

Paul Kalnins ND, MSOM

Data Scientist/Software Engineer/Naturopathic Physician

I'm a naturopathic physician, acupuncturist, and medical educator with 23-years of experience teaching and practicing integrative primary care family medicine. Currently, I'm transitioning into a career focused on data science and software engineering with a desire to apply these skills in the healthcare field in order to improve health outcomes. My training to date has been in full-stack web development (primarily using the MERN stack), data analysis and visualization, machine learning, and database management using both relational and non-relational databases.

Work Experience

Sept 2004 - Sept 2020 **Assistant Professor**
National University of Naturopathic Medicine (NUNM)

Served as a lecturer, attending physician, and research mentor at an accredited 4-year naturopathic medical school. My focus was on teaching and practicing integrative primary care family medicine, with an emphasis on neuroendocrine-immunology and the management of complex illnesses using evidence-based therapies. My other duties included program administration, student mentoring, curriculum design, and development of in-person and online courses.

Oct 1999 – Sept 2004 **Naturopathic Physician & Acupuncturist**
New Health Horizons (Internal + Integrative Medicine)

Served as a naturopathic physician and acupuncturist in an integrative care center focused on internal medicine. Patients received collaborative care from a panel of internal medicine and integrative medicine specialists. My focus was on addressing chronic gastrointestinal, respiratory, cardiovascular, gynecologic, and pain disorders using evidence-based nutritional and botanical therapies, along with acupuncture and conventional therapies.

Education

June 1998
Portland, OR **Doctor of Naturopathic Medicine (ND)**
National College of Naturopathic Medicine (NCNM)

June 1998
Portland, OR **Master of Science, Oriental Medicine (MSOM)**
National College of Naturopathic Medicine (NCNM)

June 1992
Columbus, OH **Bachelor of Science (BS)**
Mathematics & Physics, with Honors
The Ohio State University

Contact

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LinkedIn

www.linkedin.com/in/pkalnins9

GitHub

<https://github.com/pkalnins>

Skills

Data Science

General skills:

- Statistics & probability
- Linear algebra
- Python

Data visualization

- Matplotlib, Seaborn

Data analysis/machine learning

- Numpy, Pandas
- Scikit-learn, TensorFlow

Database management

- MySQL, PostgreSQL
- MongoDB

Web Development (Fullstack)

- HTML/CSS, Javascript
- React, Node.js, Express.js, MongoDB

Clinical Practice Skills:

- Integrative medicine specialist
- Chronic disease management
- Herbal pharmacology/toxicology
- Electronic health records/EPIC

Academic/Research Skills:

- Lecturing/public speaking
- Curriculum development
- Thesis advising, student mentoring
- Program administration
- Published case reports
- Herbal analytics: TLC, HPLC

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Publications

Theses

- *Toxemia and Terrain: The Evolution of Intestinal Dysbiosis and Hyperpermeability* (1998)
- *Goethean Phenomenology: An Alternative to Phytochemical Reductionism* (1998)

Studies/Case Reports

- Mist SD, Aicken M, **Kalnins P**, Cleaver J, Batchelor R, Thorne T, Chamberlin S, Tippens K, Colbert AP. Reliability of AcuGraph system for measuring skin conductance and acupoints. *Acupunct Med*. 2011 Sep;29(3):221-6
- Dombrowski A, Imre K, Yan M, **Kalnins P**, Gouge L, Silver D, Zwickey H. Treatment of Osteoarthritis With Low-level Laser Therapy, Acupuncture, and Herbal Therapy: A Case Report. *Integr Med (Encinitas)*. 2018 Apr;17(2):48-53. PMID: 30962785; PMCID: PMC6396761.
- **Kalnins P**, Brucker M, Spears D. Prolonged Survival in a Patient with Idiopathic Pulmonary Fibrosis Receiving Acupuncture and DHEA-Promoting Herbs with Conventional Management: A Case Report. *Perm J*. 2019;23:18-074. doi: 10.7812/TPP/18-074. PMID: 30624191; PMCID: PMC6326563.

Professional Activities

Evidence-based medicine (EBM) training and activities:

- Evidence-Based Medicine in CAM Short Course (August 2008, 2009, 2010, 2011, 2012)
- North American Research Conference on Complementary and Integrative Medicine (2009)
- Symposium for Portland Area Research in CAM (SPARC) (2011)
- International Research Conference in Integrative Medicine and Health (IRCIMH) (2012)
- NUNM Vanguard Faculty Member (2008-present)
- NUNM Helfgott Research Institute Faculty Investigator (2010-2016)
- Participant in EBM clinic shadow program (Internal medicine at OHSU, 2014)
- SAIM Integrative Medicine Day (2018)

Academic/Administrative experience:

- Chair of Biomedical Sciences, NUNM department of Classical Chinese medicine (2009-present)
- NUNM Curriculum Transformation Committee (CTC) (Sept 2013-present)
- NUNM Program and Curriculum Review Committee (PCRC) (Sept 2012-present)
- NUNM Clinic Guidelines Committee (2010-present)
- NUNM Academic Review Committee (2013-present)
- NUNM Metabolism & Endocrinology block coordinator & instructor (2014-present)
- NUNM Introduction to Medical systems block coordinator & instructor (2014-present)

Other activities:

- Advancement of Biotherapeutic Drainage Association (ABDA) (1998-2012)
- Participant, lecturer, facilitator at the International Post-graduate Medical Training in Anthroposophic Medicine and Therapeutics (IPMT) (2013, 2014, 2015, 2016)
- ACLS certification (2015)
- Neurology & neurosurgery seminar for the primary care provider (OHSU, 2015)
- NUNM Global Health faculty, Tanzania field studies (July 2016)
- Integrative cardiology seminars for naturopaths (OHSU Department of Cardiology, 2016)
- Advanced EPIC/EHR training (2014-2017)
- Presenter: NUNM Autoimmune Seminar on autoimmune thyroiditis (2017)
- Presenter: Introduction to Anthroposophic Medicine (AIHM) (2017)