

HEATHER ZWICKEY, Ph.D.

National University of Natural Medicine

2220 SW First Avenue
Portland, OR 97201
(503) 552-1742
hzwickey@NUNM.edu

EDUCATION

- Ph.D.** Immunology and Microbiology Sept. 93-Oct. 98
University of Colorado Health Sciences Center (UCHSC), Denver, CO
Dissertation: Processing of Antigens Secreted by Non-cytoplasmic
L. monocytogenes and Presentation by MHC Class I molecules
- B.A. cum laude** Mathematics Sept. 87-June 91
St. Olaf College, Northfield, MN
Senior Thesis: Complexity Theory and Heart Arrhythmias

RESEARCH AND PROFESSIONAL EXPERIENCE

- National University of Natural Medicine** Portland, OR
Dean of Research and Graduate Studies June 2007-present
Director of Research, Helfgott Research Institute Jan. 2002-present
Professor of Immunology
Current Projects: BRIDG: Building Research Among
Inter-Disciplinary Gaps (NIH funded) March 2015-present
Evidence Based Medicine Curriculum Development Aug. 2007-April 2016
(NIH funded)
Nutrition and Parkinson's Disease Sept 2015-present
Peat Mud for Pain from Knee Osteoarthritis Sept. 2012- May 2016
Ketogenic Diet for Parkinson's Disease May 2014-Sept 2016
Meditation and Brain Derived Neurotropic Factor Sept. 2012- 2015
- University of Washington** March 2015-present
Affiliate Associate Professor
Projects: BRIDG: Building Research Among Inter-Disciplinary
Gaps
- Oregon Health and Sciences University** Portland, OR
Adjunct Associate Professor, Department of Neurology May 2005-present
Projects: Nutrition and Autism July 2014-Sept 2015
Negative Cognition and Inflammation June 2006-Sept 2014
Stanford Investigator: Beth Darnall, PhD
CAMEO: Conditioned treatment of EAE May 2005-2009
VA Investigator: Richard Jones, PhD
- University of Michigan**
Co-Investigator Ann Arbor, MI
Project: Acupressure for Women with Long-term Fatigue Post Sept 2010- 2014
Breast Cancer Treatment
UM Investigator: Suzanna Zick, ND

Africa Bridge Investigator Project: Maternal Child Nutrition and Childhood Stunting	Tanzania (Moshi, Tanga, and Tukuyu; and Lake Oswego, OR January 2008-2011
Pontificia Universidade Catolica Do Rio Grange Do Sol Collaborator Project: Dendritic cell based vaccines for cancer	Porto Alegre, RS, Brazil July 2002-2012
Yale University School of Medicine Postdoctoral Fellow with Dr. Ira Mellman Collaborator: Ralph Steinman, Rockefeller University Project: Analyzing the cell biology of antigen processing of self and foreign antigens by dendritic cells.	New Haven, CT May 1999-January 2002
National Jewish Medical and Research Center Postdoctoral Fellow with Dr. Terry Potter Project: Determining whether a single MHC-peptide complex could mediate skin graft rejection Defining attenuator peptides that are generated during a human immune response to Mycobacterium tuberculosis to be used as vaccine candidates	Denver, CO Oct. 1998-Apr. 1999
National Jewish Medical and Research Center Graduate Student at UCHSC with Dr. Terry Potter Thesis Research: Using LLO- Listeria monocytogenes to model class I antigen presentation of bacteria that are confined to an intracytoplasmic vesicle (model for Tuberculosis)	Denver, CO Sept.1993-Oct. 1998
Brookhaven National Laboratory Summer Research Intern with Dr. Brenda Laster Project: Using a mouse model to test toxicity of a new laser activated drug directed toward glioblastoma tumors	Upton, NY June 1988-Aug.1988
Lawrence Berkeley National Laboratory Summer Research Intern with Dr. Mina Bissell Project: Designing an in vitro culture system for primary breast tumor cells	Berkeley, CA June 1987-Aug. 1987

TEACHING AND LECTURING

National University of Natural Medicine Professor of Immunology Associate Immunology Professor Assistant Immunology Professor Special Project: Development of Faculty Development program Special Project: Development of Master's of Science of Global Health Program Special Project: Development of Master's of Science of Nutrition Degree Program	Portland, OR October 2011-present April 2005-2011 April 2002-2005 July 2007- present August 2013-2015 Sept 2012 – 2014
---	--

Special Project: Development of the Master's of Science of Integrative Medicine Degree Program	August 2010-2012
Special Project: Development and Implementation of Research Mentoring Program for Faculty	Sept 2011 – present
Special Project: Development and Implementation of Faculty Development Program	Sept 2012 – present
Special Project: Development of the Master's of Science of Integrative Sports Medicine	Sept 2014- present
Special Project: Development of the Master's of Science of Ayurvedic Medicine	Sept 2015-present
Special Project: Development of the Master's of Science of Clinical Nutrition Online Degree Program	April 2015-present

Courses

Immunology	April 2001-present
Integrative Immunology	Sept 2007-present
Vaccination Elective	Nov 2005- present
Evidence Informed Practice	Sept 2007-present
Gut Immunology	March 2004-present
Wilderness First Aid	May 2015-present
Evidenced Based Medicine	Sept 2008-present
Cellular Systems	April 2002-2011
Microbiology	April 2005-2007
Research and Biostatistics	April 2002- 2010
Introduction to Cancer (Genetics)	April 2002-2014
Teaching and Learning	April 2013-present
Grant-writing	April 2013-2015
Vaccine Balancing Act (CE Course)	Nov. 2005-2011
Naturopathic Research (CE Course)	June 2002
Technology for Naturopathic Physicians (CE Course)	June 2002
Immunology Update (CE Course)	December 2001
Oregon Mini-Med School Organizer	2009-2010
Resident Education Seminars	2007-present

Seminars, Lectures and Workshops

Evidence Based Medicine Road Show

Evidence Based Medicine workshop for CAM clinicians and faculty	Baltimore, MD November 2016
---	--------------------------------

British Columbia Parkinson's Association

Nutrition and Parkinson's	Kamloops, BC October 2016
---------------------------	------------------------------

British Columbia Naturopathic Association

Vaccines and Immune Development	Vancouver, BC October 2016
---------------------------------	-------------------------------

Metro State University

Introduction to Natural Medicine	Denver, CO October 2016
----------------------------------	----------------------------

Portland State University

Ethnomedicine	Portland, OR October 2016
---------------	------------------------------

Boteko Breathing Associaton

	Portland, OR
--	--------------

How to Write a Case Study	Sept 2016
Association for the Advancement of Restorative Medicine Neuroprotective Nutrition	Hilton Head, SC Sept 2016
World Parkinson's Congress Nutrition and Parkinson's Role of Nutrition in Parkinson's Symptoms	Portland, OR Sept 2016
Naturopathic Medical Student Association Inflammation and the Brain-Gut Axis	Seattle, WA Sept 2016
Georgetown University Integrative Medicine in Global Health Eat this: The Complexity of Nutrition Studies	Washington, DC February 2016
Association for the Advancement of Restorative Medicine Gut Immunology	Santa Fe, NM October 2015
Integrative Health and Medicine Integrative Approaches to Inflammation	San Diego, CA October 2015
Parkinson's Disease Foundation Nutrition and Parkinson's Disease	Webinar September 2015
International Congress on Complementary Medicine Research Evidence-informed practice for traditional and integrative medicine clinician educators: An instructional workshop	Jeju, Korea May 2015
Evidence Based Medicine Road Show Evidence Based Medicine workshop for CAM clinicians and faculty	Toronto, CAN Phoenix, AZ Austin, TX 2014-2015
Van Andel Institute Parkinson's Conference Nutrition and Exercise for Parkinson's Disease	Grand Rapids, MI November 2015
Association for the Advancement of Restorative Medicine Gut Immunology	Santa Fe, NM October 2015
Science and Connection: Integrative Health and Medicine Integrative Approaches to Inflammation	San Diego, CA October 2015
Pain Society of Washington Placebo Effect and Pain Immunity	Vancouver, WA May 2014
Onc-ANP 4th Annual Conference Chemotherapy and Immunosuppression	Phoenix, AZ February 2014
NW Pain Society – SPINE Symposium Psychoneuroimmunology of Pain: How Personality, Nutrition, and Behavior Shape Experience	Vancouver, WA March 2013

International Association of Medical Science Educators Curriculum Design to Promote Research Literacy	International Webinar January 2013
International Association of Medical Science Educators Case Reports: Translating Clinical Insights into Science Featured Symposium: Clinical Research Literacy Curriculum	Portland, OR June 2012
International Research Congress on Integrative Medicine and Health State of the Science of Naturopathic, Chiropractic, and Asian Oriental Medicine	Portland, OR May 2012
Cancer Treatment Centers of America Integrative Medicine Conference Invited Keynote Speaker Cancer and Immunity	Tulsa, OK November 2011
Restorative Medicine Conference Invited Speaker: Vaccines and the Immune System	Portland, OR October 2011
7th Annual Pacific NW Excellence in Breast and Gynecologic Care Conference Invited Speaker: Evidence for Mushrooms in Cancer	Portland, OR October 2011
International Association of Medical Science Educators Competency in Research Literacy	St. Petersburg, FL June 2011
Symposium for Portland Area Research in Complementary and Alternative Medicine (SPARC) Conference Pre-conference workshop: Active Teaching Strategies Workshop: A Comparison of 6 Student Research Programs	Portland, OR April 2011
Association of Chiropractic Colleges Educational Conference and Research Agenda Conference Workshop: How to Teach and Apply Evidence Based Practice	Las Vegas, NV March 2011
Integrative Medicine Grand Rounds – Legacy Invited Speaker: Evidence for Mushrooms in Cancer Treatment	Portland, OR February 2011
Women’s Health and Autoimmunity Conference Invited Speaker: Autoimmunity: what goes wrong?	Portland, OR October 2010
California Association of Naturopathic Doctors Conference Invited Speaker: Cytokines and Autoimmunity	Los Angeles, CA October 2010
Northwest Naturopathic Physicians Conference Invited Speaker: Pediatric Development and Vaccination	Portland, OR May 2010
Arizona Association of Naturopathic Doctors Conference Invited Speaker: Immune Response to Vaccination	Phoenix, AZ May 2010
Symposium for Portland Area Research in Complementary and Alternative Medicine (SPARC) Conference Invited Speaker: Evidence Based Natural Medicine	Portland, OR April 2010

North American Research in Complementary and Integrative Medicine Conference	Minneapolis, MN May 2009
Changing the Culture of CAM Institutions Toward an Evidence-Based Approach-One R25 at a Time	
Collaborating Across Disciplines to Develop Joint Degree Programs in CAM and Integrative Medicine	
Practice Based Research Networks: Meeting the Challenge of Reflecting CAM Clinical Practice	
How Can CAM Research Better Reflect CAM Practice?	
Vaccine Balancing Act	Portland, OR 2005-2011
Continuing Education Course for Naturopathic Physicians	
St. Olaf College	Northfield, MN
The Relationships between International Traditional Medicine and Complementary and Alternative Medicine	May 2009, 2010
Current Research in Complementary and Alternative Medicine	May 2009, 2010
United Nations	New York, NY
Meeting the Global Challenge of Cancer	April 2007
American Association of Naturopathic Physicians Conference	
Research: Past, Present, and Future	August 2008
Five Measures of Personality and Relationship to Health	August 2006
Effects of Echinacea, Glycycerrhiza, and Astragalus on CD69 and CD25 Expression in Human Subjects: Pilot Study	August 2006
Symposium for Portland Area Research in Complementary And Alternative Medicine	Portland, OR
Conference Organizer	2006-2010
Methodological Challenges in Reiki Research	April 2006
Workshop: Models for teaching Evidence Based Natural Medicine	April 2009
Transforming the Mind: Consciousness in Medicine	Portland, OR
Conference Organizer	March 2008
Portland State University	Portland, OR
Natural Medicine Research, MPH Program	May 2006
Mind Body Medicine, Parapsychology course (Guest Lecture)	2006-2009
Oregon Health and Sciences University	Portland, OR
Psychoneuroimmunology (Biological Basis of Disease)	May 2004-2008
Biological Basis of Disease (Case Study Group Leader)	May 2004
Naturopathic Research (CAM Lecture Series)	May 2003
Evergreen State College	Olympia, WA
Invited Speaker: Psychoneuroimmunology	April 2003-2008
Invited Speaker: Immunology and Virology	October 2002, May 2005
Oregon College of Oriental Medicine	Portland, OR
Immunology of Vaccines	June 2004
Research Methodology in Natural Medicine	February 2007

Keystone Symposium Workshop on Dendritic Cells	Keystone, CO March 2003 February 2007, 2008
Pontificia Universidade Catolica Do Rio Grange Do Sol Immunotherapy with Dendritic Cells (Course) Presentation of Self Antigens by Dendritic Cells (Lecture)	Porto Alegre, RS, Brazil July 2002 July 2002
Instituto Nacional de Cancer Immunology of Dendritic Cell Antigen Presentation (Lecture)	Rio de Janeiro, RJ, Brazil July 2002
Yale University Multiple Sclerosis Short Course Histology Course Co-Instructor	New Haven, CT February 2002 Sept. 2000-Apr. 2001
Keystone Symposium Cell Biology of Self Antigen Presentation	Taos, NM March 2001
University of Colorado Health Sciences Center Immunology Graduate Program Enrichment Course Curriculum Planning Committee for Molecular and Cellular Graduate Course High School Outreach Immunology Program	Denver, CO Sept. 1996-June 1998 Nov. 1997-June 1998 Dec. 1995-Dec. 1998

AWARDS and RECOGNITION

Leadership Award, National College of Natural Medicine	2003
Leadership Award, National College of Natural Medicine	2004
Inspiration Award, National College of Natural Medicine	2007
Lifetime Achievement Award, National College of Natural Medicine	2009
Excellence in Research Award, National College of Natural Medicine	2009
Metamorphosis Award, National College of Natural Medicine	2010
Peer Reviewer, National Institutes of Health; Center for Complementary and Alternative Medicine	2009-2014
Program Committee, International Research Congress Integrative Medicine and Health	2010-2014
Scientific Advisory Board, Burt's Bees	2012-2016
Scientific Advisory Board, American Association of Naturopathic Medicine	2012-2016
Scientific Advisory Board, Brian Grant Foundation (Parkinson's)	2012-2016
Marijuana Scientific Advisory Committee, State of OR	2015-2016
Board of Directors, Natural Doctors International	2007-2010
Board of Directors, Zimbabwe Artists Project	2014-2016
Board of Directors, Brian Grant Foundation	2014-2016
Champion of Naturopathic Medicine	2016

PROFESSIONAL AFFILIATIONS

American Association of Immunology
American Association for the Advancement of Science

National Vaccine Safety Committee Writing Group
New York Academy of Science
Editorial Board, International Journal of Naturopathic Medicine
Editorial Board, Journal of Alternative and Complementary Medicine
Reviewer, Natural Medicine Journal
International Society for Complementary Medicine Research
Academic Consortium for Complementary and Alternative Health Care (ACCAHC)
Research Working Group (RWG) Co-Chair

PEER REVIEWED PUBLICATIONS

1. Vasilevsky, N., H. Zwickey, and M. Schafer. Training Alternative Medicine Researchers: Expanding the Evidence Base. *Medical Science Educator*. Submitted.
2. Dunlap, C., D. Hanes, C. Elder, C. Nygaard, and H. Zwickey Reliability of Self-Reported Constitutional Questionnaires in Ayurveda Diagnosis. *Journal of Ayurveda and Integrative Medicine*. Submitted.
3. Costa M, Panutich E, Zwickey H (2016) Renal Cell Carcinoma: A Case Series with Integrative Treatment. *J Integr Oncol* S1:002. doi:10.4172/2329-6771
4. Vasilevsky N, Schafer M, Tibbitts D, Wright K, Zwickey H. Curriculum Development of a Research Laboratory Methodology Course for Complementary and Integrative Medicine Students. *Med Sci Educ*. 2015 Jun;25(2):171-175. Epub 2015 Mar 17.
5. Hill J, Hodsdon W, Schor J, McKinney N, Rubin D, Seely D, Parmar G, Birdsall T, Alschuler L, Lamson D, Birdsall S, Zwickey H. Naturopathic Oncology Modified Delphi Panel. *Integr Cancer Ther*. 2015 Jul 24. pii: 1534735415589983. [Epub ahead of print]
6. Ryan JJ, Hanes DA, Schafer MB, Mikolai J, H. Zwickey. Effect of the Probiotic *Saccharomyces boulardii* on Cholesterol and Lipoprotein Particles in Hypercholesterolemic Adults: A Single-Arm, Open Label Pilot Study. *J Altern Complement Med*. 2015 Apr 20. PMID: 25893960
7. Sturgeon JA, Darnall BD, Zwickey HL, Wood LJ, Hanes DA, Zava DT, Mackey SC. Proinflammatory cytokines and DHEA-S in women with fibromyalgia: impact of psychological distress and menopausal status. *J Pain Res*. 2014 Dec 4;7:707-16. PMID: 25506243
8. Zwickey, H., Schiffke, H., Fleishman, S., Haas, M., Cruser, D., LeFebvre, R., Sullivan, B., Taylor, B. and B. Gaster. Teaching Evidence-Based Medicine at Complementary and Alternative Medicine Institutions. Strategies, Competencies and Evaluation. *Journal of Alternative and Complementary Medicine*. 2014 Dec;20(12):925-31. PMID: 25380144
9. Wright Kirsten, Schafer Morgan, Shaw Kelly, Kalnins Paul, and Zwickey Heather. Evidence for Phytochemical Synergism in Classical Chinese Herbal Pairs *The Journal of Alternative and Complementary Medicine*. May 2014, 20(5): A30-A30. doi:10.1089/acm.2014.5073.
10. Beil, K., Hanes, D., and H. Zwickey. Environmental influence on holistic health measures. *Explore*. 2014 Mar-Apr;10(2):115-7. doi: 10.1016.
11. Windstar, K., Dunlap, C. and H. Zwickey. Escharotic Treatment for ECC-Positive CIN3 in Childbearing Years: A Case Report. *Integrative Medicine*. 2014 April; 13(2); 39-45.

12. Guggenheim, A.G., Wright, K.M., and H. Zwickey. Immune Modulation From Five major Mushrooms: Application to Integrative Oncology. *Integrative Medicine*. 2014 Feb; 13(1): 32-44.
13. Zick, S., Zwickey, H., Sen, A., Wood, L., Foerster, B., and R. Harris. Preliminary Differences in Peripheral Immune Markers and Brain Metabolites between Fatigued and Non-fatigued Breast Cancer Survivors: a Pilot Study. *Brain Imaging and Behavior*. 2013 Nov 13. PMID: 24222427
14. Hodsdon, W., Nygaard, C., and H. Zwickey. The Sugar Study: A Monograph for In-Class Research with Medical Students. *Med Sci Educ*. 2013; 23(15): 159-164.
15. Axtell, S., Birr, A., Halvorson, C., King, C., Orscheln, C., Schafer, M., Sielaff, R., and H. Zwickey, Detoxification Diets: Three Pilot Studies. *Townsend Letter*. 2013 Feb-March. *Best of Naturopathic Medicine Award.
16. Dunlap C., Enos E., Thom D., and H. Zwickey. An integrative approach to interstitial cystitis. *Explore (NY)*. 2013 Jan-Feb;9(1):48-52.
17. Allen, E S., Connelly, E.N., Morris, C.D., Elmer, P.J., and H. Zwickey. A Train the Trainer Model for Integrating Evidence-Based Medicine into a Complementary and Alternative Medicine Training Program. *Explore (NY)*. 2011 Mar-Apr;7(2):88-93.
18. Wahbeh H, Zwickey H, and B. Oken. One method for objective adherence measurement in mind-body medicine. *J Altern Complement Med*. 2011 Feb;17(2):175-7. Epub 2011 Jan 31.
19. Darnall B., Zwickey H., and M.Aickin. A pilot study of inflammatory responses following a negative imaginal focus: Analysis by gender. *Gender Med*. 2010 Jun;7(3):247-60.
20. Connelly, E. N., Elmer, P. J., Morris, C. D., and H. Zwickey. The Vanguard Faculty Program: Research Training for Complementary and Alternative Medicine Faculty. *Journal of Alternative and Complementary Medicine*. 2010 Oct;16(10):1117-23.
21. Hodsdon, W., and H. Zwickey. Reproducibility and Reliability of Two Food Allergy Testing Methods. *Natural Medicine Journal*. March 2010; 2(3): 8-13.
22. Wahbeh, H., Haywood, A., Kaufman, K., Harling, N., and H. Zwickey. Mind Body Medicine and Immune System Outcomes: A Systematic Review. *The Open Complementary Medicine Journal*, 2009, 1, 25-34.
23. Swanick S., Windstar-Hamlin K, and H. Zwickey. An alternative treatment for cervical intraepithelial neoplasia II, III. *Integrative cancer therapies* 2009;8(2):164-7.
24. Mikolai, J., Erlandsen, A., Murison, A., Brown, K., Gregory, W., Raman-Caplan, P., and H. Zwickey. In vivo Effects of Ashwagandha (*Withania somnifera*) Extract on the Activation of Lymphocytes. *J Altern Complement Med*. 2009 Apr;15(4):423-30.
25. Tippens, K., Marsman, K., and H. Zwickey. Is Prayer CAM? *J Altern Complement Med*. 2009 Apr;15(4):435-8.
26. Tippens, K., B. Pine, E. Connelly, W. Gregory, and H. Zwickey. 2006. Effects of Soy Infant Formula on the Development of Adult Soy Allergies. *International Journal of Naturopathic Medicine*. 2009. 4(1): 12-17.

27. Chinnock, J.A., Zwickey, H., Connelly, E. and W. Gregory. Cortisol Patterns and DHEA Levels of Patients with Obesity, Prediabetes, and Type 2 Diabetes: A Chart Review in a Naturopathic Primary Care Clinic. *International Journal of Naturopathic Medicine*. 2009 4(1): 05-11.
28. Buenafe, AC, Zwickey, H, Moses, N, Oken, B, and Jones, RE. A Telemetric Study of Physiologic Changes in Mice Induced with Autoimmune Encephalomyelitis. *Lab Animal*. 2008 Aug;37(8):361-8.
29. Jones RE, Moes N, Zwickey H, Cunningham CL, Gregory WL, Oken B. Treatment of experimental autoimmune encephalomyelitis with alpha lipoic acid and associative conditioning. *Brain Behav Immun*. 2008 May;22(4):538-43.
30. Zwickey H, Brush J, Iacullo CM, Connelly E, Gregory WL, Soumyanath A, Buresh R The effect of *Echinacea purpurea*, *Astragalus membranaceus*, and *Glycyrrhiza glabra* on CD25 expression in humans: a pilot study *Phytotherapy Research*. 27 Jul 2007.
31. Wahbeh H, Calabrese C, Zwickey H, Zajdel D. Binaural beat technology in humans: a pilot study to assess neuropsychologic, physiologic, and electroencephalographic effects. *J Altern Complement Med*. 2007 Mar;13(2):199-206.
32. Motta A, Schmitz C, Rodrigues L, Ribeiro F, Teixeira C, Detanico T, Bonan C, Zwickey H, Bonorino C. Mycobacterium tuberculosis heat-shock protein 70 impairs maturation of dendritic cells from bone marrow precursors, induces interleukin-10 production and inhibits T-cell proliferation in vitro. *Immunology*. 2007 Mar 7.
33. Elder C, Ritenbaugh C, Mist S, Aickin M, Schneider J, Zwickey H, Elmer P. Randomized trial of two mind-body interventions for weight-loss maintenance. *J Altern Complement Med*. 2007 Jan-Feb;13(1):67-78.
34. Wahbeh H, Calabrese C, Zwickey H. Binaural beat technology in humans: a pilot study to assess psychologic and physiologic effects. *J Altern Complement Med*. 2007 Jan-Feb;13(1):25-32.
35. Brush, J., E. Mendenhall, A. Guggenheim, T. Chan, E. Connelly, A. Soumyanath, R. Buresh, R. Barrett, and H. Zwickey. The effect of *Echinacea purpurea*, *Astragalus membranaceus*, and *Glycyrrhiza glabra* on CD69 expression and immune cell activation in humans. *Phytotherapy Research*. 2006 Aug;20(8):687-95
36. Zwickey, H.L., J. Unternaehrer, and I. Mellman. 2006. Presentation of self antigens on MHC class II molecules during dendritic cell maturation. *International Immunology*. 2006 Jan;18(1):199-209.
37. Shannon, A., K. Weizer, S.G. Chandler, and H. Zwickey. 2005. Reversal of end stage renal disease in multiple myeloma: a case report. *International Journal of Naturopathic Medicine*. 02/05.
38. Detanico, T., L. Rodrigues, A. C. Sabritto, M. Keisermann, M. Evandro Bauer, H. Zwickey, and C. Bonorino. 2004. Mycobacterial Heat Shock Protein 70 induces IL-10 production: immunomodulation of synovial cell cytokine profile and dendritic cell maturation. *Clinical Experimental Immunology*. 135, 336-342.
39. Zwickey, H.L., and T.A. Potter. 1999. Antigen from Noncytosolic *Listeria monocytogenes* is Processed in the Classical MHC Class I Processing Pathway. *Journal of Immunology* 162:6341-50.
40. Zwickey, H.L., and T. A. Potter. 1996. Peptide Epitopes from Noncytosolic *Listeria monocytogenes* Can Be Presented by Major Histocompatibility Complex Class I Molecules. *Infection and Immunity*. 64:1870-1872.

BOOK CHAPTERS, REVIEWS and ARTICLES

1. Senders, A., Erlandsen, E. and H. Zwickey. The Importance of Research Literacy. The Natural Medicine Journal. 2014 Aug; 6(8):
2. Stamets, P. and H. Zwickey. Medicinal Mushrooms: Ancient Remedies Meet Modern Science. Integrative Medicine. 2014 Feb; 13(1):46-47.
3. H. Zwickey. Immune Function Assessment. Textbook of Natural Medicine. Editors: Pizzorno and Murray. 2013. 19: 161-168. ISBN: 978-1-4377-2333-5.
4. Zwickey H, and H.C. Schiffke. Genetic correlates of Chinese medicine: in search of a common language. J Altern Complement Med. 2007 Mar;13(2):183-4.
5. Hammerschlag, R, and H. Zwickey. Evidence Based Medicine in CAM: Back to Basics. Journal of Alternative and Complementary Medicine. November 4, 2006. 12: 349-350.
6. Wahbeh, H., and H. Zwickey. 2006. Relax! Applying Mind-Body Medicine to Breast Cancer. Naturopathic News and Reviews. June 2006.
7. Wahbeh, H., and H. Zwickey. 2005. Naturopathic Physicians Know Best: Examining where people get their information on natural products. NCNM News.
8. H. Zwickey. 2005. Paradigm Shifts in Energy Medicine. Holographic Repatterning Association Journal. May 2005.
9. Zwickey, H.L. and I. S. Mellman. 2002. Presentation of Self Antigens by Dendritic Cells. Brazilian Congress of Cell Biology Journal.
10. Zwickey, H.L. and T.A. Potter. 1999. Lymphocytes; Precursor Frequency (Review). Encyclopedia of Life Sciences. Grove's Dictionaries Inc.
11. H.L. Zwickey. Graduate Students Reach-out to High School Students. 1997 Invited American Association of Immunology article.

FUNDED PROJECTS

Ongoing

ZWICKEY (PI)

NCCIH

2015-2020

1R90AT008924-01

Building Research Across Interdisciplinary Gaps (BRIDG)

To train conventionally trained PhDs in integrative medicine.

Role: Principal Investigator

Completed

NCCAM

2007-2016

2 R25AT002878-01A1

Research in Complementary and Alternative Medicine Program

To integrate principles of evidence based medicine into the curriculum of the naturopathic medicine and Chinese medicine programs at NCNM, and to further train faculty in research principles and design.

Role: Principal Investigator

Company funded projects

Fairhaven 2011-2013
The Effects of Fertility-blend on Pregnancy and Hormones
To determine whether an herbal compound increases pregnancy in women with infertility.
Role: Principal Investigator

EMERITA 2011-2012
Organ Cotton vs Semi-Synthetic Rayon Blend Tampons
To determine whether the material of a tampon influences cervico-vaginal inflammation.
Role: Principal Investigator

Michelle's Miracle 2011-2012
To provide a review of studies of tart cherries for pain, sleep, and muscle recovery. This study may lead into a clinical trial.
Role: Principal Investigator

Terra Medica 2011
To complete an observational study of darkfield microscopy in cardiovascular disease.

Mushroom Science 2011
To provide a review article in the biochemistry of mushrooms.
Role: Mentor

Gaia Herbs 2010-2012
Hibiscus Herbal Supplement for People with Metabolic Disease
To determine if an herbal supplement can reduce blood glucose, triglycerides, and cholesterol in people with metabolic syndrome and obesity.
Role: Principal Investigator

U19 AT002656-01, Oken (PI) 2004-2009
NCCAM
CAMEO
Conditioning: Enhanced Treatment of EAE
To test the placebo effect in an animal model of Experimental Autoimmune Encephalitis
Role: Co-Project Leader; Investigator

1 R21AT002374-01A1 2005-2009
ELMER (PI)
NCCAM
RCT of the Naturopathic Anti-inflammatory Diet
To determine if a dietary intervention can reduce systemic inflammation in individuals with Non-Insulin Dependent Diabetes Mellitus.
Role: Investigator

NORTHWEST NATURAL PRODUCTS 2010
Probiotics for Weight Loss
To determine whether different probiotic strains of bacteria have the ability to assist in weight loss or weight loss maintenance according to the medical literature.
Role: Principal Investigator

SPECIAL PROJECTS

Program Development Team, Chair	March 2014-present
Council of Academic and Administrative Affairs	February 2003- present
NCNM Admissions Faculty, Chair	September 2003-2008
Oregon College of Oriental Medicine, IRB Member	September 2004-present
National Vaccine Safety Writing Group	February 2009- present
Medicine on the Move Coordinator and Group Leader	September 2007
NCNM Student Outreach Faculty Advisor	June 2002-present
Curriculum Committee	April 2002-present
International Public Policy (HIV in Africa)	August 2001

POSTDOCTORAL FELLOW'S MENTORED

<u>Post Doc</u>	<u>Years</u>	<u>Project</u>	<u>Current</u>
Julie Chinook, ND, MPH	2004-2005	Cortisol Patterns in NIDDM	Nurse, UCLA
Gene Bowman, ND, MPH	2005-2006	Achloryhdria and Memory	K23 NCCAM
Kim Tippens, ND , LAc, MPH	2004-present	Health Disparities and CAM	Asst Professor, OHSU
Helané Wahbeh, ND, MCR	2004-2007	Biological Outcomes for PNI	Asst Professor, NCNM K99 NCCAM, Asst Professor, OHSU
Ashley Haywood, ND, LAc	2007-2010	Gymnema sylvestra for PCOS	Faculty at NCNM
Jill Edwards, ND	2008-2012	Strontium for Osteoporosis	Asst Professor, NCNM
Carolyn Nygaard, ND	2009-2012	Vitamin A and T cell Regulation	Asst Professor, NCNM
Kurt Beil, ND, LAc, MPH	2010-2013	Environmental Medicine	Adjunct Faculty, NCNM
Jacob Hill, ND, MS	2014- 2015	Oncology Delphi Panel	Clinician, CTCA
Kirsten Wright, ND, MS	2014	Synergy of Chinese Herbs	Post doctoral fellow
Jennifer Ryan, ND, MS	2013-present	Probiotics and CVD	Post doctoral fellow
Sarah Hourston, ND, MS	2013-present	Nutrition and Autism	Post doctoral fellow
Corina Dunlap, ND, MS	2014-present	Women's Health and Natural Med	Post doctoral fellow
Alison Lacombe, PhD	2015-present	Yoga and Ayurvedic Medicine	Post doctoral fellow
John Phipps, PhD	2016- present	Immunology and Supplements	Post doctoral fellow

RESEARCH STUDENT'S MENTORED (Incomplete list)

<u>Student</u>	<u>Years</u>	<u>Project</u>	<u>Final Degree</u>
<u>National Jewish Medical and Research Center</u>			
Megan Roth	1994	DNA Vaccine for Chronic Fatigue Syndrome	BA2000
Kourtney Henry	1995-1996	DNA Vaccine for Hsp65 of <i>M. Tuberculosis</i>	BA2001
<u>Yale University School of Medicine</u>			
Samara Newman	1999-2001	The Effects of Oregon Grape Root on Dendritic Cell Maturation and Cytokine Secretion	BA2004

National College of Natural Medicine

Available upon request (200+ students—too many to list)