

Hongtao Li
Harrisonburg, VA
Phone: (812)223-1027

EDUCATION

Ph.D., Life Science-Physiology (Specialization in Immunology) Aug. 2009
College of Arts and Sciences, Indiana State University Terre Haute, IN
Dissertation: "Impact of Immuno-Adjuvants on Anti-Lymphoma Vaccine Efficacy"
Dissertation Advisor: Swapan K. Ghosh, Ph.D.

M.D., Clinical Medicine July 1990
Tongji Medical College, Huazhong University of Science & Technology (HUST)
Wuhan, P. R. China

FOUNDER

June 2022 to now
Smart Whole Health, LLC: Education, research, and service on integrative medicine

TEACHING EXPERIENCE

Assistant Professor Aug. 2023 to present.
Department of Biology at Eastern Mennonite University, Harrisonburg, Virginia

- *BIOL 437/BMC 612 Advanced Human Anatomy and Lab*
- *BIOL 112 and 122 Human Anatomy and Physiology and Lab*
- *BIOL 447/BMC 562 Advanced Human Physiology and Lab*
- *BMC 623 Research in Biomedicine*
- *BIOL337/BMS 561 Immunology*
- *PH 231 Foundation of Public Health Immunology*
- *BIOL 479 Biology Research*

Assistant Professor Aug. 2018 to May 2022
Received average student evaluation of about 4.5 out of five at the Department of Sciences and Mathematics, Saint Mary-of-the-Woods College, Indiana

- *141 and 142 Biology in Focus and Lab*
- *230 Anatomy and Physiology and Lab for Music Therapy Students*
- *231 Anatomy and Physiology I and Lab*
- *232 Anatomy and Physiology II and Lab*
- *325 Science Communication (proposal development)*
- *326 Science Communication (proposal presentation)*
- *332 Human Anatomy and Lab/Vertebrate Comparative Anatomy and Lab*
- *334 Human Physiology and Lab*
- *411, 412 Senior student advisor for research and independent study project*

Lecturer

Aug. 2017 to 2018
Department of Biology, Indiana State University

- *Instructor for Anatomy 231 Lab (about 120 students) and Genetics 380 Lab (About 60 students) fall 2017 with outstanding evaluation from the students. More than 88% students replied with average scores from 4.44 to 4.94 out of total five.*
- *Immunology 408/508 lecture and lab in the spring 2018 (23 students in the lecture and 17 students in the lab, and 6 students as honor students in class) spring 2018 with outstanding evaluation from the students.*

Physiology Lecturer Aug. to Dec. 2016
Department of Applied Medicine and Rehabilitation, Indiana State University

- *Taught physiology class to 29 PA students with positive evaluations from chairperson*

Advisor 2015-2016
Program on Integrative Medicine, Department of Physical Medicine and Rehabilitation
University of North Carolina at Chapel Hill

- *Mentored and tutored an intern student in multiple research projects, including Nutrition for Migraine Prevention project in collaboration with lab work in the Department of Microbiology and Immunology at UNC-Chapel Hill*

Microbiology, Physiology and Phlebotomist Lab Teacher 2009-2012
Indiana University School of Medicine Terre Haute

- *Assisted teaching medical students with peripheral blood lab work*

Teaching and Supplemental Instruction Leader 2006-2008
Anatomy and Physiology 241 and 241Lab at Department of Biology, Indiana State University

- *Facilitated the review and question & answer session for the Physiology 241 and lab*

Graduate Teaching Assistant 1999-2004
Department of Biology, Indiana State University

- *Labs taught: Anatomy and Physiology (3 semesters), Biology (1 semester), Microbiology (6 semesters), Immunology (2 semesters), Embryology (1 semester) to nursing, science and general major students*

POST-DOCTORAL/FELLOW TRAINING

Visiting Scholar Aug. 2016-July 2019
Program on Integrative Medicine, Department of Physical Medicine and Rehabilitation
UNC School of Medicine, Chapel Hill, NC

- *Continue participation in the nutrition for migraine prevention project as Co-investigator on R01, attend monthly team meetings through phone conferences, related IRB management, and manuscript writing.*

Visiting Scholar Jan. to Aug. 2017
Dr. Yonsheng Bai's Bioinformatics laboratory at the Department of Biology, Indiana State University, Terre Haute, IN

- *Worked on significant miRNA-mRNA functional modules' verification and validation in the MMiRNA-viewer2 project*

Integrative Medicine T32 Postdoctoral Fellow Aug. 2013-July 2016
Department of Physical Medicine and Rehabilitation, UNC School of Medicine, Chapel Hill, NC

- *Focused on peripheral blood immune status of migraine and inflammatory effects of Docosahexaenoic acid compared with Arachidonic acid; compared the inflammatory status of leukocytes phenotype and function differences in migraine patients compared to matched non-migraine volunteers*

Alvin S. Levine Professor Funding Postdoctoral Fellow 2009-2012
 Department of Microbiology & Immunology, Indiana University School of Medicine-Terre Haute, Terre Haute, IN

- *Studied the interactions between body and mind in the battle against chronic diseases, compared conventional exercises verse Tai Chi in the aspect of Psychoneuroimmunology; evaluated the effects of mind-body exercise Tai Chi on health, primarily focused on searching biomarkers in immune system.*

ACADEMIC AND PROFESSIONAL HONORS

- Member of the Board of Directors at Maple center for integrative medicine 2022
- Guest speaker for a workshop at the 137 Annual Indiana Academy of Science meeting in Indianapolis, IN. 2022
- International Congress on Integrative Medicine and Health New Investigator Travel Scholarships 2016
- UNC at Chapel Hill NCTraCS grant (2KR691507) 2015
- Research grants from Indiana Academy of Science 2004 and 2011
- Lilly Endowment’s “Fulfilling the Promise: Pathways to Pre-eminence” Award 2008-2009
- Intramural Research Professional Development and Travel Grants Award 2001-2008
- Research grant from Indiana Academy of Science 2002
- Graduate Award 6th Annual Graduate Research Showcase – Life Science/Medical Science-Paper Presentation, Indiana State University 2002
- First place in clinical case (division of Ob/Gyn.) analysis contest, Wuhan, China 1992
- Scholarship award in Tongji Medical College, HUST, Wuhan, China 1985-1988

PROFESSIONAL EMPLOYMENT

Core Research Technology Specialist Jan.-Jul. 2013
 Indiana School of Medicine-Terre Haute, Terre Haute, IN

- *Assisted in faculty research, including laboratory and animal work, carried out experiments, data analysis, and publication*

Resident Doctor in Department of Obstetrics and Gynecology 1990-1994
 The First Hospital of Wuhan, Wuhan, P. R. China

- *Resident duty at both outpatient and inpatient departments, worked with a team of professional health care providers, provided patients care in the procedure of diagnosis and treatment with senior doctors, assisted and performed scheduled and emergency procedures and operations, such as complex labor treatment, cesarean section, and ectopic pregnancy treatment*

GRANTS COLLABORATION AND AWARD

- Pittsburg Conference Memorial National College Grants Program April 2024
- PI on Eastern Mennonite University intramural grant application: Are the benefits of Qigong exercise “Eight Pieces of Brocade” a placebo effect?

Co-investigator on NIH R01 – AT007813 (2013-2018), PI: Dr. John Douglas Mann

- Title: Clinical and Metabolic Effects of Altering Omega-3 and Omega-6 Fatty Acid in Migraine (Randomized Clinical Trials)

T 32 fellowship from NIH National Center for Complementary and Integrative Health

- 5T32AT003378-09 (MPI): August 6, 2015 to July 31, 2016
- 5T32AT003378-08 (MPI): August 1, 2014 to July 31, 2015
- 5T32AT003378-07 (MPI): August 1, 2013 to July 31, 2014

Intramural pilot grant from UNC at Chapel Hill

- 2KR691507 “The inflammatory status of leukocytes phenotype and function in migraine”: August 1, 2015 to July 31, 2016

SELECTED PUBLICATIONS AND MANUSCRIPTS

Stephanie McCarthy, Kristopher L. Schmidt, **Hongtao Li**. The Impact of NSAIDs on Pain and Comorbidities in Ankylosing Spondylitis: A Gender-Specific Investigation is accepted for publication in *Trends in Internal Medicine* on May 16, 2024.

Christos Dimitriou, Kristopher L. Schmidt, **Hongtao Li**. Factors Influencing Dental Anxiety Using a Modified Dental Anxiety Scale (MDAS). *Archives of Dentistry and Oral Health*. 2024;5(1): 1-16. (DOI: 10.22259/2638-4809.0501001)

Hongtao Li. CD36 Level in Migraine Patients Before and After Dietary Alteration of N-3 and N-6 Fatty Acids. *Ann Clin Nutr*. 2023; 6(1): 1028.

Claudia Wang and **Hongtao Li** (2022) Excessive Videogame Playing and Associated Health-Risk Behaviors among US Youth: Results from the 2019 YRBS. *Health Science Journal* Vol. 16 No. 11: 980.

Claudia Wang, Yanbin Hu, **Hongtao Li**. A Review of Tai Chi’s Health Benefits and Its Potential Mechanisms for Chronic Diseases. *Journal of Clinical Case Reports, Medical Images and Health Sciences*; 2(3)-2022.

Claudia Wang, Yanbin Hu, **Hongtao Li**. Improving Physical Health for Underserved Elementary School Children: A Comparison of Aerobic and Mind-Body Exercise. *Academic Journal of Nursing and Health Education*, Vol. 11 No. 4, 2022.

Hongtao Li, Qiang Fu, Kamaira Philips, Yufei Sun, Kim Faurot, Susan Gaylord, John Douglas Mann. Leukocyte inflammatory phenotype and function in migraine patients compared with matched non-migraine volunteers: a pilot study. *BMC Neurology*. 2022; 22 1:278; (DOI: 10.1186/s12883-022-02781-4)

Claudia Chunyun Wang, **Hongtao Li** and Brittanie Lockard. Comparison of Three Modes of Exercise in Reducing Stress and Improving Self Esteem among Underserved Children at Title I Elementary Schools, *Health Science Journal*, Vol.12 No.3:570, June 2018 (DOI: 10.21767/1791-809X.1000570)

Evan M. O’Dea, Nansalmaa Amarsaikhan, **Hongtao Li**, Joshua Downey, Emery Steele, Steven J. Van Dyken, Richard M. Locksley, and Steven P. Templeton. Eosinophils are recruited in response to chitin exposure and enhance Th2-mediated immune pathology in *Aspergillus fumigatus* infection, *Infection and Immunity*, vol. 82, pp. 3199-205, Aug. 2014. (DOI: 10.1128/IAI.01990-14)

Roy W. Geib, **Hongtao Li**, Gabi N. Waite, Guido Pagnacco, (Elena Oggero, and Beverly L. Roberts, Using Posturography to Measure Balance Control during Seated Tai Chi. *Biomedical Sciences Instrumentation* 2014; 50:235-41.

Roy W. Geib, **Hongtao Li**, and Gabi Waite. A Pilot Study on the Effect of Tai Chi Exercise on Peripheral Blood Cytokines Associated with Nociceptive Pain in Healthy Volunteers. *Biomedical Sciences Instrumentation* 2014; 50:125-31.

Hongtao Li, Steven. P. Templeton, Roy. W. Geib. Exploring the use of five-color flow cytometry to examine the effect of acute Tai Chi practice on pro-inflammatory monocyte subtypes. *Biomedical Sciences Instrumentation*, 2013. 49: p. 209-15.

R.W. Geib, B. L. Roberts, and **Hongtao Li**. et al. Using posturography to assess expertise among Tai Chi practitioners. *Biomedical Sciences Instrumentation*, 2013. 49: p. 195-200 .

Hongtao Li., C. Howk, and R.W. Geib. A pilot study on the effect of acute tai chi practice on peripheral blood cytokine expression in healthy volunteers. *Biomedical Sciences Instrumentation*, 2012. 48: p. 254-9.

Kalsaria, P.; **Li, H.**; Waite, G. N.; Moga, M. M.; Kingsley, D. J.; Geib, R. W., Acute effects of tai chi exercise on cardiac autonomic function in healthy adults with tai chi experience. *Biomedical Sciences Instrumentation*, 2012, 48, 226-31.

Geib, R. W.; **Li, H.**; Oggero, E.; Pagnacco, G.; Lam, P.; Moga, M.; Waite, G., Using computerized posturography to explore the connection between BMI and postural stability in long-term tai chi practitioners. *Biomedical Sciences Instrumentation*, 2011, 47, 288-93.

Owegi H, **Li H.**, Bouwens M, Egot-Lemaire S, Mueller S, Geib RW, et al. The Effect of Low Oxygen with and Without Steady-state Hydrogen Peroxide on Oxidative Burst and Cytokine Expression of Monocyte-Derived Macrophages. *Biomedical Sciences Instrumentation*, 2011. 47: p. 58-63.

Li H., Waite GN, Moga MM, Lam P, and Roy RW. Balance improvements after a week-long Tai Chi workshop as determined by dynamic posturography. *Biomedical Sciences Instrumentation*, 2010, 46, 172-177.

Li H, Ghosh SK. CpG ODN 1826 enhances the efficacy of idio type DNA vaccine administrated intrasplenically. *The Open Vaccine Journal*, 2010, 3, 127-133.

SELECTED PUBLISHED ABSTRACTS AND BLOG:

Li H, Wang C, Gaylord S, Geib R. Tai Chi and its anti-inflammatory effect on the peripheral blood leukocytes. *Integrative Medicine Research*. 2015;4(1, Supplement):44. doi: <http://dx.doi.org/10.1016/j.imr.2015.04.013>.

Wang C, Seo DC, Li H. Benefits of a Health Qigong program for elementary school students: A pilot study. *Integrative Medicine Research*. 2015;4(1, Supplement):36. doi: <http://dx.doi.org/10.1016/j.imr.2015.04.374>.

Wang C, Seo D-C, Li H. Tai Chi as an Intervention on Health Promotion for Older Adults: A Systematic Review. *Integrative Medicine Research*. 2015;4(1, Supplement):117. doi: <http://dx.doi.org/10.1016/j.imr.2015.04.211>.

Hongtao Li, 2016. Let's Fund Integrative Medicine. Science writing and communication club. <http://swac.web.unc.edu/the pipette pen/lets-fund-integrative-medicine/> June 16, 2015.

SELECTED CONFERENCE PRESENTATIONS:

- Claudia Wang, Hongtao Li, Susan Gaylord, Keturah Faurot, Dongshuang Song, and Chuanwei Ding. **The effects of seated tai chi on improving sleep quality and psychological well-being of the elderly with lower limb disabilities: A pilot study.** APHA's Annual Meeting and Expo, Atlanta, Georgia, Nov. 13, 2023.
- Hongtao Li. **Leukocyte inflammatory phenotype and function in migraine patients compared with matched non-migraine volunteers: a pilot study.** Guest speaker of 4th International Webinar on Cognitive and Behavioral Neurosciences (ICBN-2022), London, Sep 22 - 23, 2022.
- Hongtao Li and Claudia Wang. **Managing Daily Stress with Mind-body Exercises: Ba Duan Jin.** Workshop presentation at the 137 Annual Indiana Academy of Science meeting in Indianapolis, IN, March 26, 2022.
- Claudia Wang, Susan Gaylord, Kaigang Li, Hongtao Li, and Kim Faurot. **"Use of Complementary and Alternative Medicine Approaches among U.S. Children with ADHD: Results from the 2012 and 2017 National Health Interview Surveys"** has been selected for a poster presentation during APHA Annual Meeting & Expo in Philadelphia, PA, Nov. 2-4, 2019.
- Tongji Medical College Overseas Alumni Association (TJMCOAA) Meeting. Advances in Medicine and Life Sciences at Norris University Center, Northwestern University, IL, July 12-14, 2019.
- Hongtao Li, Kamaira H. Philips, Can Cui, Keturah (Kim) Faurot, Xuwei Zhu, Susan A. Gaylord, Christopher E. Ramsden, John Douglas Mann, Lishan Su. **Inflammatory Characteristics of Peripheral Immune Cells in Migraineurs and Matched Controls.** Poster presentation at 134th Annual Academy Meeting Indiana Academy of Sciences in Indianapolis, IN, March 30, 2019.
- Claudia Wang, Kamaira Philips, Susan Gaylord and Hongtao Li **Poster entitled "Characteristics of meditation use among U.S. Adults: Results from the National Health Interview Survey"** has been selected and conformed for a presentation during the APHA Annual Meeting & Expo in Atlanta, Georgia, NOV. 4 – 8, 2017.
- Naureen Aslam Khattak, Hongtao Li, Yongsheng Bai Poster presentation entitled **"The Prediction and Visualization of miRNA and mRNA Pair Associated in Breast Cancer"** at the 2017 Great Lakes Bioinformatics Conference, Chicago, IL, May 15-17, 2017

- Hongtao Li, Kamaira Philips, John Douglas Mann, Xuewei Zhu and Lishan Su. Poster presentation entitled “**Docosahexaenoic acid induces an anti-inflammatory profile in lipopolysaccharide-stimulated THP-1 macrophages compared with arachidonic acid**” International Congress on Integrative Medicine and Health (ICIMH) Las Vegas, Nevada, May 17-20, 2016.
- Poster presentation entitled “**Pilot Studies of Tai Chi and its Anti-inflammatory Effect on the Peripheral Blood**” The 10th International Congress on Complementary Medicine Research (ICCMR), Jeju, Republic of Korea, May 13–15, 2015.
- Rhayun Song, Sukhee Ahn and Hongtao Li Breakfast Session 3: “**The science and clinical evidence supporting Tai Chi and Qi Gong for the intervention and prevention of chronic disease** ICCMR 2015 May 15, 2015.
- Claudia Wang, Roy W. Geib, Hongtao Li and Nancy Wroblewski. “**Managing Childhood Stress with Mind-body Exercise**” accepted for workshop in International Research Congress in Integrative Medicine and Health, Miami, Florida, May 16, 2014.
- Roy W. Geib, Hongtao Li, Martin Kidder, and Paul Lam. “**Modifying Existing Health-adapted Tai Chi Forms to Prevent Falls**” Presentation in American Public Health Association 139th Annual Meeting & Expo, Washington DC, November 2, 2012.
- Roy Geib, Hongtao Li, Elena Oggero, et al. “**Fall prevention in overweight and obese populations: are mindfulness-based exercises effective?**” Post presentation in American Public Health Association 139th Annual Meeting & Expo, Washington DC, October 30, 2011.

PROFESSIONAL INVOLVEMENT AND DEVELOPMENT

Editorial Board Member

- *Asian Journal of Complementary and Alternative Medicine* 2022 to now

Reviewer for the following magazines

- *Complementary Therapies in Medicine* 2014 to 2016
- *The American Journal of Chinese Medicine* 2014 to 2016
- *BMC Medical Genomics* 2017 to 2018
- *Medical Hypotheses* 2021 to now
- *Journal of Applied Biology & Biotechnology* 2022 to now
- *Cephalalgia* 2024 to now
- *Academia Mental Health and Wellbeing* 2024 to now

Certificate of Bio-behavioral Laboratory Salivary Cortisol Bioscience Workshop

Held at School of Nursing, UNC at Chapel Hill June 15-16, 2015

Credits from taking professional training classes at UNC-CH School of Medicine

Aug. 2013-Aug. 2014

- *Clinical Measurement and Evaluation*
- *Quantitative Methods for Health Care professionals and Advanced Quantitative Methods for Health Care Professionals*
- *Principles & Practices of Alternative and Complementary Medicine*

Arthritis Foundation certified Tai Chi Instructor	Sept. 2013-Sept. 2015
Tai Chi for Diabetes Instructor/Leader's Course	Sept. 2009-Sept. 2011
The American Association for the Advancement of Science	2010-2013 2018-2019
The American Association of Immunologists	2012-2013 2019-present
Indiana Academy of Science	2006-2013 2018-Present
Certificates from a series of pedagogy workshops from Center for Teaching and Learning, Indiana State University	1999-2003
Certificates from a series of pedagogy workshops from Faculty Resource Center, St. Mary-of-the-Woods College	2018-present