

Osher Center for Integrative Health at Vanderbilt

2023-24 Report

This report highlights accomplishments of the Osher Center for Integrative Health at Vanderbilt during the 2023–24 fiscal year in providing expert training, personalized care and leadership in integrative health. The Bernard Osher Foundation has generously supported Vanderbilt's Osher Center, which is also part of the Osher Collaborative for Integrative Health — sharing knowledge, resources and best practices in the field.

Education

1.1. Overview: Education and training are central to the mission of the Osher Center for Integrative Health at Vanderbilt. The Center provides formalized programs for doctoral health psychology and master's level counseling training that incorporate integrative health training. Also, a wide variety of health care provider students are given exposure to integrative health through clinical rotations and lectures. Our training programs emphasize high-quality clinical training, interdisciplinary care and supervision in health coaching, clinical hypnosis and mindfulness. We are also developing expertise in training clinicians and trainees to work with specific populations with conditions that are difficult to manage and/or for those who are underserved in the broader health care system, such as complex pain with comorbid mental health conditions, hypermobility (e.g. Ehlers-Danlos syndrome), autonomic dysfunction (Postural Orthostatic Tachycardia Syndrome) and functional neurological disorders.

1.2. Diversity, equity and inclusion (DEI) in education: The Center has continued to support inclusive care to a diverse population while educating providers to reduce health disparities. Led by **LeChey Hibbler, PsyD, MPH**, clinical psychologist at the Center, we held monthly working DEI group meetings. On a quarterly basis, we conducted whole team group presentations for DEI education. Dr. Hibbler also attended monthly Chat Room series sessions at Vanderbilt University Medical

Center hosted by the Office of Diversity and Inclusion. Further, she worked with a DEI advisory group to inform development of DEI scholarship applications at VUMC.

1.3. Graduate, postgraduate and clinician training in integrative health

1.3.1. Health psychology training: Our Center has a longstanding, growing health psychology training program for graduate students and postdoctoral fellows. Health psychology and counseling trainees at different postgraduate levels work together to gain clinical experience in delivering individual and group interventions. Our program has a focus on mind-body modalities, including clinical hypnosis and acceptance-based approaches, and an emphasis on integrative, team-based treatment for chronic health conditions, through supervised clinical experiences and multidisciplinary team meetings. Trainees participate in didactic training and weekly group supervision centered around integrative health psychology.

For the 2023–24 training year, we provided a minor rotation in integrative health psychology for an intern through Vanderbilt University's American Psychological Association (APA)-accredited internship in professional psychology, and the option for a master's intern from Vanderbilt University's Human Development Counseling program to start with their second year at the Vanderbilt Osher Center to complete three semesters of training with our team.

This past academic year, our training cohort included:

- One postdoctoral fellow associated with the Vanderbilt University postdoctoral fellowship program in professional psychology;
- Two doctoral psychology interns associated with the Vanderbilt University internship in professional psychology; and
- One master's student in counseling from the Department of Human and Organizational Development at Vanderbilt University.

Trainees delivered supervised clinical services to patients at our Center and completed elective rotations (supervised by Osher-affiliated psychology faculty) in urology and outpatient psychiatry. In addition to individual counseling services, our trainee cohort co-led therapy groups with our licensed providers, and independently led additional offerings of our Hypnosis for Chronic Pain and Safety Skills group programs. Because trainee services are not billed, trainees are able to

provide services to patients who are uninsured, underinsured or have other financial barriers to accessing health care.

A major focus of our health psychology training program is clinical hypnosis. All of our trainees received basic training in hypnosis through the Society for Clinical and Experimental Hypnosis. This is supplemented by a half-day training in clinical hypnosis for chronic pain, a monthly group supervision and consultation session, and ongoing individual supervision for hypnosis cases. In addition, we provided the same training to two social workers from VUMC's Inflammatory Bowel Disease Clinic who are integrating clinical hypnosis into their practice.

1.3.2. Integrative health education for health professional students: Clinical rotations are offered for a variety of health professional students to provide exposure to and knowledge of integrative health. These rotations consist of shadowing integrative health providers and attending multidisciplinary collaborative care meetings. These rotations range from 1-2 days to several months. For many, this is their first clinical experience with integrative health. New experiences for this past academic year included having a Child and Adolescent Psychiatry fellow join several full group series as a participant observer and a fourth-year medical student from Meharry Medical College complete an elective rotation as a visiting student.

Rotating learners for the 2023–24 academic year included:

- Two psychiatric nurse practitioner students from Vanderbilt University School of Nursing who completed their semester-long “health assessment” rotations at our clinic
- One medical student from Meharry Medical College
- One medical student from Vanderbilt University School of Medicine
- One Child & Adolescent Psychiatry fellow from Vanderbilt's Department of Psychiatry and Behavioral Science
- Five Internal Medicine residents from the Vanderbilt University Internal Medicine program
- One fellow from the Hospice and Palliative Care Fellowship Program at Vanderbilt University Medical Center

Osher Center faculty also regularly guest lecture at Vanderbilt University. **Kathryn Hansen, PhD, MSN, ANP-BC**, continues to lecture on integrative health topics to those in the Vanderbilt School of Nursing. Again this year, Dr. Hansen provided a total eight hours of lectures to nursing doctoral and nurse practitioner students on topics including mindfulness, botanical medicine, integrative chronic pain treatment and health services research. **Ruth Q. Wolever, PhD**, led an experiential training session on the use of mindfulness to manage stress for the Aspirnaut™ program, a K-20 STEM pipeline for diversity. Aspirnaut™ trainees are diverse undergraduates from across the country participating in summer research internships that provide mentored laboratory experiences for those interested in a career in the fields of science, technology, engineering or math (STEM).

1.3.3. Physical and Occupational Therapy education: This past year, Vanderbilt's Osher Center expanded our role in continuing education for rehabilitation care clinicians. **Charlene Zimmerman, PT, DPT, OCS, CLT-LANA**, served on the Vanderbilt University Rehabilitation Education Committee. In this role, she helps organize VUMC's quarterly rehabilitation seminars, which provide continuing education for physical and occupational therapists across the institution. In May 2024, a group of Osher Center faculty and staff, organized by Charlene, delivered the program "Multidisciplinary Perspectives on Whole Person Treatment for Hypermobility Ehlers Danlos Syndrome (hEDS)". Charlene and **Michaela Kent, PT, DPT, OCS** (PT) presented "Hearing Hoofbeats and Thinking Zebras"; **Elizabeth Walsh, PhD** (psychologist) presented "Psychosocial Considerations for Working with Individuals with hEDS" and **Amanda Wentworth** (yoga therapist) presented "A Yoga Perspective and Practice for hEDS". Osher presenters were accompanied by **Jamie Bergner, OTD, OT, CHT** (OT) who presented "EDS-Hypermobility Type: Occupational Therapy Considerations in Hand Specialty Care".

1.3.4. Osher Collaborative educational activities: Our faculty teach modules for and support the Osher Collaborative Faculty Fellowship led by Shelley Adler, PhD, and Anand Dhruva, MD, from the University of California San Francisco, and Melinda Ring, MD, from the Osher Center at Northwestern University. Dr. Hansen, and Dr. Walsh from our center delivered lectures this year. Dr. Walsh also served as an academic mentor for the fellowship, working with two fellows on their academic projects. Additionally, Dr. Wolever lectured to the fellows on health coaching, and our Vanderbilt Health Coaching Program provided up to a year of health coaching

to those fellows with interest, as well as an excellent learning experience for our Phase II trainees during their practicum.

Our Center's education director, Dr. Walsh, has significantly contributed to the Osher Collaborative elective curriculum project, led by Anna B. Shannahan, MD, of Northwestern Medicine's Osher Center. A group of educators from the U.S.-based centers, including Dr. Walsh, has been meeting regularly throughout the academic year to oversee the creation of a curriculum consisting of 20 modules covering diverse topics within integrative health. These will be made into an online learning platform and will be accessible to all Osher Centers to use for elective rotations. This project is supported by a grant from the Weil Foundation. Several faculty from our Center are serving as module leaders, including Dr. Walsh (Mind Body Medicine: Psychological Approaches), Dr. Hansen (Manual Medicine) and Dr. Wolever (Behavior Change Principles and Motivational Interviewing).

1.3.5. Internal continuing education: Our staff meets weekly for a multidisciplinary team conference. The focus rotates among internal case presentations and case discussions, team building activities and educational topics presented by Osher faculty and staff and outside invited speakers. This meeting serves to share information, disseminate research and clinical best practices, and build relationships within and outside of our Center. Presentations this past academic year ranged from pain reprocessing therapy to music therapy, and mast cell activation disorders diagnosis and treatment, to the Vanderbilt Undiagnosed Diseases Program.

1.3.6. Continuing medical education: A primary goal for our Center over the next several years is to expand our work in the areas of provider wellness and continuing medical education. As a first step, our faculty have developed educational lectures on integrative health, the Center's clinical programming, and physician wellness, and have delivered these lectures as part of Grand Rounds and team meetings.

1.3.7. Training in mindfulness: Five Psychiatry residents completed an intensive mindfulness elective with our Center. This experience includes full participation and attendance at an eight-week Mindfulness-Based Stress Reduction course consisting of two and a half hours of class time per week, home practices totaling 50 hours;

and a 50-hour Professional Development Mindfulness Skills course. Participants then select Osher mindfulness courses to attend in the second semester and take part in biweekly small group mentoring. Continuing education after formal training allows individuals to deepen their personal practice and insights while incorporating mindfulness concepts and practices in their professional role.

1.3.8. Vanderbilt Health Coaching Program: Dr. Wolever and her team are running the 16th cohort of our 135-hour Health Coaching Program curriculum. We attract strong applicants to the program, which is viewed as one of the most rigorous in North America. In addition, it brings in diverse trainees geographically (thus far from 36 states and Canada) and professionally (physicians, pharmacists, nurse practitioners, nurses, psychologists, clinical social workers, physical therapists, occupational therapists and yoga therapists).

The Health Coaching Program concluded a six-year contract with Meharry Medical College. For the first four years, we delivered a 12-week training course for all first-year medical students. In year five, Meharry faculty ran the program as part of a sustainability plan. We trained a total of 610 students over the past five years, aligning with our commitment to DEI given Meharry's status as a historically Black institution whose mission is to advance health equity. In this final year, specific online components of the curriculum were licensed and incorporated into a course on doctor-patient relationships.

Dr. Wolever remains a leader in the Health Coaching field to advance training and the profession. She continues to be on the National Board for Health & Wellness Coaching (NBHWC) and is chair of the Certification Commission that administers the national board exam. The board and commission have produced standards for individual health coaching and issue a rigorous certification exam three times per year. There are now over 10,000 nationally board-certified Health and Wellness Coaches. Dr. Wolever has also spearheaded a process to assess the exam for implicit bias and ensure that underrepresented minorities are not unfairly disadvantaged. The assessment process has now been thoroughly tested and applied to all exam forms. Finally, the NBHWC led a process to define group health and wellness coaching, which was published in 2024 in a paper led by Dr. Wolever.

Our Health Coaching program has partnered for the past four years with the Coalition for Better Health, a non-profit dedicated to making the prevention of chronic disease just as important as its treatment. This initiative is run through the Preventive Health Network (PHN: preventivehealthnetwork.com). Its first phase was to design a new role in health care called the Preventive Health Specialist (PHS) to help manage Tennessee's high rates of hypertension, Type 2 diabetes and cardiovascular disease. The second phase has been to train, assess and deploy individuals from stakeholder institutions into the PHS role across the three grand divisions of the state. The feasibility and acceptability data for this program has been analyzed, and demonstrates positive results for multiple stakeholders, including PHS personnel, their management and the patients. Practitioners reported confidence increased by 20% as a result of the training and 83% of patients rated the PHS approach as \geq four on a five point scale, and demonstrated improved activation levels.

As the field of Health Wellness Coaching has grown, so too have the number of approved programs who train health coaches. There are now 27 approved training programs, yet the quality of teaching and mentorship is highly inconsistent. After two years of development, our team launched a four level Continuing Education series on Coaching Mentorship to help increase the quality of training and mentorship across the field. Similarly, we continue to study and iterate our evidence-based tool for assessing practical skills in coaching. The inter-rater reliability studies on the fifth version should be complete in the fall.

Clinical

2.1. Overview: Vanderbilt's Osher Center is the largest integrative health provider in the mid-South. Our team served a total of 19,600 visits in the past year.

2.2. Novel clinical services: Several new clinical services have been created in the past year to better meet the needs of those we serve.

2.2.1. Anti-inflammatory cooking: Lauren Kinney, APRN, and Taylor Koval, LMT, massage therapist and chef, developed and delivered a medical group visit that supported patients to cook and improve nutrition for chronic disease. This

group, billed to insurance, was delivered online and demonstrated cooking skills, recipes and medical information regarding healthy eating.

2.2.2. Basics of breathing: Developed by **Gurjeet Birdee, MD, MPH**, this medical group visit provides patients with skills for yoga-based breathing for health. Participants are taught personalized breathing techniques based on the health condition and individual characteristics. Future implementation will collect data for quality improvement and research.

2.2.3. Pain reprocessing therapy: Led by psychology postdoctoral graduate student, **Valery Bodziony, PhD**, we offered a new program — Pain Reprocessing Therapy (PRT). This is a recently developed approach to treating chronic pain that involves a combination of pain neuroscience education and the practice of somatic tracking, a type of mindfulness practice oriented toward appraising pain through a lens of safety and attending to and amplifying positive feelings and sensations. Dr. Bodziony was supported in attending a continuing education training in PRT, as well as additional case consultation. Dr. Bodziony then piloted the intervention with a number of individual patients with suspected neuroplastic pain selected and referred by the integrative consult team, with the goal of determining if and how this intervention adds value to our current array of clinical services for chronic pain. She then presented the case series on PRT to the Osher Center clinical team.

2.2.4. Hypnosis for chronic stress: This group was to expand services to patients with anxiety and increase access to hypnosis. Developed by our intern, **Chandler Broadbent, PhD**, this group combined cognitive behavioral therapy with clinical hypnosis to help patients understand the relationship between stress responses and clinical symptoms and to reduce anxiety.

2.3. Clinical excellence: The team at Vanderbilt's Osher Center continues to be recognized as exceptional within Vanderbilt University Medical Center. Based on

third-party vendor Press Ganey, patient satisfaction with our clinic remains at the 99th percentile.

Research

3.1. Overview: Our research portfolio has expanded under the leadership of our research director, **Kristin R. Archer, PhD, DPT**, professor in the Departments of Orthopedic Surgery and Physical Medicine and Rehabilitation, and director of the Vanderbilt Center for Musculoskeletal Research. Our research infrastructure includes 10 faculty, two of whom are primary faculty at the Center. This research includes examining the mechanisms of integrative modalities, clinical effectiveness, basic science and implementation research.

3.2. Research initiatives

3.2.1. Researchers

Dr. Archer directs our research program at the Osher Center and provides mentorship to junior research faculty. She continues to conduct a study funded by the U.S. Department of Defense to examine the efficacy of early physical therapy after spinal surgery. Dr. Archer is a key research mentor for **Carrie E. Brintz, PhD**, and **Susanna Sutherland, PhD, MS, MEd**. Dr. Archer continues to collaborate with Dr. Birdee on research projects, including an ongoing study from the National Institutes of Health (NIH) to examine use of integrative therapies to deprescribe benzodiazepines among older adults.

Dr. Birdee, funded by an NIH grant, is performing a pilot study to use integrative therapies to support deprescribing of benzodiazepine receptor agonists. He has built infrastructure to collect patient-reported outcomes at the Center to examine the effects of integrative modalities for quality improvement and research.

The Center recruited Dr. Sutherland as new clinical research faculty as an assistant professor in the Department of Physical Medicine and Rehabilitation. Dr.

Sutherland's research focuses on the optimization of psychologic treatments for maternal health including peri- and post-natal depression.

Representing the Center globally, Dr. Hansen was invited to speak at the World Health Organization Technical Meeting on Traditional Medicine in New Delhi, India. Dr. Hansen lectured on "Leveraging a Practice Based Research Network for Integrative Health Research."

Dr. Brintz is assistant professor in the Department of Anesthesiology's Division of Pain Medicine. As a clinical psychologist, Dr. Brintz is funded by an NIH K23 grant from the National Center for Complementary Integrative Health (NCCIH: K23AT011569) examining the use of a telehealth mindfulness intervention for patients recovering from lumbar spine surgery. She also is a co-investigator on two multi-site NIH-funded trials, including a trial evaluating the mechanisms of mindfulness and spinal manipulation for chronic pain (R01AT009680); and a trial of a telehealth coping skills intervention for patients with chronic pain undergoing hemodialysis for end-stage kidney disease (U01DK123821).

Rogelio "Roy" Coronado, PT, MPT, PhD, is research assistant professor in the Departments of Orthopedic Surgery and Physical Medicine and Rehabilitation. He has ongoing support from a U.S. Department of Defense (DOD) grant to examine integration of health coaching for patients with chronic lower back pain that present to the emergency department (CP220070). He is co-investigator on various other NIH and DOD grants to examine use of physical therapy and integrative therapies among patients with chronic pain.

Lindsey McKernan, PhD, MPH, was awarded an NIH grant from NIDDK (R01DK133415) to study mechanistic-based treatment of interstitial cystitis/bladder pain syndrome, while completing her K23 research to develop and test a psychosocial treatment for the same population.

Dr. Wolever serves as co-investigator for research projects providing expertise and mentorship regarding changing health behaviors, implementation of health coaching for chronic health conditions, and integrative health. This includes supporting Dr. Coronado in his study of health coaching for patients with chronic back pain that present to the emergency department. Dr. Wolever and the health coaching team developed an intervention for an NIDDK-funded R03 and subsequent RO1, co-led by principal investigator **Ebele Umeukeje, MD**, to evaluate the impact of culturally tailored health coaching for African Americans with end-stage renal disease to improve treatment adherence. Dr. Wolever developed an attention-match control group for a National Center for Complementary Integrative Health-funded R01 multi-site study with the Osher Center at Harvard examining multi-modal chiropractic intervention for migraines.

3.3. Dr. Roy O. Elam III Memorial Lecture: This annual series is hosted by the Osher Center highlighting international leaders in integrative medicine. In 2024, Paula Gardiner, MD, MPH, director of Primary Care Implementation Research at the Center for Mindfulness and Compassion at Cambridge Health Alliance, and associate professor in the Department of Family Medicine and Community Health at UMass Chan Medical School, lectured on the use of technology and medical group visits for treatment of patients with chronic pain.