63 Zillicoa Street Asheville, NC 28801 (828) 210-7400

Employment	GENOVA DIAGNOSTICS Chief Medical Officer, Vice President - 1st Medical Director of Great Smokies Diagnostic Lab, now with oversight of product development, clinical education, and extramural research for Genova Diagnostics.	2002-2007
	FAMILY TO FAMILY: Your Home for Whole Family Health Owner & Founder - Established an integrative healing practice delivering holistic primary care and family medicine in Asheville, NC. Adjunct faculty with University of North Carolina School of Medicine.	1999-2007
	Hugh Chatham HealthCare System Director, AIM for Health - Research, develop and implement a model program in a rural hospital to increase options for persons seeking greater involvement in their own health care and to help health professionals to integrate self-management options into traditional medical care services.	1997-1999
	HelpER, P.A. President - Operate Emergency Room staffing company to contract with rural hospitals to provide physician services on a <i>locum-tenens</i> basis.	1996-1999
	Mountain Area Health Education Center Clinical Faculty, MAHEC Family Medicine Residency - Taught family medicine residents through consultation, on a part-time basis.	1996-1997
	University of New Mexico, Department of Family Medicine Medical Director, Mountainair Clinic - Development of comprehensive outpatient clinic to serve the residents of Southern Torrance County. Faculty member at UNM teaching medical students and residents about rural practice. Worked with local and state EMS to develop a model for primary care outreach, based on work in rural Alaska.	1994-1996
	Yukon-Kuskokwim Health Corporation Family Practitioner - Full scope family practice with inpatient and outpatient responsibilities including: Inpatient Care, Emergency Medicine, Obstetrics, Pediatrics, and Orthopedics. Director of the Maternal Child Health Program. Worked closely with the Community Health Aide Program to deliver primary care services and introduce tele-medicine to underserved villages in rural Alaska.	1992-1994
	Indian Health Service, Albuquerque Service Unit General Medical Officer - Worked at Albuquerque Indian Hospital and	1991-1992

University of New Mexico, Department of Family Medicine

services, including prenatal care to Native American people.

House Officer - Residency with emphasis in maternal and child health care, including: birthing, breastfeeding, and child development.

Pueblo clinics as family doctor, delivering inpatient and outpatient

1988-1991

Missouri Department of Health

1987-1988

Public Health Advisor - Coordinated health departments and community agencies to integrate MCH services in metropolitan St. Louis; primary emphasis on developing tools for community conflict resolution.

University of Colorado Health Sciences Center

1982-1983

Research Assistant - Pharmacology Department aide performing research and data analysis on binding affinity of Insulin receptors with the central nervous system under varying physiological parameters.

Education

Washington University School of Medicine

1983-1987

Doctorate of Medicine. May, 1987.

Founding Member, 'Health Care Is a Human Right' Coalition.
Participant, AMSA Health Promotion/Disease Prevention Project.
Creator, Lunch and Learn Nutrition Seminar Series.
Laboratory Technician, Lipid Research Center.

University of Wisconsin, Madison

1978-1981

Bachelor of Science, Molecular Biology. December, 1981. Laboratory Researcher, Muscle Biology Laboratory.

Publications

Zahniser NR, Hanaway PJ. Characterization and Regulation of Insulin receptors In Rat Brain. J Neurochem. 1984;42:1354-1362.

Turner RC, Hanaway PJ. Iodination of myofibirls and myosin. <u>Journal of Muscle Research and Cell Motility</u>. 1984;5:665-676.

The Corporatization of American Medicine: Report of the AMSA Study Group on For-Profit Health Care. Patrick Hanaway, Editor. AMSA Publications. Reston, VA. May, 1986.

Hanaway PJ, Westpheling K. Medical Students Promoting Prevention: The AMSA Health Promotion/ Disease Prevention Project. <u>Perspectives in Prevention</u>. 1988;3:13-16.

The Privatization of Public Health in St. Louis. <u>St. Louis Journalism Review</u>. January, 1988. 12 (1): 8-11.

Murphy NJ, Murphy CM, Lukey F, Hanaway PJ, Tan JH. Antenatal diagnosis of a fetal sacral mass containing a pelvis and limb bones. J Am Board Fam Pract. 1995;8:491-3.

Vaccination: Searching for Middle Ground. New Life Journal. 2002. 2(3): 8-10.

Hanaway P. Irritable Bowel Syndrome: An Integrated Approach to "Gut Feelings". <u>Integrative Medicine: A Clinicians Journal</u>. 2004;:16-21.

Stevens T, Conwell D, Zuccaro G, Van Lente F, Khandwala F, Hanaway P, Vargo JJ, Dumot JA. Analysis of pancreatic elastase-1 concentrations in duodenal aspirates from healthy subjects and patients with chronic pancreatitis. Dig Dis Sci. 2004;49:1405-1411.

Hanaway P, Roseth A. Inflammatory Biomarkers Predict Relapse in IBD. Gut. 2005;54:1346-1347.

- "Preventive Genomics, Nutrigenomics, and the Promise of Personalized Medicine" with MC Culp; Textbook of Natural Medicine, 3rd Edition. Pizzorno JE, Murray MT (Eds). New York: Churchill Livingstone, 2005.
- "Testing for Nutritional and Digestive Status" in Complementary Medicine in Clinical Practice. Rakel DP, Faass N (Eds). Sudbury, MA: Jones & Bartlett, 2006.
- "Environmental Inputs MicroOrganisms" in Textbook of Functional Medicine. Jones DS (Ed). Gig Harbor, WA: Institute for Functional Medicine, 2006.
- "Balance of Flora, GALT, and Mucosal Integrity" in Textbook of Functional Medicine. Jones DS (Ed). Gig Harbor, WA: Institute for Functional Medicine, 2006.
- D'Haens GR, Baert F, Norman M, et al. Fecal Calprotectin is a Reliable Surrogate Marker for Endoscopic Activity in Crohn's Disease. Gastroenterology. 2006;130(S2):A-212.
- Palmon R, Brown S, Ullman T, Hanaway P, Mayer, L. Calprotectin and Lactoferrin Decrease with maintenance Infliximab Administration in Luminal Crohn's Disease. Gastroenterology. 2006; 130 (S2): A-212.
- Hanaway P. Ask the experts. Explore (NY). 2006;2:284.
- Hanaway P. Balance of Flora, GALT, and Mucosal Integrity. Altern Ther Health Med. 2006;12:52-60.
- "Irritable Bowel Syndrome" in Textbook of Integrative Medicine, Rakel DP (Ed). Philadelphia, PA: WB Saunders, 2007.
- D'Haens GR, Baert F, Vermiere S, et al. Mucosal Inflammation in Inflammatory Bowel Disease Can Reliably Be Predicted with the Fecal Calprotectin Test. Gastroenterology. 2007;132(S2):A-154.

Presentations

- "Primary Prevention in Community Health Centers: The AMSA HP/DP Project." National Association of Community Health Centers Annual Meeting. New Orleans, LA. 9/15/87.
- "Innovations in Medical Education: The Role of the Community Health Center." National Association of Community Health Centers Annual Meeting. Miami, FL. 9/21/89.
- "Community-Based Medical Education: The University of New Mexico Experience." Conference on Community Responsive Practice. Washington, D.C. 3/22/90.
- "AIM for Health Alternative & Integrative Medicine." Jefferson County Medical Society. Roaring Gap, NC. 2/19/99.
- "Integrative Medicine: Combining Wisdom and Compassion." Keynote Speech, North Carolina Chapter National Association of Social Workers; Asheville, NC., 11/18/1999.
- "Synergy: The Whole Is Greater Than the Sum of the Parts." Grace Health Care System Wellness Conference; Morganton, NC. 8/9/2001.
- "From Fatigued to Fantastic." Achieving Clinical Excellence [ACE] Seminar Series. Detroit, MI; Dallas, TX. November, 2001.
- "Genomics In Primary Care." Achieving Clinical Excellence [ACE] Seminar Series. Asheville, NC; Phoenix, AZ; LosAngeles, CA; Denver, CO; Orlando, FL; Atlanta, GA; Westport, CN. March - June, 2002.
- "Functional Laboratory Testing." 3rd Annual American Board of Holistic Medicine Review Course. Denver, CO. November 19, 2002.
- "Cancer and Detoxification Defects." The Center for Mind-Body Medicine Comprehensive Cancer Care Conference. Washington, DC. April 10, 2003.

- "Functional Laboratory Testing." 4th Annual American Board of Holistic Medicine Review Course. Denver, CO. October 13, 2003.
- "Optimizing Gut Function: Improving Diagnostic and Therapeutic Decisions in Common GI Complaints" Achieving Clinical Excellence [ACE] Seminar Series. Asheville, NC; Orlando, FL; Atlanta, GA; Los Angeles, CA; Seattle, WA; Denver, CO; Dallas, TX; Toronto, CAN; Chicago, IL; Boston, MA; Washington, DC. March April, 2004.
- "Irritable Bowel Syndrome: An Integrated Approach." Integrative Medicine Symposium. Miami, FL April 2, 2004.
- "Functional Laboratory Testing." American Holistic Medical Association 26th Annual Conference. Albuquerque, NM. May 1, 2004.
- "Preventive Genomics in Clinical Practice." Clinical Nutrition Certification Board, Diplomate in Advanced Nutritional Laboratory Assessment (DANLA). Atlanta, GA. June 12, 2004.
- "Native American Healing." 5th Annual American Board of Holistic Medicine Review Course. Los Angeles, CA. October 18, 2004.
- "Functional Laboratory Testing." 5th Annual American Board of Holistic Medicine Review Course. Los Angeles, CA. October 19, 2004.
- "Holistic Medical Therapy for Gastointestinal Disorders." 5th Annual American Board of Holistic Medicine Review Course. Los Angeles, CA. October 20, 2004.
- "Personalized Approach to Inflammation." Medical Spa Conference & Expo. Indian Wells, CA. December 6, 2004.
- "Irritable Bowel Syndrome: An Integrated Approach." InnoVision's CAM Expo Pre-Conference. NewYork, NY. February 11, 2005.
- "Fire Fighting on the Frontline: Inflammation & the Immune System." CAM Expo. NewYork, NY. February 12, 2005.
- "Autism and the Gut: Going to the Source." DAN! Conference. Boston, MA. April 15, 2005.
- "Preventive Genomics in Clinical Practice." Clinical Nutrition Certification Board, DANLA. Phoenix, AZ. April 22, 2005.
- "Functional GI Testing." Clinical Nutrition Certification Board, DANLA. Phoenix, AZ. April 22, 2005.
- "Personalized Approach to HRT." Medical Spa Conference. Las Vegas, NV. April 29, 2005.
- "Fire Fighting on the Frontline: Inflammation & the Immune System." CAM Expo West. Los Angeles, CA. October 8, 2005.
- "Native American Healing." 6th Annual American Board of Holistic Medicine Review Course. Austin, TX. October 16, 2005.
- "Functional Laboratory Testing." 6th Annual American Board of Holistic Medicine Review Course. Austin, TX. October 17, 2005.
- "Integrative Holistic Medical Therapy for Gastointestinal Disorders." 6th Annual American Board of Holistic Medicine Review Course. Austin, TX. October 19, 2005.
- "Autism and the Gut: Going to the Source." DAN! Conference. Long Beach, CA. October 28, 2005.
- "Introduction to Functional Medicine." InnoVision's CAM Expo. NewYork, NY. March 3, 2006.

- "The [Oxidative] Stress of Life." InnoVision's CAM Expo. NewYork, NY. March 5, 2006.
- "Estrogen Metabolism, Genomics, and HRT" PCCA International Symposium. Houston, TX. March 9, 2006.
- "IBS: An Integrative Approach." Family Medicine Grand Rounds. Florida Hospital East. Orlando, FL. April 3, 2006.
- "Functional Medicine and the GUT." Fellowship of Anti-Aging & Functional Medicine, Module 3. Orlando, FL. April 4, 2006.
- "Autism and the Gut: Going to the Source." DAN! Conference. Washington, DC. April 7, 2006.
- "Functional Nutritional Testing." ACAM Spring Conference. Dallas, TX. May 6, 2006.
- "Laboratory Assessment Options." CMBM's Food as Medicine. Baltimore, MD. June 13, 2006.
- "Estrogen Metabolism & HRT." Fellowhip of Anti-Aging & Functional Medicine. Module 1. Chicago, IL. July 17, 2006
- "Mind the GUT: GI Dysfunction in Autism." DAN! Conference. Seattle, WA. October 6, 2006.
- "Preparing for Life: Nutritional Needs in Infancy." True North Conference. Portland, ME. October 12, 2006.
- "Nutritional Evaluation: What Vitamin Should I Take?" True North Conference. Portland, ME. October 13, 2006.
- "Introduction to Autism Spectrum Disorders." Fellowship of Anti-Aging & Functional Medicine. Module 4. October 14, 2006.
- "Native American Healing." 7th Annual American Board of Holistic Medicine Review Course. San Diego, CA. October 29, 2006.
- "Functional Laboratory Testing." 7th Annual American Board of Holistic Medicine Review Course. San Diego, CA. October 30, 2006.
- "Integrative Holistic Medical Therapy for Gastointestinal Disorders." 7th Annual American Board of Holistic Medicine Review Course. San Diego, CA. October 31, 2006.
- "Estrogen Metabolism & HRT." Fellowhip of Anti-Aging & Functional Medicine. Module 1. LasVegas, NV. December 6, 2006
- "EstroGenomics & Hormone Replacement Therapy." 14th Annual American Academy of Anti-Aging Medicine Conference. LasVegas, NV. December 9th, 2006.
- "The Gastrointestinal System: A Functional Approach to Clinical Practice." Institute for Functional Medicine's Applying Functional Medicine in Clinical Practice. Pasadena, CA. February 5, 2007.
- "NutriGenomics and PharmacoGenomics in Clinical Practice." Society for Orthomolecular Health and Medicine. SanFrancisco, CA. February 25, 2007.
- "GUT Function: Anatomy and Physiology." Institute for Functional Medicine Fellowship @ Sanoviv Hospital. Rosario, MX. March 17, 2007.
- "Mind the GUT: GI Dysfunction in Autism." DAN! Conference. Alexandria, VA. April 20, 2007.
- "Functional Medicine and the GUT." Fellowship of Anti-Aging & Functional Medicine, Module 3. Orlando, FL. April 23, 2007.

- "Hormone Essentials: Personalizing Hormone Assessment." 15h Annual American Academy of Anti-Aging Medicine Conference. Orlando, FL. April 25, 2007.
- "Hormone Essentials: The Whole Picture." 15^h Annual American Academy of Anti-Aging Medicine Conference. Orlando, FL. April 27, 2007.
- "Achieving Clinical Excellence: Diagnostic Tools in Digestive Health." Individual Well-Being Diagnostic Laboratory. London, England, UK. May 16, 2007.
- "Functional Lab Assessment of Autism." DAN! Europe: Autism and Our Future. Rome, Italy. May 19, 2007.
- "Optimizing GUT Function: IBS and Beyond." 30th Annual American Holistic Medical Association Conferenence. Portland, OR. June 7, 2007.
- "Balance of Flora, GALT, and Mucosal Integrity." Johns Hopkins School of Medicine 3rd Annual 'Current Concepts in Complementary and Alternative Medicine: Evidence-Based Medicine.' Baltimore, MD. June 21, 2007.
- "Laboratory Assays for Vitamins and other measures." Johns Hopkins School of Medicine 3rd Annual 'Current Concepts in Complementary and Alternative Medicine: Evidence-Based Medicine.' Baltimore, MD. June 22, 2007.
- "Estrogen Metabolism & HRT." Fellowhip of Anti-Aging & Functional Medicine. Module 1. Chicago, IL. July 31, 2007
- "Doctor, What Vitamins Should I Take?" California Association of Osteopathic Family Physicians Annual Meeting. Anaheim, CA. August 1, 2007.

Professional Editorial Board, *Integrative Medicine: A Clinicians Journal* **Affiliations** President-Elect, American Board of Holistic Medicine

Professional American Board of Family Practice, Diplomate (1992, 1998, 2005) **Certifications** American Board of Holistic Medicine, Diplomate (2002)

References Available Upon Request