



Russell Rothman, M.D., M.P.P.

Director, Institute for Medicine and Public Health

Director, Osher Center for Integrative Medicine at Vanderbilt University Medical Center

Applicants are sought for the position of Director of the Osher Center for Integrative Medicine in the Department of Physical Medicine and Rehabilitation at Vanderbilt University. Competitive applicants will have an academic rank of Associate Professor or Professor and a record of substantial clinical and/or academic accomplishments in integrative medicine or related fields. We seek individuals capable of leading a growing team of 30 health professionals engaged in clinical care, research, and educational activities.

The successful applicant will be able to oversee clinical, research, and educational activities of the Center. As a part of a highly productive, highly supportive interdisciplinary team of clinicians, researchers, and educators, this person will be expected to provide broad leadership of the Center, and to continue with their own academic activities. Candidates for this position should hold either a medical degree, nursing degree, or a doctorate with demonstrated experience in integrative medicine or related fields. Candidates will receive a faculty appointment in the Department of Physical Medicine and Rehabilitation or another Department as appropriate.

Applicants interested in this position should submit a cover letter and updated Curriculum Vitae. The cover letter should describe the applicant's relevant qualifications and experience, as well as brief statements of clinical, research and teaching interests. All application materials should be sent to Russell Rothman, Senior Vice President for Population and Public Health, Suite 1200, Vanderbilt Institute for Medicine and Public Health, 2525 West End Avenue, Vanderbilt University Medical Center, Nashville, TN 37203, Tel 615-936-2149; email Russell.rothman@vumc.org. Vanderbilt University Medical Center is an Equal Opportunity/Affirmative Action Employer.

The Director will:

- Oversee clinical, research, and educational activities of the Osher Center for Integrative Medicine.
- Participate in the maintenance and further development of established integrative medicine activities across Vanderbilt University Medical Center and in the community.
- Advance the clinical presence of integrative medicine at Vanderbilt University Medical Center
- Facilitate and support educational activities related to integrative medicine across Vanderbilt University Medical Center, the local community, and nationally.
- Facilitate the expansion of research activities related to integrative medicine in collaboration with the Center for Integrative Research and other researchers across Vanderbilt.
- Work with the Office of Development and Alumni Affairs to identify and secure philanthropic support for the Osher Center for Integrative medicine
- Establish further collaboration with integrative medicine activities regionally, nationally, and internationally.



The Osher Center for Integrative Medicine at Vanderbilt University Medical Center

Clinicians, faculty, staff and students of the Osher Center for Integrative Medicine at Vanderbilt University take immense pride in the work we do each day to collaboratively provide and promote integrative medicine throughout the Vanderbilt community and beyond. We continue to hold central the provision of relationship-centered, whole-person care. Our experience, combined with the generous support of The Bernard Osher Foundation, allows continued growth of our academic and clinical footprint as an integrative health center focused on the patient, the practitioner, and the healing environment. The Center provides a setting for excellence in integrative medicine clinical care, a laboratory for developing new models of care that integrate into the fabric of health care delivery beyond the Center walls, and a platform for discovery and teaching.

Clinical Services

The Osher Center at Vanderbilt continues to **successfully provide an innovative whole-person care model** to help our patients, clinicians, and staff in receiving, promoting, and modeling integrative medicine and health. Patient visits are close to seventeen thousand annually. Clinical services are provided by Acupuncturists, Physicians, Health psychologists, Massage therapists, Mind-body movement instructors, Nurse practitioners, Nutrition coaches, and Physical therapists. Key clinical services include acupuncture, integrative health consultations, mind-body counseling, mindfulness training and cognitive behavioral therapy for stress reduction and symptom management, group therapy, massage therapy, and movement classes. Classes have included programs in healing Qigong, Mindful eating, Mindfulness-Based Stress Reduction, Mindfulness and Positive Psychology Skills, Tai Chi, Yoga for Chronic Pain, and others.

Education & Clinical Training

As part of Vanderbilt University Medical Center (VUMC), the Osher team is deeply involved in academic education and training for graduate students and new professionals from multiple disciplines across healthcare, all with the foundational elements of interdisciplinary and relationship-centered care. This includes programs for: training professionals in facilitating mindfulness, training medical students and professionals in health coaching, training professional students in interprofessional communication, training graduate students and fellows in health psychology, training graduate students in neuroscience, training nurse practitioner students, training professionals in clinical hypnosis, and training for medical residents/fellows/clinical staff, community members and others.

Research

In addition to seven faculty who are at least partially focused on research at Osher, the team now includes three postdoctoral fellows, two master's level students, five undergraduates, two research coordinators, two clinical research assistants, one research analyst, a part-time program manager and most recently, a part-time biostatistician who is also a faculty member. Our Osher research team has been very productive with grant-funded research, publications, and dissemination of our work. In the past year, we have been supported by eighteen federal grants from the National Institutes of Health (NIH), the Patient-Centered Outcomes Research Institute (PCORI) and the U.S. Department of Defense; eight industry or external institutional grants/contracts, and three internal institutional grants. Our research includes pragmatic trials to assess the effectiveness of mind-body services. This work includes trials using shared-decision making, health coaching, cognitive-behavioral therapy, mindfulness-based interventions, clinical hypnosis, and physical therapy in patients with acute and chronic pain as well as other chronic conditions. Our research is conducted in diverse clinical settings which include primary care clinics, pain and spine centers, emergency departments, intensive care units, rheumatology clinics, gastroenterology clinics and outpatient physical therapy centers. This diversity reflects the broad internal and external collaboration our program is beginning to share with departments, institutes, and centers across the Vanderbilt campus as well as with outside academic centers. We also concentrate on the remote delivery of clinical care through telehealth services. We have developed and implemented yoga, mindfulness, cognitive-



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behavioral therapy, health coaching, pain self-management and physical therapy programs that can be delivered either in-person or through web-based platforms.

Department of Physical Medicine and Rehabilitation

The Osher Center's academic and clinical home is in the Department of Physical Medicine and Rehabilitation (PM&R). The Department was established on April 1st, 2012 and has since grown to be an integral part of VUMC. In addition to the Osher Center for Integrative Medicine, the Department is also the home to the Dayani Center for Health and Wellness, which focuses on the rehabilitation of complex conditions and patient populations including: lymphedema, oncologic rehab, cardio/pulmonary rehabilitation, and transplant medicine. The Department also has two free-standing inpatient rehabilitation hospitals. Stallworth is an 80-bed facility on the main VUMC campus, and McFarland is a 26-bed hospital in Wilson County immediately east of Nashville. The Department also houses all inpatient therapists at VUMC, as well as a robust outpatient clinical program that includes specialists in: spine, cancer rehab, spinal cord injury, brain injury, stroke, ultrasound, sports, pain, and electromyography. In total, there are approximately 200 health care providers in the Department. In addition to a strong clinical footprint, the Department is in the top 20 of all PM&R Departments for federal funding and has multiple training programs including 16 PM&R residents.

Vanderbilt University Medical Center

Managing more than 2 million patient visits each year, [Vanderbilt University Medical Center](#) (VUMC) is one of the largest academic medical centers in the Southeast, and is the primary resource for specialty and primary care in hundreds of adult and pediatric specialties for patients throughout Tennessee and the Mid-South. Each year, VUMC clinicians provide more than 2.3 million ambulatory visits, perform more than 56,000 surgical procedures, and see 116,000 patients in its adult and pediatric Emergency Rooms. The Medical Center employs over 24,000 staff. The School of Medicine's biomedical research program is among the nation's top 10 in terms of National Institutes of Health peer review funding, and received more than \$590 million in public and private awards during FY2018. The Medical Center is the region's locus of postgraduate medical education, with over 1,000 residents and fellows training in more than 100 specialty areas. Vanderbilt University Adult Hospital and the [Monroe Carell Jr. Children's Hospital at Vanderbilt](#) are recognized each year by U.S. News & World Report's Best Hospitals rankings as national leaders, with 19 nationally ranked adult and pediatric specialties. Through the Vanderbilt Health Affiliated Network, VUMC is working with over 60 hospitals and 5,000 clinicians across Tennessee and five neighboring states to share best practices and bring value-driven and cost-effective health care to the Mid-South.

Vanderbilt University School of Medicine

The School of Medicine, originally part of the University of Nashville, was incorporated into Vanderbilt University in 1874 and awarded its first Vanderbilt medical degrees in 1875. Since the inception of the School of Medicine, a Vanderbilt medical education has been held in high esteem among its peer institutions, and that legacy continues today. Biomedical research at the School of Medicine has long been recognized for its contributions to the advancement of medicine. The School of Medicine claims two Nobel Laureates, Earl Sutherland Jr., in 1971, for his discovery of the metabolic regulating compound "cyclic AMP," and Stanley Cohen, in 1986, for his and a colleague's discovery of epidermal growth factor. The School of Medicine currently has over 2,700 faculty and more than 500 students. **Vanderbilt University School of Medicine** ranks 18th among the nation's elite programs, according to *U.S. News and World Report's* annual ranking of top medical schools for research, released in the 2021 edition of *America's Best Graduate Schools*. **Vanderbilt University School of Medicine** ranks No. 8 in the nation among U.S. medical schools in total grant support provided through the National Institutes of Health (NIH).

Research Infrastructure

In addition to the highly collaborative and high-quality academic health center, VUMC has invested in world-class research infrastructure. Key highlights include:



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Vanderbilt Institute for Clinical and Translational Research (VICTR): The program's initial goal in 2006, when first founded, was to assist institutions in creating a "novel and integrative academic home for clinical and translational science." VICTR was created to be the single home for translational research at Vanderbilt. The foundation for VICTR was built upon an integrated, comprehensive, informatics-driven research and administrative infrastructure that served as a launchpad for numerous transformative, research-enabling programs and resources such as Studios, pilot funding vouchers, BioVU, REDCap, ResearchMatch, StarBRITE, and community engagement initiatives. Using this infrastructure as the cornerstone, we were able to leverage, grow, and refine our resources, programs, and operations during the second funding cycle while applying them to enhance the quality and efficiency of the research conducted. Moreover, we expanded the reach of our programs at a local, national, and international scale. Today, VICTR is a highly functional and integrated translational research infrastructure that has raised the quality and scientific rigor of the research conducted at Vanderbilt and longstanding partner Meharry, the nation's oldest historically black academic health science institution. VICTR is now intimately woven into the fabric and impacts every facet of clinical and translational (C&T) research, including the conduct of pragmatic clinical trials that fuel the VUMC Learning Health System.

Vanderbilt's Electronic Health Record (EHR) system: In November 2017, Vanderbilt fully implemented Epic for all inpatient and outpatient medical records and clinic workflow, pharmacy management, and hospital billing. For the operational database server, where end-user response time is critical, the EHR uses Epic's Chronicles Extended RDBMS. To help ensure optimal performance for users, Epic uses a configuration in which retrospective reports are on a database separate from the production database. The reporting database (or the EDW) is used for analytical and statistical reporting. This database is populated through regular (typically nightly), incremental extracts of production data. This data is primarily comprised of patient encounters and financial transaction data.

BioVU: BioVU, the Vanderbilt DNA Databank, is a repository of de-identified DNA extracted from discarded blood collected during routine clinical testing. Although BioVU initially used an opt-out consent mechanism, individuals currently choose to opt-in through kiosks at clinic check-in that explicitly discuss information sharing. BioVU has created a centralized resource for investigating genotype-phenotype associations that have enabled innovative research at large scale. Biospecimens within BioVU are matched with corresponding clinical and demographic data derived from a de-identified research database, the Synthetic Derivative (the "SD" described below). It is overseen by a comprehensive governance structure. BioVU contains nearly 250,000 unique samples as of January 2019 and has generated 256 studies resulting in 361 publications. BioVU's time and cost efficiency have been documented. BioVU has always required data redeposit, enabling reuse by others. BioVU data deposit into dbGaP also enables derivative research worldwide: data from BioVU have been used >610 times through dbGaP.

Synthetic Derivative (SD): The SD contains all clinical information in the EHR and its associated entry-order relational database but is stripped of personal identifiers and modified in other ways to improve data reusability. The name 'synthetic derivative' comes from both alterations (e.g., date shifting to mask actual dates, which protects against re-identification) and extractions (e.g. of textual and structured information that is identifiable). The SD currently contains >3 million records with highly detailed longitudinal data for over one million subjects. The SD has been used for 590 studies to date, including those by new and junior faculty, as well as those without any technical proficiency. The de-identification methodology is based primarily on the systematic removal of the fields that are specified in Section 164.514 of the HIPAA privacy rule; the centralized de-identification of the entire EHR promotes privacy for patients. The SD contains data beginning in the early 1980s; data since 2005 include nearly all inpatient and outpatient billing codes, laboratory values, reports, and clinical documentation, almost all in electronic formats available for searching. The database incorporates structured and unstructured data from multiple sources including diagnostic and procedure codes (ICD-9, ICD-10, and CPT); basic demographics (age, sex, race); text from clinical care including discharge summaries, nursing notes, progress notes, history and physical; problem lists; multi-disciplinary assessments; laboratory



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values; ECG diagnoses, clinical text and electronically derived trace values; and medication data. The SD can be used for searching and aggregating sets of cases for genomic analysis (via links with BioVU) or as a stand-alone clinical research resource. As a byproduct of the clinical system, the SD contains phenotypic information that can be mined for the valid development of cases and controls with no additional study procedures. All clinical data are updated regularly to include patients new to VUMC, and therefore the SD, and to append new data to clinical records of existing patients as they continue to access care. Thus, the resource is entirely suitable for mining information relative to disease progression over time.

The Research Derivative (RD): The RD is a database of clinical and administrative data developed to enable clinical research. The RD brings together data from multiple sources, including billing codes, patient demographics, lab results, medications, and clinical narratives from over five different health information systems. The data has been structured to maximize feature searching and phenotype identification. Natural language processing and other informatics methods have been applied to transform unstructured data into information critical to electronic phenotype identification. The resource is well suited for rapid, efficient extraction of clinical data on a defined cohort using specific tests or phenotypes as inclusion criteria to deliver identified or de-identified datasets, recurring reports, and up-to-date counts of subjects meeting inclusion criteria. Instead of labor- and cost-intensive manual chart review that is often required to identify and study a targeted patient population that normally occurs over months, the RD allows database analyst-driven extraction of a specified clinical dataset on the scale of hours to days.

Vanderbilt Coordinating Center (VCC): The VCC has been coordinating multi-center national and international clinical trials since its inception in 1985 and was recently expanded and transitioned to a full-service Vanderbilt Shared CORE Resource, with a transparent pricing structure. VCC provides service in support of the development, design, and conduct of clinical trials ranging from 2-900 participating sites. The VCC can provide comprehensive study management support for investigator-initiated or industry/foundation sponsored trials, similar to that provided by a contract research organization or VCC customers can choose from a menu of services. Services include deliverable/timeline-based project management; study design and protocol development; database design and management (data dictionary, query, query resolution); remote and on-site monitoring; financial management (budget development/negotiation, financial tracking, invoicing); document development/management; investigator and site identification; qualification; initiation; pre-randomization participant eligibility review; randomization services; regulatory communications (FDA, IND/IDE, audit preparation, central IRB); report generation; data safety monitoring board management (recruiting members, meeting management, data report generation; documentation, communication including SAE reporting/review; medical monitoring; clinical trial material management (oversight for distribution, documentation, disposal); and medical writing.

The Vanderbilt Institute for Medicine and Public Health (IMPH): The IMPH provides academic, research and infrastructure support for a wide array of efforts at Vanderbilt University Medical Center aimed at improving individual and population health nationally and Internationally. The Institute seeks to connect research and teaching with policy and practical solutions. The Institute currently provides support for 28 research centers and 2 departments, including the Center for Health Services Research, the Center for Epidemiology, the Center for Biomedical Ethics and Society, the Institute for Global Health, the Department of Health Policy, and the Department of Biostatistics. The Institute engages over 250 faculty across departments in the Schools of Medicine, Nursing, and Arts and Sciences. Faculty affiliated with the Institute are engaged in a robust array of funded research, making it one of the top funded programs of public health in the nation. The Institute also provides support for multiple junior faculty and postdoctoral training programs, MPH programs in Epidemiology, Global Health and Health Policy, and PhD programs in Biostatistics, Epidemiology and Health Policy (forthcoming). The Institute also provides support for community, public health, and health policy efforts.