

Michael (Bhodi) Tims, PhD

bhodi@bhoditims.com
703.309.3950

www.linkedin.com/in/michaeltims
bhoditims.com

PROFESSIONAL EXPERIENCE

Department Chair, Herbal Program, Maryland University of Integrative Health, Laurel, MD.	2012 – Current
Consultant, Radix Medicina, Principle and Founder, Poolesville, MD.	2002 – 2014
Post-Doctoral Fellow, National Institute of Standards and Technology, Gaithersburg, MD.	2006 – 2009
Medicinal Plant Researcher, University of Maryland, College Park, MD.	1999 – 2006
Traditional Herbalist, Cash Grocer Natural Foods, Alexandria, VA.	1987 – 1999

EXPERTISE

Research

Product Development.

- Primary Investigator (PI), Botanical Pharmacognosy Lab, Masters of Therapeutic Herbalism Program.
 1. Rationalized product development steps based on understanding the chemical ecology of medicinal plants, processing requirements, and identification of clinically relevant compounds.
 2. Characterized plant extractives based on matrix effects, solubility, and extract concentration.
 3. Led creation of botanical specification sheets, quality assurance Standard Operating Procedures (SOPs), and cGMP (Current Good Manufacturing Practice) compliance documents.
- Completed Standard Reference Material (SRM) development and certification measurements of green tea.
- Designed and completed extensive extraction studies on green tea using enzymatic and pressurized fluid extraction methods, leading to optimal yield and metabolite stability.
- Developed SRM methods using high performance liquid chromatography with ultra violet (HPLC-UV) and mass spectroscopy (HPLC-MS) to detect black cohosh, soy, kudzu, and red clover metabolites.
- Thin Layer Chromatography detection and isolation of toxic comfrey pyrrolizidine alkaloids to produce in-house chemical reference standards.
- Developed HPLC-MS methods to evaluate economic adulteration of goldenseal.

Clinical

- Co-PI 2013 McCormick Spice-funded pilot study, *The effect of flavorings on the perceived digestive responses to the consumption of plant-based foods.*
- Served on Maryland University of Integrative Health (MUIH) Institutional Review Board (clinical research).
- Created formulary for memory loss and arthritis in general practice patient populations.
- As clinical herbalist, created wide-ranging formulary for my clients, as well as other practitioners.

Medicinal Plant

- Field collection trials – goldenseal and American mistletoe.
- Tissue culture experiments – goldenseal and fungi.
- *In vitro* assays of plant/fungal interactions.
- Lectin isolation from American Mistletoe.
- ELISA detection of mycotoxins in plant root tissue.

Market-Driven Program Development

- Expanded program enrollment at MUIH by ~300%, transforming an executive weekend program format into a hybrid program with international reach.
- Created new growth opportunity in MUIH Herbal Product Design area of concentration, focusing on unique product development, Good Manufacturing Processes (GMP) compliance and quality assurance.
- Led redesign of GMP efforts in MUIH herbal dispensary to be compliant with Food and Drug Administration (FDA) regulations for manufacturers.
- Led initiatives to develop telemedicine training for MUIH herbal student clinicians.
- As managing partner in health food store, generated annual profits, expanding sales by 50% over ten-years.

Administrative Leadership

- Directed and developed MUIH program staffing and training strategies to ensure that subject matter expertise, technical competence and teamwork meet broad institutional needs in a changing marketplace.
 1. Delivered 600 course credits to an average of 80 students annually.
 2. Directed annual program budget of \$1.3 million and a staff of 18, focused on 5-year strategic plans.
 3. Oversight of herbal dispensary services to student clinicians, faculty practitioners and alumni in herbal, nutrition and naturopathic disciplines.
 4. Oversight of production and educational efforts developed for MUIH gardens.
- Provided MUIH program leadership to meet university accreditation requirements:
 1. Developed educational competencies so graduates can enter emerging herb-related marketplaces.
 2. Developed program assessment strategies to ensure that student outcomes are being met.
 3. Managed substantial curriculum redesign, based on articulation of programmatic values and linkage of those values to learning outcomes.
- Member of MUIH Provost's Academic and President's Executive Leadership teams.

Professional and Technical Writing

- Published research, scholarship, web resources, books and invited talks are available at bhoditims.com and LinkedIn (<http://www.linkedin.com/in/michaeltims/>).
- Served on editorial board of the Journal of Alternative and Complementary Medicine.
- Provided extensive English editing for medical research papers written by non-native English-speaking scientists on a broad scope of subject material.
- Wrote and edited chapters in Principles of Biology, an Interactive Textbook by Nature Education.
- Expanded HerbMed, (<http://cms.herbalgram.org/herbmedpro/overview.html>) an interactive herbal database, now housed at American Botanical Council, directing a web-based writing project summarizing scientific data for the use, safety and efficacy of herbs.

Teaching: Developed extensive coursework and mentored the next generation of herbal researchers, clinicians and product developers in a variety of subjects, in face-to-face and online settings.

Materia Medica	Phytochemistry and Pharmacology
Therapeutics	Microbiology
Quality Assurance	Plant Genetics
Product Development Case Studies	Plant Biology
Botanical Safety	Plant Physiology
Science Writing	Plant Taxonomy

Grants/Fellowships/Awards

- Research and Scholarship Award, Maryland University of Integrative Health, 2017.
- The Emerson Grant, *Expanding MUIH Herbal Dispensary Services to Support GMP Education of New Herbalists and Smaller Herbal Manufacturers*, Emerson Ecologics, 2015.
- Paul Peck Humanities Institute's Smithsonian Fellowship, 2011.
- National Institutes of Health, Botanical Standard Reference Material Postdoctoral Fellowship, 2006-2009.

Governance – Dietary Supplement Industry

- Stakeholder Panels, Association of Official Analytical Chemists Dietary Supplements Working Groups.
- Joint Committee on Dietary Supplements, NSF International.
- American Herbal Pharmacopoeia Analytical Advisory Committee.
- American Herbal Products Association Committees on Analytical Laboratories, Botanical Raw Materials, Education, and Small Business.
- Advisory Board, American Botanical Council.

ACADEMIC TRAINING

Ph.D., Cell Biology and Molecular Genetics, University of Maryland, College Park, MD 20742.

B.A., English/Writing, George Mason University, Fairfax, VA 22030.