

2024 Great Lakes Conference

Function Forward: Exploring Innovation in Functional Nutrition

Northwestern Health Sciences University

DATE: Oct 26-27, 2024 (In person) Oct 26-Dec 15, 2024 (On Demand)

HOURS: 14 (In-Person), 8.5 Hours (On Demand)

LOCATION: Bloomington, MN

INSTRUCTORS: Charles Sefcik, DC, DACNB, Elizabeth Board, MD Jeff Rich, DC, DACBR Josh Berka, ND, LAc Rick Mayfield, DC, DACBN Rob Silverman, DC, DABCN, Scott Bergman, DC Tricia Paulson, ND Tolu Oyelowo, DC, PhD

At our annual Great Lakes Conference, we invite you to learn from leading practitioners and pioneers in functional nutrition. This year, we'll explore the latest advancements in science and medicine to help you better manage your patients' long-term health and wellness. Discover how to integrate the latest innovations, formulas, and techniques into your protocols, therapies, and treatments to improve outcomes for both your patients and your practice.

Program Objectives/Key Takeaways:

- Learn cutting-edge techniques that you can instantly implement into your practice
- Save time and resources with more systematic and effective approaches to patient care
- Share the latest findings and products with your patients to improve their quality of life
- Create stronger links between the latest research and your clinical practice
- Stay up to date on the advancements in our ever-evolving field so that you can be a leader in functional nutrition in your community

Our Great Lakes Conference gives you a deeper understanding of the underlying causes and solutions to the many challenging health concerns in functional nutrition today. Gain the knowledge and skills to implement the best solutions for both your practice and your patients

Sat, Oct. 26, 2024

8:30 a.m. – 5:45 p.m.

Time	Description	Instructor
8:30 am – 12:00 pm 3 CE hours	Solutions to Escape the Puzzling Maze of Chronic Pain - Nutritional Approaches to Chronic Pain The opiate epidemic has impacted the landscape, options, and trajectory of chronic pain management. This series of lectures takes you on Dr Board's journey from traditional Pain Medicine to full-time Functional Medicine practice. She will share the lessons she learned and the "strings" of clinical pearls. Specific pain conditions will be presented using actual patients. She will review the characteristics of these ongoing challenging conditions that continue to impact patients and their ability to live fully functional lives. The use of nutritional testing and specific nutrients will be discussed	Elizabeth Board, MD

from the perspective of what research supports, and actual patient examples will be presented.

Key Clinical Takeaways:

- Alternatives to opiate and corticosteroid-based therapies are vital to return chronic pain patients to functional lives.
- A functional medicine approach, leveraging lifestyle and nutrition, can help bridge the existing deep chasm many chronic pain patients find themselves stuck in.
- Awareness of conditions that set patients up for nutrient deficiencies that result in chronic pain conditions must be recognized.
- Know the lifestyle behaviors that increase chronic pain risks and how to prevent and reverse them once they occur.
- Research has proven that specific nutrients have efficacy in specific chronic and acute pain conditions.

Hour by Hour:

8:30-10 am: How to provide pain relief without Harm, Current challenges in the world of Pain: Costs, Billing. What are the Challenges? How has the Paradigm Changed for the Better, and how will pain be managed in the future? How can Functional Medicine solve some of these challenges?

10 – 10:30 am – Snack Break

10:30 am – 12pm: Real-world examples of treatment for chronic pain: Autoimmune arthritis, osteoarthritis, psoriatic arthritis, cervicgia, polymyalgia rheumatica, and peripheral neuropathy.

Migraine:

Toxicity, chronic regional pain syndrome, coccygodynia, and fibromyalgia.

Updates on research that reveals:

Nutrients that have improved pain individually or as part of a treatment plan.

Functional medicine testing:

Filling in the gaps to find solutions. List of conditions that may have a nutritional solution. Real cases of patients who were treated with a nutritional approach.

12:00 pm – 1:00 pm	Lunch Break	
1:00 pm – 4:30 pm 3 CE Hours	<p>Healthy Brain On Purpose</p> <p>The objective of this discussion is to identify ways to improve overall brain health...on purpose. We will discuss purposed inclusion...things you should include as part of your wellness lifestyle to preserve and improve brain health. We will discuss purpose exclusion and things you should avoid preventing the deterioration of brain health. An understanding of barrier integrity and function will be discussed. The role of the liver-gut-brain axis will be evaluated for achieving brain wellness goals. We do not have to leave our health to chance but can make purposeful choices that reap tremendous benefits.</p> <p>Key Clinical Takeaways:</p> <ul style="list-style-type: none"> • Things to add to and remove from your life to improve brain health • Assessing the stressed, malnourished, and toxic brain. • Understanding of barrier integrity and function <p>Hour By Hour:</p> <p>1:00-2:30 pm: Identify the key problems affecting our brain health, Identify key barriers to maintaining a healthy brain, The impact of the liver-gut-brain axis, and Assessment of imbalances affecting brain health.</p> <p>2:30 – 3:00 pm – Snack Break</p> <p>3:00-4:30: Assessing the stressed, malnourished, and toxic brain: Discussion of purposed inclusion, things to add to your life to improve your brain. Discussion of purposed exclusion - things to remove from your life to improve your brain.</p>	Charles Sefcik, DC, DACNB, CCN
4:30 pm – 4:45 pm	Break	
4:45 pm – 5:45 pm 1 CE Hour	Panel Discussion and Q&A: Chronic Pain and Health Brain Facilitated by Kristi Hughes, ND	Elizabeth Board and Charles Sefcik

Time	Description	Instructor
<p>8:30 am – 12:00 pm</p> <p>3 CE Hours</p>	<p>Systemic Microvascular Dysfunction Restoration, Prebiotic & Probiotic Management for Total Body Balance</p> <p>Description: Recent evidence has correlated a strong relationship between endothelial factors and gut microbiota-derived molecules. This presentation covers a scientific review of endothelial dysfunction in relation to intestinal and endothelial permeability, oxidative stress, nitric oxide, dysbiosis, and the pertinent clinical applications of foods, nutrients, and phytochemical extracts. This will allow the healthcare provider to have a comprehensive understanding of the physiological mechanisms, molecular interactions, and practical takeaways to prevent and treat cardiovascular disorders, including hypertension and other endothelial manifestations. The primary cause of death incidence in this country, atherosclerosis / arterial plaque, will be discussed, and practical applications will be covered.</p> <p>Keystone commensal gut bacteria, Akkermansia, Clostridia butyricum, Faecalibacterium prausnitzii and other butyrate generating microbes are discussed in relation to hippocampal neurogenesis/memory issues, digestive disorders, glucagon-like peptide 1 (GLP-1), weight management, insulin resistance, and inflammatory disorders. The knowledge and utilization of new evidence-based supplements that Nutridyn has developed are key for providing the best possible clinical outcomes for your patients with these disorders.</p> <p>Key Clinical Takeaways:</p> <ul style="list-style-type: none"> • The attendee will learn the latest metabolic science and nutritional therapies for hypertension, arterial plaque removal and prevention, stroke and atherosclerosis risk reduction, prediabetes, and type 2 diabetes mellitus, digestive disorders including irritable bowel, functional constipation, inflammatory bowel, leaky gut, dysbiosis; immune regulation and inflammatory health issues. <p>Hour by Hour:</p> <p>8:30-10:00 am: Microvascular health dynamics of the endothelium and glycocalyx in relation to tocotrienols, nitric</p>	<p>Richard Mayfield DC, CCN, DACBN, IFMCP</p>

	<p>oxide, gut permeability, and intestinal dysbiosis with nutritional evidence-based formulas. Cardiovascular risk reduction by reducing lipoprotein(a) via nutrient therapy to reduce the risk of plaque, stroke, and myocardial infarction.</p> <p>10:00 am – 10:30 am – Break</p> <p>10:30-12:00 pm: Keystone commensal gut bacteria: Bacteria that control the mucin layer, butyrate production, gut permeability, microbial pathogen mitigation, and dysbiosis improvement will be discussed with specific evidence-based formulations. The topic will also include reducing dysglycemia/insulin resistance and digestive disorders through dietary and nutraceutical / botanical supplementation.</p>	
<p>12:00 pm – 1:00 pm</p>	<p>Lunch Break</p>	
<p>1:00 pm – 4:30 pm</p> <p>3 CE Hours</p>	<p>Navigating Cardiometabolic Syndrome-Strategies for Improved Patient Outcomes</p> <p>Description: Cardiovascular disease, metabolic syndrome, and poor body composition are an expanding epidemic affecting millions and costing our society billions of dollars. This seminar will explore the relationship between these conditions, exploring their risk factors, underlying mechanisms, diagnostic criteria, and management strategies. The practitioner will learn the underlying causes of these issues, including the effects of nutrient reserve depletion, mitochondrial derailment, exo-endo toxemia, and microbiome imbalances. Explore these topics with Dr. Bergman for next-day implementation to help your patients achieve their health goals better.</p> <p>Key Clinical Takeaways:</p> <ul style="list-style-type: none"> • Identify the underlying causes of these inflammatory conditions. • Recognize the predisposition and progression of these conditions. • Understand analysis and interpretation of key labs and diagnostics. • Obtain clear, next-day protocols for improved clinical outcomes. <p>Hour by Hour:</p>	<p>Scott Bergman, DC</p>

	<p>1:00-2:30 pm: Prevalence, Impact, and Criteria, Concept of Nutrient Reserve Depletion: Drug-Induced nutrient depletion, foundation nutrition for prevention and maintenance, body composition and Inflammation. Review of metabolic flexibility</p> <p>2:30 pm – 3:00 pm – Snack Break</p> <p>3:00-4:30 pm: Blood Sugar, Insulin Resistance, Metabolic Syndrome, Labs and Diagnostic Analysis, Dyslipidemia and High Triglycerides, Atherosclerosis, Blood Pressure and Hypertension, Lab Considerations, Genetic Analysis, Nutritional Protocols for Improve Patient Outcomes</p>	
4:30 pm – 4:45 pm	Break	
4:45 pm – 5:45 pm 1 CE Hour	Panel Discussion and Q&A: Prebiotic/Probiotic management and navigating cardiometabolic syndrome. Facilitated by Kristi Hughes, ND	Richard Mayfield and Scott Bergman
5:45 pm	Conference Adjourns	

8.5 On-Demand Hours – available 10/26-11/26/24

Detox Strategies for a Toxic World (1.5 CE Hours) – Tricia Paulson, ND

Description: We all know our patients could benefit from nutritional detoxification support at any time; however, choosing the proper support for the right patient at the right time can be confusing, given all of our options. Become more familiar with the tools and products Nutri Dyn has created for you to help support your patients in effective detoxification programs and targeted support detoxification support to meet the needs of the individual.

Key Clinical Takeaways:

- An in-depth look at the 10-day and 28 detoxification programs offered by NutriDyn, how to determine which patient is best suited for which program, and tips to set your patients up for success.
- Targeted detoxification support for patients who may be dealing with mycotoxins/biotoxins.
- Things to consider when creating a maintenance plan to support nutritionally detoxification pathways for your patients.

Extending the Clock: Strategies for Targeting Mitochondrial Dysfunction to Enhance Longevity (1 CE Hour) – Robert Silverman DC, MS, DABCN, DCBCN

Description: Mitochondrial dysfunction has been highlighted as a pivotal factor in the aging process and the pathogenesis of numerous age-related diseases. Strategies targeting the rejuvenation of mitochondrial function offer a promising avenue to enhance longevity and mitigate the effects of aging. These strategies include using antioxidants to reduce mitochondrial oxidative stress, promoting mitochondrial biogenesis through exercise and dietary interventions, and adding nutritional supplementation to improve mitochondrial efficiency and dynamics.

Recent advancements in understanding the molecular mechanisms underlying mitochondrial dysfunction have paved the way for the development of targeted therapies. Sirtuin activators and mTOR inhibitors are being explored for their roles in extending lifespan through pathways related to mitochondrial health. Collectively, these strategies underscore the critical role of mitochondria in aging and highlight the potential of mitochondrial-targeted interventions in the quest for longevity.

Join Dr. Robert Silverman for this incisive presentation. He will discuss the latest developments in a functional approach to extending longevity and vitality while delivering protocols to provide personalized health care for your patients.

Key Clinical Takeaways:

- Survey the mechanisms that lead to mitochondrial dysfunction.
- Review the link between mitochondrial dysfunction and neurodegenerative diseases.
- Elucidate the importance of efficient ATP production for maintaining mitochondrial health.
- Explore new functional medicine strategies for mitochondrial rejuvenation.
- Incorporate leading-edge protocols for extending health span and longevity.

Bias and Patient Outcomes (1 Professional Boundaries Hour) – Tolu Oyelowo, DC, PhD

Description: As practitioners, we want the best for our patients, but what happens when our biases impact our care? In this session, we discuss the effects of bias on clinical decision-making and explore strategies to mitigate biases for improved patient health outcomes.

Key Clinical Takeaways:

- Identify situations where bias impacts care delivery
- Recognize the impact of bias on patient outcomes
- Examine strategies to mitigate bias

Impacting Patient Care with Chiropractic Radiology: A Case Study Approach (3 X-Ray Hours) – Jeffrey A. Rich, BS, DC, DACBR

Description: Do you desire your radiographs to impact your patient care on Monday morning? Would you like to improve your ability to find abnormalities on X-rays and follow up? Do you want to see some real chiropractic radiology cases that will show noteworthy clinical takeaways for

common conditions that you see in practice? Join us for three hours of hands-on radiology cases, where you will get a chance to decipher the cases as we go along. We will practice detecting findings, considering the description of these findings, which lead to a differential diagnosis, and finally, most importantly, deciding the best follow-up for our patients.

Key Clinical Takeaways:

- Review recent, real-life chiropractic radiology case studies sent in by referring chiropractors.
- Participate in detection, description, differential diagnosis, and decision-making for each case, especially the first two hours, which will be predominantly digital radiography cases with a few advanced imaging cases. The last hour will be predominantly advanced imaging cases, specifically MRI on cases sent to a DACBR for an official report.
- Spine and extremity cases will be utilized, including trauma, tumor (including infections), arthritis, and congenital conditions.

Dragon Rising: Remembering Longevity (2 Hours) – Joshua Berka, ND, Lac.

Description: In Chinese culture, the dragon symbolizes strength, vitality, and good fortune. Coupled with the Wood Element, 2024 offers a unique opportunity for growth and expansion through the practice of flexibility and shedding the many “obstacles to cure” restricting our flow in life—our flow within.

Key Clinical Takeaways:

- In Chinese culture, the dragon symbolizes strength, vitality, and good fortune. Coupled with the Wood Element, 2024 offers a unique opportunity for growth and expansion through the practice of flexibility and shedding the many “obstacles to cure” restricting our flow in life—our *flow* within.
- The clinician will be able to identify specific nutraceuticals, herbal, dietary, exercise (qi gong), and other lifestyle interventions to support “squaring of the curve” for ourselves and patients
- The clinician will gain insight into techniques to “biohack” one’s biology through lifestyle choices and dietary habits, as well as the clinical use of biophysical modalities to improve patient outcomes.
- The attendee will receive education on novel science that has recently emerged on the structure of the meridian system and the interface between the energy/Qi flow and molecular/physical counterparts within the body.