.
2. Khan F, Khan H, Khan A, Yamasaki M, **Moustaid-Moussa N**, Al-Harrasi A, Rahman SM. Autophagy in adipogenesis: Molecular mechanisms and regulation by bioactive compounds. *Biomed Pharmacother*. 2022 Nov;155:113715. doi: 10.1016/j.biopha.2022.113715. Epub 2022 Sep 21. PMID: 36152415.
3. Mubtasim N, **Moustaid-Moussa N**, Gollahon L. The Complex Biology of the Obesity-Induced, Metastasis-Promoting Tumor Microenvironment in Breast Cancer. *Int J Mol Sci*. 2022 Feb 24;23(5):2480. doi: 10.3390/ijms23052480. PMID: 35269622; PMCID: PMC8910079.
4. Islam T, Albracht-Schulte K, Ramalingam L, Schlabritz-Lutsevich N, Park OH, Zabet-Moghaddam M, Kalupahana NS, **Moustaid-Moussa N**. Anti-inflammatory mechanisms of polyphenols in adipose tissue: role of gut microbiota, intestinal barrier integrity and zinc homeostasis. *J Nutr Biochem*. 2022 Nov 26;115:109242. doi: 10.1016/j.jnutbio.2022.109242. Epub ahead of print. PMID: 36442715.
5. Chen YT, Ramalingam L, Garcia CR, Ding Z, Wu J, **Moustaid-Moussa N**, Li W. Engineering and Characterization of a Biomimetic Microchip for Differentiating Mouse Adipocytes in a 3D Microenvironment. *Pharm Res*. 2022 Feb;39(2):329-340. doi: 10.1007/s11095-022-03195-0. Epub 2022 Feb 15. PMID: 35166994.
6. Rodriguez-Irizarry VJ, Schneider AC, Ahle D, Smith JM, Suarez-Martinez EB, Salazar EA, McDaniel Mims B, Rasha F, Moussa H, **Moustaid-Moussa N**, Pruitt K, Fonseca M, Henriquez M, Clauss MA, Grisham MB, Almodovar S. Mice with humanized immune system as novel models to study HIV-associated pulmonary hypertension. *Front Immunol*. 2022 Aug 5;13:936164. doi: 10.3389/fimmu.2022.936164. PMID: 35990658; PMCID: PMC9390008.
7. Menikdiwela KR, Kahathuduwa C, Bolner ML, Rahman RL, **Moustaid-Moussa N**. Association between Obesity, Race or Ethnicity, and Luminal Subtypes of Breast Cancer. *Biomedicines*. 2022 Nov 15;10(11):2931. doi: 10.3390/biomedicines10112931. PMID: 36428500; PMCID: PMC9687751.
8. Menikdiwela KR, Guimarães JPT, Scoggin S, Gollahon LS, **Moustaid-Moussa N**. Dietary pH Enhancement Improves Metabolic Outcomes in Diet-Induced Obese Male and Female Mice: Effects of Beef vs. Casein Proteins. *Nutrients*. 2022 Jun 22;14(13):2583. doi: 10.3390/nu14132583. PMID: 35807769; PMCID: PMC9268221.
9. Regmi A, Singh S, **Moustaid-Moussa N**, Coldren C, Simpson C. The Negative Effects of High Rates of Biochar on Violas Can Be Counteracted with Fertilizer. *Plants (Basel)*. 2022 Feb 11;11(4):491. doi: 10.3390/plants11040491. PMID: 35214822; PMCID: PMC8875082.
10. Guimarães JPT, Menikdiwela KR, Ramalho T, Queiroz LAD, Kalupahana NS, Jancar S, Ramalingam L, Martins JO, **Moustaid-Moussa N**. Effects of captopril on glucose metabolism and autophagy in liver

and muscle from mice with type 1 diabetes and diet-induced obesity. *Biochim Biophys Acta Mol Basis Dis.* 2022 Oct 1;1868(10):166477. doi: 10.1016/j.bbadis.2022.166477. Epub 2022 Jun 30. PMID: 35780942.

- Schuster C, Wolpert N, **Moustaid-Moussa N**, Gollahon LS. Combinatorial Effects of the Natural Products Arctigenin, Chlorogenic Acid, and Cinnamaldehyde Commit Oxidation Assassination on Breast Cancer Cells. *Antioxidants (Basel).* 2022 Mar 20;11(3):591. doi: 10.3390/antiox11030591. PMID: 35326241; PMCID: PMC8945099.
- Soto PL, Ramalingam L, George B, **Moustaid-Moussa N**. Long-term effects of adolescent exposure to olanzapine in C57BL/6 J mice and the impact of dietary fish oil supplementation. *Psychopharmacology (Berl).* 2022 Oct;239(10):3117-3131. doi: 10.1007/s00213-022-06193-7. Epub 2022 Jul 27. PMID: 35896725.
- Camfield E, Bowman A, Choi J, Gwinn K, Labbe N, Rajan K, Ownley B, **Moustaid-Moussa N**, D'Souza DH. Switchgrass extractives to mitigate *Escherichia coli* O157:H7 and *Salmonella enterica* serovar Typhimurium contamination of romaine lettuce at pre- and postharvest. *J Food Sci.* 2022 Aug;87(8):3620-3631. doi: 10.1111/1750-3841.16249. Epub 2022 Jul 14. PMID: 35836257.
- Shen CL, Dufour JM, Miranda JM, Kaur G, Chung E, Ramalingam L, **Moustaid-Moussa N**, Cao JJ. Effect of Dietary Geranylgeraniol and Green Tea Polyphenols on Glucose Homeostasis, Bone Turnover Biomarkers, and Bone Microstructure in Obese Mice. *Int J Mol Sci.* 2023 Jan 4;24(2):979. doi: 10.3390/ijms24020979. PMID: 36674494; PMCID: PMC9866936.

Grant Awards

- Co-I USDA NIFA AFRI REEU\$500,000. 09/01/2021 –08/31/2024 Nutrition Bench-to-Community Engaged Scholars in Texas (Nutrition BEST) REEU Program (PI: Dr. Naima Moustaid-Moussa)
- Chanaka Kahathuduwa (Psychiatry Lbk). Title: Texas Child Mental Health Consortium CPAN, TCHATT, CPWE, and CAP Fellowship (Contract grant – University of Texas System). Funded by Texas Higher Education Coordinating. \$500,000 for 1 year.

Murimi, Mary

Publications:

- Murimi M**. What is the Place of Beef in a Healthful Sustainable Homo sapiens Diet? *Am J Health Promot.* 2022 Jun;36(5):898-900. doi: 10.1177/08901171221088661c. PMID: 35531995.
- Kitessa DA, Bacha K, Tola YB, **Murimi M**, Smith E, Gershe S. Nutritional compositions and bioactive compounds of "Shameta", A traditional home made fermented porridge provided exclusively to lactating mothers in the western part of Ethiopia. *Heliyon.* 2022 Feb 17;8(2):e08990. doi: 10.1016/j.heliyon.2022.e08990. PMID: 35243103; PMCID: PMC8866073.
- Moyeda-Carabaza AF, Githinji P, Nguyen B, **Murimi M**. The influence of frequent consumption of foods-away-from-home on the total diet quality and weight status among faculty and staff. *J Am Coll Health.* 2023 Jan;71(1):292-299. doi: 10.1080/07448481.2021.1891081. Epub 2021 Mar 24. PMID: 33759716.

Nair, Nandini

Publications:

- Mittal N, Pawar D, Parmar K, Sly Z, Del Rio-Pertuz G, Ansari MM, **Nair N**. Covaxin-Induced Lymphocytic Myocarditis. *Cureus.* 2022 Jul 11;14(7):e26759. doi: 10.7759/cureus.26759. PMID: 35967168; PMCID: PMC9365502.
- Nair N**. Vascular rejection in cardiac allograft vasculopathy: Impact on graft survival. *Front Cardiovasc Med.* 2022 Aug 4;9:919036. doi: 10.3389/fcvm.2022.919036. PMID: 35990962; PMCID: PMC9386065.
- Abdelnabi M, EINawaa S, Benjanuwattra J, Elmassy M, **Nair N**. Ustekinumab-Induced Fatal Acute Heart Failure in a Young Female: A Case Report. *Methodist Debakey Cardiovasc J.* 2022 Jul 12;18(1):54-58. doi: 10.14797/mdcvj.1076. PMID: 35891701; PMCID: PMC9284982.

4. **Nair N.** Use of machine learning techniques to identify risk factors for RV failure in LVAD patients. *Front Cardiovasc Med.* 2022 Sep 14;9:848789. doi: 10.3389/fcvm.2022.848789. PMID: 36186964; PMCID: PMC9515379.
5. Del Rio-Pertuz G, **Nair N.** Gastrointestinal bleeding in patients with continuous-flow left ventricular assist devices: A comprehensive review. *Artif Organs.* 2023 Jan;47(1):12-23. doi: 10.1111/aor.14432. Epub 2022 Nov 5. PMID: 36334280.
6. **Nair N,** Du D, Hu Z, Gongora E. Risk Prediction Model for Survival of Wait-List Patients on Axial CF-LVAD: A UNOS Database Analysis. *Transplant Proc.* 2022 Sep;54(7):1894-1901. doi: 10.1016/j.transproceed.2022.04.029. Epub 2022 Aug 2. PMID: 35927087.

Neugebauer, Volker

Publications:

1. Presto, P., Ji, G., Junell, R., Griffin, Z., **Neugebauer, V.** Fear extinction based inter-individual and sex differences in pain-related vocalizations and anxiety-like behaviors but not nocifensive reflexes. *Brain Sci.* 11: 1339 (19 pp.), 2021. PMID: 34679403. PMC8533751.
2. Avila, M., **Neugebauer, V.**, DeToledo, J. Gender differences in MS related pain, correlation with MRI lesion localization and burden of disease. *Pharm. Pharmacol. Int. J.* 9:258–261, 2021.
3. Shen, C.-L., Wang, R., Ji, G., Elmassry, M.M., Zabet-Moghaddam, M., Vellers, H., Hamood, A.N., Gong, X., Mirzaei, P., Sang, S., **Neugebauer, V.** Dietary supplementation of gingerols- and shogaols-enriched ginger root extract attenuate pain-associated behaviors while modulating gut microbiota and metabolites in rats with spinal nerve ligation. *J. Nutr. Biochem.* 100: 108904 (12 pp.), 2022. PMID: 34748918; PMC8794052.
4. Shen, C.-L., Watkins, B., Kahathuduwa, C., Chyu, M.-C., Zabet, M., Elmassry, M.M., Luk, H.-Y., Brismee, J.-M., Knox, A., Lee, J., Zumwalt, M., Wang, R., Wager, T.D., **Neugebauer, V.** Tai Chi improves brain functional connectivity and plasma lysophosphatidylcholines in postmenopausal women with knee osteoarthritis: an exploratory pilot study. *Front. Med.* 8: 775344 (16 pp.), 2022. PMID: 35047525. PMC8761802.
5. Ashraf-Uz-Zaman, M., Ji, G., Tidwell, D., Yin, L., Burugu, D., Thakolwiboon, S, Pan, J., Junell, R., Griffin, Z., Shahi, S., Barthels, D., Sajib, M.S., Trippier, P.C., Mikelis, C.M., Das, H., Avila, M., **Neugebauer, V.**, German, N.A. Evaluation of Urea-Based Inhibitors of the Dopamine Transporter Using the Experimental Autoimmune Encephalomyelitis Model of Multiple Sclerosis. *ACS Chem. Neurosci.* 13: 217–228, 2022. PMID: 34978174.
6. Shen, C.-L., Castro, L., Fang, C.-Y., Castro, M., Sherali, S., White, S., Wang, R., **Neugebauer, V.** Bioactive compounds for neuropathic pain: an update on preclinical studies and future perspectives. *J. Nutr. Biochem.* 104: 108979 (29 pp.), 2022. PMID: 35245654.
7. Presto, P., Mazzitelli, M., Junell, R., Griffin, Z., **Neugebauer, V.** Sex differences in pain along the neuraxis. *Neuropharmacology* 210: 109030 (14 pp.), 2022. PMID: 35331712. PMC9354808.
2. Mazzitelli, M., Yakhnitsa, V., Neugebauer, B., **Neugebauer, V.** Optogenetic manipulations of CeA-CRF neurons modulate pain- and anxiety-like behaviors in neuropathic pain and control rats. *Neuropharmacology* 210: 109031 (12 pp.), 2022. PMID: 35304173. PMC9352141
3. Shen, C.-L., Schuck, A., Tompkins, C., Dunn, D.M., **Neugebauer, V.** Bioactive compounds for fibromyalgia-like symptoms: a narrative review and future perspectives. *Int. J. Environ. Res. Public Health* 19: 4148 (17 pp), 2022. PMID: 35245654. PMC8998198.
4. Ito, H., Navratilova, E., Vagnerova, B., Watanabe, M., Kopruszinski, C., Moreira de Souza, L.H., Yue, X., Ikegami, D., Moutal, A., Patwardhan, A., Khanna, R., Yamazaki, M., Guerrero, M., Rosen, H., Roberts, E., **Neugebauer, V.**, Dodick, D.W., Porreca, F. Chronic pain recruits hypothalamic dynorphin/kappa opioid receptor signaling to promote wakefulness and vigilance. *Brain* 153, 2022. PMID: 35485490.
5. Yakhnitsa, V., Ji, G., Hein, M., Presto, P., Griffin, Z., Ponomareva, O., Navratilova, E., Porreca, F., **Neugebauer, V.** Kappa opioid receptor blockade in the amygdala mitigates pain like-behaviors by inhibiting CRF neurons in a rat model of functional pain. *Front. Pharmacol.* 13: 903978 (16 pp.), 2022. PMID: 35694266. PMC9177060.

6. Presto, P., **Neugebauer, V.** Sex differences in CGRP regulation and function in the amygdala in a rat model of neuropathic pain. *Front. Mol. Neurosci.* 15: 928587 (14 pp.), 2022. PMID: 35726298. PMC9206543.
7. Shen, C.-L., Wang, R., Yakhnitsa, V., Santos, J., Watson, C., Kiritoshi, T., Ji, G., Hamood, A., **Neugebauer, V.** Gingerol-enriched ginger supplementation mitigates neuropathic pain via mitigating intestinal permeability and neuroinflammation: gut-brain connection. *Front. Pharmacol.* 13: 912609 (10 pp.), 2022. PMID: 35873544. PMC9305072
8. Kopruszinski, C.M., Watanabe, M., Martinez, A.L., de Souza, L.H.M., Dodick, D.W., Moutal, A., **Neugebauer, V.**, Porreca, F., Navratilova, E. Kappa opioid receptor agonists produce sexually dimorphic and prolactin-dependent hyperalgesic priming, *Pain*, 2022.
9. Mazzitelli, M., Presto, P., Antenucci, N., Meltan, S., **Neugebauer, V.** Recent Advances in the Modulation of Pain by the Metabotropic Glutamate Receptors. *Cells* 11: 2608 (40 pp), 2022. PMID: 36010684; PMC9406805.

Meeting Abstracts and Presentations (* denotes peer-reviewed):

1. *Pan, J., Thakolwiboon, S., German, N., **Neugebauer, V.**, Avila, M. Neuroprotective effect of AZ257, a novel urea-based dopamine transporter inhibitor, in the experimental autoimmune encephalitis (EAE) mouse model. American Academy of Neurology 2022 Annual Meeting, #2267, 2022.
2. Azzam, S., Manczak, M., **Neugebauer, V.** Studying the effect of mitochondrial dysfunction and other hallmarks of Alzheimer's. 34rd Annual Student Research Week, p. 124, 2022.
3. Griffin Z., Yakhnitsa, V., Hein, M., Navratilova, E., Presto, P., Porreca, F., **Neugebauer, V.** Kappa opioid receptor blockade reduces pain-like behaviors and restores inhibition of amygdala CRF neurons in a functional pain model in rats. 34rd Annual Student Research Week, p. 130, 2022.
4. Junell, R., Presto, P. Ponomarev, I., **Neugebauer, V.** Subacute silencing of HMGB1 in the amygdala inhibits pain-related behaviors in a rat model of chronic neuropathic pain. 34rd Annual Student Research Week, p. 133, 2022.
5. Watson, C., Wang, R., Yakhnitsa, V., Santos, J., Kiritoshi, T., Ji, G., **Neugebauer, V.**, Shen, C.-L. Ginger root extract improves mitochondrial dysfunction in NP model animals. 34rd Annual Student Research Week, p. 146, 2022.
6. Nia, S.S., Hossain, M.A., Ji, G., Obeng, S., Nozohouri, S., Patel, D., Kalem, R., Jonnalagadda, S., Sifat, A.E., Hiranita, T., Abbruscato, T.J., Trippier, P.C., Putnam, W.T., **Neugebauer, V.**, German, N.A. Selective KOR Antagonists, Novel Candidates For Treatment of Neuropathic Pain. 34rd Annual Student Research Week, p. 159, 2022.
7. Presto, P., **Neugebauer, V.** CGRP1 receptor blockade in the amygdala in neuropathic pain: cellular and behavioral outcomes. 34rd Annual Student Research Week, p. 161, 2022.
8. Shahi, S., Ashraf-Uz-Zaman, M.D., Ji, G., Tidwell, D., Yin, L., Thakolwiboon, S., Pan, J., Trippier, P.C., Avila, M., **Neugebauer, V.**, German, N.A. Novel class of DAT inhibitor for the treatment of addiction. 34rd Annual Student Research Week, p. 163, 2022.
9. Presto, P., **Neugebauer, V.** CGRP1 receptor blockade in the amygdala in neuropathic pain: Cellular and behavioral effects. 6th Annual CTNT Symposium, p. 28, 2022.
10. *Shen, C.-L., Newman, J.W., Elmassry, M.M., Borkowski, K., Chyu, M.-C., Kahathuduwa, C., **Neugebauer, V.**, Watkins, B.A. Tai Chi improves plasma levels of oxylipins and endocannabinoids in postmenopausal women with knee osteoarthritic pain. International Congress on Integrative Medicine and Health, 1866, 2022.
11. *Shen C.-L., Elmassry, M.M., Santos, J., Wang, R., Yakhnitsa, V., Kiritoshi, T., Ji, G., Lovett, J., Hamood, A., **Neugebauer, V.** Two Curcumin extracts modify composition of gut microbiota, tight junction protein, and neuroinflammation in rats with neuropathic pain: microbiota-gut-brain axis, Nutrition, PO19-25-22, ID 1201566 2022.
12. *Shen C.-L., Wang, R., Yakhnitsa, V., Santos, J., Watson, C., Kiritoshi, T., Ji, G., Kim, N., Lovett, J., Hamood, A., **Neugebauer, V.** Ginger root extract mitigates neuropathic pain via suppressing neuroinflammation: gut-brain connection. Nutrition, PO19-24-22, ID 1201512, 2022.

13. * Santos, J.M., Wang, R., Driver, Z., Bhakta, V., Contreras, J., Yakhnitsa, V., Kiritoshi, T., Ji, G., **Neugebauer, V.**, Shen, C.-L. Curcumin and Curcuminoid effects modulating chronic mechanical sensitivity in spinal nerve ligation model revert mitochondria dysfunction and oxidative stress. Nutrition, PO07-63-22, ID 1209117, 2022.
14. *Presto, P., Ponomarev, I., **Neugebauer, V.** Subacute Silencing of HMGB1 in the Amygdala Reduces Pain-Related Behaviors in a Rat Model of Chronic Neuropathic Pain. 19th World Congr. Pain, IASP, PFR189, 2022.
15. *Mazzitelli, M., **Neugebauer, V.** Group II mGluR agonists decrease CeA neuronal excitability via astrocytic mGluR3 activation in an arthritis pain model. 19th World Congr. Pain, IASP, PTH80, 2022.
16. John, J., **Neugebauer, V.** Chemogenetic modulation of the amygdala in pain. Transformative Undergraduate Experiences Symposium, 55, 2022.
17. Santos, J.M., Wang, R., **Neugebauer, V.**, Shen, L. Curcumin effects modulating chronic pain in spinal nerve ligation (SNL) model by reverting mitochondria dysfunction and oxidative stress in spinal cord and amygdala. 4th Integrative Medicine Symposium and 11th Gender-Specific Medicine and Women's Health Symposium, LWBIWH, 2022.
18. *Welch, G.S., Presto, P., Mendoza, B., **Neugebauer, V.** Role of exogenously induced neuroimmune activation in the rodent right and left central amygdala. Soc. Neurosci. Abstr. 51: 047.01, 2022.
19. *Kiritoshi, T., Yakhnitsa, V., **Neugebauer, V.** Differential pain-related synaptic and excitability changes in amygdala CRF and non-CRF neurons in acute and chronic phases of a neuropathic pain model. Soc. Neurosci. Abstr. 51: 047.02, 2022.
20. *Ji, G., Kiritoshi, T., Yakhnitsa, V., Navratilova, E., Porreca, F., **Neugebauer, V.** Chemogenetic manipulation of amygdala kappa opioid receptor neurons modulates amygdala neuronal activity. Soc. Neurosci. Abstr. 51: 047.03, 2022.
21. *Mazzitelli, M., **Neugebauer, V.** mGluR2 and mGluR3 activation mediate different neuronal and synaptic functions of CeA neurons in an arthritis pain model. Soc. Neurosci. Abstr. 51: 047.04, 2022.
22. *Mendoza, B., Presto, P., Ponomarev, I., **Neugebauer, V.** Hmgb1 silencing in the amygdala inhibits pain-related behaviors in a sex-specific manner in a rat neuropathic pain model. Soc. Neurosci. Abstr. 51: 047.05, 2022.
23. *Yakhnitsa, V., Ponomareva, O., Thompson, J., Pruitt, K., **Neugebauer, V.** Reduced SK2-channel expression in central nucleus of amygdala in chronic neuropathic pain. Evidence for epigenetic mechanism. Soc. Neurosci. Abstr. 51: 047.06, 2022.
24. *Presto, P., Ji, G., Ponomarev, I., **Neugebauer, V.** Transcriptomic profiling of the central and basolateral amygdala in a rat model of chronic neuropathic pain. Soc. Neurosci. Abstr. 51: 047.07, 2022.
25. *Antenucci, N., Ji, G., Kiritoshi, T., Navratilova, E., Porreca, F., **Neugebauer, V.** Chemogenetic manipulation of amygdala kappa opioid receptor neurons modulates neuropathic pain behaviors. Soc. Neurosci. Abstr. 51: 047.08, 2022.
26. **Neugebauer, V.**, Mazzitelli, M. Amygdala mGluR2 and mGluR3 modulate different aspects of arthritis pain-related behaviors. Soc. Neurosci. Abstr. 51: 047.09, 2022.
27. *Kopruszinski, C.M., Stratton, H.J., Watanabe, M., Martinez, A.L., Moreida De Souza, L., Dodicks, D.W., Moutal, A., **Neugebauer, V.**, Porreca, F., Navratilova, E. Kappa opioid receptor agonists produce sexually dimorphic and prolactin-dependent hyperalgesic priming. Soc. Neurosci. Abstr. 51: 541.16, 2022.
28. *Manczak, M., Yib, X., Burugu, D., Lawrence, J.J., **Neugebauer, V.** The role of mitochondrial fission protein Drp1 in mitophagy process in transgenic mouse model (Tau-P301L). Soc. Neurosci. Abstr. 51: 705.19, 2022.
29. *Shen, C.-L., Elmassry, M.M., Santos, J.M., **Neugebauer, V.** Effects of two curcumin extracts on lipid and amino acid metabolites in amygdala and colon of rats with neuropathic pain. 4th Asia-Pacific Nutrigenomics & Nutrigenetics Organisation APNNO22 Conference, Taipei, Taiwan.

Invited Lectures during reporting period:

1. 09-21-2022 “Role of Amygdala Neuro-Immune Signaling in Chronic Neuroplasticity and Pain Behaviors”. Topical Workshop - Session: The Amygdala as a Master Generator of Pain Plasticity - from Nociceptive Amygdala to Nociplastic Amygdala, IASP 2022 World Congress on Pain, Toronto, Canada.
2. 09-19-2022 “Amygdala Neuroplasticity and Pain Behaviors with a Focus on CRF Neurons”. Refresher Course - Session: The central amygdala in chronic pain - circuit, neuropeptides, and nociplasticity, IASP 2022 World Congress on Pain, Toronto, Canada.
3. 06-16-2022 “Emotional aspects of pain – preclinical studies. Behavioral assessment”. Neuroscience School of Advanced Sciences, Venice, Italy.
4. 06-16-2022 “Emotional aspects of pain – preclinical studies. Neuroplasticity”. Neuroscience School of Advanced Sciences, Venice, Italy.
5. 06-01-2022 “Amygdala CRF neurons and pain modulation”. Pain Mechanisms and Therapeutics Conference. Verona, Italy
6. 04-30-2022 “Mentoring Early Career Faculty and How to Deal with Senior Inactive / Unfunded Faculty?” AMSNDC, Long Beach, CA.
7. 03-22-2022 “Brain mechanisms of pain”. Biology of Pain course, UTHSC, San Antonio, TX (virtual)
8. 01-21-2022 “Amygdala modulation of pain behaviors”. Texas Gulf Coast Consortium for Translational Pain Research, Houston, TX, Virtual Workshop.
9. 10-04-2021 “Differential roles of mGluR2 and mGluR3 in the amygdala in pain modulation”. 10th mGlu Meeting, Taormina, Italy.

News Releases - Educational Activities for the Lay Public

1. “TTUHSC Event Seeks to Spread the Word About Alzheimer’s Disease”. In: TTUHSC Statline Daily Dose, by Mark Hendricks, November 4, 2022; <https://dailydose.ttuhs.edu/2022/november/garrison-alzheimers-awareness.aspx>
2. “TTUHSC researchers receive new NIH grant to continue studying amygdala-pain link”. In: EurekAlert, a service of the American Association for the Advancement of Science. Media Contact: Suzanna Cisneros, February 1, 2022. <https://www.eurekalert.org/news-releases/941989>.
3. “TTUHSC Researchers Receive New NIH Grant to Continue Studying Amygdala-Pain Link”. In: TTUHSC Statline Daily Dose, by Mark Hendricks, January 31, 2022; <https://dailydose.ttuhs.edu/2022/january/researchers-receive-nih-grant-amygdala-pain-link.aspx>.

Grants:

TTUHSC SOM, CTNT, GIA Seed Fund Program

01/01/23 – 12/31/23

“Mental Health Telemedicine for Caregivers of People with Alzheimer’s Disease and Related Dementias in Rural West Texas”

The goal of this study is to implement a telehealth program to expand our mental health services to individuals living in rural counties in West Texas. We will also examine the dyadic relationship between family caregivers receiving telehealth services and the person with Alzheimer’s disease (AD) and related dementias (ADRD) and underlying biopsychosocial mechanisms.

PI (Contact), Volker Neugebauer

MPI, Jonathan Singer (TTU)

Total costs: \$30,000

Davis Foundation

11/10/22 – 10/31/23

“Ginger extract in anxio-depressive disorders: gut-brain-axis”

The goal of this study is to test candidate genes associated with neuroinflammation-, neuroimmune-, neuroplasticity-, neurotransmitters-, and neurotoxicity in anxio-depressive disorders on brain samples from GEG-supplemented animals and to use gut microbiome analysis to explore the association between gut microbiome and anxio-depressive disorder-related gene expression.

PI (Contact), Chwan-Li (Leslie) Shen (TTUHSC)

MPI, Volker Neugebauer

Total costs: \$10,000

R01 NS129552 – NIH/NINDS

09/20/22 – 07/31/27

“Brain Circuits of Migraine Pain”

The goal of this study is to determine the potential relevance of a central CGRP circuit from parabrachial nucleus to amygdala as a common pathway of migraine pain that can be engaged by CGRP-dependent and CGRP-independent peripheral mechanisms, which may ultimately lead to development of improved therapies.

PI (Contact), Frank Porreca (University of Arizona), MPI, Edita Navratilova (University of Arizona)

MPI, Volker Neugebauer

Total costs: \$3,118,625 (TTUHSC subcontract \$1,235,720)

Diversity, Equity and Inclusion (DEI) research grant

09/01/22 – 08/31/23

Office of Diversity, Equity and Inclusion, the Office of the Provost, and the Office of Research and Innovation
“Implementing Individual Mental Health Treatment and Respite for Hispanic Informal Caregivers of Individuals with Dementia”.

The overall goal of this project is to implement individual mental health services for Hispanic informal caregivers of Alzheimer’s Disease and Related Dementia (ADRD) patients and provide both respite care and weekly therapeutic recreation (e.g., music, arts, and crafts) for individuals with ADRD.

PI, Jonathan Singer, TTU

MPI, Volker Neugebauer

Total costs: \$14,500

Garrison Family Foundation

01/25/22 – 01/31/23

“Increasing Mental Health Services for Low Income and Minority Informal Caregivers of Dementia Patients: A GIA and TTU Collaboration”

The goal of this study is to provide mental health healthy services and stress busting program for informal caregivers of patients with dementia.

PI, Volker Neugebauer

Total costs: \$75,000

R01 NS038261 - NIH/NINDS

12/15/21 - 11/30/26

“Amygdala Pain Mechanisms”

The overall goal of this project funded since 1999 is to determine role and mechanisms of amygdala plasticity in pain and its interactions with cortical-cognitive control centers, using electrophysiology, pharmacology, behavioral assays, gene transfer and optogenetic strategies. The focus of this project period is on neuroimmune signaling as a mechanism of neuroplasticity and neuropathic pain.

PI, Volker Neugebauer

MPI, Igor Ponomarev

Total costs: \$2,757,940

R01 NS120395 – NIH/NINDS Impact score: 10, Percentile: 1.0 08/01/21 – 07/31/26

“A prolactin-mediated neuroendocrine link between stress-induced latent sensitization and female-selective pain”

The goal of this study is to identify a previously unknown stress-related neuroendocrine link between hypothalamic kappa opioid receptors and prolactin/prolactin receptor signaling in nociceptors as a basis for female selective pain syndromes.

PI (Contact), Frank Porreca (University of Arizona), MPI, Edita Navratilova (University of Arizona)

MPI, Volker Neugebauer

Total costs: \$2,297,350 (TTUHSC subcontract \$ 921,815)

2021-67017-34026 - USDA/NIFA

“Ginger root extract for neuropathic pain”

01/01/21 - 12/31/23

The goal of this study is to evaluate the effects of ginger root extract on neuropathic pain-associated sensory and affective behaviors, gut health, and neuroinflammation in animals.

PI (Contact), Chwan-Li (Leslie) Shen (TTUHSC)

MPI, Volker Neugebauer

Total costs: \$500,000

R01 NS118731 – NIH/NINDS

08/01/20 – 07/31/25

“Trans-Synaptic Signaling Complex in Amygdala Pain Mechanisms”

The goal of this project is to determine the role of the trans-synaptic signaling complex centered on cerebellin 1 and glutamate delta 1 receptor in the regulation of amygdala plasticity and pain mechanisms.

PI (Contact), Shashank Dravid (Creighton University)

MPI, Volker Neugebauer

Total costs: \$2,674,615 (TTUHSC Subcontract \$ 733,450)

R01 NS109255 – NIH/NINDS

08/15/19 – 06/30/24

“Pronociceptive and Antinociceptive Opioid Mechanisms in the Central Nucleus of the Amygdala”

The goal of this project is to determine cellular mechanisms and behavioral consequences of differential functions of mu and kappa opioid systems in the amygdala in neuropathic pain.

PI (Contact), Edita Navratilova (University of Arizona), PI, Guangchen Ji

Co-I, Volker Neugebauer

Total costs: \$2,544,148 (TTUHSC subcontract \$ 1,253,415)

R01 AA027096 – NIH/NIAAA

07/01/19 - 06/30/23

“The Neuroimmune Model of Excessive Alcohol Consumption: Transition to Alcohol Use Disorder”

The goal of this project is to determine cell type-specific molecular mechanisms of immune activation, its role and effects on the brain in the development of alcohol use disorder (AUD).

PI, Igor Ponomarev (TTUHSC)

Co-I, Volker Neugebauer

Total costs: \$2,868,750 (original start date, 09/10/2018; transferred to TTUHSC on 07/01/19)

R01 NS106902 – NIH/NINDS

04/01/18 - 03/31/23

“Stress-Induced Descending Facilitation from Amygdala Kappa Opioid Receptors in Functional Pain”

The overall goal of this project is to determine the role of KOR in amygdala plasticity and behaviors in a functional pain model. A key hypothesis is that blockade of stress-induced endogenous amygdala KOR signaling reduces pain responses following priming-induced latent sensitization.

PI (Contact), Frank Porreca (University of Arizona)

MPI, Volker Neugebauer

Total costs: \$ 2,740,180 (TTUHSC subcontract \$ 1,295,245)

PN-CTNT 2018-12 LSVNBAW

12/01/18 - 12/31/21

Center of Excellence for Translational Neurosciences and Therapeutics, TTUHSC.

“Tai Chi for Pain Management: A Pilot Mechanistic Study”.

The goal of this study is to collect preliminary data on how Tai Chi (pre and post design) may help with pain management of postmenopausal women with knee osteoarthritis and explore the molecular mechanism.

PI (Contact), Chwan-Li (Leslie) Shen (TTUHSC)

PI, Volker Neugebauer

Total costs: \$18,000

COHS AD Seed Grant - TTU

03/01/21 – 12/31/21

“Global gene expression profiling of high fat and fish oil effects in a mouse model of Alzheimer’s disease”

The goal of this study is to test if fish oil has protective effects in an Alzheimer's disease mouse model by reducing brain, adipose tissue and systemic inflammation and decreasing amyloid beta accumulation.

PI (Contact), Naima Moustaid-Moussa (TTU)

PI, Volker Neugebauer

Total costs: \$10,000

Awards

1. University Distinguished Faculty Award, President, TTUHSC, 2022
2. Chancellor's Distinguished Research Award, Texas Tech University System, 2021

Oldewage, Wilna

Publications:

1. **OLDEWAGE-THERON W** & GROBLER C. 2022. Vitamin D status of the elderly in the Vaal region, South Africa. South African Journal of Clinical Nutrition, 2 pages. <https://doi.org/10.1080/16070658.2022.2041887>.
2. MOYO G, STICKLEY Z, LITTLE T, DAWSON J, THOMAS-JACKSON S, NGROUND A J, JORDAAN M, ROBB M, WALSH C & **OLDEWAGE-THERON W**. 2022. Effects of nutritional and social factors on favorable fetal growth conditions using structural equation modelling. Nutrients, 14: 4642. <https://doi.org/10.3390/nu14214642>
3. # SIENSO G, LYFORD C & **OLDEWAGE-THERON W**. 2022. Using instrumental variables to establish the relationship between household production diversity and household dietary diversity in Northern Ghana. African Journal of Food, Agriculture, Nutrition and Development, 22(7): 21036-21055. <https://doi.org/10.18697/ajfand.112.20255>
4. LEE H, MOYO G, IBIYEMI T, PENG LL, NAJAM W & **OLDEWAGE-THERON W**. 2022. Impact of COVID-19 on food security status of college students in West Texas. Epidemiology International Journal, 6 (special issue 1): 12 pages. <https://medwinpublishers.com/EIJ/impact-of-covid-19-on-food-security-status-of-college-students-in-west-texas.pdf>
5. MUSA AO, CARPIO CE & **OLDEWAGE-THERON W**. 2022. Who uses food banks and other private food charities? A comparison with SNAP users. Journal of Hunger & Environmental Nutrition, 17: 14 pages. <https://doi.org/10.1080/19320248.2022.2058333>
6. MOYO G, EGAL AA & **OLDEWAGE-THERON, W**. 2022. Exploring the prevalence of multiple forms of malnutrition in children 6-18 years living in the Eastern Cape, South Africa. South African Journal of Clinical Nutrition, 5 pages. <https://doi.org/10.1080.16070658.2022.2061109>
7. MKHIZE X, **OLDEWAGE-THERON W**, NAPIER, C, DUFFY K & MTHEMBU BE. 2022. Introducing grain legumes for crop diversification and sustainable food production systems amongst urban small-holder farmers: a food and nutrition security project in KwaZulu-Natal, South Africa. Agroecology and Sustainable Food Systems. 46(6): 791-814. . <https://www.tandfonline.com/doi/full/10.1080/21683565.2022.2070814>
8. ABU BAZ, TAVAREZ S & **OLDEWAGE-THERON W**. 2022. University students suggest solutions to campus food insecurity: A mixed methods study. Journal of Hunger & Environmental Nutrition. 17(1): 16 pages. <https://doi.org/10.1080/19320248.2022.2055437>
9. IBIYEMI TE & **OLDEWAGE-THERON W**. 2022. A review of food and nutrition security in Nigeria. African Journal of Food, Agriculture, Nutrition and Development, 22(1): 16 pages. <https://ajfand.net/Volume22/No1/Commentary-Temitope.pdf>
10. MOYO G, THOMAS-JACKSON S, CHILDRESS A, DAWSON J, THOMPSON L & **OLDEWAGE-THERON W**. 2022. Chrononutrition and breast milk: a review of the circadian variation of hormones present in human milk. Clinical Lactation, 12(3): 7-17.
11. MALCZYK S, STEYN NP, NEL JH, EKSTEEN G, DRUMMOND L, **OLDEWAGE-THERON W**, FABER M, VAN STUIJVENBERG ME & SENEKAL M. 2022. Mean \pm standard deviation intake values for 1- <10-year old South African children for application in the assessment of the inflammatory potential of

their diets using the DII® method: Developmental research. *Nutrients*, 14: 11.
<https://doi.org/10.3390/nu14010011>

Abstracts:

1. IBIYEMI T, NAJAM W & **OLDEWAGE-THERON W**. 2022. Interplay between food insecurity and stress among international students at a university in West Texas. *Current Developments in Nutrition*, 6(Suppl 1): 116. https://academic.oup.com/cdn/article/6/Supplement_1/116/6606832
2. NAJAM W, WALSH C & **OLDEWAGE-THERON W**. Nutrition knowledge, attitudes, beliefs, and practices among adults in urban and rural areas in the Free State, South Africa. *Journal of Nutrition Education and Behavior*, 54(7)(Sppl): S24.
3. IBIYEMI T, ANDREWS P & **OLDEWAGE-THERON W**. 2022. Perceived stress levels and eating habits of college students at a West Texas University. *Journal of the American Academy of Nutrition and Dietetics*, 122(9)(Suppl 1): A64.

Presentations:

1. Academy of Nutrition and Dietetics Food & Nutrition Conference 8-11 October 2022, Orlando, FL
IBIYEMI T, ANDREWS P & **OLDEWAGE-THERON W**. 2022. Perceived stress levels and eating habits of college students at a West Texas University (poster).
2. Society of Nutrition Education and Behavior Conference July 2022, Atlanta, GA
NAJAM W, WALSH C & **OLDEWAGE-THERON W**. Nutrition knowledge, attitudes, beliefs, and practices among adults in urban and rural areas in the Free State, South Africa (poster).
3. Nutrition 2022 Conference 8 June 2022 (virtual): IBIYEMI T, NAJAM W & **OLDEWAGE-THERON W**. 2022. Interplay between food insecurity and stress among international students at a university in West Texas (poster).

Palmer, Ty

Publications:

1. **Palmer, T. B.**, Farrow, A. C.* (2022). Correcting for subcutaneous fat: does it improve the correlation between vastus lateralis echo intensity and physical performance in older women? *Clinical Physiology and Functional Imaging*, 42(5), 372-379.
2. **Palmer, T. B.**, Akehi, K. (2022). Rate of torque development as a discriminator of playing level in collegiate female soccer players. *Journal of Musculoskeletal and Neuronal Interactions*, 22(3), 326-335.
3. **Palmer, T. B.**, Blinch, J., Farrow, A. C.*, Agu-Udemba, C. C.†, Mitchell, E. A.† (2022). The acute effects of fast-paced walking on isometric peak torque and rate of torque development in regularly exercising and inactive older women. *Journal of Aging and Physical Activity*, 30(3), 397-403.
4. Akehi, K., **Palmer, T. B.**, Conchola, E. C., Thompson, B. J., Kasl, A., Bice, M., Unruh, S. (2022). Changes in knee extension and flexion maximal and rapid torque characteristics during a collegiate women's soccer season. *Journal of Strength and Conditioning Research*, 36(5), 1389-1395.
5. **Palmer, T. B.**, Farrow, A. C.*, Agu-Udemba, C. C.†, Mitchell, E. A.† (2022). The time course of passive stiffness responses following an acute bout of static stretching in healthy, elderly men. *Physiotherapy Theory and Practice*, 38(5), 695-703.

Note: * indicates graduate student author; † indicates undergraduate student author.

Abstracts:

Posters:

1. Farrow, A. C.*, **Palmer, T. B.**, Texas ACSM Regional Meeting, Texas ACSM, Waco, TX, "Acute effects of static stretching on passive stiffness of the hamstrings in healthy young and older women," Regional, peer-reviewed/refereed, published in proceedings. (February 2022).
2. Riley, W. N.†, Akehi, K., Rowley, M. S.†, Farrow, A. C.*, **Palmer, T. B.**, Texas ACSM Regional Meeting, Texas ACSM, Waco, TX, "Vertical jump performance as a discriminator of playing ability in

collegiate female soccer players," Regional, peer-reviewed/refereed, published in proceedings. (February 2022).

Note: * indicates graduate student author; † indicates undergraduate student author.

Park, Oak Hee

Publications:

1. Islam T, Albracht-Schulte K, Ramalingam L, Schlabritz-Lutsevich N, **Park OH**, Zabet-Moghaddam M, Kalupahana NS, Moustaid-Moussa N. Anti-inflammatory mechanisms of polyphenols in adipose tissue: role of gut microbiota, intestinal barrier integrity and zinc homeostasis. J Nutr Biochem. 2022 Nov 26;115:109242. doi: 10.1016/j.jnutbio.2022.109242. Epub ahead of print. PMID: 36442715.

Conference Presentations/Proceedings: Note: * indicates student authors/presenters.

1. Wang, H*, Moustaid-Moussa, N, Oldewage-Theron, W., Thompson, L., Albracht-Schulte, K., Lee, J., & **Park, O.** (2022). Social Cognitive Theory-based Nutrition Intervention to Improve Healthy Eating and Active Lifestyle among Rural Texas High School Students. 7th Annual Meeting Poster Competition, Obesity Research Institute, Innovation Hub, Lubbock, Texas.
2. Phy, S.* & **Park, O.** (2022). Impact of polyphenol and carotenoid intakes on mental health and diet quality in a food insecure undergraduate student sample. 7th Annual Meeting Poster Competition, Obesity Research Institute, Innovation Hub, Lubbock, Texas. **Outstanding Undergraduate Presenter (1st Place)**
3. Akra, E.* , Driver, J.* , Phy, S* , Wang, H.* , & **Park, O.** (2022). Food insecurity: Risk factors, characteristics, and lifestyle changes among university students during COVID pandemic. 2022 Fall TrUE Transformers Showcase, TTU-HSC, Lubbock Texas.
4. Phy, S.* & **Park, O.** (2022). Impact of polyphenol and carotenoid intakes on mental health and diet quality in a food insecure undergraduate student sample. 2022 Texas Tech University Undergraduate Research Conference, Lubbock, Texas.
5. Ganjegunte, D.* , Wang, H.* , Thompson, L., Moustaid-Moussa, N. & **Park, O.** (2022). Examine U.S. consumers' perceptions of sorghum grain as regular diet. 2022 Texas Tech University Undergraduate Research Conference, Lubbock, Texas.
6. Akra, E.* , Wang, H.* , & **Park, O.** (2022). The association between financial literacy and food insecurity in a college student sample. 2022 Texas Tech University Undergraduate Research Conference, Lubbock, Texas. **Outstanding Presenter (3rd Place in Economic Impact Category)**
7. Driver, J.* , Wang, H.* , & **Park, O.** (2022). Comparison of health and academic well-being between food secure and food insecure college students during COVID pandemic. 2022 Texas Tech University Undergraduate Research Conference, Lubbock, Texas.

Grants Not Funded (I do not have funded grants in 2022, but below are submissions, just in case FYI)

1. USDE-PN; Lubbock Improving Families Together (LIFT); 5-year project (01/01/2023-12/31/2027); Total Amount Requested: \$55,892,150; Role: Co-PI (6% Credit); PI: Shirley Matteson
2. USDA-Sustainable Agriculture Systems; GRow and EAT Leafy GREENS (GREAT GREENS): Sustainable Production of Leafy Greens for Health and Nutrition Security; 5-year project (06/01/2023-05/31/2028); Total Amount Requested: \$10 Million; Role: Co-PI (8% Credit); PI: Naima Moustaid-Moussa; Invited Resubmission
3. USDA-NNF; SUSTAINN: Skill development in Urban Horticultural Systems thru Training using Agricultural Interdisciplinary Networks in Nutrition, Food and Plants; 4-year project. (01/01/2023-12/31/2026); Total Amount Requested: \$262,500; Role: Co-PI (12% Credit); PI: Catherine Simpson
4. National Cattlemen's Beef Association; Does Beef Consumption Impact the Metabolome and Systemic Inflammatory Status in Human Subjects? A Study Across Different Weight Spectra; 2-year project (01/01/2023- 12/31/2025); Total Amount Requested: \$175,829; Role: Co-PI (20% Credit); PI: Clarissa Strieder Barboza; Invited Resubmission

Phy, Jennifer

Publications:

1. Mathew M, Sivaprakasam S, Phy JL, Bhutia YD, Ganapathy V. Polycystic ovary syndrome and iron overload: biochemical link and underlying mechanisms with potential novel therapeutic avenues. *Biosci Rep*. 2023 Jan 31;43(1):BSR20212234. doi: 10.1042/BSR20212234. PMID: 36408981.
2. Williams A, Buschmann B, Rimu A, **Phy JL**. Addison's disease presenting as shortness of breath and hypertension in early pregnancy. *The Southwest Respiratory and Critical Care Chronicles*, (45): 54-58, October 2022.
3. **Phy JL**. Spontaneous Pregnancies in Polycystic Ovary Syndrome Patients with a Low Starch/Low Dairy Diet: A Retrospective Case Series. *J Community Med Public Health*, 6:242., April 6, 2022.

Grants and Contracts Awarded

1. Exploring the Effects of a Dietary Education Program on Gut Microbiome Composition and Management of Polycystic Ovary Syndrome (PCOS), August 30, 2021 - Present, Laura W Bush Institute for Women's Health. **Phy JL** . Total Amount: \$20,000.

Punyanunt, Narissra

Publications:

1. *Brammer, S. E., **Punyanunt-Carter, N. M.**, & Duffee, R.S. (2022). Oversharing on social networking sites: A contemporary communication phenomenon. *Computers in Human Behavior Reports*, 8,100236-100240. <https://doi.org/10.1016/j.chbr.2022.100236> [Elsevier Publishing Company, IF: 6.829]
2. Wagner, T.R., & **Punyanunt-Carter, N. M.** (2022). Rules, reciprocity, and emojis: An exploratory study on flirtatious texting communication. *Southern Communication Journal*, 87 (5), 461-475. <https://doi.org/10.1080/1041794X.2022.2108889> [Taylor & Francis Company, 2022 Q2, IF: 1.10]
3. Charoensap-Kelly, P., Preddis, D., & **Punyanunt-Carter, N. M.** (2022). Needs assessment of national communication conference presentations: Members' perceptions of presentation effectiveness, values, and challenges. *Journal of Communication Pedagogy*, 6 (1), 100-127. <https://doi.org/10.31446/JCP.2022.1.10>. [Scimago: 2021 IF: .90]
4. **Punyanunt-Carter, N. M.**, LaFreniere, J. R., Norman, M. S., Brammer, S. E., & Colwell, M. J. (2022). From stepmonsters to the family's saving grace: Viewer perceptions of stepfamilies, stepfathers and stepmothers in media. *Media Watch*. <https://doi.org/10.1177/09760911221113444>. [Scimago: 2021 IF: .53]
5. *Brammer, S. E., *Martinez, R. J., & **Punyanunt-Carter, N. M.** (2022). Practical tools for the teacher-scholar: Four ways to advance racial justice through transformative learning. *Communication Education*, 71(4), 356-358. <https://doi.org/10.1080/03634523.2022.2105919>. [Taylor & Francis Company, 2022 Q1: IF: 1.79]
6. Riggs, R.E., Melhem, S., *Perez, C., Smith, C., & **Punyanunt-Carter, N.M.** (2022). Understanding American College Students' Perceptions of Asians in the Media. *Media Asia*. <https://doi.org/10.1080/01296612.2022.2116535>. [Taylor & Francis Company, 2022 IF: 1.67]
7. Preddis, D., Charoensap-Kelly, P., & **Punyanunt-Carter, N. M.** (2022). Practice What We Preach: National Communication Association Members Define Effective Conference Presentations and Provide Suggestions for their Improvement. *Texas Speech Communication Journal*, 46, 11-30. <https://ttu-ir.tdl.org/handle/2346/90297>. [Scimago: 2021 IF: .09]
8. Wagner, T. R. & **Punyanunt-Carter, N.M.** (2022, June). Understanding Communication, Social Presence, and Dialectical Tensions of Pandemic Learning. *Ohio Communication Journal*, 60, 164-169. <https://www.ohiocomm.org/wp-content/uploads/2022/06/Wagner.pdf>. [Scimago: 2021 IF: .29]
9. Levine, T. R., Serota, K., & **Punyanunt-Carter, N.M.** (2022). Lie frequency and motives from the sender and receiver perspectives: Testing predictions from truth-default theory. *Southern Communication Journal*. <https://doi.org/10.1080/1041794X.2022.2052745>. [Taylor & Francis Company, 2022 Q2 IF: 1.10]
10. *Brammer, S. E. & **Punyanunt-Carter, N. M.** (2022). Getting the Attention of Online Learners. *Communication Education*, 71(2), 155-157. <https://doi.org/10.1080/03634523.2021.2022732>. [Taylor & Francis Company, 2022 Q1 IF: 1.79]

11. Charoensap-Kelly, P., & **Punyanunt-Carter, N. M.** (2022). Changing the Graduate Student Socialization Process for the Future. *Communication Education*, 71(1), 67-70.
<https://doi.org/10.1080/03634523.2021.1995767>. [Taylor & Francis Company, 2022 Q1 IF: 1.79]

Book chapters:

1. **Punyanunt-Carter, N. M.** (2022). Chapter 25: Serving as Chair: Different Perspectives. In Andrew T. Kemp & Nicholas D. Hartlep (Eds). *What the Hell was I Thinking? Reflections, Ruminations, and Revelations on Becoming a Department Chair*. DIO Press, United States.
2. Dibble, J. L., **Punyanunt-Carter, N. M.** (2022). Chapter 13: A New Look for the "Little Black Book": Back Burner Relationships, and Modern Communication Technology. In Jimmie Manning & Cary Marie Noland (Editors). *Contemporary Studies of Sexuality & Communication* 2nd. Edition. Dubuque, IA: Kendall Hunt.
3. *Alfonsin, B., & **Punyanunt-Carter, N.M.** (2022). Chapter 3: College students' perceptions of online learning during the pandemic. In Micheal Strawser (Ed). *Higher Education Implications for Teaching and Learning during COVID-19*. Rowman & Littlefield: Washington, DC.
4. **Punyanunt-Carter, N. M.** (2022). Chapter 8: Persuasion in Interpersonal Contexts. In Shawn Wahl (Ed.) *Persuasion in Your Life* (3rd. Edition). Pearson Press. (pp. 177-194).

Instructional Publication:

1. Arias, V. S., **Punyanunt-Carter, N.M.**, & *Martinez, R. J. (2022). Incorporating the Social Media App for Civil Engagement. *Texas Speech Communication Journal*, 46, 80-82.

* Indicates a publication with a current TTU graduate student

Presentations:

1. Martinez, R. J., Brammer, S. E., & **Punyanunt-Carter, N. M.** (2022, November 17). "I can spend forever on it without getting bored": Analyzing what college students like and dislike about TikTok. Paper will be presented at the annual meeting of the National Communication Association, New Orleans, LA.
2. Martinez, R. J., **Punyanunt-Carter, N. M.**, & Levine, T. R. (2022, November 17). How People Detect Lies On and Offline. Paper will be presented at the annual meeting of the National Communication Association, New Orleans, LA.
3. Brammer, S. E., Martinez, R. J., & **Punyanunt-Carter, N. M.** (2022, November 18). Examining College Students' Perceptions Regarding Self-Disclosure Behaviors on TikTok. Paper will be presented at the annual meeting of the National Communication Association, New Orleans, LA.
4. Balota, I. K., Wagner, T. R., Bowman, N. D., & **Punyanunt-Carter, N.M.** (2022, November 17). Understanding Relationship Maintenance Behaviors and Video Game Use Effects in Romantic Relationships. Paper will be presented at the annual meeting of the National Communication Association, New Orleans, LA.
5. Martinez, R. J., **Punyanunt-Carter, N. M.**, & Arias, V. S. (2022, November 19). Incorporating The Social Media App for Civic Engagement. Paper will be presented at the annual meeting of the National Communication Association, New Orleans, LA.
6. Riggs, R., Melhem, S., Perez, C., Smith, C., & **Punyanunt-Carter, N.M.** (2022, November 20). Understanding American College Students' Perceptions of Asians in the Media. Paper will be presented at the annual meeting of the National Communication Association, New Orleans, LA.
7. Arias, V.S., **Punyanunt-Carter, N.M.**, Dibble, J.; Drouin, M. Ouystel, J. V., & Martinez, R. J. (2022, April 9). College Students' Motivations to Engage in Back Burner Relationships. Paper will be presented at the annual meeting of the Eastern Communication Association, Philadelphia, PA.
8. **Punyanunt-Carter, N.M.**, & Martinez, R. J. (2022, April 6). Power in the Classroom: Exploring the Connections Between Graduate Teaching Assistant's Deployment of Power in Public Speaking Courses and College Students' Communication Apprehension. Paper will be presented at the annual meeting of the Eastern Communication Association, Philadelphia, PA.

9. Brammer, S. E., **Punyanunt-Carter, N. M.**, & Duffee, R. S. (2022, April 2). Oversharing on Social Networking Sites: A New-Age Communication Phenomenon. Paper will be presented at the annual meeting of the Central States Communication Association, Madison, WI.

GRANTS (Texas Tech University, Internal Funding Opportunities) N= 5

1. 2022	Institutional Diversity, Texas Tech University	\$10,000
2. 2022	Open Educational Resources, Texas Tech University	\$4,000
3. 2022	TRU Undergraduate Research Mentoring Grant	\$750
4. 2022	Online Course Design Academy Grant	\$2,500
5. 2022	MACRO TRU Funding	\$12,000

Rahman, Rakhshanda

Publications:

1. **Rahman RL**. Wisdom is in the eye of the beholder. *Am J Surg*. 2022 Jul;224(1 Pt A):6-7. doi: 10.1016/j.amjsurg.2022.04.013. Epub 2022 Apr 18. PMID: 35450747.
2. Menikdiwela KR, Kahathuduwa C, Bolner ML, **Rahman RL**, Moustaid-Moussa N. Association between Obesity, Race or Ethnicity, and Luminal Subtypes of Breast Cancer. *Biomedicines*. 2022 Nov 15;10(11):2931. doi: 10.3390/biomedicines10112931. PMID: 36428500; PMCID: PMC9687751.
3. Macha SJ, Koneru B, Burrow TA, Zhu C, Savitski D, **Rahman RL**, Ronaghan CA, Nance J, McCoy K, Eslinger C, Reynolds CP. Alternative Lengthening of Telomeres in Cancer Confers a Vulnerability to Reactivation of p53 Function. *Cancer Res*. 2022 Sep 16;82(18):3345-3358. doi: 10.1158/0008-5472.CAN-22-0125. PMID: 35947641; PMCID: PMC9566554.
4. Whitworth PW, Beitsch PD, Murray MK, Richards PD, Mislowsky A, Dul CL, Pellicane JV, Baron PL, **Rahman RL**, Lee LA, Dupree BB, Kelemen PR, Ashikari AY, Budway RJ, Lopez-Penalver C, Dooley W, Wang S, Dauer P, Menicucci AR, Yoder EB, Finn C, Blumencranz LE, Audeh W. Genomic Classification of HER2-Positive Patients With 80-Gene and 70-Gene Signatures Identifies Diversity in Clinical Outcomes With HER2-Targeted Neoadjuvant Therapy. *JCO Precis Oncol*. 2022 Sep;6:e2200197. doi: 10.1200/PO.22.00197. PMID: 36108259; PMCID: PMC9489196.
5. Whitworth P, Beitsch PD, Pellicane JV, Baron PL, Lee LA, Dul CL, Nash CH 3rd, Murray MK, Richards PD, Gittleman M, Budway R, **Rahman RL**, Kelemen P, Dooley WC, Rock DT, Cowan K, Lesnikoski BA, Barone JL, Ashikari AY, Dupree B, Wang S, Menicucci AR, Yoder EB, Finn C, Corcoran K, Blumencranz LE, Audeh W; NBRST Investigators Group. Age-Independent Preoperative Chemosensitivity and 5-Year Outcome Determined by Combined 70- and 80-Gene Signature in a Prospective Trial in Early-Stage Breast Cancer. *Ann Surg Oncol*. 2022 Apr 4;29(7):4141–52. doi: 10.1245/s10434-022-11666-2. Epub ahead of print. PMID: 35378634; PMCID: PMC9174138.
6. Whitworth PW, Beitsch PD, Pellicane JV, Baron PL, Lee LA, Dul CL, Murray MK, Gittleman MA, Budway RJ, **Rahman RL**, Kelemen PR, Dooley WC, Rock DT, Cowan KH, Lesnikoski BA, Barone JL, Ashikari AY, Dupree BB, Wang S, Menicucci AR, Yoder EB, Finn C, Corcoran K, Blumencranz LE, Audeh W; NBRST Investigators Group. Distinct Neoadjuvant Chemotherapy Response and 5-Year Outcome in Patients With Estrogen Receptor-Positive, Human Epidermal Growth Factor Receptor 2-Negative Breast Tumors That Reclassify as Basal-Type by the 80-Gene Signature. *JCO Precis Oncol*. 2022 Apr;6(1):e2100463. doi: 10.1200/PO.21.00463. PMID: 35476550; PMCID: PMC9200401.

Shen, Chwan-Li (Leslie)

Publications:

1. **Shen CL**, Dufour JM, Miranda JM, Kaur G, Chung E, Cao JJ. Effect of dietary geranylgeraniol and green tea polyphenols on glucose homeostasis, bone turnover biomarkers, and bone microstructure in obese mice. *International Journal of Molecular Sciences*. Special Issue: Bioactive Compounds: From Diet to Therapeutic Use. (in press)
2. Dhanasekara C, Payberah D, Chyu JY, **Shen CL**, Kahathuduwa C. The Effectiveness of Botulinum Toxin in the Prevention and Treatment of Chronic Tension-Type Headaches: A Systematic Review and Meta-Analysis. *Cephalalgia* (in press)

3. Masud AA, **Shen CL**, Chyu MC. On the Optimal Whole-Body Vibration Protocol for Muscle Strength. "Biomechanics". Special Issue: "Effect of Neuromuscular Deficit on Gait". 2022. (in press).
4. Wang R, Santos JM, Dufour JM, Stephens ER, Miranda JM, Washburn RL, Hibler T, Kaur G, Lin D, **Shen CL** (corresponding author). Ginger root extract improves GI health in diabetic rats by improving intestinal integrity and mitochondrial dysfunction. *Nutrients*. 2022 Oct 19;14(20):4384. doi: 10.3390/nu14204384.
5. **Shen CL**, Elmassry MM, Grue K, Joiner HE, Jacobo AU, Hamood A, Chung E, Geranylgeraniol and green tea polyphenols mitigate negative effects of a high-fat diet on skeletal muscle and the gut microbiome. *Metabolites*. 2022 Sep 27;12(10):913. doi: 10.3390/metabo12100913.
6. Jiwan NC, Appell CR, Wang R, **Shen CL**, Luk H-Y, Geranylgeraniol Supplementation Mitigates Soleus Muscle Atrophy via Changes in Mitochondrial Quality in Diabetic Rats. *In Vivo*. Nov-Dec; 36(6):2638-2649.
7. **Shen CL**, Wang R, Yakhnitsa V, Santos J, Watson C, Kiritoshi T, Ji C, Hamood A, Neugebauer V. Gingerol-enriched ginger supplementation mitigates neuropathic pain via mitigating intestinal permeability and neuroinflammation: gut-brain connection. *Frontiers in Pharmacology*. 2022. Jul 8;13:912609. doi: 10.3389/fphar.2022.912609. eCollection 2022.
8. **Shen CL**, Schuck A, Tompkins C, Dunn DM, Neugebauer V. Bioactive compounds for fibromyalgia-like symptoms: a narrative review and future perspectives. *International Journal of Environment Research and Public Health*, Special Issue: "Individual Difference in Pain in Various Populations". 2022, 19(7):4148.
9. Masud AA, **Shen CL**, Luk HY, Chyu MC. Impact of local vibration training on neuromuscular activity, muscle cell, and muscle strength: a review. *Critical Reviews in Biomedical Engineering*, 2022; 50(1):1-17.
10. **Shen CL**, Castro L, Fang C-Y, Castro M, Sherali S, White S, Wang R, Neugebauer V. Bioactive compounds for neuropathic pain: an update on preclinical studies and future perspectives. *Journal of Nutritional Biochemistry*. 2022; 104:108979. doi: 10.1016/j.jnutbio.2022.108979. Online ahead of print.
11. Chen JN, St-John JA, **Shen CL**, Dennis JA. Self-reported patient compliance with physician advised lifestyle behavior changes among adults with musculoskeletal conditions. *Frontiers in Public Health*. 2022; 10:821150.
12. **Shen CL**, Wang R, Ji G, Elmassry MM, Zabet-Moghaddam M, Vellers H, Hamood AN, Gong X, Mirzaei P, Sang S, Neugebauer V. Dietary supplementation of gingerols- and shogaols-enriched ginger root extract attenuate pain-associated behaviors while modulating gut microbiota and metabolites in rats with spinal nerve ligation. *Journal of Nutritional Biochemistry*, Special Issues: Precision nutrition – individual nutrient needs for optimal health throughout the lifespan. 2022; 100:108904. Online ahead of print.
13. **Shen CL**, Watkins BA, Kahathuduwa C, Chyu MC, Zabet-Moghaddam M, Elmassry MM, Luk H-Y, Brismee J-M, Knox A, Lee J, Zumwalt M, Wang R, Wager TD, Neugebauer V. Tai Chi improves brain functional connectivity and plasma lysophosphatidylcholines in postmenopausal women with knee osteoarthritis: an exploratory pilot study. *Frontiers in Medicine*. 2022; 8:775344.
14. Dhanasekara CS, Nelson A, Spradley M, Wynn A, Robohm-Leavitt C, **Shen CL**, Kahathuduwa C. Effects of Consumption of Coconut Oil or Coconut on Glycemic Control and Insulin Sensitivity: A Systematic Review and Meta-Analysis of Interventional Trials. *Nutrition, Metabolism and Cardiovascular Disease*. 2022; 32(1):53-68.

Abstracts: for internal or external conferences: * peer-reviewed

1. ***Shen CL**, Elmassry MM, Santos JM, Neugebauer V. Effects of two curcumin extracts on lipid and amino acid metabolites in amygdala and colon of rats with neuropathic pain. *Asia-Pacific Nutrigenomics and Nutrigenetics Organization (APNNO)* 2022.
2. ***Shen CL**, Elmassry MM, Santos J, Wang R, Yakhnitsa V, Kiritoshi T, Ji G, Lovett J, Hamood A, Neugebauer V. Two curcumin extracts modify composition of gut microbiota, tight junction protein, and neuroinflammation in rats with neuropathic pain: microbiota-gut-brain axis. *Nutrition* 2022.

3. *Santos JM, Wang R, Driver Z, Bhakta V, Contreras J, Yakhnitsa V, Kiritoshi T, Ji G, Neugebauer V, **Shen CL**. Curcumin and curcuminoid effects modulating chronic mechanical sensitivity in spinal nerve ligation model revert mitochondria dysfunction and oxidative stress. *Nutrition* 2022.
4. *Stephens ER, Santos JM, Wang R, **Shen CL**. Effects of dietary gingerol-enriched ginger supplementation on distribution of colon function markers in rats with diabetic neuropathic pain. *Nutrition* 2022.
5. ***Shen CL**, Wang R, Yakhnitsa V, Santos J, Watson C, Kiritoshi T, Ji G, Kim N, Lovett J, Hamood A, Neugebauer V. *Nutrition* 2022. Ginger root extract mitigates neuropathic pain via suppressing neuroinflammation: gut-brain connection. *Nutrition* 2022.
6. *Meister ML, **Shen CL**, Feresin RG. Dietary geranylgeraniol and statins may act synergistically to mitigate oxidative stress in obese mice. *Nutrition* 2022.
7. Bassett A, Hall R, Rodaniche A, Stephens E, Dhanasekara CS, Robohm-Leavitt C, **Shen CL**, Kahathuduwa CN. Effects of Repetitive Transcranial Magnetic Stimulation on Immediate Post-Intervention Chronic Daily Headache Intensity: A Systematic Review and Meta-Analysis. *CTNT* 2022
8. ***Shen CL**, Newman JW, Elmassry MM, Borkowski K, Chyu MC, Kahathuduwa C, Neugebauer V, Watkins BA. Tai Chi improves plasma levels of oxylipins and endocannabinoids in postmenopausal women with knee osteoarthritic pain. Presented at International Congress on Integrative Medicine and Health, Phoenix, AZM 2022.
9. ***Shen CL**, Casey Appell C, Jiwan NC, Wang R, Luk HY. Ginger root extract supplementation attenuated mitochondrial fusion and improved skeletal muscle size in type 2 diabetic rats. Internal Conference on Frailty and Sarcopenia Research, Boston, MA, 2022.
10. Stephens E, Bassett A, Hall R, Rodaniche A, Dhanasekara CS, Robohm-Leavitt C, **Shen CL**, Kahathuduwa CN. Effects of repetitive transcranial magnetic stimulation on intensity and frequency of chronic daily headaches: a systematic review and meta-analysis. *TTUHSC Student Research Week* 2022.
11. Watson C, Wang R, Yakhnitsa V, Santos JM, Kiritoshi T, Ji G, Neugebauer V, **Shen CL**. Ginger root extract improves mitochondrial dysfunction in NP model animals. *TTUHSC Student Research Week* 2022.
12. Viren Bhakta V, Santos JM, Wang R, Yakhnitsa V, Kiritoshi T, Ji G, Neugebauer V, **Shen CL**. Gingerol-Enriched ginger administration modifies mRNA gene expression in colon and spinal cord of animals with neuropathic pain. *TTU Student Research Week* 2022.
13. Driver Z, Santos JM, Wang R, Yakhnitsa V, Kiritoshi T, Ji G, Neugebauer V, **Shen CL**. Effect of gingerol-enhanced ginger on gut-brain-associated mitochondrial gene expression in animals with neuropathic pain. *TTU Student Research Week* 2022.
14. Contreras J, Santos JM, Stephens E, Driver Z, Bhakta V, Lovett J, Wang R, **Shen CL**. Effect of curcumin on the protein expression of MFN1 and GFAP proteins in colon of rat with neuropathic pain. *TTU Student Research Week* 2022.

Presentations:

1. **Shen CL**. Invited. My career path in integrative health. Asian Pacific American Medical Student Association (APAMSA). Region IX conference. 9/10/2022. Virtual oral presentation.
2. **Shen, CL**. Invited. Health Impacts of Green Tea in Musculoskeletal Health. Alzheimer's Awareness Month. 11/9/2022. Lubbock, TX.

Grants:

1. "Curcumin and Retinal Amyloid-beta Pilot Study". **Shen CL (PI)**. Kelly Mitchell (Co-I), Dale Dunn (Co-I), Jaehoon Lee (Co-I). The goal of this study is to test how two weeks of curcumin supplementation would cross the blood brain barrier (BBB) and attach to amyloid beta proteins, to assess the feasibility (safety and bioavailability), and to explore the resulting abundance/composition of gut microbiota. Sabinsa Corporation, East Windsor, NJ. 1/1/2022-12/31/2023. \$94,991.

2. “Effect of annatto-derived geranylgeraniol (GG) on statin-associated myopathy”. **Shen CL (PI)**. Mohammad (Mac) Ansari (Co-I), Dale Dunn (Co-I), Scott Shurmur (consultant), Jaehoon Lee (Co-I), Hui-Ying Luk (Co-I), Martin Binks (Co-I). The goal of this study is to evaluate the effects of 3-months annatto-derived geranylgeraniol (GG) supplementation on statin-associated skeletal muscle health. Funded by American River Nutrition, LLC. \$266,294. 1/1/2022-12/31/2023.
3. “Ginger root extract for neuropathic pain”. **Shen CL (PI-contact, 4%)**, Neugebauer, Volker (MPI). USDA/NIFA. Award no: 2021-67017-34026. The goal of this study is to evaluate the effects of ginger root extract on neuropathic pain-associated sensory and affective behaviors, gut health, and neuroinflammation in animals. \$500,000. 1/1/2021-8/31/2023.
4. “Medication Development for the Treatment of Alcohol Use Disorder”. Bergeson S (PI-contact), **Shen CL (MPI, 33%)**. NIH/NIAAA. U01-AA028957. The goal of this study is to complete studies to prepare the chemically modified minocycline analogs for completion of investigational new drug (IND) enabling approval by the FDA and to begin a Phase I clinical trial. \$7,251,682. 9/20/2020-8/31/2025.
5. “Tai Chi for pain management: a pilot mechanistic study”. Center of Excellence for Translational Neurosciences and Therapeutics, TTUHSC. **Shen CL (PI, 3%)**. The goal of this study is to collect preliminary data on how Tai Chi may help with pain management of postmenopausal women with knee osteoarthritis and explore the molecular mechanism. \$18,000 from CTNT. \$6,000 matching fund Texas Tech University Neuroimaging Institute (TTNI). 12/1/2018-11/30/2023.
6. “Actions of dietary tocotrienols on obesity: ARN supplemental fund”. American River Nutrition, Inc., Hadley, MA. **Shen CL (PI, 3%)**. The goal of study is to test the hypothesis that tocotrienol supplementation improve lipid profiles and modify endocannabinoid and oxylipins in obese postmenopausal women. \$70,000. 11/1/2018-10/31/2023.
7. “Dietary tocotrienol (vitamin E isomer) supplement for postmenopausal women: aspects of metabolomics and gut microbiome”. Laura W. Bush Institute for Women’s Health. **Shen CL (PI, 3%)**. The goal of this study is to test dietary tocotrienol supplementation on metabolites and gut microbiome of obese women. \$10,000. 8/1/2018-3/31/2023.

Shin, Andrew

Publications:

1. Shah H, Kramer A, Mullins CA, Mattern M, Gannaban RB, Townsend RL, Campagna SR, Morrison CD, Berthoud HR, **Shin AC**. Reduction of plasma BCAAs following Roux-en-Y gastric bypass surgery is mediated by FGF21. *Frontiers in Endocrinology*, 2022 (under review)
2. Shah H, Haque Z, Ramezan M, Dehghani F, Gannaban RB, Rahimi F, Abbasi S, **Shin AC**. Revisiting the role of vitamins and minerals in Alzheimer’s disease. *Antioxidants*, 2022 (under review)
3. Zhou C, Ruiz H, Ling L, Maurizi G, Sakamoto K, Butera M, Libernini C, Wang L, Stanley A, **Shin AC**, Egritag H, Sanz S, Lindtner C, Buettner C. Adipose tissue lipolysis is a major driver of alcohol-induced fatty liver. *Hepatology*, 2022 (under review)
4. Benko S, Zhang F, **Shin AC**, Gillespie V, Zhang G, Gingold J, Andino B, Aguilo F, Chen CH, Li S, Lemischka I, Zhang WJ, Buettner C, Zhou MM, Walsh MJ. BRD4 regulates the enhancer landscape to modulate selective cell type-specific lipid metabolism. *Cell Reports*, 2022 (under review)
5. Siddik MAB, Mullins CA, Kramer A, Shah H, Gannaban RB, Zabet-Moghaddam M, Huebinger RM, Hegde VK, MohanKumar SMJ, MohanKumar PS, **Shin AC**. Branched-chain amino acids are linked with Alzheimer’s disease-related pathology and cognitive deficits. *Cells*, 2022 11(21): 3523
6. Della Guardia L, **Shin AC**. PM2.5-induced adipose tissue dysfunction can trigger metabolic disturbances. *Trends in Endocrinology & Metabolism*, 2022 Sep 26, Online ahead of print
7. Della Guardia L, **Shin AC**. The role of adipose tissue dysfunction in PM2.5-induced vascular pathology. *American Journal of Physiology – Heart Circ Physiol*, 2022 Jun 1; 322(6): H971-972
8. Della Guardia L, **Shin AC**. White and brown adipose tissue functionality is impaired by fine particulate matter (PM2.5) exposure. *Journal of Molecular Medicine*, 2022 Mar 14, Online ahead of print

Grants:

1. NIH R21 AG069140-01. BCAAs as a novel biomarker and treatment for Alzheimer's disease, Sep 2020 – Dec 2022. (PI: Andrew C. Shin)
2. NIH R01 AG071560-01A1. Serotonin-modulated mitochondrial dysfunction in dementia, depression and diabetes, Feb 2022 – Jan 2027. (PI: Arubala Reddy; Co-I: Andrew C. Shin)
3. NIH R01 1R01AG073826-01A1. The hippocampal dentate gyrus in aging and Alzheimer's disease: boosting transcription of retinoic acid-sensitive genes through vitamin A supplementation and HDAC inhibition, Aug 2022 – Apr 2027. (PI: John J. Lawrence; Co-I: Andrew C. Shin)
4. College of Human Sciences, TTU. The role of synbiotics in metabolic health and muscle tone in elder people, Oct 2022 – August 2023. (PI: Andrew C. Shin)
5. College of Human Sciences, TTU. Effects of BT2 on AD-related pathology in the brain, April 2022 – April 2023. (PI: Andrew C. Shin)
6. Wylie Briscoe Fund, College of Human Sciences, TTU. Serum metabolomics in women with Alzheimer's disease, Dec 2021 – Feb 2023. (PI: Andrew C. Shin)
7. Scientific & Technological Research Council of Turkey. The effects of central and systemic irisin on glucose homeostasis in diet-induced obese mice, Nov 2020 – Dec 2022. (PI: Hale E. Egritag; Co-PI: Andrew C. Shin)

Awards:

1. Apple Polishing Award, TTU Mortar Board, 2022
2. Open Access Initiative Award – Office of Research & Innovation, TTU, 2022
3. Nominated for Texas Tech Alumni Association New Faculty Award, 2022

Presentations: INVITED TALKS/LECTURES:

1. 2022 Seminar, Seoul National University, Department of Functional Neuroanatomy, Seoul, South Korea. Acute effects of BCAAs on glucose homeostasis and insulin sensitivity
2. 2022 Seminar, Seoul National University, Department of Medicine, Seoul, South Korea. A novel metabolic approach to treat Alzheimer's disease.
3. 2022 Seminar, 40th Annual US Foods: Food and Nutrition Seminar, Texas Tech University Weight control & the brain.

Conference talks:

1. Mullins CA, Shah H, Siddik MAB, Reddy PH, MohanKumar PS, **Shin AC**. Therapeutic effects of BT2 in the hippocampus of Alzheimer's disease mouse model. American Society for Nutrition (online conference), Jun 2022
2. Gannaban RB, Shah H, **Shin AC**. Acute exposure to branched-chain amino acids (BCAAs) impairs glucose homeostasis by promoting insulin resistance in mice. American Society for Nutrition (online conference), Jun 2022
3. Mullins CA, Shah H, Reddy PH, MohanKumar S, MohanKumar PS, **Shin AC**. A BCAA-lowering agent BT2 alleviates Alzheimer's disease-related pathology and delays cognitive decline in 5xFAD mouse model. Cold Spring Harbor Laboratory (CSHL) Conference, New York, Nov 2022
4. Mullins CA, Kramer A, Siddik MAB, Shah H, MohanKumar PS, **Shin AC**. BT2 alleviates brain pathology and improves neurotransmitter status in Alzheimer's disease mouse model. Center of Excellence for Translational Neuroscience and Therapeutics (CTNT) Annual Symposium, TTUHSC, Apr 2022

Conference posters:

1. Halbgewachs K, Buxton M, Zabet-Moghaddam M, Lawrence JJ, **Shin AC**. Blood-based lipidomic analyses in Alzheimer's disease: Investigating relationships between dysregulated lipid species and molecular mechanisms of oxidative stress. Center of Excellence for Translational Neuroscience and Therapeutics (CTNT) Annual Symposium, TTUHSC, Apr 2022
2. Kramer A, Shah H, Mattern M, Gannaban RB, Berthoud HR, **Shin AC**. FGF21 mediates restored BCAA metabolism following Roux-en-Y gastric bypass (RYGB) surgery in mice. Undergraduate Research Conference, TTU, Mar 2022

3. Mullins CA, Kramer A, Siddik MAB, Shah H, MohanKumar PS, **Shin AC**. BT2 alleviates brain pathology and improves neurotransmitter status in Alzheimer's disease mouse model. 21st Graduate Student Research Poster Competition, Mar 2022

Singh, Sharda

Publications:

1. Hindle A, Singh SP, Pradeepkiran JA, Bose C, Vijayan M, Kshirsagar S, Sawant NA, Reddy PH. Rlip76: An Unexplored Player in Neurodegeneration and Alzheimer's Disease? *Int J Mol Sci*. 2022 May 29;23(11):6098. doi: 10.3390/ijms23116098. PMID: 35682775; PMCID: PMC9181721.

Song, Huaxin

Publications:

1. Reyes AT, **Song H**, Bhatta TR, Kearney CA. Exploring the relationships between resilience, mindfulness, and experiential avoidance after the use of a mindfulness- and acceptance-based mobile app for posttraumatic stress disorder. *Perspect Psychiatr Care*. 2022 Apr;58(2):776-784. doi: 10.1111/ppc.12848. Epub 2021 May 20. PMID: 34018197.
2. Masten Y, **Song H**, Esperat CR, McMurry LJ. A maternity care home model of enhanced prenatal care to reduce preterm birth rate and NICU use. *Birth*. 2022 Mar;49(1):107-115. doi: 10.1111/birt.12579. Epub 2021 Aug 24. PMID: 34427349.
3. Esperat, M.C., Hust, C., **Song H.**, Garcia,M., & McMurry, L. (*in press*). Interprofessional Collaborative Practice: Management of Chronic Disease and Mental Health Issues in Primary Care. *Public Health Reports*
4. Eldridge, T. T., Martin, N., Campbell, L., **Song, H.**, & Frazier, L. (2022). Quality Improvement Project to Reduce Opioid Use in Patients Undergoing Cesarean Birth. *AORN journal*, 115(4), 327-336.

Grants:

1. HRSA-22-124 PI Linda McMurry 9/15/2023-9/14/2026. Community Health Worker Training Program (CHWTP)
Funding Agency: HRSA \$ 2,425,194. Role: Program evaluator/Statistician, Program Manager
2. HRSA-20-012 PI Linda McMurry 07/2020-06/2023. Nurse Education, Practice, Quality and Retention (NEPQR) Interprofessional Collaborative Practice Program (IPCP): Behavioral Health Integration (BHI). Funding Agency: HRSA \$1,461,487. Role: Program evaluator/Statistician, Program Manager

St-John, Julie

Publications:

1. **St. John, J.** (2022, Fall). Public Health, Populations, Purpose, Priorities, and Passion. *Rural Health Quarterly*. 3: 20-23. <https://ruralhealthquarterly.com/home/2022/10/03/rural-health-quarterly-fall-2022/>
2. Brooks T, **St. John J**, Gilbert K, & Guindon J (2022). Establishing a faculty development academy at a health sciences center: A needs assessment [Special Issue 15]. *Chronicle of Mentoring and Coaching*. 6(1).
3. Chen, J., Dennis, J. A., **St. John, J.A.**, Shen, C.L. (2022, February 24). Self-reported Patient Compliance with Physician Advised Lifestyle Behavior Changes Among Adults with Musculoskeletal Conditions. *Frontiers in Public Health, Public Health Education and Promotion*. 10: 821150. <https://doi.org/10.3389/fpubh.2022.821150>
4. **St. John, J. A.**, Fox, D. J., Rosenthal, E. L., Lee, L. K. (2022). Editorial: Community Health Workers Practice from Recruitment to Integration. *Frontiers in Public Health, Public Health Education and Promotion*, 10: 841081. <https://doi.org/10.3389/fpubh.2022.841081>
5. **St. John JA**, Hernández-Gordon, W., Martínez, S., Hernández, I. (2022, January/March). Community health workers connecting communities during Covid-19: A case study from Chicago, USA. *Journal of*

Presentations:

1. Applying Diffusion of Innovation to the Texas Mother Friendly Worksite Program: Does early adoption lead to lower rates of infant mortality? Jessyca Cripps, **Julie St. John**. Annual American Public Health Association Meeting, November 7, 2022, Boston, Massachusetts.
2. How CHW Associations Strengthen and Support the CHW Workforce: Examples from the Texas Association of Promotores and CHWs. Ashley Rodriguez, **Julie St. John**. Annual American Public Health Association Meeting, November 6, 2022, Boston, Massachusetts.
3. The C3 Project's next steps to an engaged national review of CHW roles and competencies. Lee Rosenthal, Paige Menking, **Julie St. John**, Lily Lee, & Durrell Fox. Annual American Public Health Association Meeting, November 6, 2022, Boston, Massachusetts.
4. Qualitative findings from a human trafficking community needs assessment conducted within a health sciences center. **Julie St. John**, Tiffany Hotchkiss, Abbey Weed. Annual American Public Health Association Meeting, November 7, 2022, Boston, Massachusetts.
5. Laughter Therapy (presenter). **Julie St. John**. Texas Association of Community Health Workers Annual Conference, Waco, Texas, September 20, 2022.
6. Determinantes sociales de la salud (Social Determinants of Health) (presenter). **Julie St. John**. Texas Association of Community Health Workers Annual Conference, Waco, Texas, September 19, 2022.
7. What CHWs told us about their experiences and needs during the COVID-19 pandemic. (speakers & panelist). **Julie St. John**, Venus Gines, Denise Hernandez, Rosalia Guerrero-Luera. UT Health School of Public Health, Texas Epidemic Public Health Institute (TEPHI) CHW Training Center Virtual Town Hall: "Supporting CHWs as part of the pandemic preparedness workforce: The role of the training centers in Texas." Webinar. August 25, 2022.
8. Human Trafficking is a Public Health Issue. (speaker). West Texas Pharmacy Association Annual Convention. Abilene, Texas, March 5, 2022.
9. Immigrants & Human Trafficking: Risk factors & Prevention. TTUHSC Human Trafficking and Social Justice Symposium: "Human Trafficking: Shining a Light on Vulnerable Populations." January 28, 2022, virtual.

FUNDED RESEARCH OR PRACTICE:

1. Health equity grant for Parmer, Deaf Smith, and Gray counties in Texas. Texas Department of State Health Services. Grant #: HHS00111770001. Role: Co-investigator, PI: Theresa Byrd. \$245,000 (December 17, 2021 – May 31, 2023).
2. Piloting a Composting Latrine Project in Pedregal Grande, Piura, Peru. TTUHSC Office of Global Health, \$10,000 (January 2021-December 2023).
3. International Rescue Committee, Abilene, Victims of Trafficking Program. OVC Fiscal Year (FY) 2019, Direct Services to Support Victims of Human Trafficking, Office for Victims of Crime, Office of Justice Programs, U.S. Department of Justice, CO-I & Evaluator, sub contracted, International Rescue Committee, \$28,168 (January 2020-December 2022).

Tinsley, Grant

Publications:

1. Santos HO, Genario R, **Tinsley GM**, Ribeiro P, Carteri RB, Coelho-Ravagnani CF, Mota JF. A scoping review of intermittent fasting, chronobiology, and metabolism. *Am J Clin Nutr.* 2022 Apr 1;115(4):991-1004. doi: 10.1093/ajcn/nqab433. PMID: 34978321.
2. Stratton MT, Albracht-Schulte K, Harty PS, Siedler MR, Rodriguez C, **Tinsley GM**. Physiological responses to acute fasting: implications for intermittent fasting programs. *Nutr Rev.* 2022 Feb 10;80(3):439-452. doi: 10.1093/nutrit/nuab094. PMID: 35142356.

3. **Tinsley GM**, Harty PS, Stratton MT, Siedler MR, Rodriguez C. Liposomal Mineral Absorption: A Randomized Crossover Trial. *Nutrients*. 2022 Aug 13;14(16):3321. doi: 10.3390/nu14163321. PMID: 36014827; PMCID: PMC9414097.
4. Graybeal AJ, Willis JL, Morales-Marroquin E, **Tinsley GM**, Messiah SE, Shah M. Emerging evidence of the relationship between fat-free mass and ghrelin, glucagon-like peptide-1, and peptide-YY. *Nutrition*. 2022 Nov-Dec;103-104:111815. doi: 10.1016/j.nut.2022.111815. Epub 2022 Aug 12. PMID: 36088864.
5. Harty PS, Friedl KE, Nindl BC, Harry JR, Vellers HL, **Tinsley GM**. Military Body Composition Standards and Physical Performance: Historical Perspectives and Future Directions. *J Strength Cond Res*. 2022 Dec 1;36(12):3551-3561. doi: 10.1519/JSC.0000000000004142. Epub 2021 Sep 29. PMID: 34593729.
6. Tesch JC, Papadopoulos P, Dolgener F, **Tinsley GM**. New Equations for Hydrostatic Weighing without Head Submersion. *J Funct Morphol Kinesiol*. 2022 Sep 16;7(3):70. doi: 10.3390/jfmk7030070. PMID: 36135428; PMCID: PMC9506326.
7. Blue MNM, Hirsch KR, Brewer GJ, Cabre HE, Gould LM, **Tinsley GM**, Ng BK, Ryan ED, Padua D, Smith-Ryan AE. The validation of contemporary body composition methods in various races and ethnicities. *Br J Nutr*. 2022 Feb 3:1-11. doi: 10.1017/S0007114522000368. Epub ahead of print. PMID: 35109945.
8. Ashtary-Larky D, Bagheri R, **Tinsley GM**, Asbaghi O, Salehpour S, Kashkooli S, Kooti W, Wong A. Betaine supplementation fails to improve body composition: a systematic review and meta-analysis. *Br J Nutr*. 2022 Sep 14;128(5):975-988. doi: 10.1017/S0007114521004062. Epub 2021 Oct 7. PMID: 34743773.
9. Santos HO, Cerqueira HS, **Tinsley GM**. The Effects of Dietary Supplements, Nutraceutical Agents, and Physical Exercise on Myostatin Levels: Hope or Hype? *Metabolites*. 2022 Nov 20;12(11):1146. doi: 10.3390/metabo12111146. PMID: 36422286; PMCID: PMC9695935.
10. Siedler MR, Rodriguez C, Stratton MT, Harty PS, Keith DS, Green JJ, Boykin JR, White SJ, Williams AD, DeHaven B, **Tinsley GM**. Assessing the Reliability and Cross-Sectional and Longitudinal Validity of 15 Bioelectrical Impedance Analysis Devices. *Br J Nutr*. 2022 Nov 21:1-29. doi: 10.1017/S0007114522003749. Epub ahead of print. PMID: 36404739.
11. Brandner CF, **Tinsley GM**, Graybeal AJ. Smartwatch-based bioimpedance analysis for body composition estimation: precision and agreement with a 4-compartment model. *Appl Physiol Nutr Metab*. 2022 Dec 3. doi: 10.1139/apnm-2022-0301. Epub ahead of print. PMID: 36462216.
12. **Tinsley GM**, Harty PS, Stratton MT, Smith RW, Rodriguez C, Siedler MR. Tracking changes in body composition: comparison of methods and influence of pre-assessment standardisation. *Br J Nutr*. 2022 Jun 14;127(11):1656-1674. doi: 10.1017/S0007114521002579. Epub 2021 Jul 30. PMID: 34325758.
13. Graybeal AJ, Brandner CF, **Tinsley GM**. Validity and reliability of a mobile digital imaging analysis trained by a four-compartment model. *J Hum Nutr Diet*. 2022 Nov 30. doi: 10.1111/jhn.13113. Epub ahead of print. PMID: 36451080.
14. **Tinsley GM**, Stratton MT, Harty PS, Williams AD, White SJ, Rodriguez C, Dellinger JR, Johnson BA, Smith RW, Trexler ET. Influence of Acute Water Ingestion and Prolonged Standing on Raw Bioimpedance and Subsequent Body Fluid and Composition Estimates. *J Electr Bioimpedance*. 2022 May 20;13(1):10-20. doi: 10.2478/joeb-2022-0003. PMID: 35646197; PMCID: PMC9124033.
15. Stratton MT, Siedler MR, Harty PS, Rodriguez C, Boykin JR, Green JJ, Keith DS, White SJ, DeHaven B, Williams AD, **Tinsley GM**. The influence of caffeinated and non-caffeinated multi-ingredient pre-workout supplements on resistance exercise performance and subjective outcomes. *J Int Soc Sports Nutr*. 2022 Apr 4;19(1):126-149. doi: 10.1080/15502783.2022.2060048. PMID: 35599920; PMCID: PMC9116396.
16. Bongiovanni T, **Tinsley G**, Martera G, Orlandi C, Genovesi F, Puleo G, Rossi A, Trecroci A. Regional Lean Soft Tissue and Intracellular Water Are Associated with Changes in Lower-Body Neuromuscular Performance: A Pilot Study in Elite Soccer Players. *Eur J Investig Health Psychol Educ*. 2022 Jul 22;12(8):882-892. doi: 10.3390/ejihpe12080064. PMID: 35893080; PMCID: PMC9332301.
17. Graybeal AJ, Brandner CF, **Tinsley GM**. Visual body composition assessment methods: A 4-compartment model comparison of smartphone-based artificial intelligence for body composition

- estimation in healthy adults. *Clin Nutr.* 2022 Nov;41(11):2464-2472. doi: 10.1016/j.clnu.2022.09.014. Epub 2022 Sep 29. PMID: 36215866.
18. Graybeal AJ, Brandner CF, **Tinsley GM**. Visual body composition assessment methods: A 4-compartment model comparison of smartphone-based artificial intelligence for body composition estimation in healthy adults. *Clin Nutr.* 2022 Nov;41(11):2464-2472. doi: 10.1016/j.clnu.2022.09.014. Epub 2022 Sep 29. PMID: 36215866.
 19. Graybeal AJ, Brandner CF, **Tinsley GM**, Haynes H, Stavres J. Associations between visceral adipose tissue estimates produced by near-infrared spectroscopy, mobile anthropometrics, and traditional body composition assessments and estimates derived from dual-energy X-ray absorptiometry. *Br J Nutr.* 2022 Oct 21:1-11. doi: 10.1017/S0007114522003488. Epub ahead of print. PMID: 36268732.
 20. Giro R, Matias CN, Campa F, Santos DA, Cavaca ML, Duque P, Oliveira M, Matos N, Vicente F, Pereira P, Santos HO, **Tinsley GM**, Teixeira FJ. Development and Validation of an Anthropometric Equation to Predict Fat Mass Percentage in Professional and Semi-Professional Male Futsal Players. *Nutrients.* 2022 Oct 27;14(21):4514. doi: 10.3390/nu14214514. PMID: 36364777; PMCID: PMC9655567.
 21. Rodriguez C, Harty PS, Stratton MT, Siedler MR, Smith RW, Johnson BA, Dellinger JR, Williams AD, White SJ, Benavides ML, **Tinsley GM**. Comparison of Indirect Calorimetry and Common Prediction Equations for Evaluating Changes in Resting Metabolic Rate Induced by Resistance Training and a Hypercaloric Diet. *J Strength Cond Res.* 2022 Nov 1;36(11):3093-3104. doi: 10.1519/JSC.0000000000004077. Epub 2021 Jun 22. PMID: 34172636.
 22. Barakat C, Escalante G, Stevenson SW, Bradshaw JT, Barsuhn A, **Tinsley GM**, Walters J. Can Bodybuilding Peak Week Manipulations Favorably Affect Muscle Size, Subcutaneous Thickness, and Related Body Composition Variables? A Case Study. *Sports (Basel).* 2022 Jul 5;10(7):106. doi: 10.3390/sports10070106. PMID: 35878117; PMCID: PMC9321665.
 23. Graybeal AJ, Brandner CF, **Tinsley GM**. Evaluation of automated anthropometrics produced by smartphone-based machine learning: a comparison with traditional anthropometric assessments. *Br J Nutr.* 2023 Jan 12:1-29. doi: 10.1017/S0007114523000090. Epub ahead of print. PMID: 36632007.
 24. Kord-Varkaneh H, Salehi-Sahlabadi A, **Tinsley GM**, Santos HO, Hekmatdoost A. Effects of time-restricted feeding (16/8) combined with a low-sugar diet on the management of non-alcoholic fatty liver disease: A randomized controlled trial. *Nutrition.* 2023 Jan;105:111847. doi: 10.1016/j.nut.2022.111847. Epub 2022 Sep 13. PMID: 36257081.

Abstracts:

1. P. Harty, M. Stratton, G. Escalante, M. Siedler, C. Rodriguez, J. Dellinger, A. Williams, S. White, R. Smith, B. Johnson, and **G. Tinsley**. "Isokinetic Squat Performance Is Associated With Leg Press One-Repetition Maximum but Not Repetitions to Fatigue". In: *Journal of strength and conditioning research* 35.12 (2021), pp. 291-446. DOI: 10.1519/JSC.0000000000004141.
2. M. Stratton, P. Harty, M. Siedler, C. Rodriguez, R. Smith, A. Williams, S. White, J. Dellinger, and **G. Tinsley**. "Comparison Between Changes in Muscular Performance and Dual-Energy X-Ray Absorptiometry Segmental Lean Mass after Overfeeding With Resistance Training". In: *Journal of strength and conditioning research* 35.12 (2021), pp. 291-446. DOI: 10.1519/JSC.0000000000004141. PROFESSIONAL ORGANIZATIONS|||SELECTED CONSULTING ACTIVITIES||ABSTRACTS□□□
3. D. Keith, J. Boykin, C. Harrison, J. Zaragoza, J. Prather, M. Tinnin, L. Taylor, and **G. Tinsley**. "Relationship Between Changes in Upper Body Fat-Free Mass and Bench Press Performance in American Football Players". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 24. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/24>.
4. M. Siedler, C. Rodriguez, M. Stratton, P. Harty, D. Keith, J. Green, J. Boykin, S. White, A. D. Williams, B. DeHaven, and **G. Tinsley**. "A Between-sex Comparison of the Validity of Body Fat Percentage Estimates From Four Bioelectrical Impedance Analyzers". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 29. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/29>.

5. J. Boykin, D. Keith, C. Harrison, J. A. Zaragoza, J. Prather, M. Tinnin, L. W. Taylor IV, and **G. Tinsley**. "Associations of Changes in Body Composition and Athletic Performance in Collegiate American Football Players". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 27. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/27>.
6. J. Green, A. Ambrosius, C. Dodge, B. Merfeld, C. Khurelbaatar, M. Carpenter, P. Harty, C. Rodriguez, M. Siedler, M. Stratton, D. Keith, J. Boykin, A. Jagim, and **G. Tinsley**. "Assessment of Youth Athlete Body Composition using Bioimpedance Techniques as Compared to a Three-Compartment Model". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 18. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/18>.
7. G. DeHaven, M. Siedler, C. Rodriguez, S. White, A. Williams, P. Harty, M. T. Stratton, D. Keith, J. Green, J. Boykin, and **G. Tinsley**. "Comparison of Laboratory-Grade and Consumer-Grade Hand-to-Foot Bioelectrical Impedance Analyzers for Body Composition Estimation". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 11. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/11>.
8. C. Florez, **G. Tinsley**, J. Prather, J. Zaragoza, C. Teague, K. Glenn, J. Kelly, M. Bourque, M. Hockett, A. Gutierrez, M. Tinnin, K. Brennan, and L. Taylor. "Body Fluid Estimation Via Segmental Multi-Frequency Bioelectrical Impedance Analysis Following Acute Resistance Exercise". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 5. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/5>.
9. J. Prather, C. Harrison, A. Vargas, B. Soto, A. Harrison, M. Tinnin, **G. Tinsley**, D. Willoughby, and L. Taylor. "The Effects of a Thermogenic Supplement on Metabolic and Hemodynamic Variables and Subjective Mood States". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 4. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/4>.
10. S. White, M. Siedler, C. Rodriguez, A. Williams, G. DeHaven, P. S. Harty, M. Stratton, D. Keith, J. Green, J. Boykin, and **G. Tinsley**. "Validity of Hand-to-Foot and Foot-to-Foot Consumer Bioimpedance Analyzers: A Four-Compartment Model Comparison". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 3. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/3>.
11. C. Rodriguez, C. Harrison, J. Prather, J. A. Zaragoza, C. Teague, K. Glenn, J. Kelly, M. Bourque, M. Hockett, A. Gutierrez, M. Tinnin, K. Brennan, L. Taylor, and **G. Tinsley**. "Acute Resistance Exercise Influences Bioelectrical Impedance Analysis Segmental Fat Mass Estimates". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 2. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/2>.
12. P. Harty, A. Ambrosius, C. Dodge, B. Merfeld, C. Khurelbaatar, M. Carpenter, M. Siedler, M. Stratton, C. Rodriguez, J. Green, D. Keith, J. Boykin, A. Jagim, and **G. Tinsley**. "Body Composition Estimation in Youth Athletes: Agreement Between Two-Component Methods". In: *International journal of exercise science: conference proceedings* 2.14 (2022), p. 50. URL: <https://digitalcommons.wku.edu/ijesab/vol2/iss14/50>.
13. J. Boykin, M. Stratton, M. Siedler, P. Harty, C. Rodriguez, J. Green, A. Williams, D. Keith, S. White, B. DeHaven, and **G. Tinsley**. "Acute Effects of Caffeinated and Non-Caffeinated Pre-Workout Supplement Consumption on Eccentric and Concentric Force Production During an Isokinetic Squat Exercise". In: *Journal of the International Society of Sports Nutrition* 19.S1 (2022), pp. 1-69. DOI: 10.1080/15502783.2022.2056381.
14. J. Green, P. Harty, M. Stratton, M. Siedler, C. Rodriguez, J. Boykin, D. Keith, S. White, B. DeHaven, A. Williams, and **G. Tinsley**. "Differential Effects of Caffeinated and Stimulant-Free Pre-Workout Supplements on Ratings of Perceived Energy, Focus, and Fatigue". In: *Journal of the International Society of Sports Nutrition* 19.S1 (2022), pp. 1-69. DOI: 10.1080/15502783.2022.2056381.
15. C. Rodriguez, M. Stratton, M. Siedler, P. Harty, J. Boykin, J. Green, D. Keith, S. White, A. Williams, B. DeHaven, and **G. Tinsley**. "Influence of Caffeinated and Non-Caffeinated Pre-Workout Supplements on Maximal and Rapid Isometric Strength Characteristics". In: *Journal of the International Society of Sports Nutrition* 19.S1 (2022), pp. 1-69. DOI: 10.1080/15502783.2022.2056381.
16. M. Siedler, M. Humphries, P. Lamadrid, G. Mastrofi ni, J. Gegenheimer, A. Ibrahim, A. Brooks, T. Smith, **G. Tinsley**, and B. Campbell. "Baseline Anthropometric, Dietary intake, and Behavioral

Variables Do Not Predict Study Completion or Fat Loss Success in Young, Resistance-trained Females Undergoing a Dietary Intervention". In: *Journal of the International Society of Sports Nutrition* 19.S1 (2022), pp. 1-69. DOI:10.1080/15502783.2022.2056381.

17. M. Stratton, M. Siedler, P. Harty, C. Rodriguez, J. Boykin, J. Green, D. Keith, S. White, B. DeHaven, A. Williams, and **G. Tinsley**. "The Influence of Caffeinated and Non-Caffeinated Pre-Workout Supplements on Resistance Exercise Performance". In: *Journal of the International Society of Sports Nutrition* 19.S1 (2022), pp. 1-69. DOI:10.1080/15502783.2022.2056381.

Grants:

1. Chronic Thermogenic Dietary Supplement Consumption: Effects on Body Composition, Anthropometrics, Metabolism, and Subjective Variables (A23-0089-001). Sponsor: EHP Labs. 2022 - 2023. Role: Lead Principal Investigator Amount: \$85,378
2. Digital Anthropometry and Body Composition Estimation Using a Generation 2 Prototype 3-Dimensional Optical Scanner (A22-0305-001). Sponsor: Prism Labs. 2022 - 2023- Role: Lead Principal Investigator Amount: \$32,756
3. Metabolic Effects of a Novel Ready-to-drink Thermogenic Beverage (A22-0092-001). Sponsor: EHP Labs. 2021 - 2022. Role: Lead Principal Investigator. Amount: \$28,401
4. Pharmacokinetic Analysis of Nutrient Absorption from a Novel Liposomal Multivitamin/mineral Formulation (A21-0282-001). Sponsor: Nutraceutical International Corporation. 2021 - 2022 Role: Lead Principal Investigator. Amount: \$159,341
5. Evaluation of Novel Beverage Formulations for Hydration Enhancement in Humans (A21-0284-001). Sponsor: 8 POiNT, LLC. 2021 - 2022. Role: Lead Principal Investigator. Amount: \$35,000
6. Quantifying the Relationship Between Anthropometry, Body Composition, and Performance on the Army Combat Fitness Test (A21-0261-001). Sponsor: Texas Chapter of the American College of Sports Medicine [Doctoral Student Research Development Award: Patrick Harty]. 2021 - 2022. Role: Lead Principal Investigator Amount: \$1,750

Zhang, Fangyuan

Publications:

1. Shrestha, K., Li, H. F., Santos, A. P., Vaughan, J., **Zhang, F.**, Kurian, A. S., Couch, B., Bayouth, C. (2022). Local Infiltration of Liposomal Bupivacaine in Isolated Traumatic Rib Fractures. *Journal of the American College of Surgeon*, 235(5), S87-88.
2. Tian, S., Wang, J., **Zhang, F.**, Wang, D. (2022). Comparative analysis of microRNA binding site distribution and microRNA-mediated gene expression repression of oncogenes and tumor suppressor genes. *Genes*, 13(3), 481. 4 = Highly respected in field, refereed.
3. Neupane, J., Guo, W., Cao, G., **Zhang, F.**, Slaughter, L., Deb, S. (2022). Spatial patterns of soil microbial communities and implications for precision soil management at the field scale. *Precision Agriculture*, 23, 1008–1026. <https://doi.org/10.1007/s11119-021-09872-1> 4 = Highly respected in field, refereed.

Zu, Yujiao

Publication:

1. Pal, A., Sun, S., Armstrong, M., Manke, J., Reisdorph, N., Adams, V. R., Kennedy, A., Zu, Y., Moustaid-Moussa, N., Carroll, I., Shaikh, S. R. (2022). Beneficial effects of eicosapentaenoic acid on the metabolic profile of obese female mice entails upregulation of HEPEs and increased abundance of enteric *Akkermansia muciniphila*. *Molecular and Cell Biology of Lipids*, 1867(1).

Abstracts:

1. Zu, Y., Moustaid-Moussa, N. (2022). 8-Hydroxyeicosapentaenoic Acid Reduces Adipogenesis and Inflammation in 3T3-L1 Adipocytes (Issue Supplement_1 ed., vol. Volume 6, pp. Page 1100).
2. Zu, Y., Moustaid-Moussa, N. Temperature-Dependent Effects of Eicosapentaenoic Acid (EPA) on Browning of Subcutaneous Adipose Tissue in UCP1 Knockout Male Mice. *Molecular Metabolism*.

3. Yavari, M., Ramalingam, L., N., C., Chavira, A., Biltz, C., Mounce, I., Maldonado, K. A., Scoggin, S., Zu, Y., Kalupahana, N. S., Yosofvand, M., Moussa, H., Moustaid-Moussa, N. Eicosapentaenoic Acid Protects Against Metabolic Impairments in the APPswePS1dE9 Alzheimer's Disease Mouse Model. *The Journal of Nutrition*.

Presentation:

1. Zu, Y. (Presenter & Author), ObesityWeek, "Beneficial effects of eicosapentaenoic acid in glycerol 3-phosphate dehydrogenase 2 deficient mice," The Obesity Society, San Diego, CA. (November 2022, Poster).
2. Zu, Y. (Presenter & Author), Nutrition 2022, "8-hydroxyeicosapentaenoic acid reduces adipogenesis and inflammation in 3t3-L1 adipocytes," American Society of Nutrition, online. (June 2022, Oral).

Grant awards:

Federal:

1. Zu, Yujiao, Moustaid-Moussa, Naima, "Novel prebiotic nanoparticles to enhance tart cherry anthocyanin bioavailability and improve gut health in obesity," USDA-AFRI New Investigator Seed Grant (Recommend to an award)

Internal:

1. Zu, Yujiao, "Healthy fats that fight body fats" TTU COHS Internal Grant (Awarded)
2. Zu, Yujiao, Moustaid-Moussa, Naima, "Protective effects of shogaol in obesity-related breast cancer", TTU COHS Internal Grant, (Awarded)

Zumwalt, Mimi

Publications:

1. Shen CL, Watkins BA, Kahathuduwa C, Chyu MC, Zabet M, Elmassry MM, Luk HY, Brismee JM, Knox A, Lee J, **Zumwalt M**, Wang R, Wager TD, Neugebauer V. Tai Chi Improves Brain Functional Connectivity and Plasma Lysophosphatidylcholines in Postmenopausal Women with Knee Osteoarthritis: An Exploratory Pilot Study. *Frontiers in Medicine*, section Rheumatology. 2022;8:775344. <https://www.frontiersin.org/articles/10.3389/fmed.2021.775344/full>
2. Petrie KA, Chen JN, Miers H, Grimes JS, **Zumwalt M**. Gender Differences in Seeking Health Care and Postintervention Pain Outcomes in Foot and Ankle Orthopedic Patients. *Womens Health Rep (New Rochelle)*. 2022 May 9;3(1):500-507. doi: 10.1089/whr.2021.0076. PMID: 35652003; PMCID: PMC9148655.
3. Hayward D, Dowdle TS, Steadman J, Froerer D, Perry C, **Zumwalt M**. Orthopaedic surgery residency match trends during COVID-19 pandemic: a cross-sectional study. *Curr Orthop Pract*. 2022 Jul 20;33(5):458-460. doi: 10.1097/BCO.0000000000001139. PMID: 36033129; PMCID: PMC9394201.
4. Caleb Hawkes, MBA; Dan Hayward, MBA; Cody Perry; Werner de Riese, MD, PhD; **Mimi Zumwalt, MD**. Potential Patient Bias by Insurance Coverage on CG-CAHPS Surveys and its Impact on Physician Reimbursement. *Journal of Orthopaedic Business* (2022) Vol 2, No.3. DOI: <https://doi.org/10.55576/job.v2i3.18>

Presentations:

Poster:

1. Nicolas Householder, Elwin Rutayomba, Kofi Agyare, **Mimi Zumwalt, MD**. Experimental intra-articular injections for the treatment of primary knee OA. TTUHSC Research Week, March 2022
2. Kristin Huseman, Adilene Chapina-Guizar, **Mimi Zumwalt, MD**. COVID-19's Impact on TTUHSC Graduate & Medical Students' Exercise Routines. TTUHSC Research Week, March 2022.
3. Nicolas Householder, Elwin Rutayomba, Kofi Agyare, **Mimi Zumwalt, MD**. Literature review - experimental intra-articular injections targeting reversal of OA pathology. Texas Surgical Society Conference, April 2022