Vanderbilt is leading the charge in ushering in a new era of health and prevention, detection and treatment of disease. Progress that could not have been imagined a decade ago is now being realized with our research and reality for our patients and individuals in the community. We are transforming interventions away from a model in which we see people for the first time when they begin experiencing symptoms to one that detects, manages and perhaps eradicates disease before individuals even know they have them. The work is being driven by our pioneering discoveries in basic, translational, clinical, and population research, as well as learning systems. VUMC is engaging in new ways with our patients and community through new prevention and treatment modalities in the form of interventional trials, as well as with new models of engagement, health care implementation and outcomes assessment - both here and through our affiliate hospitals and community in the Vanderbilt Health Affiliated Network.

**CAPABILITIES TO ENHANCE**

- Our collaborative, inclusive and trans-disciplinary culture that promotes interactions across Vanderbilt and the community
- Since the start of Strategic Directions, many trans-disciplinary partnerships and collaborations have been formed that catalog new directions and accelerate our ability to deliver our mission, including partnerships with GE Healthcare, Bayer, IBM Watson and Burroughs Welcome
- **Neuroscience and behavioral health research and translation**
- Leveraging new commitments and leadership in Vanderbilt Kennedy Center, Vanderbilt Brain Institute, Departments of Neurology, Psychiatry & Behavioral Sciences, Pediatrics, and Pharmacology; and Vanderbilt University Institute of Imaging Science
- Launching the new trans-disciplinary inaugural Alzheimer’s Disease Research Day, a Vanderbilt-wide academic event to showcase Alzheimer’s disease and related dementia research from multiple clinical and basic science departments across campus
- Institutionally-supported research cores, facilities and tools
- Ongoing design of new shared resources that address immunophenotyping, biospecimen repositories and animal models of infection and immunity
- **Footprint and functionality of research space**
- Development of a dashboard to track research space and associated extramural support
- Transparency of data sets and methods; reproducible research
- Programs and tools to advance learning opportunities and workforce engagement
- Launch of the Catalyst Leadership Program and Defining Postdoctoral Care Program; continued investment in Vanderbilt Program in Research Administration Development, Programs in frontline and Mid-level Leadership Development.
- Development and implementation of the Medical Innovators Development Program (MiCDP) in its third year
- Implementation of novel interprofessional working-learning student team model at Mercury Courts
- Launch of Addiction Medicine Fellowship
- Personalized/precision medicine
- Precision Medicine Strategy Planning with a goal of implementing a system-wide approach to identifying and appropriately managing subsets of patients with distinct genetic causes for common disease and/or adverse drug reactions
- Continued discovery and translation enabled by BioVU, Center for Precision Medicine, Vanderbilt Genetics Institute and Office of Personalized Medicine
- **Focus on health disparities, outcomes and policy; and implementation research**
- Appointment of Vice President for Health Equity and Associate Dean for Health Equity and establishment of the Office of Health Equity

**CAPABILITIES TO DEVELOP**

- Dynamic process to develop, share and recognize the contributions of individuals and teams to discovery and learning
- Institutional recognition of high impact and high station publications
- “Celebration” presentations at SOM Executive Faculty meetings
- Creation of the Office of Research social media presence via Twitter (@VUMCResearch
- Launching annual StrategyShare events
- Trans-institutional framework for infectious, immunology, and inflammation research
- New investments and launch of two new entities to accelerate advances in immunology, infectious diseases and our understanding of the role of the microbiome in prevention and treatment of diseases: Vanderbilt Institute for Infectious Immunology and Inflammation and Vanderbilt Center for Immunobiology
- Systems that enable co-registration and biomarkers harmonization of all forms of data across the research and clinical enterprise
- Plan for computational sciences, information technology and data storage as required to meet the demands and advance basic, clinical and population research
- Data science strategic planning efforts underway
- Acquisition and oversight of the data and coordinating center for All of Us in the Center of Precision Medicine
- Pragmatic trials using broad scope clinical operations as a platform
- Successful completion of several trials leveraging Vanderbilt Institute for Clinical and Translational Research (VICTR) resources and clinical teams
- Balanced Crystallids versus Saline in Nociceptively II Adults
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- Designs and access to leverage clinical specimens at scale with appropriate database capabilities; specimens representative of a diverse population
- Workplace-based systems for Continuing Professional Development
- Launch of Discovery Scholars Program
- Systems to support learning-working teams
- Development and launch of QualTime, an innovative learning tool that provides an asynchronous learning paradigm for Educators and Learners
- Population health and discovery platform across the VHAN enabling research, community engagement and collaboration partnerships
- Deployment of Lung Cancer Screening
- Advances in smoking cessation
- Health forecasting system; knowledge engine
- Launch of Master of Genetic Counseling Degree Program
- Launch of the Health Equity Graduate Certificate for medical students
- Develop integrated interdisciplinary experiences for post-graduate trainees
- Develop approach to competency-based progression for UME to GME using multi-score assessment data

**STATEMENT OF IMPORTANCE**

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**2019 STRATEGIC DIRECTIONS UPDATE**

**DISCOVER, LEARN AND SHARE**