

NAME Chwan-Li (Leslie) Shen		POSITION TITLE Professor of Pathology School of Medicine	
EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Providence University, Taiwan, R.O.C.	B.S.	1986-1989	Food & Nutrition
Texas Tech University, Lubbock, Texas	M.S.	1990-1991	Nutrition/bone
Purdue University, West Lafayette, Indiana	Ph.D.	1992-1995	Food Sci/Nutrition/bone
Texas Tech University Health Sciences Center, School of Medicine, Lubbock, Texas	Postdoc	1996-2000	Bone pathology /nutrition/carcinogenesis

Summary of Research:

During the past 20 years or so at School of Medicine, I developed independent research programs in a number of areas related to musculoskeletal pathology, addressing bone, joint, and muscle health issues related to osteoporosis, osteoarthritis, and sarcopenia, in addition to other chronic diseases including obesity, diabetes, renal disease, and frailty, using treatments/interventions such as nutrition (dietary nutrients, bioactive components, functional food, phytochemicals, herbal supplements) and exercise, and investigated mechanisms such as anti-inflammation, anti-oxidative DNA damage, bone metabolism and microstructure, and bone/joint/muscle strength.

As a researcher, I have several unique traits different from others. First, I am one of a few researchers who can conduct true **translational research**. To benefit human health, scientific discoveries must be translated from basic laboratory research into practical applications to humans. I have conducted translational research using animal models to investigate the effects and mechanisms associated with nutritional/dietary treatments, and eventually tested them on human subjects in clinical studies (I am a certified Clinical Research Professionals) and producing results that can benefit human health. Secondly, I am one of a few researchers who can and have conducted studies with both dietary and exercise interventions on human health. Knowledge has been established that it is particularly important to combine nutrition and physical activity in improving **musculoskeletal health (bone, joint, and skeletal muscle)** and **obesity-associated disorders (diabetes and metabolic syndrome)** through their additive or even synergistic effects.

One of my strengths is in organizing and leading issue-oriented **multidisciplinary** research collaborations with faculty members inside and outside my department, school, and university. Based on research ideas initiated by myself to address various health issues mentioned above, I have succeeded in organizing a team of about 40 researchers with a wide spectrum of expertise including internal medicine, cardiology, endocrinology, rheumatology, nephrology, immunology, cell biology, molecular epidemiology, orthopedic surgery, dietetics, physical therapy, rehabilitation sciences, family & community medicine, environmental health, food science, psychology, nursing, pharmacology, pharmacy, exercise sciences, biostatistics, animal sciences, and material & fracture engineering.

In conducting the research above, I have secured more than \$12 M external grants (as the PI or MPI) from federal, foundation, and industry sources. My co-authors and I have published 118 papers in peer-reviewed journals including invited reviews and 3 book chapters. Our work on mitigation of bone loss, osteoarthritis, and sarcopenia through dietary supplements (i.e., green tea, tocotrienols, bioactive components) and exercise (i.e., Tai Chi) have been publicized in major news media and more than million websites (e.g., USA today, MSN.com, etc.). With my experience, vision, and leadership in research, I continue to develop/establish a variety of programs across multiple disciplines that will complement and strengthen my current research and education focus on **the role of nutrition/food, diet, and physical activity in the etiology, prevention, and treatment of chronic diseases** in School of Medicine as well as TTUHSC.

In 2018, I have established a new *Center of Excellence for Integrative Health* to promote CAM research including basic, translational, and clinical disciplines through scholarly activities. Key areas of collaborative research area are mind-body exercise (e.g., Tai Chi) and dietary bioactive components in the management of chronic diseases, including osteoarthritis, osteoporosis, sarcopenia, diabetes, obesity, and neuropathic pain.

Position and experience

Associate Dean for Research, School of Medicine, 2018-present.

Founding Director, Center of Excellence for Integrative Health, 2018-present.
Professor (tenured), 2014-present. Associate Professor (tenured), 2008-2014. Assistant Professor, February 2001-2008.
Department of Pathology, School of Medicine, Texas Tech University Health Sciences Center, Lubbock, TX.
Joint Professor, 2014-present. Joint Associate Professor, 2008-2014. Joint Assistant Professor, 2005-2008. Department of
Physiology, School of Medicine, Texas Tech University Health Sciences Center, Lubbock, Texas.
Joint Clinical Professor, 2014-present. Joint Clinical Associate Professor, 2008-2014. Joint Clinical Assistant Professor,
2004-2008. Department of Laboratory Sciences and Primary Care, School of Allied Health, Texas Tech University
Health Sciences Center, Lubbock, Texas.
Faculty Member, 2001 to present. Southwest Cancer Treatment and Research Center, University Medical Center,
Lubbock, Texas.
Adjunct Faculty Member, 2002 to present. Institute of Environmental and Human Health, Texas Tech University,
Lubbock, Texas.
Adjunct Graduate Faculty Member, 2002 to present. Texas Tech University, Lubbock, Texas.
Adjunct Assistant Professor, 2002-2008. Adjunct Associate Professor, 2008 to present. Department of Food & Nutrition,
Texas Tech University, Lubbock, Texas.
Adjunct Associate Professor, 1995. Department of Food & Nutrition, Providence University, Taiwan. Taught Nutrition.

Honors

S.P. Yang Food and Nutrition Scholarship, Texas Tech University, 1990.
Certificate of Merit, Institute of Food Technologists, 1993-1994, 1994-1995.
Phi Tau Sigma, 1995.
Neely Treadwell Cancer Investigator Award, 2005.
Fellow, United States Bone and Joint Decade Young Clinical Investigator Workshop Program on the Design and Conduct
of Randomized Clinical Trials in Bone and Joint Diseases, 2006.
Unsung Hero, School of Medicine, Texas Tech University Health Sciences Center, 2011.
Chancellor's Council Distinguished Research Award, Texas Tech University System, 2011.
Nominated for "E.V. McCollum Award", American Society for Nutrition, 2013.
Nominated for "Mary Swartz Rose Senior Investigator Award", American Society for Nutrition, 2014.
Nominated for "Mary Swartz Rose Senior Investigator Award", American Society for Nutrition, 2015.
Chair-Elect for ASN's (American Society for Nutrition) Dietary Bioactive Components Research Interest Section, 2016-
2017.
Fellow, NIH Clinical Research Management, 2017.
Chair for ASN's (American Society for Nutrition) Dietary Bioactive Components Research Interest Section, 2017, 2018.
Fellow, *Hedwig van Ameringen* Executive Leadership in Academic Medicine (ELAM) Program for Women, 2019.

Certificate

CCRP: Certified Clinical Research Professionals by SoCRA (The Society of Clinical Research Associates), 2010.

Professional society memberships

American Association for Cancer Research (AACR), 1996 - 2001
American College of Sports Medicine (ACSM), 2004 - present
American Diabetes Association (ADA), 2005 - present
American Federation for Medical Research (AFMR), 2015-present
American Heart Association (AHA), 2016-present
American Oil Chemists' Society (AOCS), 1992 - 1996
American Society for Bone and Mineral Research (ASBMR), 2005 - present
American Society for Nutrition (ASN), 1990 - present
Center for Enhancing Foods to Protect Health, 2001 - present
Institute of Food Technologists (IFT), 1992 - present
Institute for Healthy Aging, TTUHSC, 2001 - present
International Chinese Hard Tissue Society (ICHTS), 2002 - present
International Society for Clinical Densitometry (ISCD), 2011-present
OsteoArthritis Research Society International (OARSI), 2001 - present

SoCRA: The Society of Clinical Research Associates, 2010-present
Southwest Cancer Treatment and Research Center, 2001 - present

Teaching

Medical School Years I & II, including apoptosis and cell repair, inflammation, nutritional deficiency, and herbal medicine, nutrition and bone diseases, 2001 - 2019.

Serve on PhD Advisory Committee:

1. Ying Liu, The Institute of Environmental and Human Health, TTU, 2002 (changed to different mentor in 2002).
2. Billam M, Institute of Environmental and Human Health, TTU, 2002-2006. Dissertation title: Microcystin-LR, aflatoxin B1 and fumonisin B1 in liver carcinogenesis.
3. Liu H, Institute of Environmental and Human Health, TTU 2002-2005. Dissertation title: Phase IIa chemoprevention trial with green tea polyphenols in high-risk population of liver cancer.
4. Wang Z, Institute of Environmental and Human Health, TTU 2004-2007. Dissertation title: Environmental carcinogens exposure and genetic polymorphisms on human esophageal carcinogenesis.
5. Lee F, Department of Physiology, TTUHSC, 2002-2006. Dissertation title: The effect of acute and chronic exercise training on systemic BDNF, mood, cognition. Other research project: Resistance training improves sleep quality in older adults.
6. Bliss R, Department of Physiology, TTUHSC, 2007-2009. Dissertation title: The effect of tumor necrosis factor alpha on AMPA induced excitotoxicity in cerebellar purkinje neurons.
7. Chen L, Institute of Environmental and Human Health, TTU 2008-2010. Dissertation title: The effects of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) on human lung epithelial cells.
8. Goswami D, Department of Nutrition, TTU. 2010-2011. Tentative Dissertation title: Green tea and atherosclerosis (changed to different mentor in 2012).
9. Goktas Z, Department of Nutrition, TTU. 2010-2013. Dissertation title: Visfatin, vaspin, apelin, and RBP-4 expression levels in different tissues in severely obese patients.
10. Lu C, Department of Environmental and Human Health, TTU, 2011-2015. Dissertation title: Chemotherapeutic sensitization of lung cancer cells by combination therapy.
11. Veni S, Department of Endocrinology, Dr. Alm Post Graduate Institute of Basic Medical Sciences, University of Madras, Taramani Campus, Chennai, India. 2011-2012. Dissertation title: In vitro and in vivo studies on the impact of ethanolic bark extract of Terminali arjuna (Wight & Arnott) on rat bone cells.
12. Zhang J, Department of Nutrition, TTU. 2013-2016. Dissertation title: Effect of nanoencapsulated EGCG on atherosclerotic lesion formation.
13. Schuster C, Department of Biology, TTU. 2014-present. Thesis title: The effects of epigallocatechin-3-gallate on obesity-related breast cancer bone metastasis.
14. Nguyen B. Department of Nutritional Sciences, TTU. 2017-2020. Thesis title: Nutrition education intervention to promote dietary calcium intake among Vietnamese women aged 30-65 years in rural areas in Hanoi, Vietnam.

Served as PhD thesis external examiner:

1. Wong, Sok Kuan. Department of Pharmacology, Universiti Kebangsaan Malaysia Medical Centre. Thesis title: The effects of tocotrienol in rat model of bone loss due to metabolic syndrome. Served as thesis examiner in 2017.
2. Zar Chi Thent. Universiti Teknologi Mara. Thesis title: Molecular mechanism on osteoprotective effect of phytoestrogen against bisphenol a induced bone loss. Served as thesis examiner 2019.

Serve on Master Advisory Committees:

1. Raja A, Department of Mechanical Engineering, TTU. 2002-2004. Thesis title: Dietary n-3 polyunsaturated fatty acids prevent aging-induced bone loss in male rats.
2. Jackson TL, Department of Nutrition, TTU, 2008-2009. Thesis title: Obese hemodialysis subjects have lower serum 25-hydroxy vitamin D levels and are taking higher doses of doxercalciferol than normal weight subjects.
3. Bollman L, Department of Nutrition, TTU, 2008-2009. Thesis title: Effects of vitamin D3 supplementation on serum bone specific alkaline phosphatase and intact parathyroid hormone levels in hemodialysis subjects.

4. Chanjaplammoovil S, Master Engineering Degree, Healthcare Engineering Program, Department of Mechanical Engineering, TTU 2009-11. Report title: Effect of green tea polyphenols on body composition in obese rats induced by high-fat diet.
5. Rodriguez C, Department of Biology, TTU, 2012-2014. Thesis title: Attachment of fibroblasts to hybrid nanoscale scaffolds. Changed to different advisor.
6. London Allen, Department of Nutritional Sciences, TTU, 2016-2018. Thesis title: Effects of delta-tocotrienols on obesity and inflammation: in vivo and in vitro studies.

Supervisor for resident/fellow research project:

1. Oetama B, Department of Pathology, TTUHSC 2001-2004. Project title: (i) Differential effects of selenium compounds on inflammation in human osteoarthritic chondrocyte model, and (ii) Effects of conjugated linoleic acids on inflammation in human osteoarthritis chondrocytes.
2. Allen S, Department of Pathology, TTUHSC, 2004-2005. Project title: Comparison of effects of resistance training and Tai Chi on bone health of the elderly at high risk of osteoporosis.
3. Do T, Nephrology fellow, Department of Internal Medicine, TTUHSC. 2009-2010. Project title: Modified Tai Chi Exercise During Outpatient Hemodialysis Therapy.
4. Lixia Chen, Department of Neuroscience and Pharmacology, TTUHSC, 2012-2015. Invited review articles. (i) Fruits and dietary phytochemicals in bone protection; (ii) Green tea and other fruit polyphenols attenuate deterioration of bone microarchitecture; (iii) Functions and mechanisms of green tea catechins in regulating bone remodeling; (iv) Novel insights of dietary polyphenols and obesity; and (v) Therapeutic properties of green tea against environmental insults.

Supervisor for Medical Student Research Project:

1. von Bergen, V, School of Medicine, TTUHSC, 2010-2013 (i) participating in invited review articles (1st review title: CAM exercise for osteoarthritis, and 2nd review title: Polyphenolics for bone health), and (ii) participating in an ongoing clinical study (project title: Martial Arts Exercise Program for Overweight/Obese Premenopausal Women- a Pilot Study).
2. Chuang E, School of Medicine, TTUHSC, 2010-2013: (i) participating in invited review articles (title: Polyphenolics for osteoarthritis) and (ii) participating in clinical studies (1st project title: Effect of GTP and Tai Chi on lipid profiles and glucose in postmenopausal osteopenic women, and 2nd project title: Martial Arts Exercise Program for Overweight/Obese Premenopausal Women- a Pilot Study).
3. Peihuan Tsai, School of Medicine, TTUHSC, 2013-2017: (i) participating in clinical study (project title: Effect of Tocotrienols on Bone Health), and (ii) participating in Frontier Research (project title: Diabetes and Musculoskeletal Health, Sleep Deficits and Musculoskeletal Health, Depression and Musculoskeletal Health).
4. Chihyu Fang, School of Medicine, TTUHSC, 2019 MSSRP: (i) conducting laboratory work to investigate how ginger root extract effects on protein expression of proinflammatory cytokines in liver of spinal nerve ligation-induced pain animals, and (ii) working on a review article. Bioactive components for neuropathic pain.
5. Samir Sherali, School of Medicine, TTUHSC, 2019 MSSRP: (i) conducting laboratory work to investigate how ginger root extract effects on protein expression of proinflammatory cytokines in liver of spinal nerve ligation-induced pain animals, and (ii) working on a review article. Bioactive components for neuropathic pain.
6. Daniel Payberah, School of Medicine, TTUHSC, 2020 MSSRP: conducting meta-analysis. Project title: Effects of Botulinum Toxin on Tension-type Headaches: A Systematic Review and Meta-analysis.
7. Kevin Chin, School of Medicine, TTUHSC, 2020 MSSRP: conducting meta-analysis. Project title: Effects of Tai Chi and Qi Gong on anxiety and depression: a systematic review and meta-analysis.
8. Haven Ward, School of Medicine, TTUHSC, 2020 MSSRP: conducting meta-analysis. Project title: Effects of Tai Chi and Qi Gong on anxiety and depression: a systematic review and meta-analysis.
9. Fehintola Soetan, School of Medicine, TTUHSC, 2020 MSSRP: conducting meta-analysis. Project title: Effects of mind-body interventions on symptoms and cognitive functions of individuals with ASD.
10. Adam Wynn, School of Medicine, TTUHSC, 2020 MSSRP: conducting meta-analysis. Project title: Effects of consumption of coconut oil or coconut on glycemic control and insulin sensitivity: a systematic review and meta-analysis of interventional trials.
11. Jason Chen, School of Medicine, TTUHSC, 2020: conducting 2nd analysis of data. Project title: TBD.
12. Jessyca Turner, School of Medicine, TTUHSC, 2020: conducting 2nd analysis of data. Project title: TBD.

13. Tochi Eboh, School of Medicine, TTUHSC, 2020: conducting 2nd analysis of data. Project title: TBD.
14. Alexis Shuck, School of Medicine, TTUHSC, 2020: working on a review article. Bioactive components for Fibromyalgia.
15. Christina Tompkins, School of Medicine, TTUHSC, 2020: working on a review article. Bioactive components for Fibromyalgia.
16. Emily Stephens (MS1) School of medicine. TTUHSC, 2021 MSSRP. Conduct meta-analysis Title: Effects of transcranial magnetic stimulation on tension-type headaches and chronic daily headaches
17. Carina Watson (MS1) School of medicine. TTUHSC, 2021 MSSRP. Working on mRNA expression of genes using previously collected tissues.
18. Madison Hayes (MS1) School of medicine. TTUHSC, 2021 MSSRP. Title: Effects of Dietary Interventions on Polycystic Ovarian Syndrome: A Systematic Review and Meta-Analysis
- 19.

Supervisor for PhD student summer project:

1. Wang P, Department of Environmental and Human Health, TTU, 2007. Protective Role of Green Tea Polyphenols (GTP) in Bone Microarchitecture of Aged Female Rats.
2. Poklikuha G. Department of Rehabilitation Sciences, School of Allied Health, TTUHSC. 2008. Project title: Effects of Tai Chi exercise on biomechanical responses in postmenopausal women with low bone mass.
3. Shao C, Department of Environmental and Human Health, TTUH, 2009. Project title: A gel-based proteomic analysis of green tea polyphenols effects on ovariectomized rats.

Supervisor for master student research project:

1. Tran H, Molecular Pathology Graduate Research Program, School of Allied Health, TTUHSC. 2004 - 2005. Project title: n-3 PUFA on osteoblastogenesis: NO production.
2. Badger T, Molecular Pathology Graduate Research Program, School of Allied Health, TTUHSC. 2004 - 2005. Project title: n-3 PUFA on osteoblastogenesis: PGE2 production.
3. Arnold A, Molecular Pathology Graduate Research Program, School of Allied Health, TTUHSC. 2004 - 2005. Project title: n-3 PUFA on osteoblastogenesis: NO protein expression.
4. Locknane G, Molecular Pathology Graduate Research Program, School of Allied Health, TTUHSC. 2004 - 2005. Project title: n-3 PUFA on osteoblastogenesis: COX-2 protein expression.
5. Peterson J, Molecular Pathology Graduate Research Program, School of Allied Health, TTUHSC. 2005-2006. Project title: Effect of long-chain n-3 PUFA on inflammation during osteoblastogenesis.
6. Tubb C, Molecular Pathology Graduate Research Program, School of Allied Health, TTUHSC. 2007-2008. Project title: Effect of green tea polyphenols on fibrosis in female rats with chronic inflammation-induced bone loss.
7. Boatright JD, Department of Rehabilitation Science, School of Allied Health, TTUHSC, 2005-2007. Research activity: participating in clinical trial (project title: Effects of Tai Chi on Status of Elderly Subjects with Knee Osteoarthritis : a Prospective Randomized Controlled Trial).
8. Hagar JM, Department of Rehabilitation Science, School of Allied Health, TTUHSC, 2005-2007. Research activity: participating in clinical trial (project title: Effects of Tai Chi on Status of Elderly Subjects with Knee Osteoarthritis : a Prospective Randomized Controlled Trial).
9. McCaleb JA, Department of Rehabilitation Science, School of Allied Health, TTUHSC, 2005-2007. Research activity: participating in clinical trial (project title: Effects of Tai Chi on Status of Elderly Subjects with Knee Osteoarthritis : a Prospective Randomized Controlled Trial).
10. Quintela MM, Department of Rehabilitation Science, School of Allied Health, TTUHSC, 2005-2007. Research activity: participating in clinical trial (project title: Effects of Tai Chi on Status of Elderly Subjects with Knee Osteoarthritis : a Prospective Randomized Controlled Trial).
11. Camp C, Molecular Pathology Graduate Research Program, School of Allied Health, TTUHSC. 2009 - 2010. Project title: Effect of Tai Chi on 1,25-OH vitamin D of hemodialysis patients.
12. Lo D, Department of Biology, TTU, 2011-2012. Research activities: (i) participating in invited review article (review title: Dietary polyphenols for osteoarthritis) and (ii) participating in clinical study (project title: Acupressure's impact on knee pain among osteoarthritic women).

Supervisor for Undergraduate students

1. Thompson E, Department of Biology, TTU 2004-2005. Project titles: (i) Effects of a six-week Tai Chi exercise intervention on gait kinematics in individuals with knee osteoarthritis and (ii) Effect of Tai Chi Exercise on Type 2 Diabetes. 2009. Project title: Intradialytic Modified Tai Chi Exercise Improves Balance in Hemodialysis Patients.
2. Durrer K, TTU/HHMI Undergraduate Research Fellow, Biology major, 2004-2006. Project title: Effect of CLA on IL-6 production of osteoblastic-like cells treated with human prostate cancer conditioned media.
3. Catalina R, TTU/HHMI Undergraduate Research Fellow, Biology major, 2008. Project title: Modified Tai Chi on the bone health of hemodialysis patients.
4. Lo D, Department of Molecular Biology, University of Berkeley, 2009. Project title: Short-term modified Tai Chi exercise on quality of life in hemodialysis patients.
5. Ayankola J, TTU/HHMI undergraduate Research Fellow, Biology major, TTU, 2010-2011: (i) involving in an animal study (title: Green tea and osteoarthritis), and (ii) participating in my ongoing clinical study (title: Martial Arts Exercise Program for Overweight/Obese Premenopausal Women- a Pilot Study -responsible for bone turnover biomarker assessment).
6. Annika Klein, TTU/Undergraduate Research Scholars Programs. Biology major, TTU, 2016-2017: (i) access bone biomarkers (TRAP and RANKL) and inflammation markers (TNF- α and MCP-1) in previously collected tibia tissues using immunohistochemistry, (ii) learn how to perform literature search using existing database, (iii) learn how to utilize the available published work to answer the research questions, and (iv) participate in preparation of review manuscript as needed.
7. Steely White, Biology major, TTU, 2019: (i) involving in an animal study (title: ginger root extract for neuropathic pain in animals), (ii) learn how to perform literature search using existing database, and (iii) participate in preparation of review manuscript as needed.
8. Zarek Driver, Biology major, TTU, 2021-
9. Viren Bhakta, Biology major, TTU, 2021-
10. Jessica Contreras, Biology major, TTU, 2021-

Supervisor for High School Research Program:

1. Lo D, 2004 summer, 2005 summer, and 2006 summer. Project title: Dietary n-3 PUFA on the production of oxidative stress in tissues of middle-aged male rats.
2. Hwang J, 2004 summer. Project title: Dietary n-3 PUFA on the production of inflammatory mediators in middle-aged male rats.

Supervisor for Visiting Scholar:

1. Jian Han, Professor, College of Public Health, Xinjian Medical University, Urumqi, PR China. 2013-2014. Project title: Effects of tocotrienols on oxidative stress in postmenopausal women.
2. Chun Gao, Associate Professor, First Affiliated Hospital, Hunan University of Chinese medicine, PR China. 2015-2016. Project title: Effects of tocotrienols on brain function in animals.

Others:

1. Small Group Facilitator for MSI (4 hours/month): 2005
2. Participated in curriculum of Medical School Year I. Foundation II block and Organ block 2005, 2006.
3. Participated in new curriculum design: Nutrition in Medicine- GI Nutrition Design Team, Structure and Function of Cells and Tissues Block, Structure and Function of Major Organ Systems 2005.
4. Medical School Year I Students Discussion Group. Texas Tech University Health Sciences Center, 2005-2006, 2013-2015.
5. Curriculum development for Sex and Gender-based medicine 2012-2015.

Mentoring of Postdoctoral and Faculty

1. Yan Zhang, PhD, Associate Professor, Department of Family and Community Medicine, TTUHSC, Lubbock, TX. 2008-2018.
2. Shu Wang, PhD, Associate Professor, Department of Nutritional Science, TTU, Lubbock, TX. 2008-2020.

3. Shengping Yang, PhD, Assistant Professor, Department of Pathology, TTUHSC, Lubbock, TX. 2013-2018.
4. Eunhee Chung, PhD, Assistant Professor, Department of Health Exercise and Sport Sciences, TTU, Lubbock, TX. 2014-2016.
5. Libo Tan, PhD, Assistant Professor, Department of Human Nutrition, University of Alabama, Tuscaloosa, AL. 2015-2018.
6. Dingbo Lin, PhD, Associate Professor, Department of Nutritional Sciences, Oklahoma State University, Stillwater, OK. 2013-2018.
7. Hangqui Luo, PhD, Postdoc, Department of Nutrition, University of California at Davis, Davis, CA. 2017-2019.
8. Hao Lei, PhD. Research Assistant Professor, Department of Nutritional Sciences. TTU, Lubbock, TX. 2017-present.
9. Huiying Luk, PhD. Assistant Professor, Department of Kinesiology and Sport Management, TTU, Lubbock, TX. 2018-present.
10. Heather Vellers, PhD. Assistant Professor, Department of Kinesiology and Sport Management, TTU, Lubbock, TX. 2018-present.
11. Samudani Khanasekara, PhD, Postdoc, Department of Surgery, TTUHSC, Lubbock, September 2019-August 2021.
12. Rui Wang, PhD, Senior Research Associate, Department of Pathology, TTUHSC, Lubbock, TX. June 2019-present.
13. Julianna Santo, PhD, Senior Research Associate, Department of Pathology, TTUHSC, Lubbock, TX. August 2021-present.

Academically-Related Public Service

Co-founder and president for the North America Chinese Society for Nutrition (NACSN): established in April, 2012.

The North America Chinese Society for Nutrition (NACSN) is a non-profit organization established in April, 2012 in the United States. NACSN's mission is to: provide a platform in nutrition, health and related fields of interest for networking among well-established principal investigators of Chinese descent; promote scientific exchange with Chinese colleagues, particularly those inside China; facilitate graduate education and training of Chinese scientists; support the dissemination and application of nutrition science to improve public health and clinical practice in the Chinese community; promote and facilitate collaboration with nutrition and food industry; advocate for nutrition research and its application to development and implementation of policies and practices related to nutrition in the Chinese community. In this session invited speakers of NACSN will introduce the society to the attendees, share their research highlights covering a wide range of nutrition-related topics including non-communicable chronic diseases, obesity, cancer, micronutrients, nutrition immunology, and nutrigenomics, and discuss potential individual or group collaborations in nutrition research, education, and outreach.

Funding director of "Center of Excellence for Integrative Health", School of Medicine, 2018:

Center of Excellence for Integrative Health is the 8th Center within School of Medicine, Texas Tech University Health Sciences Center. The missions of Center is (i) To support the strategic objectives and academic mission of School of Medicine and TTUHSC in enhancing research and research-related education. (ii) To foster and facilitate synergistic, interdisciplinary, transdisciplinary, and inter-professional collaboration among researchers/colleagues committed to integrative health research and to assist the professional development of new researchers. (iii) 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. (iv) To promote research-associated educational opportunities for medical students, health professionals, and general public.

Grant reviewer:

(Ad Hoc, WebEx-based Review Meeting) Reviewer for NIH/NCCIH. (R01, R34). 2/24/22-2/25/22.

(Ad Hoc) for National Science Foundation. Physiological and Biomechanics Mechanism. 2020

(Ad Hoc) for BARD - The US-Israel Agricultural Research & Development Fund, 2020

(Ad Hoc) Mail reviewer for Health and Medical Research Fund, under the Government of Hong Kong Special Administrative Region. 2019, 2020

- (Ad Hoc, WebEx-based Review Meeting) Reviewer for NCCIH. “Training and Research Grants” including fellowship (F24, F30, F31, F32), career development (Ks), scientific meeting support (R13), and Academic Research Enhancement Award (AREA; R15). 11/12/20-11/13/20.
- (Ad Hoc) Reviewer for NIH U54 grant study section. “Specialized Centers of Research Excellence (SCORE) on Sex Differences”. 7/9/19-7/10/19.
- NIH Clinical and Integrative Diabetes and Obesity (CIDO) Study Section at the Center for Scientific Review (CSR). 2/14/19-2/15/19. Washington DC.
- USDA NIFA Study Panel. 11/14/18-11/16/18. Washington DC.
- (Mailer: ad hoc) Reviewer for United States Department of Agriculture, South east Area with project plan for NP 107-OSQR process, 2018.
- (Ad Hoc, mailer) Study Panel of Health and Medical Research Fund, Food and Health Bureau (FHB) of the Government of the Hong Kong Special Administrative Region, 2018.
- Reviewer for NIH grant U54 study section. “Specialized Centers of Research Excellence (SCORE) on Sex Differences”. 7/24/18-7/26/2018.
- (Ad Hoc, WebEx-based Review Meeting) Reviewer for NCCIH. “Training and Research Grants” including fellowship (F24, F30, F31, F32), career development (Ks), scientific meeting support (R13), and Academic Research Enhancement Award (AREA; R15). 4/5/2018, 11/12/20-11/13/20.
- Clinical Research Institute seed grant, 2017-2018. TTUHSC, Lubbock, Texas.
- LWBIWH & UMC seed grant, 2017-2018. Lubbock, Texas.
- The CH Foundation 2017-2018. Lubbock, Texas.
- (Ad Hoc, mailer) Study Panel of Health and Medical Research Fund, Food and Health Bureau (FHB) of the Government of the Hong Kong Special Administrative Region, 2017.
- (Ad Hoc, WebEx-based Review Meeting) Reviewer for NCCIH. “Training and Research Grants” including fellowship (F30, F31, F32), career development (Ks), scientific meeting support (R13), and Academic Research Enhancement Award (AREA; R15). 11/9/2017.
- (Ad Hoc, WebEx-based Review Meeting) Reviewer for NCCIH Special Emphasis Panel (R61/R33) grant applications. “Phased Innovation Award for Mechanistic Studies to Optimize Mind Body Interventions in NCCIH High Priority Research Topics”. 11/8/2017.
- (Ad Hoc, mailer) Reviewer/consultant for South African Medical Research Council for Nutrition and Exercise, Department of Health, Republic of South Africa 2017.
- (Ad Hoc, mailer) South African Medical Research Council for 2016 Nutrition and Exercise.
- (Ad Hoc) Training and Research Grant. NIH/National Center for Complementary and Integrative Health, 11/22/2016.
- (Ad Hoc, mailer) Study Panel of Health and Medical Research Fund, Food and Health Bureau (FHB) of the Government of the Hong Kong Special Administrative Region, 2016.
- Obesity Research Cluster Pilot and Feasibility Grants 2016-2017. Texas Tech University, Lubbock, TX.
- (Ad Hoc) NIH Study Panel: Integrative and Clinical Endocrinology and Reproduction Study Section. ICER. June 11-12, 2015.
- (Ad Hoc) French National Research Agency (ANR). Scientific Evaluation Panel. Nutrition and Obesity Study Section. June 2015.
- (mailer) Beijing National Science Foundation. 2015
- (Ad Hoc, mailer) Applicants for “Research Mobility and International Doctoral Programmes”. DAAD - Deutscher Akademischer Austauschdienst German Academic Exchange Service. 2014
- (mailer) Health and Medical Research Fund, Food and Health Bureau, Government of Hong Kong Special Administrative Region, China. Topic: Exercise and Health. January 2013.
- Study Section. US Army Medical Research and Material Command (USAMRMS) 2012- for Peer Reviewed Medical Research Program (PRMRP) Mechanism: Clinical Trial Award. Topic: Orthopaedic Research Program. August 19-21, 2012.
- (mailer) Scientific Review Committee, Diet and Health Initiative, University of Connecticut & University of Connecticut Health Center, Storrs, CT, July 2012.
- (mailer) US Army Medical Research and Material Command (USAMRMS) 2012- for Peer Reviewed Medical Research Program (PRMRP). Mechanism: Idea Development Award. Topic: Orthopaedic Research Program, June 2012.
- Laura W. Bush Institute for Women’s Health seed grant/research scholar, Texas Tech University Health Sciences Center, Lubbock, TX. 2012

National Council for Research and Development, Partnership Programme - Joint Applied Research Projects - PCCA 2011.
The program finances joint experimental research and technological development projects, having as results such as products, technologies and innovative services aimed at resolving and implementing solutions to complex socio-economic problems of national priority.

Study Section. US Army Medical Research and Materiel Command (USAMRMS) 2011- for Peer Reviewed Medical Research Program (PRMRP) Topic: Osteoporosis & Related Bone Disease Panel 2 to evaluate proposals that center on biochemical and molecular treatments of osteoporosis. September 21-22, 2011.

(Mailer) Reviewer for Dairy Farmers of Canada. Topic: Nutrition Research Funding. 2011

(Mailer) Reviewer for Discovery Grant proposal for Natural Sciences and Engineering Research Council of Canada, 2009, 2010, 2011.

(Mailer) Grant proposal reviewer, Oklahoma Agricultural Experiment Station (OAES), 2010.

Study Section and Reviewer for USDA/ARS, Center Project Proposals, FY 2009-2013. Topic: Obesity, Physical Activity, and Bone Health, September 23-25, 2009.

Study Section, 2009, National Institutes of Health/Healthcare Delivery and Methodologies Integrated Review Group. 2009.

Study Section. US Army Medical Research and Materiel Command (USAMRMC) for Peer Reviewed Medical Research Program (PRMRP) Topic: Osteoporosis and Related Bone Diseases-O. July 9-10, 2009.

(Mailer) Reviewer for NIH RFA-OD-09-003 (Challenge Grants) Initiative, 2009.

(Mailer, ad hoc) Reviewer/consultant for South African Medical Research Council, Department of Health, Republic of South Africa 2007.

Invited to participate in the election of the Advisory Board of the European Society for the Study of the Aging Male (ESSAM) 2007.

(Mailer) Reviewer for SickKids Foundation, Toronto, Canada 2006, 2007

(Mailer: ad hoc) Reviewer for United States Department of Agriculture:
Cooperative State Research, Education, and Extension Service, National Research Initiative Competitive Grants Program, Bioactive Food Components for Optimal Health 2005

Reviewer for seed grant, Texas Tech University Health Sciences Center 2005

Reviewer for seed grant, Southwest Cancer Treatment and Research Center 2005

(Mailer, ad hoc) Reviewer for Canadian Institutes of Health Research / Instituts de recherche en santé du Canada, Innovation Programs Branch / Direction des programmes d'innovation. 2002, 2003.

Editorial Board Member for 13 Journals:

Annals of Obesity & Disorders (2016-present)
International Journal of Genuine Traditional Medicine (2011-present)
International Journal of Orthopaedics (2014-present)
International Scholarly Research Network Rheumatology (2010-present)
International Scholarly Research Notes (2014-present)
Journal of Nutritional Biochemistry (2011-present)
Nutrition Discovery (2014-present): Associate Editor
Nutrition Research (2010-present)
The Open Access Journal of Science and Technology (2013-present)
The Open Bone Journal (2008-present)
The Open Nutraceuticals Journal (2008-present)
The Open Access Rheumatology Research and Reviews (2009-present)
World Journal of Orthopaedics (2009-present)

Guest editor for Journal of Nutritional Biochemistry, special issues, "Precision nutrition –Individual nutrient needs for optimal health throughout the lifespan"- 2021

Reviewer for 140+ Journals:

- *Acta Biochimica et Biophysica Sinica*
- *Acta Pharmacologica Sinica*
- *Advance Practice in Nursing*

- *African Journal of Biotechnology*
- *African Journal of Pharmacy and Pharmacology*
- *American Journal of Chinese Medicine*
- *American Journal of Clinical Nutrition*
- *American Journal of Experimental Agriculture*
- *Amino Acids*
- *Annals of Nutrition Disorders & Therapy*
- *Annals of the New York Academy of Sciences*
- *Antioxidants*
- *Archives of Gerontology and Geriatrics*
- *Archives of Orthopaedic and Trauma Surgery*
- *Archives of Physical Medicine and Rehabilitation*
- *Asia Pacific Journal of Clinical Nutrition*
- *Beverage*
- *Biochemistry and Biophysics Reports*
- *Biomedical Engineering*
- *Biomedicine & Pharmacotherapy*
- *BMC Complementary and Alternative Medicine*
- *BMC Public Health*
- *BMC Women's Health*
- *BMC Musculoskeletal Disorders*
- *BioFactors*
- *Bone*
- *Botanics: Targets and Therapy*
- *Brain Research*
- *British Journal of Applied Science & Technology*
- *British Journal of Medicine and Medical Research*
- *British Journal of Nutrition*
- *Calcified Tissue International*
- *Canadian Journal of Physiology and Pharmacology*
- *Cell Biology International*
- *Cellular Physiology and Biochemistry*
- *Chemico-Biological Interactions*
- *Clinical Immunology, Endocrine & Metabolic Drugs*
- *Clinical Interventions in Aging*
- *Clinical Medicine Insights: Therapeutics*
- *Clinical Orthopaedics and Related Research*
- *Clinical Nutrition*
- *Clinical Rehabilitation*
- *Complementary Clinical Trials*
- *Complementary Therapies in Clinical Practice*
- *Communication Biology*
- *Contemporary Clinical Trials*
- *Current Developments in Nutrition*
- *Current Drug Targets*
- *Current Medicinal Chemistry*
- *Current Nutrition & Food Science*
- *Drug Design, Development and Therapy*
- *Experimental Biology and Medicine*
- *Experimental and Clinical Endocrinology & Diabetes*

- *Environmental Toxicology and Pharmacology*
- *Expert Opinion on Pharmacotherapy*
- *Expert Review of Endocrinology & Metabolism*
- *Expert Review of Precision Medicine and Drug Development*
- *Evidence Based Complementary and Alternative Medicine*
- *European Journal of Nutrition*
- *FASEB Journal*
- *Food Bioscience*
- *Food and Chemical Toxicology*
- *Food & Function*
- *Food & Nutritional Disorders*
- *Food & Nutrition Journal*
- *Food & Nutrition Research*
- *Food Research International*
- *Food Technology and Biotechnology Journal*
- *Hepatology International*
- *International Journal of Environmental Research and Public Health*
- *International Journal of Food Sciences and Nutrition*
- *International Journal of Medicine and Medical Sciences*
- *International Journal of Medical Sciences*
- *International Journal of Molecular Sciences*
- *International Journal of Nanomedicine*
- *International Journal of Nutrition and Metabolism*
- *International Journal of Green Pharmacy*
- *International Scholarly Research Network*
- *International Scholarly Research Notices*
- *ISRN Rheumatology*
- *Journal of the American College of Nutrition*
- *Journal of Aging and Physical Activity*
- *Journal of Agricultural and Food Chemistry*
- *Journal of Animal Science and Biotechnology*
- *Journal of Animal Science*
- *Journal of Applied Physiology*
- *Journal of Arthritis*
- *Journal of Basic and Clinical Physiology and Pharmacology*
- *Journal of Biomedicine and Biotechnology*
- *Journal of Biological Chemistry*
- *Journal of Bone and Mineral Research*
- *Journal of Clinical Densitometry*
- *Journal of Clinical Medicine and Research*
- *Journal of Endocrinological Investigation*
- *Journal of Experimental Pharmacology*
- *Journal of Gerontology: Biological Sciences*
- *Journal of Healthcare Engineering*
- *Journal of Inflammation*
- *Journal of Medicinal Food*
- *Journal of Medicinal Plants Research*
- *Journal of Natural Product*
- *Journal of Nutrition*
- *Journal of Nutrition, Health, and Aging*

- *Journal of Nutrition and Health Sciences*
- *Journal of Nutritional Biochemistry*
- *Journal of Osteoporosis and Physical Activity*
- *Journal of Orthopaedic Surgery and Research*
- *Journal of Osteoporosis*
- *Journal of Osteoporosis and Physical Activity*
- *Journal of Physiology and Pharmacology*
- *Journal of Rural Health*
- *Journal of Veterinary Medicine*
- *Lipids*
- *Mediators of Inflammation*
- *Medical Journals*
- *Medical Science Monitor*
- *Mini-Review in Medicinal Chemistry*
- *Molecular Nutrition and Food Research*
- *Mount Sinai Journal of Medicine*
- *Neurobiology of Pain*
- *Nutrients*
- *Nutrition*
- *Nutrition & Dietetics*
- *Nutrition Discovery*
- *Nutrition Research*
- *Obesity Epidemic*
- *Osteoporosis International*
- *Oxidative Medicine and Cellular Longevity*
- *Phytochemistry Reviews*
- *Polymers*
- *PLoS ONE*
- *Preventive Nutrition and Food Science*
- *Sciencedomain International*
- *Scientia Pharmaceutica*
- *Scientific Report*
- *Societies*
- *Sport*
- *The Chinese Journal of Physiology*
- *The Ergonomics Open Journal*
- *The New York Academy of Sciences*
- *The Open Bone Journal*
- *The Open Nutraceutical Journal*
- *Pharmacological Research*
- *Pharmaceutical Giology*
- *Physiological Genomics*
- *Public Health Nutrition*
- *Recent Patients on Food, Nutrition & Agriculture*
- *Research in Sports Medicine*
- *Scientific Reports*
- *Toxicology and Applied Pharmacology*
- *World Journal of Orthopaedics*
- *World Journal of Traditional Chinese Medicine*

Department:

Residency Search and Review Committee 2001-2012.
Faculty Search Committee 2001-present.
P&T Review Committee 2008-present.

School of Medicine:

Steering Committee of Center of Excellence for Translational Neuroscience and Therapeutics, 2019-
Associate Dean for Research (ADR) 2018-present.
Admissions Committee 2003-2018.
Communication Council Committee 2008-2010.
Faculty Development Advisory Committee 2004-2006.
Faculty Appointment Committee 2004-2006.
Faculty Research Committee (Faculty Executive Committee) 2008-2010. 2018-2020. Vice Chair 2018. Chair 2019.
Faculty Forward Task Force Committee 2009-2011.
Faculty Council Executive Committee (Faculty Elected Committee) 2012-2013.
Faculty Council Executive Committee - Hearing Committee (Faculty Elected Committee) 2013-2016.
Faculty Development Leave Committee (Dean Appointed Committee) 2013-2018.
Faculty Networking Group Facilitator 2014-present.
Grievance Committee 2013-2018.
Lubbock Year 1 and 2 Subcommittee (of the SPPCC) (Faculty Elected Committee) 2018-2020. Resigned in 2018 due to my appointed Associate Dean for Research.
Post Tenure Peer Review Committee 2013-2018.
Student Conduct Board Hearing (SCBH) Committee (Faculty Elected Committee) 2014-2018. Resigned in 2018 due to my appointed Associate Dean for Research.
Student Promotions & Professional Conduct Committee (Faculty Elected Committee) 2016-2018. Resigned in 2018 due to my appointed Associate Dean for Research.
Tenure and Promotion Committee 2014-2018. Vice chair, 2018-2020. Chair 2020-2022. Resigned in 2018 due to my appointed Associate Dean for Research.
Serve as a reference for Kandis Wright for scholarships, Department Cell Biology and Biochemistry, TTUHSC, Lubbock, TX. 2017-2019.
TTUHSC Center of Excellence for Integrative Health, Founding Director, 2018-present.
Served as the Steering Committee member for “Center of Excellence for Translational Neuroscience and Therapeutics”, TTUHSC, Lubbock, TX, 2019-present.

Served as Ex-Officio since 2018:

Faculty Council Executive Committee
Faculty Research Committee

University:

Institutional Animal Care and Use Committee 2004-2006. 2017-2018 (resigned due to ADR).
Executive Council, the Laura W Bush Women’s Health Institute (LWBIWH) 2015-2017.
Texas Tech University Obesity Research Cluster Advisory Board 2013-present.
Search Committee, Director and Chief Scientific Officer for the Garrison Institute on Aging 2013-2014.
Member, Obesity Research Cluster Advisory Board, TTU System, 2014-present.
Reviewer, LWBIWH/UMC Research Scholar Grant and Research Seed Grant 2015.
Member, Translational Research Committee, Research Office, TTUHSC, 2015-present.
Member, Center for Translational Neuroscience and Therapeutics, TTUHSC, 2015-present.
Co-Chair, LWBIWH Scientific Advisory Committee, 2015-2017.
Co-Chair, LWBIWH Gender-Specific medicine & Women’s Health Symposium, 2015.
Chair, LWBIWH Gender-Specific medicine & Women’s Health Symposium, 2016.
Reviewer, Obesity Research Cluster Pilot and Feasibility Grants, 2016-2017, TTU System.
Served as a clinical mentor support for Dr. Eric Rivas for his NIH/NCCIH grant application, Department of Kinesiology and Sport Management, TTU, Lubbock, 10/2018.

Served as a member of advisory board, Obesity Research Institute, TTU, 2017-2019.

Co-organized 2nd Annual Integrative Medicine Symposium. April 12, 2019. Lubbock, TX.

"New research to examine effects of vitamin E on obesity". In: TTUHSC Statline Daily Dose, by Suzanna Cisneros, November 11, 2021; <https://dailydose.ttuhs.edu/2021/november/new-research-vitamin-e-and-obesity.aspx>

National:

American Society for Nutrition

- Served as a judge for ASN Student Interest Group (SIG) three Minute (3MT) Thesis Competition, 6/3/21
- Serve as a member of Membership Board (At Large), American Society for Nutrition, 2019-2022
- Proposed symposium (Musculoskeletal health throughout the lifespan: role of nutrition) to the Nutrition 2018, the annual meeting of American Society for Nutrition, Boston, MA, 6/9/18-6/12/18.
- Elected as the Chair-Elect for ASN's (American Society for Nutrition) Dietary Bioactive Components Research Interest Section, 2016-2018. Chair terms in 2018.
- Served as lead judge for the poster competition, Research Interest Section, Dietary Bioactive Components, American Society for Nutrition, 2017.
- Served as the chair of Dietary Bioactive Components, Research Interest Group, American Society for Nutrition, 2017.
- Judge for the poster competition, Research Interest Section, Nutrition-Gene Interaction, American Society for Nutrition, April 18, 2009.

Academic Consortium for Integrative Medicine & Health

- Served as a member of Bylaws Committee, Academic Consortium for Integrative Medicine & Health, 2019-

North America Chinese Society for Nutrition

Elected as the Board of Director, North America Chinese Society for Nutrition (NACSN) 2016-2018.

Served as the President of North America Chinese Society for Nutrition (NACSN) 2014-2015.

- Initiated and implemented "Faculty Mentor-Mentee Program" is designed to offer mentorship to help our junior members to develop a successful career. The program will also be a great platform for academic communication and research collaboration, career development skills, and general skills. Senior members (associate and full professor, senior managers/CEO in industry, etc.) will serve as mentors. The junior members (assistant professor, postdoc, etc.) will be the mentees. Participants (Mentor/Mentee) can choose a mentoring relationship based on criteria such as type of mentoring relationship (i.e., input on grant submission, general career advice, etc.) or based on research interests/topics. Mentor and mentees will be paired on a one-to-one basis. NACSN will provide contact information for both mentor and mentee to begin establishing a mentorship relationship.
- Initiated and implemented "Trainee Mentor-Mentee Program" is designed to offer general career-related advices and it will run as a single group with all trainees. NACSN plans to hold sessions during Experimental Biology meeting, webinars, teleconferences, and produce FAQs for career development. This program is not designed for science issues which should be communicated with their respective advisors instead of NACSN. The trainees include PhD students, PhD candidates, and Postdocs. The mentors will include NACSN members at independent stages of their career (assistant professor to full professor, scientists in industry, etc).
- Initiated and implemented "Travel Award Program" provides two awards in 2015, each at \$500, for graduate students and/or postdoctoral fellows (trainees) of NACSN members traveling to the scientific meeting of the American Society of Nutrition as part of Experimental Biology Meeting, 2015. Funding is provided in cash or check at Experimental Biology meeting of the year.
- Worked on Fundraising for NACSN activities at Experimental Biology meeting 2015.
- Organized and sponsored "Obesity and Nutrition" session at 12th Chinese Nutrition Conference on May 16-18, 2015, Beijing, China.
- Organized and co-sponsored "International Forum: China" with Chinese Nutrition Society and American Society for Nutrition at Experimental Biology 2015.
- Involved in the by-laws revision, e-newsletter publication quarterly, and policy decision.

External reviewer for tenure & promotion or job hiring

- Served as an external reviewer for Tenure & Promotion application for Dr. Juan Liuzzi. Assistant Professor to Associate Professor with tenure, Florida International University, 2014.
- Served as an external reviewer for Tenure & Promotion application for Dr. Anita M. Nucci. Assistant Professor to Associate Professor with tenure, George State University, 2014.
- Serve on an external reviewer of Tenure & Promotion for Dr. Jay J Cao, Nutrition Scientist. USDA Agricultural Research Service, Grand Forks Human Nutrition Research Center, Grand Forks, ND, 2015.
- Serve on an external reviewer of Tenure & Promotion for Dr. Jin-Ran Chen, Assistant Professor to Associate Professor, Department of Pediatrics, Arkansas Children's Nutrition Center, Little Rock, AK, 2015.
- Serve as a reference for Dr. Sritulasi Karri for application of Assistant Professor, India, 2/2016.
- Serve on an external reviewer of United States Citizenship and Immigration Services (USCIS) for Dr. Chuanwen Lu. 5/2016.
- Serve as a reference for Ms. Lee Paradise for job application, 5/2016.
- Serve as a reference for Dr. Lili Tang for application of Associate Professor, Department of Environmental Health Science, University of Georgia, Athens, GA, 9/2016.
- Serve as a reference for Ms. Hayli E. Joiner for application of Physician Assistant, 9/2016.
- Serve as an external reviewer of Tenure & Promotion for Dr. Seong-Ho Lee, Assistant Professor to Associate Professor, Department of Nutrition and Food Science, University of Maryland, College Park, MD, 9/2016.
- Serve as an external reviewer of United States Citizenship and Immigration Services (USCIS) for Dr. Sanggil Lee. 9/2016.
- Serve as an external reviewer of Tenure & Promotion for Dr. Huifang Lu, Associate Professor to Professor, Department of General Internal Medicine, MD Anderson Cancer Center, Houston, TX. 11/2017.
- Serve as an external review of Tenure & Promotion for Dr. Wen-Hsing Cheng, Associate Professor to Professor, Department of Food Science, Nutrition and Health Promotion. Mississippi State University, MS. 6/2018.
- Serve as a reference for Dr. Ock K Chun for job relocation, Department of Nutritional Sciences, University of Connecticut, Storrs, CT, 2018/2019.
- Served as an external reviewer for Tenure & Promotion application for Dr. Sheau-Ching Chai. Assistant Professor to Associate Professor, University of Delaware, 9/2019.
- Served as an external reviewer for Promotion application for Dr. Xiang Gao. Associate Professor to Professor, Pennsylvania State University, 10/2019.
- Served as an external reviewer for Tenure application for Lili Tang. Associate Professor to Professor, University of Georgia, 8/2021.

International

- Served on International Organizing Committees, 2nd International Symposium on Phytochemicals in medicine and Food (Phytochemical Society of Europe Meeting), 4/7/2017-4/10/2017, FuZhou, China.
- Served as a core member for establishing an International Import Center on Food Nutrition and Human Health supported by Chinese Ministry of Education, China Agricultural University, Beijing, China. 11/29/17. The goal of the Center is to innovate research, teaching, and outresearching related to food nutrition and human health and to create a top-quality center of research, teaching, and international collaboration.
- Proposed symposium (Musculoskeletal health throughout the lifespan: role of nutrition) accepted by Scientific Committee, International Conference on Frailty & Sarcopenia Research, Miami Beach, 3/1/18-3/3/18.
- Served on the Chair of International Scientific Organizing Committee, 10th Conference on the Science and industry of Health Products (CNIC), Shanghai, China. 10/25/18-10/27/18.
- Served as scientific committee member for 11th Asia Pacific Conference on Clinical Nutrition (11th APCCN) and the 14th China Nutrition Science Congress (14th CNSC), Nanjing, China. 9/19/2019-9/22/2019.

Others:

- Judge for the Student Research Days, Texas Tech University Health Sciences Center and Texas Tech University, 2005-present.

Judge for Student Research Days, Texas Tech University undergraduate research program/Howard Hughes Medical Institute Science Education Program/Collage of Human Sciences/McNair Scholars Program/Honors College, 2005-2011.

Serve as a presentation reviewer of TEDxTTU, 2015.

Serve on a grant reviewer of Clinical Research Institute seed grant 2018, TTUSHC, Lubbock, TX. 2017.

Served on a grant reviewer of LWBIWH/UMC, 2017-2018, TTUHSC, Lubbock, TX.

Refereed Journal Publications (118)

1. **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 doi: 10.1016/j.jnutbio.2021.108904. Online ahead of print.
2. **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.
3. **Shen CL**, Mo H, Dunn DM, Watkins BA. Tocotrienol supplementation led to higher serum levels of lysophospholipids but lower acylcarnitines in postmenopausal women: a randomized double-blinded placebo-controlled clinical trial. *Frontiers in Nutrition*. 2021;8: 766711.
4. 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*. 2021 Sep 22;S0939-4753(21)00454-3.
5. Chung E, Elmassry MM, Cao JJ, Kaur G, Dufour JM, Hamood AN, **Shen CL (corresponding author)** Beneficial effect of dietary geranylgeraniol on glucose homeostasis and bone microstructure in obese mice is associated with suppression of proinflammation and modification of gut microbiome. *Nutrition Research* 2021; 93:27-37.
6. **Shen CL**, Ramamoorthy S, Kaur G, Dufour JM, Wang R, Mo H, Watkins BA. Dietary annatto-extracted tocotrienol reduces inflammation and oxidative stress, and improves macronutrient metabolism in obese mice: a metabolic profiling study. *Nutrients* 2021; 13(4):1267.
7. **Shen CL**. Clinical trials of FDA IND natural bioactive components for bone health. *SOCRA SOURCE, Journal for Clinical Research Excellence*. 2021; 2:53-60.
8. Xue KS, Tang L, **Shen CL**, Pollock BH, Guerra F, Phillips TD, Wang JS. Increase in Aflatoxin Exposure in Two Populations Residing in East and West Texas, United States. *International Journal of Hygiene and Environmental Health* 2021; 231:113662.
9. Elmassry MM, Chung E, Cao JJ, Hamood AN, **Shen CL (corresponding author)**. Osteoprotective effect of green tea polyphenols and annatto-extracted tocotrienol in obese mice is associated with enhanced the microbiome vitamin K2 biosynthetic pathways. *Journal of Nutritional Biochemistry*, 2020 Dec;86:108492. doi: 10.1016/j.jnutbio.2020.108492. Epub 2020 Sep 11.
10. Huang H-T, Cheng T-L, Lin S-Y, Ho C-J, Chyu JY, Yang R-S, Chen C-H, **Shen C-L (corresponding author)**. Osteoprotective roles of green tea catechins. *Antioxidants* 2020; 9(11):1136.
11. Harlan L, Mena LT, Ramalingam L, Jayarathne S, **Shen CL**, Moustaid-Moussa N. Mechanisms Mediating Anti-Inflammatory Effects of Delta-Tocotrienol and Tart Cherry Anthocyanins in 3T3-L1 Adipocytes. *Nutrients* 2020; 12(11): E3356.
12. Luk HY, Appell C, Chyu MC, Chen CH, Wang C, Yang RS, **Shen CL (corresponding author)** Impacts of Green Tea on Joint and Skeletal Muscle Health: Prospects of Translational Nutrition. *Antioxidants* 2020; 9(11): E1050
13. Beebe ML, Mo H, Ji X, **Shen CL (corresponding author)**. Tocotrienols in bone protection: evidence from preclinical studies. *eFood*. 2020; 1(3): 217-225.
14. Chung E, Elmassry MM, Kottapalli P, Kottapalli KR, Kaur G, Dufour JM, Wright K, Ramalingam L, Moustaid-Moussa N, Wang R, Hamood AN, **Shen CL (corresponding author)**. Metabolic benefits of annatto-

- extracted tocotrienol on glucose homeostasis, inflammation and gut microbiome. *Nutrition Research*. 2020, 77:97-107. Received Open Access Award.
15. Zhou J, Tang L, **Shen CL**, Wang JS. Green tea polyphenols boost gut-microbiota-dependent mitochondrial TCA and urea cycle in sprague-dawley rats. *Journal of Nutritional Biochemistry*. 2020. Jul;81:108395. doi: 10.1016/j.jnutbio.2020.108395.
 16. Aryaie A, Tinsley G, Lee J, Watkins BA, Moore L, Alhaj-Saleh A, Shankar K, Wood SR, Wang R, **Shen CL (corresponding author)**. Actions of annatto-extracted tocotrienol supplementation on obese postmenopausal women: study protocol for a double-blinded placebo-controlled randomized trial. *BMJ Open*. 2020; 10(3):e034338.
 17. **Shen CL**, Mo H. Effect of dietary tocotrienol on age-related bone health. *Spectrum (published by the healthy aging dietetic practice group of the Academy of Nutrition and Dietetics)*. 2020; Spring issue, 1-6.
 18. Chung C, Grue KA, Kaur G, Mallory B, Serrano CR, Ullevig SL, Kottapalli KR, Lee SC, Dufour J, **Shen CL**, Umeda M. Maternal exercise before and during pregnancy alleviates metabolic dysfunction associated with high-fat diet in pregnant mice, without significant changes in gut microbiota. *Nutrition Research*. 2019;69:42-57.
 19. Zhang J, Nie S, Zu Y, Abbasi M, Cao J, Li C, Wu D, Labib S, Brackee G, **Shen CL**, Wang S. Anti-atherogenic effects of CD36-targeted epigallocatechin gallate-loaded nanoparticles. *Journal of Controlled Release*. 2019; 303: 263-273.
 20. Chung E, Campise SN, Joiner HE, Tomison MD, Kaur G, Dufour JM, Cole L, Ramalingam L, Moustaid-Moussa N, **Shen CL (corresponding author)**. Effect of annatto-extracted tocotrienols and green tea polyphenols on glucose homeostasis and skeletal muscle metabolism in obese male mice. *Journal of Nutritional Biochemistry*. 2019; 67: 36-43.
 21. **Shen CL**, Smith BJ, Li J, Cao JJ, Song X, Mendez M, Corry KA, Tomison MD, Tang L, Wang JS, Chyu MC, Effect of long-term green tea polyphenol supplementation on bone architecture, turnover, and mechanical properties in middle-aged ovariectomized rats. *Calcified Tissue Int*. 2019; 104(3):285-300.
 22. Mo H, Jeter R, Bachmann A, Yount ST, **Shen CL**, Yeganehjo H. The potential of isoprenoids in adjuvant cancer therapy to reduce adverse effects of statins. *Frontier in Pharmacology*. 2019 Jan 4;9:1515. doi: 10.3389/fphar.2018.01515. eCollection 2018. Review.
 23. Zhou J, Tang L, **Shen CL**, Wang JS. Green tea polyphenols modify gut-microbiota dependent metabolisms of energy, bile constituents and micronutrients in female Sprague-Dawley rats. *Journal of Nutrition Biochemistry*. 2018;61:68-81.
 24. **Shen CL**, Kaur G, Wanders D, Sharma S, Tomison MD, Ramalingam L, Chung E, Moustaid-Moussa N, Mo H, Dufour J. Annatto-extracted tocotrienols improve glucose homeostasis and bone properties in high-fat diet-induced type II diabetic mice by decreasing the inflammatory response. *Scientific Reports*. 2018; 8(1): 11377.
 25. **Shen CL**, Wang S, Yang S, Tomison MD, Abbasi M, Hao L, Scott S, Khan MS, Romero AW, Felton CK, Mo H. A 12-week evaluation of annatto tocotrienol supplementation for postmenopausal women: safety, quality of life, body composition, physical activity, and nutrient intake. *BMC Complementary and Alternative Medicine*. 2018; 18(1):198.
 26. Chumacero E, Masud AA, Isik D, **Shen CL**, Chyu MC. Advances in powered ankle-foot prostheses. *Clinical Reviews in Biomedical Engineering* 2018; 46(2):83-108.
 27. **Shen CL**, Yang S, Tomison MD, Romero AW, Felton CK, Mo H. Tocotrienols supplementation suppressed bone resorption and oxidative stress in postmenopausal osteopenic women: a 12-week randomized double-blinded placebo-controlled trial. *Osteoporosis International* 2018; 29(4):881-9.
 28. Wang J, Tang L, Zhou H, Zhou J, Glenn TC, **Shen CL**, Wang JS. Long-term treatment with green tea polyphenols modified the gut microbiome of female Sprague-Dawley rats. *Journal of Nutritional Biochemistry*. 2018; 56:55-64.
 29. Chung E, Mo H, Wang S, Zu Y, Rios SR, Elfakhani M, Chyu MC, Yang RS, **Shen CL (corresponding author)**. Potential roles of vitamin E in age-associated change in skeletal muscle health. *Nutrition Research* 2018; 49:23-36.
 30. Jayarathne S, Koboziev I, Park O-H, Oldewage-Theron W, **Shen CL**, Moustaid-Moussa N. Anti-inflammatory and anti-obesity properties of bioactive food components. *Preventive Nutrition & Food Science* 2017; 22(4):251-262.
 31. Schuster C, Mo H, **Shen CL**, Gollahon L. RANK/RANKL/OPG: The axis of breast cancer bone metastasis

- evil? *Annals of Breast Cancer Research* 2017; 2(1):1008.
32. **Shen CL**, Klein A, Chin KY, Mo H, Tsai P, Yang RS, Chyu MC, Ima-Nirwana S. Tocotrienols for bone health: a translational approach. *Annals of the New York Academy of Sciences* 2017; 1401:150-165.
 33. Cao JJ, Gregoire BR, **Shen CL**. A high fat diet decreases bone mass in growing mice with systemic chronic inflammation induced by low-dose slow-release lipopolysaccharide pellets. *Journal of Nutrition* 2017; 147(10): 1909-1916.
 34. **Shen CL**, Brackee G, Song X, Tomison MD, Finckbone VL, Mitchell KT, Tang L, Chyu MC, Dunn, DM, Wang JS. Safety evaluation of green tea polyphenols consumption in middle-aged ovariectomized rat model. *Journal of Food Science* 2017; 82(9): 2192-220.
 35. Allen L, Ramalingam L, Menikdiwela K, Scoggin S, **Shen CL**, Tomison MD, Kaur G, Dufour J, Chung E, Moustaid-Moussa N. Effects of delta-tocotrienol on obesity-related adipocyte hypertrophy, inflammation, and hepatic steatosis in high fat fed mice. *Journal of Nutritional Biochemistry* 2017; 48:128-137.
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Published book chapter

1. **Shen CL**, Mo H, Smith BJ, Chen CH, Chen L, Chyu MC, Kwun IS (2013). Green tea and other fruit polyphenols attenuate deterioration of bone microarchitecture. Book title: *Polyphenols in Health and Disease*. Watson RR, Preedy VR, Zibadi S, eds, Elsevier publisher. Volume 1, chapter 52.
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Published Newsletter

National/international recognition

2022:

<https://wholefoodsmagazine.com/suppliers/news-suppliers/study-tocotrienols-may-help-reduce-bone-loss-oxidative-stress-in-postmenopausal-women/>

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2013:

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2012:

“Drinking Tea May Help Prevent Chronic Illness” in *Detroit Free Press* (viewers per month: 1,643,224), Sept 21, 2012. Story about “Tea and Bone Health: Steps Forward in Translational Nutrition”. Results were from GTP and Tai Chi for bone health study (funded by NIH/NCCAM, R21AT003735).

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“Drink Green Tea”: one of 10 soothing solution in *Eating Well Magazine* (viewers per month: 500,000), May/June 6, 2012. Story about green tea supplementation reduced oxidative stress/inflammation in postmenopausal women. Results were from GTP and Tai Chi for bone health study (funded by NIH/NCCAM, R21AT003735).

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“Distinguished Research Award: Leslie Shen”. Faculty who are leading the way. *Leading the Way*. 2012-2012. A Year in Review.

2011:

“Green Tea and Tai Chi Enhance Bone Health and Reduce Inflammation in Postmenopausal Women” was recently selected as one of 6 research highlights from 1,750 abstracts by the American Society for Nutrition (ASN) at the 2011 Experimental Biology annual meeting. Through the ASN press release, our study is now featured on over a million websites of news media and organizations worldwide.

2010:

“Quality of Life and Safety of Tai Chi and Green Tea Extracts in Postmenopausal Women” was selected as Spotlight Research by *National Center for Complementary and Alternative Medicine/NIH* in December 2010.

2009:

Phone interviewed with contributing editor *Body + Soul* (a national health magazine; www.wholeliving.com) on Oct 16, 2009.

2008:

“Tea for you and tea for me”. *Investigations Discoveries. Pulse*, TX. Summer 2008.

“Tai Chi: the gentle martial art that defeats arthritis”. In book: *Non-drug approaches to health and healing*. Published by Bottom Line Books, June 2008.

2005:

“Managing Osteoarthritis” *Washington Woman magazine*, October issue 2005.

“Tai Chi and Health” Phone interview with *Nature Health magazine*, August 12, 2005.

“TTUHSC psychologist: Tai Chi has health benefits” *Lubbock Avalanche-Journal*, August 4, 2005.

“Tai chi and health” Radio interview (KLLL, KMMX, KONE, KBTE Radio), July 19, 2005.

Asian Pacific Heritage Month Celebration: <http://www.ttuhs.edu/diversity/forms/diversityNewsletterMay05.pdf>

Promoted bone health at the following events:

- Senior News, Lubbock, TX. May 2008.
- Business Expo, Lubbock Civic Center, Lubbock, TX. May 8, 2008.
- Free Skin Cancer Screening. Southwest Cancer Center, Lubbock, TX. May 10, 2008.
- Women and Bone Health. Participated in Community Health Center of Lubbock, Lubbock National Women's Health Week, May 14, 2009.
- National Women's Health Week. Lubbock, TX. May 22, 2008.
- Health & Safety Fair, Maggie Trejo Super Center, Lubbock, TX. June 7, 2008.
- Healthy Lubbock Day, Maxey Park, Lubbock, TX. June 14, 2008.
- 2008 4th on Broadway Celebration. Lubbock, TX. July 4, 2008.
- Team Straight Talk. Sciences Spectrum and Grace Clinic, Lubbock, TX. July 12, 2008.
- Covenant Nurse Alumni Association Brunch, Knipling Center, Lubbock, TX. July 19, 2008.
- Health Fair and Safety, Mae Simmons Community Center, Lubbock, TX. July 21, 2008.
- Healthwise, KCBD studio, Lubbock, TX. July 23, 2008.
- Lubbock's Home & Family Magazine, Lubbock, TX. August issue 2008.
- 2nd Annual Marching Back to School Health Fair, Maggie Trejo Super Center, Lubbock, TX. August 2, 2008.
- Hispanic Church Block Activity, Lubbock, TX. August 9, 2008.
- Senior News, Lubbock, TX. September 2008.
- Community Medical School, Lubbock, TX. September 16 and September 30, 2008.
- American Diabetes Association, Lubbock-Mackenzie Park, TX. September 27, 2008.
- Breast Cancer Awareness, Lubbock-Civic Center, Lubbock, TX. October 4, 2008.
- Women's Expo, Lubbock-Civic Center, Lubbock, TX. October 7, 2008.
- Healthwise, KCBD studio, Lubbock, TX. October 16, 2008.
- National Diabetes Month, Maggie Trejo Super Center, Lubbock, TX. November 14, 2008.
- Business Expo, Lubbock Civic Center, Lubbock, TX. May 4, 2014.
- 2014 4th on Broadway Celebration. Lubbock, TX. July 4, 2014.

Abstracts submitted/presented at local, national, and international meetings

1. Ward H, Chin K, Dhanasekara D, Dunn D, **Shen CL**, Chanaka Kahathuduwa Post-intervention Effects of Tai Chi and Qi Gong on Anxiety Scores: A Systematic Review and Meta-Analysis. Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.
2. Chin K, Ward H, Dhanasekara C, Dunn D, **Shen CL**, Kahathuduwa C. Post-Intervention Effects of Tai Chi and Qi Gong on Depression Scores: A Systematic Review and Meta-Analysis. Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.
3. Devega R, Payberah D, Kahathuduwa C, **Shen CL**. Potential Health Effects of Bioactive Compounds on Depression: A Review of the Literature. Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.
4. Payberah D, Chyu J, Dhanasekara C, **Shen CL**, Kahathuduwa C. The Effectiveness of Botulinum Toxin in the Prevention and Treatment of Tension-Type Headaches: A Systematic Review and Meta-Analysis. Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.
5. Schoeberl M, Mikkelson M, Urias E, Scott C, Lee J, **Shen CL**, Al-Rahawan MM. Vitamin D levels in pediatric patients undergoing chemotherapy. Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.
6. Schuck A, Tompkins C, Neugebauer V, **Shen CL**. Potential Therapeutic Benefits of Capsaicin, EGCG and Green Tea Extract, Curcumin, and Ginger on Fibromyalgia: A Review of the Literature. Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.
7. Tompkins C, Schuck A, Neugebauer V, **Shen CL**. Analgesic Effects of GSPE, Soy and Genistein, Naringin, and Omega-3 PUFA in the Treatment of Fibromyalgia and Possible Molecular Mechanisms: A Review of the Literature. Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.
8. Wynn A, Nelson A, Spradley M, Dhanasekara C, 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. Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.

9. Eboh T, St-John J, **Shen CL**, Dennis J. Do Demographic or Lifestyle Factors Explain the Differences in BMI and Obesity between US-born and Foreign-born Africans? Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.
10. Chen J, **Shen CL**, St-John J, Dennis J. Patient Adherence to Physician Advised Lifestyle Behavior Changes Among Adults with Musculoskeletal Conditions from 2017 NHIS dat. Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.
11. Castro M, Castro LF, Neugebauer V, **Shen CL**. Potential effects of EGCG, Curcumin, Omega-3, and Lycopene in the Treatment of Neuropathic Pain and Proposed Molecular Mechanisms: A Review of the Literature. Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.
12. Castro LF, Castro M, Neugebauer V, **Shen CL**. Antiallodynic and Antihyperalgesic Effects of Ginger, Capsaicin, Naringin, Soy, Resveratrol and Molecular Mechanism in the Treatment of Neuropathic Pain: A Review of the Literature. Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.
13. Turner J, St.-John J, Dennis J, **Shen CL**. Applying Diffusion of Innovation to the Texas Mother Friendly Worksite Program: Does early adoption lead to lower rates of infant mortality? Submitted to 2021 Student Research Week, Texas Tech University Health Sciences Center.
14. Jiwan NC, Appell C, Wang R, Shen CL, Luk H-Y. Geranylgeraniol increases autophagy and mitophagy gene expression in soleus of rats with diabetes. Submitted to American College of Sports Medicine 2021. June 1-5, 2021. International Journal of Exercise Science Conference Proceedings. 2021, 2(13).
15. Appell CR, Nigel C. Jiwan NC, Wang R, Shen CL, Luk H-Y. Ginger Root Extract Increases Mitochondrial Fission and Mitophagy in Diabetes Mellitus Rats. Submitted to American College of Sports Medicine 2021. June 1-5, 2021.
16. Shen CL, Kahathuduwa C, Chyu, M-C, Brismée J-M, Knox A, Wang R, Luk H-Y, Appell C, Michael O'Boyle M, Zumwalt M, Lee J, Watkins BA, Neugebauer V. Neurobiological mechanisms of pain modulation from Tai-Chi: a single-arm pre/post pilot study. *Integrative Medicine & Health Symposium*. ID #27, 2021.
17. Wang R, Ji G, Dufour JM, Kaur G, Miranda JM, Washburn RL, Hibler T, Luk H-Y, Neugebauer V, **Shen CL**. Ginger Mitigates Pain Behaviors and Improves Colon Health in Obese Rats with Diabetic Neuropathy. Annual Meeting of The Obesity Society 2020, Nov 2-6, 2020.
18. Elmassry MM, Chung E, Hamood AN, **Shen CL**. Addition of geranylgeraniol and green tea polyphenols to high-fat diet impacts the gut microbiome composition and function in type 2 diabetic mice. Submitted to International Congress on Integrative medicine and Health. Cleveland, OH. 4/28/20-5/1/20.
19. Zabet M, Gong X, Mirzaei P, Wang R, Neugebauer V, Mechref Y, **Shen CL**. Analysis of fecal metabolome to study the function of Microbiota in rats with neuropathic pain treated by Ginger root extract. Annual Meeting of American Society for Mass Spectrometry 2020. 5/31/20-6/4/20. Houston, TX.
20. Kim JS, Najjar RS, **Shen CL**, Feresin RG. Effects of annatto-extracted tocotrienols in the liver of high-fat diet fed mice. Nutrition 2020. Seattle, WA. 5/30/20-6/2/20.
21. Elmassry MM, Wang R, Hamood AN, Neugebauer V, **Shen CL**. Two isomers of ginger root extracts modify composition and function of gut microbiota in rats treated with neuropathic pain. Current Developments in Nutrition, 2020; 4:Suppl 2, June 20, page 394.
22. **Shen CL**, Wang R, Ji G, Vellers H, Sang S, Neugebauer V. Dietary supplementation of gingerols- and shogaols-enriched ginger root extracts attenuate pain-associated behaviors in animals with spinal nerve ligation. Current Developments in Nutrition, 2020; 4:Suppl 2, June 20, page 74.
23. Zabet M, Gong X, Mirzaei P, Wang R, Neugebauer V, **Shen CL**. Differential impacts of gingerols- and shogaols-enriched ginger root extracts on fecal metabolites in rats with neuropathic pain. Current Developments in Nutrition, 2020; 4:Suppl 2, June 20, page 494.
24. Elmassry MM, Chung E, Hamood AN, **Shen CL**. Supplementation of geranylgeraniol and tocotrienols to high-fat diet shifts the gut microbiome composition and function in type 2 diabetic mice. Current Developments in Nutrition, 2020; 4:Suppl 2, June 20, page 393.
25. Elmassry MM, Hamood A, **Shen CL**. Annatto-extracted tocotrienol and green tea polyphenols reshape the gut microbiome of obese male mice. ObesityWeek 2019 (Annual Meeting of The Obesity Society), November 6, 2019. Las Vegas, NV.

26. **Shen CL**, Kaur G, Dufour J, Ramalingam L, Chung E, Moustaid-Moussa N, Cao JJ. Effect of geranylgeraniol and green tea polyphenols on high-fat-diet-induced bone deterioration in male B6 mice. *Current Developments in Nutrition*. 2019, 3 Suppl (1): June 3019, nzz031.P06-025-19.
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28. Ramalingam L, Allen L, Udahawatte S, Scoggin S, Koboziev I, **Shen CL**, Moustaid-Moussa N. Delta-Tocotrienol and Tart Cherry Anthocyanins Reduces Inflammation in 3T3-L1 Cells. *Nutrition* 2018, June 9-12, 2018, Boston MA.
29. **Shen CL**, Tomison MD, Kaur G, Ramalingam L, Chung E, Moustaid-Moussa N, Dufour J. Synergistic effect of dietary delta-tocotrienol and geranylgeraniol on bone properties in obese C57BL/6J mice with obesity-associated type 2 diabetes mellitus. *International Congress on Integrative Medicine & Health*, Baltimore, MD. 5/8/18-5/11/18.
30. Chung E, Joiner HE, Campise SN, Gonzalez K, Kaur G, Dufour JM, **Shen CL**. Effect of delta-tocotrienols and green tea polyphenols on glucose homeostasis and skeletal muscle in obese male mice with insulin resistance. *International Conference on Frailty & Sarcopenia Research*, Miami Beach, FL. 3/1/18-3/3/18.
31. Chung E, Joiner HE, Campise SN, Gonzalez K, Kaur G, Dufour JM, Wright K, Ramalingam L, Tomison MD, Moustaid-Moussa N, **Shen CL**. Effect of delta-tocotrienols and green tea polyphenols on glucose homeostasis and skeletal muscle in obese male mice with insulin resistance. *10th International Conference on Cachexia, Sarcopenia & Muscle Wasting*, Rome, Italy. 12/8/17-12/10/17.
32. **Shen CL**, Tomison MD, Kaur G, Ramalingam L, Chung E, Moustaid-Moussa N, Mo H, Dufour J. Dietary geranylgeraniol improved glucose homeostasis, bone turnover biomarkers, and bone quality in C57BL/6J mice with obesity-associated type 2 diabetes mellitus. *10th International Symposium on Nutritional Aspects of Osteoporosis*, Hong Kong 11/29/17-12/1/17.
33. Sharma S, Mo H, **Shen CL**, Wanders D. *d*-delta-Tocotrienol inhibits high-fat diet-induced hepatic inflammation by downregulating STAT3. *ADA* 2017.
34. Dufour JM, Greer RH, Kaur G, Wright K, Tomison MD, Ramalingam L, Chung E, Moustaid-Moussa N, **Shen CL**. Effect of early type 2 diabetes on male fertility. *XXIV North American Testis Workshop* (Miami, Florida, April 19-22) (2017).
35. Dufour JM, Greer RH, Kaur G, Wright K, Tomison MD, Ramalingam L, Chung E, Moustaid-Moussa N, **Shen CL**. Effect of early type 2 diabetes on male fertility. *42nd Annual American Society of Andrology Meeting* (Miami, Florida, April 22-25) (2017).
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37. Wright K, Kaur G, Tomison MD, Ogunmokun G, Rodriguez A, Dufour J, Quintana R, **Shen CL**. Effect of tocotrienol and statin on glucose homeostasis in high-fat-diet-induced obese mice. *FASEB J* April 2017 31:431.8.
38. **Shen CL**, Tomison MD, Romero AW, Yang S, Mo H, Watkins BA. Effect of 12-week tocotrienol supplementation on postmenopausal women with low bone mass: a serum metabolomics profile. *FASEB J* April 2017 31: 1 supplement, 972.2.
39. **Shen CL**, Kaur G, Ramalingam L, Tomison MD, Chung E, Moustaid-Moussa N, Dufour J, Mo H, Watkins BA. Dietary delta-tocotrienol modifies serum metabolites profiles in diet-induced obese mice. *FASEB J* April 2017, 31:1 supplement, 972.4
40. **Shen CL**, Kottapalli R, Tomison MD, Koboziev I, Web CR, Ramalingam L, Moustaid-Moussa N, Kaur G, Dufour J, Chung E, Mo H, Grisham M. Dietary delta-tocotrienol favors abundance and diversity of beneficial microbiomes in obese male mice. *FASEB J* April 2017 31:646.35.
41. **Shen CL**, Tomison MD, Kaur G, Ramalingam L, Dufour J, Moustaid-Moussa N, Chung E, Mo H, Cao J. Effect of delta-tocotrienols and green tea polyphenols on high-fat-diet-induced bone deterioration in male C57BL/6J mice. *FASEB J* April 2017 31:800.10.
42. Chung E, Grue KA, Kottapalli R, Kaur G, Dufour J, **Shen CL**. Effects of exercise before and during pregnancy on microbiomes in obese pregnant mice. *FASEB J* April 2017 31:800.10
43. Khan M, Hao L, **Shen CL**, Wang S. An updated approach for extraction and detection of human plasma tocopherols and tocotrienols. *FASEB J* April 2017 31:800.10.

44. Lyford C, Shafer A, Yang S, Crews J, Romero AW, Lovett C, **Shen CL**. (2016) Using Behavioral Economics to Achieve Improved Healthy Behavior Outcomes in Breast Cancer Survivors. Sex- and Gender-Based Medicine & Women's Health Symposium. E-abstract.
45. **Shen CL**. Tocotrienols in bone protection: from animals to humans. (2016) BIT's 5th Annual World Congress of Food and Nutrition-2016. Kaohsiung, Taiwan. Book abstract.
46. **Shen CL**, Yang S, Tomison MD, Romero AW, Felton CK, Tsai P, Pence BC, Mo H. (2016) Effect of 12-week Tocotrienol supplementation on bone biomarkers, safety, and quality of life in postmenopausal osteopenic women: a randomized double-blinded placebo-controlled study. *J Bone Mineral Res* 32 (Suppl 1), MO253.
47. Grue KA, Joiner HE, **Shen CL**, Kaur G, Ramalingam L, Dufour J, Moustaid-Moussa N, Chung E. (2016) Effects of high fat diet and exercise intervention before and during pregnancy on the hearts of C57BL/6 mothers. *FASEB J* 30(1): S1239.8.
48. Ramalingam L, Allen L, Scoggin S, **Shen CL**, Tomison MD, Kaur G, Dufour J, Chung E, Moustaid-Moussa N. (2016) Delta-Tocotrienol regulates lipid metabolism in livers of high fat fed mice. *FASEB J*. 30(1) S126.6.
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50. **Shen CL**, Kaur G, Ramalingam L, Tomison MD, Chung E, Moustaid-Moussa N, Guo C, Web CR, Mo H, Dufour JD. (2016) Dietary tocotrienols improve glucose homeostasis and bone turnover biomarkers in high-fat-diet-induced obese male mice. *FASEB J*. 30(1) S692.2.
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53. **Shen CL**, Yang S, Brismee JM, Tsai P, Chyu MC, Zhang Y, Han J, Lambert ME. (2015). Investigation of Gait Disturbance and Grip Strength in a Rural Cohort: A Project FRONTIER study. *Medicine & Science in Sports & Exercise*. 47(5S):180.
54. **Shen CL**, Brackee G, Mitchell KT, Song X, Finckbone V, Tomison MD, Han J, Wang JS. (2015). A 6-month chronic toxicity study on green tea polyphenols in middle-aged ovariectomized rats. *FASEB J* 2015; 29(1): S608.6
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57. **Shen CL**, Bergeson S, Syapin P, Brackee G, Graef JL, Smith BJ. Green tea polyphenols improve cortical bone and bone quality in alcohol-induced bone loss of young male rats. *FASEB J* 2014. Vol 28; (1): S1032.1
58. **Shen CL**, Bergeson S, Syapin P, Dagda RY, Chen JJ, Graef JL, Brackee G, Brenda J Smith. (2013). Green tea polyphenols improve bone matrix in alcohol-induced bone loss of young male rats. *J Bone Miner Res* 29 (Suppl 1).
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Funded Research:

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 Co. 1/1/2022-12/31/2022. \$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). 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. “Levels of vitamins D and infection risk in pediatric patients undergoing chemotherapy”. South Plains Foundation.
Shen CL (Co-I, 3%). The goal of study is to measure the serum levels of vitamin D in children undergoing chemotherapy and track changes after 6 months and to investigate the relationship between vitamin D levels and the incidence of fever as a marker for infection in this population. \$13,000. 9/1/19-8/31/20.
6. “Effect of ginger extract on pain management: an animal pilot study”. Department of Pathology and Department of Pharmacology & Neuroscience.
Shen CL (PI, 3%). The goal of this study is to collect preliminary data on how ginger extract may help with pain reduction, in terms of pain behaviors of rats, in the spinal nerve ligation pain model. \$5,000. 1/1/2019-12/31/2020.
7. “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). 12/1/2018-11/30/2021.
8. “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. 11/1/2018-10/31/2021.
9. “Tocotrienols supplementation for postmenopausal women with low muscle strength: 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 modify endocannabinoid and oxylipins in postmenopausal women with low muscle strength. \$30,000. 11/1/2018-10/31/2021.
10. “Tocotrienols supplementation for postmenopausal women with sarcopenia: a pilot study”, South Plains Foundation.
Shen CL (PI, 3%). Culberson, J (co-I), Palmer T (co-I), Yang, SP (co-I), Luk HY (co-I), Robyn Richmond (Co-I), Watkins BA (co-I). The goal of study is to test the hypothesis that tocotrienol supplementation improves muscular outcomes in postmenopausal women with sarcopenia, and to explore the underlying mechanisms. \$15,000. 9/1/2018-8/31/2020.
11. “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. 8/1/2018-7/31/2021

12. “Actions of dietary tocotrienols on obesity: a pilot clinical study”. School of Medicine, Texas Tech University Health Sciences Center.
Shen CL (PI, 3%). Aryaie A (co-PI), Lee J (co-I), Tinsley G (co-I), Watkins BA (co-I). The goal of this pilot study is to test a dietary tocotrienol supplementation for feasibility, and to quantitatively assess its potential anti-obesity effects on postmenopausal women. \$20,000. 7/1/2018-12/31/2020.
13. “Treating Vitamin D insufficiency in community dwelling elderly to improve arterial stiffness”.
Peiris A (PI). **Shen CL** (collaborator, non-measurable efforts). Funded by School of Medicine. The goal of this study is to evaluate one-year vitamin D supplementation on the CVD of elderly. \$20,000. 7/1/2018-6/30/2020.
14. “Utilizing tocotrienols to prevent the formation of islet amyloid deposits- a novel treatment for diabetes mellitus”.
LWBIWH/UMC Women’s Health grant program.
Kaur G (PI). Co-PI: **Shen CL** (collaborator, non-measurable efforts), Dufour J, Cornwell G. The goals of this study is test the novel ideal of utilizing tocotrienol to prevent islet amyloid deposits. \$20,000. 10/2017-9/2019.
15. “CurcuWIN and Joint Health: an Efficacy Study”. OmniActive Health Technology. \$238,648. 7/1/2017-6/30/2019.
Shen CL (PI, 5%). Brismee JM (5%, Co-I), Zumwalt M (5%, Co-I), Lee J (5%, Co-I).
The overall objectives are to conduct a randomized double-blinded placebo-controlled trial to test the effects of 12 weeks of CurcuWIN on joint health (pain, stiffness, and function), functional impairment, quality of life, and mechanisms in adults with self-report joint pain.
16. “Clinical Outcomes of an Interprofessional Collaborative Practice (IPCP) Program for Cardiovascular Risk Reduction (CRR) Among Chronic Disease Patients in a Nurse-Managed Health Center”.
Esperat C (PI). **Shen CL** (co-I, 5%). Subcontract for blood parameters. \$20,000. 1/1/2016-12/31/2018.
17. “Tocotrienols for Alzheimer’s Disease”. American River Nutrition, Inc. \$50,000. 12/1/2015-6/30/2017.
Shen CL (PI, 10%). Mo H (Co-PI), Xia W (Co-PI).
The goal of this study is to evaluate the potential benefits of tocotrienols on Alzheimer Disease-related brain markers in mice.
18. “Effects of bioactive compounds (tocotrienols and geranylgeraniol) on type 2 diabetic rats”. American River Nutrition, Inc. \$ 99,830. 2/1/2015-7/31/2017.
Shen CL (PI, 15%). Dufour J (Co-PI), Brackee G (Co-PI), Chung E (Co-PI), Moustaid-Moussa N (Co-PI).
The goal of this study is to evaluate the potential benefits of T3, GG, and T3+GG on glucose metabolism, musculoskeletal health, energy homeostasis, and gut microbiota composition in T2DM rats.
19. “Effect of tocotrienols on bone health: a pilot study”. **Shen CL (Principal Investigator)**, Mo H (co-investigator, Texas Woman’s University, Denton, TX), Felton CK (collaborator, TTUHSC, OB/GYN), Shengping Yan (collaborator, TTUHSC, Pathology), Soelaiman, Ima Nirwana, PhD (collaborator, Dept. of Pharmacology, Faculty of Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia), and Pence BC (consultant, TTUHSC, Pathology). Funded by American River Nutrition, Inc., Hadley, MA. \$118,160. 1/1/2013-12/31/2016.
The objective is to evaluate the effects of toccotrienols on bone turnover biomarkers and safety in postmenopausal women.
20. “Using behavioral economics to achieve improved healthy behavior outcomes in breast cancer survivors”
Obesity Research Center Pilot and Feasibility Grants. \$5,000; Laura W. Bush Institutes for Women’s Health \$6,000. Texas Tech University: \$7,000. 12/1/2014-11/30/2016.
Lyford C (PI). **Shen CL** (Co-PI, 5%), Shafer A (Co-PI), Arentz C (Co-PI), Yang SP (Co-PI)

The goal of this study is to determine, compared to the control group, if 12-weeks of social media intervention would increase compliance with ACS recommendations and health related quality of life, reduce physiological and psychological distress in breast cancer survivors.

21. “Nutrition and Obesity” Texas Tech University Transdisciplinary Research Academy. \$4,000. 4/1/2014-3/31/2015.
Moustaid-Moussa (PI). **Shen CL** (5%) (Co-investigator)
The goal of this study is to specifically investigate mechanisms by which omega 3 polyunsaturated fatty acids ameliorate obesity and related metabolic disorders.
22. “The effects of epigallocatechin-3-gallate on obesity-related breast cancer bone metastasis”. Texas Tech University Transdisciplinary Research Academy. \$4,000. 4/1/2014-3/31/2015.
Gollahon (PI). **Shen CL** (Co-PI, 5%)
The goal of this study is to investigate (1) whether the green tea catechin epigallocatechin-3-gallate (EGCG) can counteract the effects of obesity on breast cancer through modulating estrogen receptor status and (2) whether EGCG will promote bone health, attenuating metastatic progress.
23. “How do various omega-3 fatty acids alone or in combination influence the risk for osteoporosis, obesity, and neural degenerative diseases” Omega Proteins. \$5,802. 8/1/13-12/31/13.
Ballou MA (PI), Wang S (Co-investigator), **Shen CL** (Co-PI, 5%)
The goal of this study is to evaluate the effects of different omega-3 fatty acids on bone-, obesity-, and neural degeneration-related parameters.
24. “Sex and Gender-Based Medicine Triad-Osteoporosis”.
PI: Casanova R. Co-investigator: Bergeson S, **Shen CL** (5%), Song M, Dickerson R. Laura Bush Institute for Women’s Health. \$25,000. 2012-2013.
The objective is to establish a Triad module covering basic science, pharmacology, clinical application.
25. “Effect of green tea polyphenols on alcohol-induced bone loss”. **PI: Shen CL**. Co-investigator: Syapin P and Bergeson S (Texas Tech University Health Sciences Center). Funded by Laura W. Bush Institute for Women’s Health. \$7500. 5/1/2013-4/30/2014.
The objective is to study the effects of green tea polyphenols on bone matrix, bone microstructure, and bone strength along with safety and mechanistic profiles in young male rats using a binge drinking model.
26. “Preparation for GTP Long-Term Clinical Study on Bone Health”. National Complementary and Alternative Medicine (NCCAM)/NIH. 1 U01 AT006691. 09/30/2012-6/30/2017. \$1,585,149. **PI: Shen CL (Principal Investigator)**. Co-investigator: Wang JS (University of Georgia), Song X (University of Georgia). Collaborators: Jenkins M (TTUHSC), Brackee G (TTUHSC), Felton CK (TTUHSC). Consultant: Mitchell K (TTUHSC), Dunn DM (TTUHSC), Pence BC (TTUHSC), Lewiecki ME (New Mexico Clinical Research & Osteoporosis Center).
The objective is to collect the preliminary data for a future long-term GTP clinical trial with an optimal dose in postmenopausal women with low bone mass.

“GTP and Tai Chi for Musculoskeletal Health”. National Complementary and Alternative Medicine (NCCAM)/NIH. 1 R01 AT006691-01A1. 07/1/2012-06/30/2017. Total requested: \$3,021,034.
Received an impact score of 13 and 3% tile at NIH study section. NCCAM then decided to convert this R01-AT006691 to U01-AT006691 to supplement additional funding for more preliminary data collection prior to this R01. **PI: Shen CL (Principal Investigator)**. Co-investigator: Wang JS (University of Georgia), Song X (University of Georgia), Chyu MC (Texas Tech University) Collaborators: Felton CK (TTUHSC). Consultant: Pence BC (TTUHSC), Zhang Y (TTUHSC), Brismee JM (TTUHSC), Magaziner J (University of Maryland).
The objective is to study effect of green tea polyphenols and Tai Chi on bone remodeling, fat deposition, and muscle integrity in overweight/obese postmenopausal women with low bone mass.

27. “Acupressure’s impact on knee pain among osteoarthritic women”. UMC Women’s Health Scholar Program. Zhang Y (Principal Investigator). **Shen CL** (co-investigator), Peck K, Brismee JM. \$20,000. 03/01/2011-2/28/2013.
The goal is to study the effect of 12-wk acupressure on pain management in osteoarthritic women.
28. “Understanding and Improving the Health of Rural West Texans”. The CH Foundation
PI: O’Bryant SE. Co-investigator: Johnson L, Dentino A, Momeni P, Bergeson S, Grammas P, Jenkins M, Zhang Y, Syapin P, **Shen CL**, Covington C. \$50,000. 12/1/2010-11/30/2011.
The objective is to obtain multiplex assays on over 200 samples from the Project FRONTIER biobank in order to study the biological mediators of health outcomes among rural-dwelling adults and elders.
29. “Martial Arts Exercise Program for Overweight/Obese Premenopausal Women- a Pilot Study”. **Shen CL (Principal Investigator)**. Ragain M, Zhang Y, Chyu MC, Laura W. Bush Institute for Women’s Health & University Medical Center Women’s Innovation Fund, \$5,000, 1/1/2010-12/31/2011.
The objective is to evaluate the effects of martial arts exercise on bone metabolism and turnover biomarkers, body composition, and quality of life in overweight/obese premenopausal women.
30. “Performance of osteoporosis risk assessment tools in diagnosing osteoporosis in postmenopausal Hispanic women”. PI: Mittal N (Internal Medicine, TTUHSC, Lubbock), participating researcher: **Shen CL**. LWBIWH & UMC seed grant, \$10,000, 2008-2010.
The objective is to evaluate the osteoporosis risk assessment tools in postmenopausal Hispanic women in order to assist in osteoporosis diagnosis.
31. “Effect of GTP on obesity and bone loss”. **Shen CL (Principal Investigator)**. Wang JS, Yeh JK, Cao JJ. Winthrop-University Hospital. \$11,230 and Laura W. Bush Institute for Women’s Health, \$17,000 (11/1/2009-10/31/2010).
The objective is to study the effect of green tea polyphenols on promoting weight loss and improving bone quality along with related mechanisms in female rats.
32. “GTP and male osteoporosis”. **Shen CL (Principal Investigator)**. Wang JS, Yeh JK, Cao JJ. Winthrop-University Hospital. \$8,000. 4/1/2009-3/31/2010.
The objective is to study the effect of green tea polyphenols on bone metabolism and related mechanisms in male rats.
33. “GTP and Tai Chi for Bone Health: a Pilot Study.” **Shen CL (Principal Investigator)**, Wang JS, Chyu MC, Felton CK, Arjmandi BH, Yeh JK, Magaziner J, Xu KT, Pence BC, Brismee JM. National Institutes of Health (NIH)/National Center for Complementary and Alternative Medicine (NCCAM) \$572,740, 9/1/2007-8/31/2010.
The objective is to study the effect of exercise (Tai Chi) and green tea polyphenols supplementation on bone metabolism and oxidative stress in postmenopausal women with low bone mass.
34. “Modified Tai Chi Exercise During Outpatient Hemodialysis Therapy.” **Shen CL (Principal Investigator in basic science)**, Phisitkul S (Principal Investigator in clinical science), Prabhakar S, Chyu MC, Brismee JM. Clinical and Basic Science Seed Grant, TTUHSC. \$20,000 (1/1/2008-8/31/2009).
The objective of this study is to evaluate the effect of exercise (Tai Chi) on musculoskeletal health in outpatients receiving hemodialysis therapy.
35. “Effect of green tea polyphenols on bone loss and atherosclerosis.” **Shen CL (Principal Investigator)**, Wang JS. Women Health Research Institute, Texas Tech University Health Sciences Center. \$20,000, 9/1/2007-8/31/2009.
The objective of this study is to elucidate the bioavailability, efficacy, and mechanisms of green tea polyphenols in preventing bone loss and fibrosis of coronary vessel in middle-aged female rats in a chronic inflammation-induced bone loss and atherosclerosis model.

36. “Tai Chi for fitness and wellness in the elderly.” **Shen CL (Principal Investigator)**, Chyu MC. Carillon senior living campus. \$6,000, 1/1/04-12/31/08.
The objective is to establish a community-based exercise program and to investigate the long-term benefits of Tai Chi in fitness and wellness of the elderly.
37. “Effect of green tea polyphenols on breast cancer survivors: a pilot study.” **Shen CL (Principal Investigator)**, Wang JS, Cobos E. Southwest Cancer Treatment and Research Center, Oncology Development Award. \$15,000, 1/1/06-12/31/07.
The objective is to test a dietary supplement, green tea polyphenol (Polyphenon E), for feasibility, safety, bioavailability, and efficacy in breast cancer survivors.
38. “Effect of Tai Chi on self-efficacy of Diabetes.” CM Esperat (Principal Investigator), **Shen CL (co-investigator)**, Chyu MC, Feng D, Zhang Y. School of Nursing, Texas Tech University Health Sciences Center. \$20,000, 1/1/06-8/31/07.
The objective is to improve the adherence rate of exercise protocol in type 2 diabetes through enhancing subjects’ self-efficacy.
39. “Effect of green tea polyphenols on bone loss in aged estrogen-deficient female rats.” **Shen CL (Principal Investigator)**, Wang JS, Yeh JK. Lubbock Endowed Professorship. \$20,000, 1/1/06-12/31/06.
The objective is to evaluate the bioavailability, mechanisms, and efficacy of green tea polyphenols in preventing bone loss in middle-aged ovariectomized rats.
40. “Effect of Tai Chi on Biomechanical responses related to risk of falls in postmenopausal women with osteoporosis.” **Shen CL (Principal Investigator at Texas Tech University Health Sciences Center)**, Chyu MC (Principal Investigator at Texas Tech University), Sawyer S, James R, Brisemee JM, Xu KT. Texas Tech University seed grant. \$8,980, 1/1/2005-12/31/2006.
The objective of this study is to evaluate the efficacy of short-term (24 wks) group Tai Chi intervention on risk of falls in elderly osteoporotic women.
41. “Preventive effects of risedronate and vitamin K administration prior to ovariectomy on bone loss in rats-short and –long term study.” **Shen CL (Principal Investigator)**. Winthrop-University Hospital. \$26,000, 10/1/2003-9/30/2006.
The objective of this study is to evaluate the effects of risedronate and vitamin K on the prevention of bone loss in ovariectomized female rats through bone histomorphometric measurements
42. “Effect of CLA on IL-6 production of osteoblastic cells.” **Shen CL (Principal Investigator)**. Neely Treadwell Cancer Investigator Award. \$15,000, 1/17/2005-1/26/2006.
The objective of this study is to evaluate the effects of conjugated linoleic acid on interleukin-6 production in a co-culture of prostate cancer cells and osteoblastic cells.
43. “Effect of Tai Chi on glycemic index of type II diabetes.” **Shen CL (Principal Investigator)**, Chyu MC, Esperat CM, Feng D, Irons B. School of Nursing, Texas Tech University Health Sciences Center. \$10,000, 8/1/2004-7/31/2005.
The objective of this study is to investigate the effect of Tai Chi on blood sugar and hemoglobin A1C in subjects with type-II diabetes.
44. “Molecular modifier of n-3 fatty acids on bone metabolism.” **Shen CL (Principal Investigator)**, McMahon K, Dunn DM. Texas Tech University Health Sciences Center School of Medicine seed grant. \$19,600, 9/1/2003-2/28/2005.
The objective of this study is to evaluate the role of n-3 PUFA on osteoblastogenesis using bone marrow stromal cells.

45. "Effect of n-3 polyunsaturated fatty acids on osteoblastogenesis." **Shen CL (Principal Investigator)**, McMahon K. South Plains Foundation. \$7,000, 9/1/2004-8/31/2005.
The objective of this study is to investigate the effect of EPA vs. AA on the expression of inflammatory mediators, cyclooxygenase-2 and inducible nitric oxide synthase.
46. "Exercise and Osteoarthritis." **Shen CL (Principal Investigator)**, Chyu MC, Brismee JM. School of Allied Health, Texas Tech University Health Sciences Center. \$5,000, 1/1/2004-12/31/2004.
The objective of this study is to compare the effects of Tai Chi versus control on pain and range of motion in the elderly with clinical osteoarthritis of the knee, a prospective randomized controlled trial.
47. "Effects of dietary lipids on flexural strength and histomorphometry of osteoporotic animal bone model." **Shen CL (Principal Investigator at Texas Tech University Health Sciences Center)**, Rasty J (Principal Investigator at Texas Tech University), M-C Chyu. Texas Tech University. \$20,000, 6/1/2002-5/31/2003.
The objective of this study is to evaluate the effects of dietary lipids on bone mechanical strength, bone histomorphometry, bone fatty acid composition, and bone formation biomarkers in aged male rats.
48. "Improving bone health of breeding female pigs." **Shen CL (Principal Investigator at Texas Tech University Health Sciences Center)**, Kim SW (Principal Investigator at Texas Tech University), Texas Tech University. \$10,000, 6/1/2002-5/31/2003.
The objective of this study is to investigate the effects of ginger root extract and fish oil on the production of prostaglandin E2 and nitric oxide in swine osteoarthritic chondrocytes.
49. "Effects of exercise on bone metabolism of the elderly in west Texas." **Shen CL (Principal Investigator)**, Chyu MC, Chauency KB, Williams JS, Prabhu FR. Helen Jones Foundation/Carillon Research and Education Center. \$20,000, 9/1/2002-12/31/2003.
The objective of this study is to compare the effects of Tai Chi vs. resistance training on biochemical markers of bone metabolism in postmenopausal women directly related to osteoporosis.
50. "Role of cyclooxygenase-2 in testosterone biosynthesis in male aging." Wang XJ, **Shen CL (co-investigator)**, Institute of Healthy Aging, Texas Tech University Health Sciences Center. \$50,000, 11/1/2002-10/31/2003.
The objective of this study is to illustrate the role of cyclooxygenase-2 on StAR gene expression, testosterone production, and bone histomorphometry during the process of male aging using both animal and cell models.

Invited Lectures/Oral Presentations

1. Regulatory role of dietary conjugated linoleic acids (CLA) on osteoarthritis of the elderly, invited presentation to Scientific Advisory Committee, Institute for Healthy Aging, Lubbock, TX. February 14, 2001.
2. Effects of exercise intervention on bone metabolism of the elderly in west Texas, invited presentation to Carillon Research and Education Committee, Lubbock, TX. March 28, 2002.
3. Effect of Chinese herbal remedy on osteoarthritis, invited presentation to Toxicology Department, Veteran General Hospital, Taipei, Taiwan. May 31, 2002.
4. Effects of conjugated linoleic acids on decreasing the production of inflammatory mediators by human osteoarthritis chondrocytes. Invited presentation at Annual Meeting of Experimental Biology, San Diego, CA. April 12, 2003.
5. Lipids and bone health, as an invited seminar speaker at Department of Pharmacology, TTUHSC, Lubbock, TX. April 29, 2003.
6. Diet and bone health, as an invited seminar speaker at Journal Club, Department of Pathology, TTUHSC, TX. June 13, 2003.
7. Effects of exercise on bone metabolism of the elderly in west Texas. Presented at Carillon Research and Education Committee, Carillon Senior Living Campus, Lubbock, TX. August 28, 2003.
8. Effects of exercise on bone metabolism of the elderly in west Texas. Presented at Carillon Research and Education Committee, Carillon Senior Living Campus, Lubbock, TX. August 28, 2003.
9. A comparison of Tai Chi versus conditioning exercise program on pain, range of motion, frequency of falls and physical functioning in an elderly population with clinical osteoarthritis of the knee and/or hip: a prospective

- randomized controlled trial, presented at Carillon Research and Education Committee, Carillon Senior Living Campus, Lubbock, TX. November 6, 2003.
10. Effects of exercise on bone metabolism of the elderly in west Texas, presented at Carillon Research and Education Committee, Carillon Senior Living Campus, Lubbock, TX. December 4, 2003 (final report).
 11. Effects of dietary lipids on bone metabolism of the middle-aged male rats. Invited presentation at Journal Club of Pathology Department, Lubbock, TX. December 12, 2003.
 12. Effects of Exercise on Bone Metabolism of the Elderly in West Texas. Journal Club of Pathology Department, Lubbock, TX. March 12, 2004.
 13. Dietary n-3 polyunsaturated fatty acids modulate the production of inflammatory mediators in tissues of middle-aged male rats, invited presentation at Annual Meeting of Experimental Biology, Washington, DC. April 17, 2004.
 14. Dietary n-3 polyunsaturated fatty acids prevent aging-induced bone loss in male rats, invited presentation at Annual Meeting of Experimental Biology, Washington DC. April 20, 2004.
 15. Comparison of effects of resistance training and Tai Chi on bone metabolism of the elderly, invited presentation at Annual Meeting of American Collage of Sport Medicine, Indianapolis, IN. June 5, 2004.
 16. Research of Tai Chi as an alternative exercise therapy in Asian Pacific Heritage Month. Lubbock, TX. May 10, 2005.
 17. Nutrition, Physical Activity, and Bone Health, invited presentation at Okalahoma State University, Stillwater, OK. February 20, 2006.
 18. Nutrition, Physical Activity, and Bone Health, invited presentation at Florida State University, Tallahassee, FL. March 13, 2007.
 19. Nutrition, Physical Activity, and Bone Health, invited presentation at Oregon State University, Corvallis, OR. June 5, 2007.
 20. Tai Chi and Bone Health, invited presentation at Healthy Aging of Lubbock, TX. June 9, 2007.
 21. Nutrition, Physical Activity, and Bone Health, invited presentation at Winthrop-University Hospital, Mineola, NY. July 5, 2007.
 22. Exploring Integrative and Complementary Medicine: Session Three: Tai Chi and Bone Health. Outreach Class, Texas Tech University, Lubbock, TX. October 11, 2007.
 23. Nutrition, Physical Activity, and Bone Health, invited presentation at University of Maryland, School of Medicine, Baltimore, MD. December 5, 2007.
 24. Nutrition, Physical Activity, and Bone Health, invited presentation at School of Arts and Sciences, Providence University, Taiwan. December 26, 2007.
 25. Nutrition, Physical Activity, and Bone Health, invited presentation at Aging Interest Researcher Group, Garrison Institute on Aging, Lubbock, TX. January 18, 2008.
 26. Nutrition, Physical Activity, and Bone Health, invited presentation at Department of Nutrition, Hospitality, and Retailing. Texas Tech University, Lubbock, TX. March 4, 2008.
 27. Effect of green tea polyphenols on chronic inflammation-induced bone loss in female rats. The Annual Meeting of Experimental Biology, 2008. San Diego Convention Center, San Diego, CA. April 7, 2008.
 28. Vitamin D and Musculoskeletal Health. The 5th Annual Aging Symposium. Lubbock, TX on April 10, 2008.
 29. Martial Arts Exercise and Nutrition Education for Overweight/Obese Children. Sid Richardson Foundation, Fort Worth, TX. May 5, 2008.
 30. Green Tea and Bone Health. Leadership Texas Program, Amarillo, TX. August 12, 2008.
 31. Vitamin D and Musculoskeletal Health. Geriatric Symposium- The Fitness prescription: Should Grandma Pump Iron? Amarillo, TX. November 7, 2008.
 32. Nutrition, Physical Activity, and Bone Health. Solae LLC, St. Louis, MO. April 6, 2009.
 33. Green Tea and Bone Health. Lubbock Dietetic Association, Lubbock, TX. April 15, 2009.
 34. Synergistic effect of green tea polyphenols and vitamin D on chronic inflammation-induced bone loss in female rats. The Annual Meeting of Experimental Biology, 2009. New Orleans, LA. April 20, 2009.
 35. Epidemic Obesity in China. President's Forum on International Health, Lubbock, TX. May 20, 2009.
 36. Tai Chi and Bone Health. Lubbock Rotary Club, Lubbock, TX. June 10, 2009.
 37. Nutrition and Bone Health. Department of Nutritional Science, Fu Jen Catholic University, Taiwan. June 24, 2009.

38. Green tea and bone health. USDA Grand Forks Human Nutrition Research Center, Grand Forks, ND. September 24, 2009.
39. Obesity/bone health and green tea research. Laura W. Bush Institute for Women's Health National Advisory Board Meeting. Amarillo, TX. April 22, 2010.
40. Green tea and bone health to Winthrop-University Hospital, Mineola, NY. June 4, 2010.
41. Nutrition factors in bone diseases-clinical integration. Department of Nutrition, Texas Tech University, Lubbock, TX. April 5, 2011.
42. Green tea and bone health to US Food Service, Lubbock, TX. May 18, 2011.
43. How to write a review article? Department of Nutrition, Texas Tech University, Lubbock, TX. November 17, 2011.
44. How to write a clinical grant proposal in NIH format? Department of Nutrition, Texas Tech University, Lubbock, TX. November 17, 2011.
45. Green tea and bone health: from bench to clinical trial, School of Pharmacy, Distinguished Speaker, Amarillo, TX. December 16, 2011.
46. Healthy eating and bone health, Daughter/Mother Program, Atkins Middle School, Lubbock, TX. March 4, 2012.
47. Healthy eating and bone health, Daughter/Mother Program, Wilson Middle School, Lubbock, TX. March 8, 2012.
48. Nutrition factors in bone diseases-clinical integration. Department of Nutrition, Texas Tech University, Lubbock, TX. April 3, 2012.
49. Green tea and bone health: from bench to clinical trial. Bioscience Research Center, Andong National University, Andong, South Korea. June 11, 2012.
50. Experimental design/model for nutrition and bone health study. Fu Jen University, Taipei, Taiwan. June 20, 2012.
51. Green tea and bone health: from bench to clinical trial. Fu Jen University, Taipei, Taiwan. June 20, 2012.
52. How to write a review article about one nutrient/group nutrients on bone health. Fu Jen University, Taipei, Taiwan. June 20, 2012.
53. How to prepare proposal about nutrition and bone health: cell, animal and clinical trial. Fu Jen University, Taipei, Taiwan. June 20, 2012.
54. Effect of GTP and Tai Chi on bone health. The Annual Meeting of International Academy on Nutrition and Aging, Albuquerque, NM. July 13, 2012.
55. Green tea and women's health. San Angelo Community-sponsored by Angelo State University, San Angelo, TX. September 12, 2012.
56. Tea and bone health: steps forward in translational nutrition. Fifth International Scientific Symposium on Tea & Human Health at the U.S. Department of Agriculture in Washington DC. September 19, 2012.
57. Green tea for women's health. The Lunch 'n Learn-Community Matters, Amarillo National Bank, Amarillo, TX. November 7, 2012.
58. Green tea and bone health: a translational approach, Department of Nutrition, Texas Tech University, Lubbock, TX. March 25, 2013.
59. Green tea for women's health. American Association of University Women Lubbock Betty Anderson Branch. March 27, 2013.
60. Shen CL. Tea and bone health: steps forward in translational nutrition. A Special Session for the North America Chinese Society for Nutrition (NACSN), Annual Meeting of Chinese Society for Nutrition. Hangzhou, China. May 17, 2013.
61. Shen CL. Dietary polyphenols in management of osteoporosis. West Lake Frontiers in Nutrition Research Training Program (WFNRTP), Hangzhou, China. May 19, 2013.
62. Shen CL. How to interact with media and general public. West Lake Frontiers in Nutrition Research Training Program (WFNRTP), Hangzhou, China. May 19, 2013.
63. Shen CL. Nutrition and musculoskeletal health (invited by Taiwanese Osteoporosis Association) Taipei, Taiwan. August 24, 2013.
64. Shen CL. Nutrition and musculoskeletal health, Fu Jen University, Taipei, Taiwan. August 26, 2013.
65. Shen CL. Clinical Nutrition Investigation and Women' Bone Health. Texas Tech University. Obesity Research Cluster Annual Meeting and Networking Event. Texas Tech University, Lubbock, TX. May 14, 2014.

66. Shen CL. Nutrition and Bone Disorders. Department of Nutritional Sciences, Texas Tech University, Lubbock, TX. April 2, 2014.
67. Shen CL. Nutrition and Bone Health. Osher Lifelong Learning Institute (OLLI), Texas Tech University, Lubbock, TX. October 8, 2014.
68. Shen CL. Tea and bone health: translational nutrition approach. Department of Nutritional Sciences, University of Connecticut, Storrs, CT. November 13, 2014.
69. Shen CL. Nutrition and Bone Health. Integrative Medicine Lecture, Spring Series, TTUHSC, Lubbock, TX. February 11, 2015.
70. Shen CL. Tea polyphenols in bone protection. American Society for Nutrition, Dietary Bioactive Components, RIS Topic Session "*The Role of Dietary Bioactive Components in Bone Health and Development*". Experimental Biology 2015, Boston, MA. March 30, 2015.
71. Shen CL. Nutrition and Bone Disorders. Department of Nutritional Sciences, Texas Tech University, Lubbock, TX. April 8, 2015.
72. Shen CL. Tea and Health. Women's Health Committee, University Medical Center, Lubbock, TX. May 12, 2015.
73. Shen CL. "Tea polyphenols in bone protection". 12th China Nutrition Science Congress, Beijing, China. May 17, 2015.
74. Shen CL. "Dietary polyphenols and obesity: translational nutrition approaches". 12th China Nutrition Science Congress, Beijing, China. May 18, 2015.
75. Shen CL. "Clinical Trial of FDA-IND Green Tea Polyphenols for Bone Health". The Society of Clinical Research Associates, (SOCRA) annual meeting. Denver, CO. September 18, 2015.
76. Shen CL. Tea polyphenols in bone protection: a translational research approach. The 8th Conference and Exhibition of the International Society for Nutraceuticals and Functional Foods (ISNFF), Wuxi, China. September 22, 2015.
77. Shen CL. Tea polyphenols in bone protection: a translational research approach. Providence University, Taiwan. September 29, 2015.
78. Shen CL. Gender differences in musculoskeletal health: a project FRONTIER Study. Sex- and Gender-Based Medicine & Women's Health Symposium, Lubbock, TX. October 23, 2015.
79. Shen CL. Dietary polyphenols in bone and obesity. TTUHSC Garrison Institute on Aging, Lubbock, TX. November 3, 2015.
80. Shen CL. "Qi Gong for low back pain relief: a Mechanistic study". SOM Center of Excellence for Translational Neuroscience and Therapeutics club, Lubbock, TX. December 2, 2015.
81. Shen CL. "Tea polyphenols for bone health: lessons from animals to humans". Cornell Biotechnology Club, Cornell University, Ithaca, NY. March 14, 2016.
82. Shen CL. "Tocotrienols for bone health: a pilot clinical study". 2nd Bone Symposium. National University of Malaysia (Universiti Kebangsaan Malaysia), Kuala Lumpur, Malaysia. March 31, 2016.
83. Shen CL. "Green Tea and Bone Health: From Bench to Clinical Trial". Symposium Session: Natural Products: Biological Effects and Therapeutic Potential in Human Disease, Sponsored by American Federation for Medical Research. Annual Meeting of Experimental Biology, San Diego, CA. April 6, 2016.
84. Shen CL. "Dietary tocotrienols for bone health: from animals to humans". The first Annual Symposium of the new Center of Excellence for Translational Neuroscience and Therapeutics (CTNT), Lubbock, TX. April 21, 2016.
85. Mo H, Shen CL, Xia W. Exploration of tocotrienols for the prevention of Alzheimer's disease. Chinese Congress on Gerontology and Health Industry, Suzhou, China, 2016. Presented by Mo H.
86. Shen CL. "Tea Polyphenols for Bone Health: from Animals to Humans", Department of Environmental Health Sciences, University of Georgia, Athens, GA. September 16, 2016.
87. Shen CL. "Tocotrienols for Bone Health: from Animals to Humans", Department of Nutrition, Georgia State University, Atlanta, GA. September 20, 2016.
88. Shen CL. "Tea Polyphenols for Bone Protection: from Animals to Humans", Coordinated Program in Dietetics, University of Texas at San Antonio, San Antonio, TX. September 26, 2016.
89. Shen CL. "Green tea for bone health". Faculty Senate, TTUHSC, Lubbock, TX. October 6, 2016.
90. Shen CL. "Tocotrienols in bone protection: from animals to humans". BIT's 5th Annual World Congress of Food and Nutrition, Kaohsiung, Taiwan. November 19, 2016.

91. Shen CL. "Tocotrienols in bone protection: from animals to humans". 2nd International Symposium on Phytochemicals in Medicine and Food, Fuzhou, China. April 8, 2017.
92. Shen CL. "Nutrition translational approaches for musculoskeletal health". China Interest Group (CIG), Experimental Biology 2017, Chicago, IL. April 24, 2017.
93. Shen CL, Tomison MD, Kaur G, Ramalingam L, Dufour J, Moustaid-Moussa N, Chung E, Mo H, Cao J. Effect of delta-tocotrienols and green tea polyphenols on high-fat-diet-induced bone deterioration in male C57BL/6J mice. Experimental Biology 2017, Chicago, IL. April 23, 2017.
94. Shen CL. "Therapeutic Properties of Green Tea Catechins against Environmental Insults". North American Congress of Clinical Toxicology, Vancouver, BC. October 14, 2017.
95. Shen CL. "Dietary geranylgeraniol improved glucose homeostasis, bone turnover biomarkers, and bone quality in C57BL/6J mice with obesity-associated type 2 diabetes mellitus". 10th International Symposium on Nutritional Aspects of Osteoporosis. Hong Kong. November 29, 2017.
96. Shen CL. "Phytochemicals for bone health: translational approach and beyond". State Key Laboratory of Quality Research in Chinese Medicine Institute of Chinese Medical Sciences. University of Macau, Macau, China. November 30, 2017.
97. Shen CL. "Dietary Nutrients and bone health". Department of Orthopedic Surgery, Taipei Veterans General Hospital, Taipei, Taiwan. December 7, 2017.
98. Shen CL. "Dietary Nutrients and bone health". Division of Clinical Toxicology & Occupational medicine, Taipei Veterans General Hospital, Taipei, Taiwan. December 7, 2017.
99. Shen CL. "Tocotrienols for bone health: a translational approach". International Life Sciences Institute (ILSI) Taiwan, Taipei, Taiwan. December 8, 2017.
100. Shen CL. "Green tea for bone health: from bench to humans". Graduate Institute of Food Science and Technology, National Taiwan University, Taipei, Taiwan. December 8, 2017.
101. Shen CL. "Effect of delta-tocotrienols and green tea polyphenols on glucose homeostasis and skeletal muscle in obese male mice with insulin resistance". International Conference on Frailty & Sarcopenia Research, Miami Beach, FL. March 1, 2018.
102. Shen CL. "Nutrition and joint health: current and future". International Conference on Frailty & Sarcopenia Research, Miami Beach, FL. March 3, 2018.
103. Shen CL. "Nutrition for bone and joint health: aspects of clinical practice" at Research to Practice: Clinical Track session. Nutrition 2018 (Annual Meeting of American Society for Nutrition), Boston. MA. June 10, 2018.
104. Shen CL. "Nutrition for joint health: current and future" at China Interest Forum session. Nutrition 2018 (Annual Meeting of American Society for Nutrition), Boston. MA. June 11, 2018.
105. Shen CL. "Effects of tocotrienol and statin supplementation on microbiome and glucose homeostasis in inbred obese mice." Effect of Dietary Bioactive Components on Gut Microbiome oral session. Nutrition 2018 (Annual Meeting of American Society for Nutrition), Boston. MA. June 12, 2018.
106. Shen CL. "Nutrition for bone health: aspects of clinical practice". 7th Asian Congress of Dietetics, Hong Kong. July 7, 2018.
107. Shen CL. "Nutrition for joint health: current knowledge and future direction". 7th Asian Congress of Dietetics, Hong Kong. July 7, 2018.
108. Shen CL. "Nutrition for bone health". Science Camp. Texas Tech University, Lubbock, TX. July 18, 2018.
109. Shen CL. "Nutrition for bone health: aspects of clinical practice". Academic Consortium for Integrative Medicine, July Grand Round. Webinar, Lubbock, TX. July 19, 2018.
110. Shen CL. "Tai Chi for pain management: a pilot mechanistic study". Center of Excellence for Translational Neurosciences and Therapeutics (CTNT) monthly meeting. TTUHSC, Lubbock, TX. October 17, 2018.
111. Shen CL. "Tocotrienols in bone protection: from animals to humans". Shanghai Institute of Nutrition and Health, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai, China. October 24, 2018.
112. Shen CL. "Tocotrienols in bone protection: from animals to humans". 10th Conference on the Science and Industry of Health Products (CNIC), Shanghai, China. October 26, 2018.
113. Shen CL. "Establishing the Center of Excellence for Integrative Health (CEIH) at Texas Tech University Health Sciences Center (TTUHSC). Executive Leadership in Academic Medicine (ELAM). May 1, 2019.
114. Shen CL. Career path in integrative medicine. Endowed Lecture Series. Therapeutic Innovations & Integrative Medicine Club, School of Medicine, Lubbock, TX. September 12, 2019.

115. Shen, CL. Clinical trials of FDA-IND natural bioactive components for bone health. Annual meeting of Society of Clinical Research Associates (SoCRA), Orlando, FL. September 27, 2019.
116. Shen CL. Career path in integrative medicine. Endowed Lecture Series. School of Health Professions, Lubbock, TX. October 4, 2019.
117. Shen CL. Health impacts of green tea on musculoskeletal system. Taiwanese Osteoporosis Association, Taipei, Taiwan. October 20, 2019.
118. Shen CL. My career path in integrative medicine. Department of Food and Nutrition, Providence, Taichung, Taiwan. October 21, 2019.
119. Shen CL. Challenges and risk management for investigator-initiated FDA-IND clinical trials. Annual meeting of Society of Clinical Research Associate (SoCRA). September 24, 2020. Virtual oral presentation.
120. Shen, CL. Invited. Tocotrienol (vitamin E bioactive molecules) supplementation for muscle strength study: an ongoing FDA-IND study, Annual meeting of Society of Clinical Research Associates (SoCRA), 9/25/21. Virtual oral presentation.
121. Shen CL. Invited. Bioactive compounds for neuropathic pain: findings from preclinical studies. 5th International Symposium on Phytochemicals in Medicine and Food. 8/27/21. Virtual oral presentation.