STRATEGIC PLAN FOR

Vanderbilt's Mental Health and Wellbeing

by the Chancellor's Strategic Planning Committee

DECEMBER 2017

VANDERBILT **V** UNIVERSITY

STRATEGIC PLAN FOR VANDERBILT'S MENTAL HEALTH AND WELLBEING

CONTENTS

ABBREVIATIONS

ACRS	Assessment of Campus Resources Subcommittee
ASD	Autism Spectrum Disorder
C	Culture
CIT	Center for Integrative Technologies
CSPCMHW	Chancellor's Strategic Planning Committee on Mental Health and Wellbeing
CSW	Center for Student Wellbeing
CWO	Chief Wellness Officer
D	Discovery
DALY	Disability-adjusted life years
DAR	Development and Alumni Relations
DOD	Department of Defense
EAD	Equal Opportunity, Affirmative Action, and Disability Services
fMRI	Functional magnetic resonance imaging
HR	Human Resources
LEAPS	Liaisons Educating and Advocating for Psychological Support
LGBTQI	Lesbian, Gay, Bisexual, Transgender, Queer and Intersex
LIGHT	Laboratories for Innovative Global Health Technologies
MHW	Mental health and wellbeing
NIH	National Institutes of Health
NSF	National Science Foundation
OUCRL	Office of the University Chaplain and Religious Life
PCC/UCC	Psychological and Counseling Center/University Counseling Center
PET	Positron emission tomography
PP	Positive psychology
R	Resources
S	Space
SAP	Strategic Appliance
SHC	Student Health Center
SHIP	Student Health Insurance Plan
SR	Stigma reduction
SSRI	Selective serotonin reuptake inhibitor
STEM	Science, Technology, Engineering, and Mathematics
TIPs	Trans-Institutional Programs
VBI	Vanderbilt Brain Institute
VCNDD	Vanderbilt Center for Neuroscience Drug Discovery
VCPMMI	Vanderbilt Center for Precision Medicine for Mental Illness
VKC	Vanderbilt Kennedy Center
VINSE	Vanderbilt Institute of Nanoscale Science and Engineering
VRS	Vanderbilt Recovery Support
VU	Vanderbilt University
VUIIS	Vanderbilt University Institute of Imaging Science
VUMC	Vanderbilt University Medical Center
VUPD	Vanderbilt University Police Department
WHO	World Health Organization
WLC	Work-Life Connections

A. INTRODUCTION

The Chancellor's Strategic Planning Committee on Mental Health and Wellbeing firmly believes that we as a university and a university community have an obligation to strive for maximizing the full human development and potential of all members of our community—students, staff, and faculty. That obligation includes not only providing an environment that facilitates intellectual and professional development, but also one that promotes mental health and wellbeing, if each community member is to optimize their time at Vanderbilt, whether that is one year or 50. Our obligation to them not only lies at the individual level or in the connection between them and Vanderbilt University, but also in promoting supportive relationships with each other, as research has shown that people cannot reach their full potential unless they are in healthy connection with others.

Vanderbilt also can serve a major role in creating an environment that fosters mental health and wellbeing for all members of our community. We must commit as a university and a community to creating an environment that encourages a sense of "we-ness," a sense of belonging that sends the message that we care about and will take care of each other. Fostering this kind of environment is important because research on health and social behavior has consistently shown that, for all individuals, being surrounded by supportive people and having opportunities to share our personal experiences are important factors in predicting both mental and physical health. Our wellbeing is strongly dependent on other people. We need caring, supportive people in order to be "mentally healthy." Having such support networks in place can increase a sense of feeling valued, foster positive self-regard, and promote optimal development and adjustment.

One must strive for good personal mental health and wellbeing in order to be prepared to enter in and maximize those healthy connections. One's state of mental health, however, much like physical health, flows along a continuum, affected by many factors (including social determinants), and even for the same person may vary over time. It also is important to acknowledge that, in addition to managing the demands associated with academics, work, personal life, and family, some individuals in our community have the additional challenge of managing mental illness. We make a distinction here because mental health and mental illness are neither the same entity nor necessarily diametrically opposed to each other. For example, one may have a mental illness and be in excellent mental health; conversely, one may have no mental illness but, for various reasons, may be unable to function well, emotionally, psychologically or socially. When this occurs, this individual is exhibiting poor mental health. In this report, the committee has accepted the challenge of making recommendations related to mental health and wellbeing issues facing all members of our community *and* to the unique challenges faced by those in our community who have mental illness. Additionally, any investments in the mental health and wellbeing of our community must recognize the importance of creating a Vanderbilt culture that strives to eliminate the stigmas that discourage individuals from engaging in conversations about mental health and mental illness.

Similar to physical health, one's mental health status is affected by many factors, including gender identity, socioeconomic status, race, ethnicity, national origin, sexuality, social structural oppressions, and other social determinants. Vanderbilt must keep these broader social and economic forces that influence wellbeing at the forefront of bringing the strategic plan to fruition. These forces are influential not just directly, in terms of restricting access to services for some people, but also indirectly, through their influence on how individuals respond to stress. Through a collective commitment, Vanderbilt has become a richer, more

diverse community; as individuals and a community, we must celebrate the benefits that diversity brings to our collective and individual wellbeing, and acknowledge that engaging diverse perspectives is essential if we are to have a mentally healthy, inclusive community.

Vanderbilt has many outstanding, high-quality wellbeing resources, as we hope is evidenced in our report (see Appendix A for a comprehensive list of resources for students, staff, and faculty); however, as one participant in a town hall declared, "it is time to up our game." Vanderbilt is poised to become the national leader in innovative approaches to promote the wellbeing of all its constituents, the discovery of new treatments and approaches to mental illness, and the development of a stigma-free, inclusive environment dedicated to pursuing optimal mental health for all members of our community. Further, we should strive to keep in mind the broader social, economic, and political forces that influence mental health, mental illness, and wellbeing, not just in terms of the impact of restricting access to services for some people, but also by understanding epigenetic mechanisms and stress pathways. Further, campaigns that aim to reduce stigma by focusing primarily on the biological underpinning of mental illness have been shown to be ineffective. In fact, some studies have even shown that a strong sense of marginalization still unfolds despite the fact that most people believe that mental illness is due to biological factors beyond the individual's control. As students, staff, faculty, and administration, we must own our collective and individual roles in Vanderbilt's efforts to move its citizens on this path toward optimal mental health and wellbeing. Our hope is that this document will provide a roadmap to guide our journey to creating a campus culture of wellness.

B. CHARGE, PROCESS, TIMELINE

THE VISION

"Mental wellbeing is central to the success of all, **including our incredible students, the faculty who teach and mentor them, and the staff who play a critical role in the success of this remarkable university**. Only through honest, brave dialogue and self-examination can we maintain the highest standards in research and resources, and also begin to create a culture of openness that fosters success for all at Vanderbilt."

—*Chancellor Nicholas S. Zeppos*

THE MISSION

In the fall of 2016, Chancellor Nicholas Zeppos established the Chancellor's Strategic Planning Committee on Mental Health and Wellbeing, consisting of representatives from the breadth of constituencies of the Vanderbilt community—faculty, staff, and undergraduate and graduate students—to address the charge below and develop a strategic plan for mental health and wellbeing efforts on campus over the next five to 10 years.

COMMITTEE MEMBERS

Donald W. Brady, Senior Associate Dean of Graduate Medical Education (Medicine), *Co-Chair*

Velma McBride Murry, Human and Organizational Development (Peabody), *Co-Chair*

Stephanie Brooks Barger (Alumna)

Dominique Behague, Medicine, Health, and Society (Arts and Science)

Emelyne Bingham, Music Theory (Blair)

G.L. Black, Associate Dean of Students

Marino Bruce, Medicine, Health, and Society (Arts and Science)

Christopher (Kitt) Carpenter, Economics (Arts and Science)

Gilbert Gonzales, Health Policy (Medicine)

Elizabeth Hale, Graduate Student (M.D./Ph.D.)

Alyssa Hasty, Molecular Physiology and Biophysics (Medicine)

Joni Hersch (Law)

Megan Ichinose, Graduate Student (Psychology)

Madison Maderious, Undergraduate Student (Peabody)

René Marois, Psychology (Arts and Science)

Craig Philip, Civil and Environmental Engineering (Engineering)

Graham Reside, Cal Turner Program in Moral Leadership (Divinity)

U. Monique Robinson-Nichols, Associate Dean for Students and Equity, Diversity, and Inclusion (Peabody)

Sandra Rosenthal, Chemistry (Arts and Science)

Mavis Schorn, Senior Associate Dean for Academics (Nursing)

Kiley Stokes, Assistant Director of Dining Services (Dining Services)

Tim Vogus, Management (Owen)

August Washington, Associate Vice Chancellor and Chief of Police (VUPD)

Anita Wilhelm (Development and Alumni Relations)

THE CHARGE

Provost Susan Wente met with the committee in September 2016 to deliver and articulate the following charge:

- Provide a **comprehensive review** of existing campus resources, programs, and research efforts
- Prepare recommendations to create a **holistic and inclusive approach** to mental health and wellbeing across the spectrum of education, research, and services
- Give a special focus to ways to **reduce stigma** for support-seeking by any member of the campus community

COMMITTEE'S PLAN OF ACTION TO MEET THE CHARGE

To fulfill this charge, the committee, led by co-chairs Donald Brady and Velma McBride Murry, established several organizational structures and procedures to address the committee's charge:

- Developed a timeline for the committee's work
    - Interim report due to the Chancellor in March 2017
    - Final report due to the Chancellor in December 2017

- Organized four subcommittees (see further discussion below)
    - Assessment of Campus Resources Subcommittee
    - External Benchmarking Subcommittee
    - Research and Discovery Subcommittee
    - Stigma Reduction Subcommittee

- Scheduled various platforms to share committee's activities and accomplishments, as well as receive feedback and input from constituents, including
    - town halls
        - 2 for undergraduate students
        - 2 for graduate/professional students
        - 2 for university staff
        - 2 for university faculty
        - 2 campuswide (open to all constituents, including one late-night)
    - listening sessions
        - Internal MHW committee listening session
        - Chancellor's Community Town Hall on mental health
        - Chancellor's 'Dores of Distinction Alumni Advisory Board
    - suggestion box (handwritten or submitted online)
    - campus surveys, such as the COACHE and Healthy Minds
    - numerous rollout sessions to review draft final recommendations with stakeholders across the university, including vice chancellors, deans, Human Resources, Faculty Senate, faculty at large, undergraduate students, graduate students, professional students, faculty/staff health and wellness leadership, Dean of Students staff, late-night staff

C. RECOMMENDATIONS

ORGANIZATION OF RECOMMENDATIONS AND APPENDICES

This report provides detailed recommendations supported by the CSPCMHW and developed through the process outlined above with specific attention given to ways in which the committee has addressed the charge, both as a whole and through its subcommittees. As the Chancellor directed the charge to the committee to include all students, university staff, and faculty in its scope, the committee has organized the recommendations into four sections: 1) recommendations applicable to all Vanderbilt community members; 2) recommendations specifically applicable to students (undergraduate, graduate, and professional, subcategorized as appropriate); 3) recommendations applicable to faculty and staff; and 4) recommendations related to culture change. Through its work, the committee recognized that its recommendations fell into four key areas—resources (including services), space, discovery, and culture. As such, each of the recommendations in the four sections ends with a code delineating into which of the four areas the recommendation falls according to the following key (with a fifth code "SR" added, given the Chancellor's specific charge to give a special focus to ways to reduce stigma for support-seeking by any member of the campus community):

S = Space
R = Resources
D = Discovery
C = Culture
SR = Stigma Reduction

The appendices contain the detailed reports of each of the subcommittees. For each, we highlight key findings and recommendations for the Chancellor's consideration. Each subcommittee section begins with a description of their charge as well as strategies and approaches undertaken to address said charge. The themes highlighted are those that emerged from our town halls and listening sessions, in addition to literature review, conversations with outside entities (including persons at peer institutions), and (in the case of the research and discovery subcommittee) site visits to other institutions. Taken as a whole, we believe this report and the contents therein meet the Chancellor's goal of developing a strategic plan through which Vanderbilt University can become a world-class model for creating community that promotes and supports mental health and wellness. Through the delivery of services, the promotion of education, and the process of discovery, we can create "a culture of openness that fosters success for all at Vanderbilt."

1. FOR ALL VANDERBILT COMMUNITY MEMBERS

- Enhance services to meet the needs of all constituents sufficiently, including increasing the number and diversity of providers who are trained to effectively deliver culturally competent services in order to meet the needs of an increasingly diverse population (R, C). *Rationale: Vanderbilt's community is continually becoming increasingly diverse. Persons with mental health needs may prefer to interact with providers either similar to their own, or culturally competent in the needs of their own, racial, ethnic, national origin, religion, gender identity, sexual orientation, and other identities. Further, they may wish to communicate with their provider in their native tongue when addressing mental health needs. Communication barriers can be reduced through the use of bilingual providers, live interpreters, and language lines.*

- Ensure a robust online presence that provides easily navigable information about services for all, allowing personalization of a homepage tailored to an individual's needs (R). *Rationale: Vanderbilt has many excellent services available to its constituents, but often community members are unaware of those services. By developing a virtual "hub" that collects and organizes health-related resources, the university could provide its constituents with easily navigable resources not only for personal use but also for helping friends and colleagues.*

- Consider designating wellbeing ombudsperson(s) (R). *Rationale: Having a core group of persons, shared by Human Resources and the Dean of Students, who are knowledgeable of and facile with both the available university services and resources and the health plans offered by the university would enable persons to more efficiently access the appropriate university resources and more effectively understand financial and other implications of the use of such services. Such an ombudsperson also could ensure that all constituents are aware of available benefits and services, including lesser-known ones (e.g., discounts, child care, elder-care services, etc.).*

- Enhance messaging and resources awareness through orientations and annual re-orientations, with subsequent detailed exposure education regarding resources post-orientation (C, R, SR). *Rationale: There is a "both/and" component to this recommendation. While post-orientation education regarding services may be the most beneficial in terms of sustained knowledge of those resources and services, some constituents need services early in their entry into Vanderbilt and benefit from at least cursory visual/auditory/online exposure to available resources during orientation. Given the volume of material and the natural dispersion of attention during initial hire/enrollment, messaging solely during orientation is not sufficient. Such consistent normalization of onboarding also would benefit stigma reduction.*

- Increase the network of on-campus and off-campus providers that accept VU insurance and SHIP for individuals seeking regular, ongoing appointments (R). *Rationale: Throughout our town halls and listening sessions, the quality of the providers within the VUMC network and off campus was very highly rated. That said, there was a consistent theme that there may be an inadequate pool of providers and/or appointments available to meet the needs of the university population, which would be consistent with published local and national data regarding mental health resources. Community preference would be for a greater but nonexclusive focus on more on-campus options.*

- Continue focus on reducing abuse of alcohol and drugs, building on previous campus initiatives (R, C).
  - Continue implementing the recommendations from the Faculty Senate Student Alcohol and Drug Task Force reports on responsible student drinking (2012) and prescription drug use (2013), and continue to assess the effectiveness of that implementation.
  - As part of the implementation of the committee's recommendations, there should be a sub-committee composed of students, staff, faculty, and administrators tasked to assess progress on addressing recommendation #1.
  - Promote the coordination at least of messaging, if not of programming, between Work-Life Connections/EAP and the Dean of Students and Dean of The Ingram Commons offices regarding responsible alcohol use and the avoidance of misuse of prescription medications (particularly opioids and stimulants).
  - Establish deliberate connections between the existing Vanderbilt Center for Addiction Research and the proposed Institute for Mental Health and Wellbeing Research (See Section 5).

Rationale: Many of the recommendations from the initial task force reports have been implemented. Vanderbilt Recovery Services is the only collegiate recovery program in the state of Tennessee and continues to offer recovery housing on campus. The Dean of Students, Dean of The Ingram Commons, and their partners engage in robust and comprehensive alcohol and other drug prevention programming and awareness education throughout the year. The committee and the Dean of Students recognize the risk factors that alcohol and other drug use contribute to intimate partner violence victimization and sexual assault perpetration, and the corresponding impact of these traumatic experiences on mental health. The committee commends the university on its use of EverFi Haven and Haven Plus modules for educating all students, as well as the implementation of the Project Safe Center and the Green Dots program for bystander intervention training. The committee also recognizes the concerning continuing national trends in alcohol and other drug use (particularly the misuse of opioids and the use of stimulants taken or dispensed without a prescription for neuroenhancement or other purposes not intended by the prescribing provider).

- Broaden the range of services offered to people experiencing trauma (R, C, SR). *Rationale: There is clear evidence that the experience of trauma has a profound effect on one's mental health. Vanderbilt proactively has addressed this concern by providing resources for persons (particularly students) experiencing sexual trauma, including Project Safe, EAD, and other resources; however, the university should continue to assess whether the resources currently present are adequate to serve persons experiencing other forms of trauma and meet the needs of staff and faculty who experience trauma.*

- Create a campuswide plan for proactive, emotional support after local, regional, national and international tragedies that affect the university and its constituents (R). *Rationale: Work-Life Connections/EAP provides critical incident stress management interventions for faculty and staff designed to promote an environment of safety, calm, connectedness, self-efficacy, empowerment, and hope after a critical incident. As many tragedies create the need for psychological first aid for all Vanderbilt community members, a plan for the entire community coordinated between the Dean of Students and WLC/EAP would be beneficial and ensure consistent messaging and support. Ideally, such a plan would include both an opportunity for individuals/groups to request an intervention and a proactive outreach component.*

- Develop standard procedures for alerting all Vanderbilt community members when a student, staff member, or faculty member has died (R, C). *Rationale: While feelings of sorrow or grief can be inevitable with the death of a member of the Vanderbilt community, acknowledging their passing may benefit the wellbeing of the community and the individuals that reside within it by honoring the fact that they were a valued member of Vanderbilt. Acknowledging the impact of the death of a co-worker can make sure that everyone feels safe expressing feelings openly.*

- Broaden the Student of Concern form to include all VU community members and promote utilization throughout campus among students, faculty, and staff (R, C). *Rationale: The Student of Concern form provides all university community members an opportunity to make appropriate leaders aware of students for whom they have concern about their mental health. Developing a similar system for the remainder of the university community may be beneficial.*

- Investigate alternative modes of access and service, including mobile phone apps and video chat (R). *Rationale: As a residential campus, our community is a 24/7 operation, and service access should reflect that reality. Many companies use mobile video channels (e.g., FaceTime, Skype) in order to add visual components to services, both after-hours and as routine follow-up.*

2. FOR STUDENTS

- Develop a culture of transparency around the interrelated but distinct missions of the PCC/UCC, Center for Student Wellbeing, and Student Health Services as regards mental health (R, C). *Rationale: The persons who use each of the service areas uniformly spoke to the high quality of providers there; however, through our town halls, there appeared at times to be some confusion of the distinct purposes of each resource. Enhanced clarity, distinction of purpose, and focus on interrelatedness might afford more appropriate, effective utilization of each resource.*

- Increase number and diversity of well-trained and culturally competent providers in the PCC/UCC, including staff for targeted groups such as graduate/professional, international, racial/ethnic and sexual minorities (R, C). *Rationale: See first recommendation under "for all community members." This recommendation may have particular importance for our students, particularly those for whom enrolling at Vanderbilt is also their first time entering the United States.*

- Change the name of the PCC/UCC to reflect the continuum of care (C). *Rationale: while in an ideal world there would be no stigma to having the word "counseling" in the title of the student mental health center, at present the title of the center may not accurately reflect the continuum of services provided and may be stigma-enhancing.*

- Broaden flexibility of services at the PCC/UCC, including extended hours and satellite locations (S, R). *Rationale: The current location of the PCC/UCC does not promote optimal accessibility to the full student population, and the hours of the PCC/UCC do not fully align with the needs of the student population. The committee appreciates the university's strategic analysis of the current services provided by the PCC/UCC and requests that the university incorporate this recommendation into that analysis.*

- Relocate PCC and integrate with SHC and CSW to facilitate a system of care (S, R). *Rationale: Promoting a system of care and integrating all health services, including mental and physical, can enhance the recognition of the importance of overall health and wellbeing. Ideally, this integration would be part of the development of a larger physical "Wellness Hub" on campus (see later recommendation).*

- Increase network of off-campus providers that accept SHIP and provide transportation options for accessing off-campus providers when off-campus services are required (R). *Rationale: Given regional and local deficiencies in available, trained providers and other considerations, Vanderbilt has a need at times to access off-campus mental-health resources; however, distance, lack of transportation, and cost can be barriers for students accessing such resources. Providing transportation vouchers and/or shuttle services can mitigate distance and transportation barriers. Successful negotiations regarding SHIP acceptance and effective ombudsperson counseling (see previous recommendation) can help address affordability and student understanding of personal, out-of-pocket costs.*

- Increase support for and strengthen relationships with Vanderbilt's student-led mental health education and support organizations, both LEAPS and Active Minds (R, C, SR). *Rationale: The stated goals of these organizations are to empower students to change the perception about mental health on college campuses (Active Minds) and to reduce stigma associated with seeking help (LEAPS). Successful partnerships with these student-focused organizations to enact campuswide stigma change naturally would be of benefit to the broader Vanderbilt community.*

- Hire case managers to follow up and check in with students of concern (R). *Rationale: A critical component of the continuum of care is to provide follow-up care for students after crises and/or counseling sessions. Research studies have shown that follow-up efforts are effective and critical in increasing adherence to treatment protocols and identifying needs for additional intervention before crisis point occurs. Further, follow-up services can occur virtually or via scheduled telephone calls and is therefore cost-effective.*

- Promote the Student of Concern reporting form to all VU community members (R, C). *Rationale: Although there is a "Student of Concern Form" located on the Center for Student Wellbeing website for all community members to be able to report when a student is exhibiting behaviors that are of concern in relation to their personal, physical, or emotional wellbeing, its existence does not seem to be widely known by the university population. The form is not designed to be an emergency response notification process and, therefore, can and should be submitted in addition to using the identified distress interventions for imminent threats and urgent matters outlined elsewhere on the CSW website.*

- Provide faculty, staff, and students incentives to innovate new ways to promote health and wellness in the classroom (R, D, C). *Rationale: The committee learned of some classroom wellbeing innovations across campus, such as incorporating mindfulness moments or check-ins at the beginning of class. A small granting program or other incentive to promote other innovative ideas to integrate wellbeing into the classroom setting may aid overall student mental health and provide an avenue for scholarship in this area.*

- Have after-hours, in-person, nonemergency department support options for students experiencing mental health distress (S, R, C). *Rationale: During normal business and school hours, such support already is available; however, it is distressing to VUPD and the Community Service Officers that their only current after-hours option for students in crisis is to transport them by VUPD vehicle to a busy emergency room. While there are times when that option is the best one, there are many more times when a de-escalated intervention would be more beneficial to the student and less distressing to the intervening officer.*

- Establish "stress-free zones" for students that include relaxation pods, games, and therapy animals (R, C). *Rationale: The university has undertaken a number of initiatives along this line including Stress Fest, certain activities at the Recreation and Wellness Center during Final Exam time, etc. We encourage further enhancement of this initiative including the examination of the installation of relaxation pods at strategic points on campus and possible introduction of pet therapy for students.*

- Offer a specific international student orientation, and target awareness efforts for international students who may experience cultural differences, adjustment, and adaptation (R, C). *Rationale: International students of all levels (undergraduate, graduate, and professional), particularly those entering the U.S. for the first time, may have specific needs not experienced by persons already acculturated into the American social and health systems. Community-building activities and targeted awareness efforts regarding resources for such students may help enhance their sense of mental wellbeing.*

- Develop ways to address the financial stresses of graduate and professional students and their impact on those students' mental health (R, S, C). *Rationale: While the undergraduate students have the One Vanderbilt program, such a program does not exist for graduate and professional students. Additionally, there currently is not on-campus housing for graduate and professional students and there is a dearth of affordable near-campus housing. The combination of school-related debt and cost-of-living issues can*

have a significant negative impact on the mental health of graduate/professional students, and the university is encouraged actively to address these issues. While there are differences to the financial stresses faced by graduate and professional students, both have stressors that should be considered.

- Increase social and community-building events for graduate and professional students to promote healthy relationships and a sense of inclusion (R, C). *Rationale: There is good evidence that healthy relationships promote the mental health and wellbeing of the individuals in relationship with each other, whether those healthy relationships are work or non-work related. By increasing community-building events for graduate and professional students, particularly graduate students where isolation may be more readily experienced, the university and its schools can promote wellbeing by encouraging connection. The impact of such events could be enhanced if they were both intra- and inter-school.*

- Recognize the unique needs of students with spouses and/or children and ensure adequate resources (R). *Rationale: Vanderbilt has numerous students who have significant others and many of whom have children, particularly at the graduate and professional school levels. In assessing mental health resources, the university should pay attention to the unique needs of this population.*

3. FOR FACULTY AND STAFF

- Increase awareness about Work-Life Connections/EAP services, including awareness of the breadth of services offered, such as counseling around grief, divorce, and other losses, as well as life transitions and financial wellbeing (R). *Rationale: Uniformly, those with whom the committee spoke were highly complimentary of the breadth and quality of services provided by WLC/EAP. However, there was a large portion of the community, particularly among staff, that was not aware of the resources available to them through the WLC/EAP. There is a significant need for more effective communication to both staff and faculty of the resource offerings. This would include better awareness by area department and administrative leaders of the critical incident review services available through WLC/EAP for debriefing adverse, challenging, and/or tragic events.*

- Consider relocating EAP (S). *Rationale: The current location and space for WLC/EAP are not as welcoming and comfortable as would be preferred for this program. If the proposed physical wellness hub is developed over time, it would be important to consider integrating WLC/EAP into that space. Alternatively, other interim options for improving the convenience and appearance could be considered.*

- Assess current mental health services for faculty and staff and if necessary subsidize or offer discounted rates for VUMC mental health care for employees (R). *Rationale: Efforts need to be undertaken to ensure that our insurance plans sufficiently cover mental health services.*

- Incorporate sensitivity training on mental health, wellbeing, and diversity through faculty and staff orientation and re-orientation (C, SR). *Rationale: Onboarding is a prime time to make a statement regarding what a university most values; incorporating training regarding wellbeing highlights its importance to Vanderbilt. Similarly, when and where re-orientation or ongoing orientation exists, these are additional opportunities to reiterate a culture of wellbeing.*

- Increase staff reward programs and appreciation events, including incentivizing health and wellness best practices (R). *Rationale: There is a need to identify strategies to encourage faculty and staff to use health and wellness facilities, awards and recognitions may be an avenue to achieve this goal.*

- Broaden use of Kognito-At-Risk modules, Title IX and other resources and identify ways to ensure that all faculty complete training (C, SR). *Rationale: Given that Vanderbilt has invested substantially in the Kognito training system, it would be useful to evaluate the extent of Kognito training among campus constituencies and increase Kognito participation where possible (but especially among key stakeholders such as resident advisers, faculty heads of house, deans, Student Affairs staff, Public Safety, and other gatekeeping staff). This training could also include EAP's toolkit on resilience.*

- Expand current health and wellness support systems and efforts by having designated trained case managers/health liaisons on-site, but not directly connected to the units (i.e., this is a revamping of the current Wellness Commodores) (R). *Rationale: Identifying and training health and wellness support staff can address issues of access as these individuals can be first responders and serve as "crisis touchpoints."*

- Provide training for administrators, faculty, and staff on effective ways to engage in difficult conversations, e.g., diversity, mental health, mental illness, and other sensitive topics that affect the wellbeing of others (R, C). *Rationale: To encourage open dialogue about diversity, mental health, and mental illness, there is a need for cultural competence training, modeling dialogue approaches and strategies, and cultivating a psychologically safe space for our community to engage in dialogues about sensitive, difficult topics in a culture of civility.*

- Ensure that all services and programs are available to all employees, regardless of work hours (C, SR). *Rationale: Several members of the Vanderbilt community work late-evening and night shift and are often unable to access services or attend training during regular work hours of the university.*

- Increase awareness of professional development for staff, and expand opportunities for educational advancement to prepare staff to achieve career and professional goals (e.g., expand career counseling services to address staff needs) (R). *Rationale: Many staff desire to advance their education or receive training for promotion, yet many are unaware of the career counseling and other professional development resources available to them.*

- Provide additional training and support to ensure that faculty and staff have the skills, knowledge and capacity to identify and respond to crisis, including procedures for referral (C, R). *Rationale: In addition to on-site case managers, there is a need for faculty and staff training to identify and address crises, which may entail referring individuals to case managers as first responders to serve as "crisis touchpoints."*

- Have more events and initiatives in which faculty and staff can observe administrators and supervisors modeling behaviors that reflect a commitment to health and wellbeing, such as walking meetings, fitness/nutrition activities, and inclusion of moments of mindfulness and meditation during faculty and staff meetings. (C). *Rationale: Embedding wellness check-in as a standard procedure has a way of normalizing conversations about mental health and wellbeing.*

- Establish faculty and staff affinity groups (R, C). *Rationale: While opportunities to form clubs are readily available for students, there is no formal mechanism to organize such groups for faculty and staff. Research shows that human contact and social bonding with others who have similar lived experiences can foster a sense of support, which in turn can enhance mental health and wellbeing.*

- Establish a faculty lounge or other common space for social gatherings (R, C). *Rationale: A designated space where social gatherings can occur will encourage social interactions and may serve as a meeting space for affinity groups.*

- Consider flexible work schedule options in addition to recent winter break closure and flex summer hours (C). *Rationale: The benefits of flexible work policies are numerous including sending employees messages that an institution is aware of work-life demands. Research has shown that flexible hours create positive work culture, reduce conflicts between traditional work hours and personal needs, and increase work satisfaction, morale, commitment, and productivity.*

4. TO CREATE A CULTURE THAT SUPPORTS MENTAL WELLBEING

- Establish a chief wellness officer who is responsible for improving the overall health and wellbeing of our most valuable asset—our students, staff, and faculty—and for developing an inclusive process to shape and define the vision for Vanderbilt health and wellness initiatives (R, C). *Rationale: The Office of Health and Wellness has responsibility for the staff and faculty, while the various deans of students have responsibility for the undergraduate, graduate and professional students. A coordinating and visionary CWO would promote alignment (and integration as appropriate) across the various constituents.*

- Develop a wellness "hub" on campus. This area or space (to be determined) can be characterized as a comprehensive health "hub" to centralize all resources in one place—in addition to satellite options—and would include 24-hour access and an aggregating of all mental health services and programs (SHC, PCC/UCC, CSW, EAP, HR, VUPD, Project Safe, OUCRL, and VRS, among others) (C, D). *Rationale: There is a trend toward unified, integrated, and physically proximate MHW services at academic institutions identified as leaders in this area. It is common for one facility or an integrated set of physically proximate facilities to house student recreation, student health services, the psychological counseling center, and related offices. Typically, satellite services are offered as well.*

- Recognize and develop programming to combat the inherent tension between an environment that appropriately celebrates and encourages high achievement and the concomitant stigmas that may arise that may discourage individuals from engaging in conversations about mental health and mental illness (C). *Rationale: In any academic environment, it is natural for members of that community to face internal (and potentially external) pressure to strive for high achievement and even perfectionism. While high achievement is to be encouraged and celebrated, it also runs the risk of being stress-inducing and can potentially create barriers to seeking mental health care. For example, celebrating that Vanderbilt has the "happiest students" causes some students to wonder if they are outliers and possibly inhibits them from trying to better understand their sadness. Vanderbilt needs to create a culture that celebrates and desires high achievement, yet does not encourage or promote an environment of perfectionism.*

- Foster a climate of psychological safety where individuals feel safe to take an interpersonal risk—to disclose, discuss, and seek help for issues related to mental health and wellbeing (C, SR, D). *Rationale: To encourage open dialogue about mental health and mental illness, there is a need to cultivate the belief that it is safe to take an interpersonal risk without punishment or ridicule. Psychological safety is foundational to fostering richer conversations regarding health and wellbeing, and in fact, organizational research on compassion practices and compassion supports the profound benefits of psychological safety for mental health and wellbeing.*

- Identify individuals within the Vanderbilt community who have successfully faced mental illness, addiction, or mental health challenges and who are comfortable sharing their experiences and establish appropriate forums and venues for those individuals to share their experiences on a continuing basis (R, C, SR). *Rationale: A recurring theme in the research on reducing public stigma is that "contact works." This effort will require finding members of the Vanderbilt community willing to participate and also determining the most appropriate forum for engaging the contact (e.g., during student orientation, faculty lectures, poster campaigns, etc.).*

- Integrate mental health discussions into the regular academic fabric of the university by increasing faculty, staff, and student participation in gatekeeper (e.g., Kognito) training (C, R, SR). *Rationale: Another aspect of stigma is "institutional stigma" which refers to an organization's policies or culture of negative attitudes or beliefs about mental health and mental illness. Vanderbilt should provide community members with training in order to enable more constituents to feel confident about knowing how to help students, faculty, and staff who may be experiencing mental health challenges. A key component of this is increasing participation in gatekeeper training (e.g., Kognito).*

- Invite voluntary discussion of health and wellbeing as part of the core of regular academic advising in order to integrate conversation about wellbeing into the regular academic fabric of the university (C, SR). *Rationale: Making wellbeing a regular (but voluntary for the student or employee) component of periodic academic advising and job performance review may normalize mental health and all aspects of stigma, including self-, public, and institutional stigma.*

- Implement a public messaging campaign to correct common misperceptions and stigma around utilization of services (C, SR). *Rationale: Since the root of stigma is the idea that those beliefs are not correct, this recommendation would rectify the most common misperceptions held by members of the campus community, namely, self-stigma (e.g., when individuals embrace and internalize negative attitudes and beliefs held about people with mental health challenges, one may underestimate mental health care services use among our colleagues, and systematically overestimate negative views that the community may have about colleagues use of mental health services.*

- Implement active, concerted efforts to reduce stigma and include sensitivity and stigma reduction training and mentorship during orientation and annual re-orientation events (C, SR) *Rationale: A recurring theme in the research on reducing public stigma is that "contact works." That is, individual contact with people who have lived experience with mental health challenges is one of the most consistently proven ways to reduce the public stigma associated with mental illness.*

- Develop and implement direct and indirect measurements of stigma on campus to assess the impact of stigma-reduction initiatives over time (D, SR). *Rationale: Currently, the university has no measure of the degree of mental health stigma on campus. The stigma subcommittee's literature review highlighted the lack of evidence demonstrating the effectiveness of stigma reduction community-wide, including assessing the effectiveness of the GO THERE campaign. If successful in reducing stigma and measuring that improvement, Vanderbilt could make significant contribution to this area of study and become a model for other universities.*

- Conduct tailored, targeted assessments to determine the extent to which specific types of messages would be effective at reducing stigma in key groups within Vanderbilt and develop a deployment strategy that includes duration and scope of the communications plan (D, C, SR). *Rationale: A recur-*

ring theme in the research on reducing public stigma—the false attitudes and beliefs held by the public about people with mental health challenges—is that the most effective messages are finely tailored to the targeted population. There is not a "one-size" that fits all. To develop, design, and implement messaging that will affect all members of the community may require consulting with communications firms who have the expertise needed to identify effectively tailored messages.

- Foster a supportive educational and workplace environment for neurodivergent individuals that increases disclosure and provides assistance and support, including training in awareness of neurodivergence and its implications for life and work, as well as providing mentoring and support for individuals who choose to disclose their neurodiversity. *Rationale: An environment that embraces neurodiversity as differential ability, not disability, can be demonstrated not only through training and awareness but also by making a formal commitment to neurodiversity through hiring and accommodations. These efforts are ways to show that the university values inclusion, equity, and diversity in spirit and in actions.*

- Recognize the inextricable connection between physical and mental health (C, SR). *Rationale: While we often discuss physical and mental health as separate issues, they are intimately linked. According to the World Health Organization, "without mental health there can be no true physical health" (Kolappa, Henderson, and Kishore, 2013, pg. 3). A plethora of studies has demonstrated, with strong evidence, the bidirectional relationship between depression and anxiety and physical health outcomes.*

- Recognize and foster the deep connection between spirituality and mental health (C, SR, D). *Rationale: Similar to linkages between mental and physical health, spirituality also has been associated with improved mental and physical health outcomes. For example, practices such as prayer, meditation, spiritual music and social media exposure are coping strategies that predict positive outlook on life or optimism, and have been shown to reduce the intensity of chronic pain. The processes through which spirituality influences mental health outcomes have not been sufficiently studied and warrant further examination. Connecting spiritual, mental, and physical health and wellbeing will position Vanderbilt to pave the way for research studies using a holistic framework in the production of new knowledge regarding the contribution of spirituality to mental health, mental illness, wellbeing, and recovery.*

- Build additional mental health and wellbeing components into Go for the Gold and parallel programs (R). *Rationale: These programs provide another avenue to expand and integrate mental health into the fabric of the university.*

- Establish a team to conduct ongoing evaluations of progress and disseminate findings to all members, possibly through an annual report card (C). *Rationale: Given the magnitude of this endeavor, this team can work collaboratively with the implementation team and evaluators of the Center for Mental Health and Wellbeing to ensure that the recommendations are not only achieved but are shared with members of the community, in keeping with the spirit of transparency.*

5. TO POSITION VANDERBILT AS A LEADER IN MENTAL HEALTH RESEARCH AND DISCOVERY

- Develop a new model for promoting research that truly encompasses both mental health and mental illness through the establishment of an Institute for Mental Health and Wellbeing (IMHWB). The IMHWB, in collaboration with the existing Vanderbilt Brain Institute, can serve several functions, including: 1) foster collaborative and trans-institutional research in mental health, wellbeing, and illness, with specific emphasis on understanding and identifying ways to reduce and eliminate stigma; 2) serve as a catalyst to integrate research efforts in mental health/illness with existing centers and institutes, namely the Vanderbilt Brain Institute, Vanderbilt Kennedy Center, Center for AIDS Research, Center for Addiction Research, and potential new centers, (e.g., a Center for Precision Medicine for Mental Illness (see Appendix E); and 3) collectively, advance research and discovery in mental health, mental illness, and wellbeing through the integration of neuroscience and bench molecular, cellular, system-based research, with social and behavioral science and the humanities (D). *Rationale: Scientific inquiries in mental health and mental illness have historically been carried out separately. While several institutions and centers are sprouting across the nation that target either mental illnesses or positive psychology/MHW, there are none that truly encompass both mental health and mental illness. Further, there is significant need for more rigorous discovery in the realm of stigma and health. Launching this proposed integrative model could be Vanderbilt's "moonshot" on mental health research.*

- Invest in research on mental wellbeing, including in regards to developing effective means to educate, rationalize, and change mindsets about mental health (D, SR). *Rationale: This further confirms ways to ensure that mental health and wellbeing are integrated throughout the fabric of our community.*

- Launch a neurodiversity initiative and expand this area of research to encompass mood disorder and precision medicine to raise awareness, reduce stigma, and support Vanderbilt's becoming a leading institution with regard to these areas of research (C, SR). *Rationale: There is widespread agreement, both within the subcommittee and across Vanderbilt's scientific community, that Vanderbilt should further invest in and build on its current research strengths, namely in basic neuroscience, autism, drug/alcohol addiction, mood disorders, and precision medicine. Vanderbilt also should continue to foster the research centers dedicated to the study and treatment of mental disorders, namely the VCNDD, the Drug Addiction center, the Vanderbilt Kennedy Center and the Vanderbilt Genetics Institute.*

D. CLOSING

Implementation of these recommendations will no doubt pave the way for a healthier, safer, and ultimately more vibrant and successful community at Vanderbilt. Some recommendations could be implemented relatively soon; others, such as planning a "Wellness Hub" and developing the concept of a broader, integrated research institute/center(s) for mental illness and wellbeing, likely will need to be part of an ongoing, multiyear effort. We firmly believe that the addition of a chief wellness officer whose focus is assessing and prioritizing the implementation of this strategic plan and whose position in the administration is similar to that of the chief diversity officer, would send a strong message to the Vanderbilt community regarding the university's commitment to wellbeing. We believe that this strategic plan, as a whole, outlines a path that will position Vanderbilt as a national and international leader in groundbreaking research and in fostering community culture that promotes the success of all. The committee is confident in the administration's commitment and dedication to the wellbeing of all who work, live, and learn on this campus. It is our hope that such dedication will lead to a robust implementation plan.

ACKNOWLEDGEMENTS AND THANKS

The Mental Health and Wellbeing Strategic Planning Committee greatly appreciates the time and energy that the Vanderbilt community has given to the development of this report through town halls, listening sessions, suggestion boxes, rollout forums, and personal meetings. The committee co-chairs in particular want to thank all the members of the committee who have given so much of their time and energy along this journey. While it has taken us a little over a year to produce this report and to engage all of you, that is only the beginning of our collective journey to continually strive for the culture of openness that fosters success for all at Vanderbilt. Yes, the task was daunting and challenging, but also very rewarding. We must not stray from our focus on optimal communal and individual wellbeing for all in our community, both those with and without mental illness.

APPENDICES

APPENDIX A – SUBCOMMITTEE REPORT: ASSESSMENT OF CAMPUS RESOURCES

Subcommittee Members: G.L. Black (Chair), Gilbert Gonzalez, Joni Hersch, Megan Ichinose, Madison Maderious, Monique Robinson-Nichols, Mavis Schorn

Charge

The Assessment of Campus Resources Subcommittee (ACRS) charge is as follows: To assess campus resources for faculty, staff, and students and determine current strengths and areas for growth.

Process

To assess current campus resources related to the mental health and wellbeing of Vanderbilt University's faculty, staff, and students, the ACRS held a number of individual meetings with constituents and listening sessions with relevant offices, departments, providers, and organizations. These meetings and listening sessions were in addition to those conducted by the Strategic Committee as a whole. The purpose of these meetings and listening sessions was two-fold: 1) to gather information about mental health services, staffing, facilities, funding, prevention efforts, educational initiatives, utilization rates, satisfaction rates, and potential gaps in resources, and 2) to solicit feedback and ideas for improvements and innovations that could enhance or revise our current systems and structures to make Vanderbilt a leader in supporting the mental health and wellbeing of its faculty, staff, and students. In addition, the ACRS also reviewed all publicly available information about mental health and wellbeing at Vanderbilt as well as targeted information requested from offices, departments, providers, and organizations.

The ACRS met with or gathered information from the following:

- Psychological and Counseling Center (PCC)
- Student Health Center (SHC)
- Center for Student Wellbeing (CSW)
- Recreation and Wellness Center
- University Staff Advisory Council
- Work/Life Connections–Employee Assistance Program (EAP)
- Vanderbilt Recovery Support
- Diversity, Inclusion and Community Committee
- Office of the Dean of Students
- Office of Housing and Residential Education
- Vanderbilt Student Government
- Graduate Student Council
- Student government organizations from the schools
- Student services deans/representatives from the graduate and professional schools
- Bishop Joseph Johnson Black Cultural Center
- Margaret Cuninggim Women's Center
- Office of LGBTQI Life
- Office of the University Chaplain and Religious Life
- Interfaith Council
- Inclusion Initiatives and Cultural Competence
- International Student and Scholar Services
- Human Resources
- The Martha Rivers Ingram Commons
- Vanderbilt Athletics
- Office of Postdoctoral Affairs
- Interfraternity, Panhellenic, and National Pan-Hellenic Councils
- Multicultural Leadership Council
- Mental health and wellness–focused student organizations (e.g., LEAPS, Active Minds, and others)

Summary of Feedback/Findings

- Generally, the information and feedback gathered by the ACRS suggests that Vanderbilt has a significant number of resources devoted to mental health and wellbeing. Significant positive feedback, particularly about crisis response and management efforts, was provided by multiple constituencies. However, as explained in more detail below, numerous constituencies expressed concerns about the capacity of the mental health service providers on campus. On the whole, rather than identifying large gaps in the current systems and structures, most feedback focused on the expansion, recalibration, and/or systematization of existing initiatives and resources.

- There is confusion across constituencies about the scope of services provided by the relevant direct service providers (e.g., PCC, SHC, CSW, EAP, etc.). Feedback suggests there is a lack of clarity and transparency around issues such as type of care and services provided, session number limitations, referrals to community providers, and health insurance coverage. In addition, feedback suggests that there is not an adequate case management system in place for students and that coordination and integration of resources and care may therefore be lacking. Because of this, the leadership of offices and departments outside of direct mental health service providers have noted increasing demands on their staffs to assist with mental health crises and coordinating follow-up care in addition to their typical work. There also does not appear to be a well-developed network of community providers with an ongoing relationship with Vanderbilt to which to refer students, faculty, and staff, particularly those within the geographic constraints of available student transportation.

- Significant student feedback focused on the difficulties obtaining appointments at the PCC, particularly with medication providers, and the length of time required to complete the multistep intake process electronically and via phone. Students noted the lack of an in-person intake option, thus identifying an area of growth via a multiple modality intake process.

- Students voiced concerns about the process and timing for receiving formal accommodations as well as about excuses for absences, both medical excuses due to provision of care by a provider and excuses for mental or physical health issues that may not result in care. Faculty members have also voiced concerns about navigating excuses for student absences and the formal accommodations process for students.

- Feedback suggests that further exploration of the mind/body connection and integration of physical health and mental health efforts and programs is necessary, and that the Vanderbilt system should provide comprehensive wellbeing programming through care and services for those diagnosed with mental illness or experiencing mental and emotional distress. Feedback indicated the desire for an overall environment of wellbeing (physical, emotional, spiritual, financial, sexual, etc.) given that such distress often exists on a spectrum of severity, and the improvement of health and wellness across the Vanderbilt community facilitates preventative and reactionary care, irrespective of diagnosis.

- While positive feedback about existing trainings to identify and support students in distress, such as the Kognito At-Risk modules, was evident across constituencies, feedback also suggests that there is a general lack of awareness of these opportunities, particularly among faculty and staff.

- Students noted perceived challenges and pressure in the campus culture related to high achievement expectations, over-involvement, cultural involvement, perfectionism, leadership and entrepreneurship. Certain of these challenges also linked to feedback about a perceived lack of time to utilize resource and support options. For example, 39.1 percent of respondents to the Graduate Student Perspectives Survey conducted by the Graduate Student Council indicated that they were "too busy in general" to access mental health services. Students did report significant interest in health and wellbeing issues, and indicated that better integration and coordination of student organizations in this area would be helpful, perhaps through an umbrella organization.

- With regard to facilities, feedback suggests a potential need for the centralization of mental health and wellness-related services in one area of the campus to promote coordination and integration of care, as well as the provision of programs and services in satellite locations across campus to enhance efficiency and accessibility for different constituencies. Feedback also suggests there may be a need for more opportunities to seek services and participate in programs outside of regular business hours. Faculty, staff, and graduate/professional students have expressed concern about sharing spaces, including medical and recreation facilities, with undergraduate students and, to some extent, with one another. In addition, graduate/professional students, in particular, have expressed interest in having more targeted and tailored resources for their population, including on-campus housing. Continued efforts to modernize facilities, particularly the SHC and EAP, are also needed.

- Most resources appear to be operating at near or total capacity, and in some instances, resources are experiencing backlogs or are unable to meet the demand for services or programs. For example, PCC reported receipt of 1,188 new requests for services for the period of August through November 2016 and a 27 percent increase in unique clients during the same period as compared to 2015. In addition, Health and Wellness reported a 25 percent increase in utilization of the Faculty and Physician Wellness Program and a 28 percent increase in general utilization of EAP services from 2014–15 to 2015–16. When this occurs, there appears to be a shift of resources from proactive prevention and health promotion efforts to alleviate the burden associated with the demands of care. Another response to excess demand includes referrals to community health care providers, whereby faculty, staff, and students are required to navigate, secure, and pay for mental health services on their own. Feedback suggests that staffing models, particularly at the PCC and CSW, may need further review. Several providers have also noted the difficulty attracting, hiring, and retaining a diverse staff, which feedback suggests is critical to better serving the diverse faculty, staff, and student populations at Vanderbilt, particularly with regard to underlying barriers like trust and stigma to seeking and maintaining mental health services. Constituents across the board noted the importance of having both a diverse and representative staff as well as a culturally competent staff.

- Aside from EAP, there are limited resources available for faculty and staff, particularly when compared with resources available for students. Some programs that are available, such as Aetna's behavioral health program for enhanced case management for acute or chronic illnesses, appear to be underutilized. Feedback suggests that faculty and staff may not be actively considering or using certain benefits because communications are generally centered around open enrollment rather than ongoing through multiple media.

- While Human Resources provides a number of community-building opportunities each year, feedback suggests that more transparency, support, and communication from management would be

helpful in making staff, particularly nonexempt staff, feel comfortable attending events and availing themselves of resources. Staff feedback suggests that modeling by all levels of management would be significant in promoting health and wellbeing and decreasing stigma.

• Students and staff voiced concerns about staff retention, particularly at the coordinator level, as it relates to competitive pay, moving and living expenses, professional development, and opportunities for advancement.

• Two major reports have been written on campus regarding these issues among the student population: "Strategies to Promote Responsible Student Drinking at Vanderbilt" Final Report (April 2012) and "Recommendations for Prescription Drug Use" Final Report (April 2013), both developed by the Faculty Senate Student Alcohol and Drug Task Force. The CSPCMHW reviewed the recommendations of those two reports, progress by the university in implementing said recommendations, and national trends in substance use since the publication of those reports. The use of illicit substances and the nonmedical use of prescription-type substances is a major concern on university campuses, as is nonresponsible drinking; all three of these both affect and are affected by poor mental health.

  ◉ Full-time college students remain more likely to be current (past month) alcohol drinkers than others their age (59.8% versus 51.5% respectively), more likely to engage in past month binge drinking (37.9% vs. 33.5%). [SAMHSA, CBHSQ Report 081616]. A separate study has noted that the higher rates of alcohol use among college students emerged only after high school; during high school, alcohol use was lower among those who later attended college [Monitoring the Future, National Survey on Drug Use 1975–2016]. For the last decade, the perception among full-time college students of marijuana availability (i.e., believed they could easily obtain it) has remained steady at 80% while the same perception of cocaine or crack availability has fallen significantly (39% down to 25% and 28% down to 17%, respectively). Full-time college students were more likely than other age-matched young adults to believe they could easily obtain marijuana or LSD. Over that same decade, the perception of great risk from using marijuana once or twice per week fell from 37% to 18%, while the same perception for trying heroin once or twice rose slightly (75% to 77%), using cocaine once a month fell only slightly (60% to 59%), and for trying LSD once or twice fell significantly (61% to 50%).

  ◉ As for the most likely month for using various substances for the first time, full-time college students were significantly more likely to initiate alcohol use in June, July, September or December; marijuana in June or July; nonmedical use of prescription-type stimulants in April, November, and December; and cocaine and nonmedical use of prescription-type pain relievers in December (SAMHSA, The CBHSQ Report from August 27, 2015).

APPENDIX B – SUBCOMMITTEE REPORT: EXEMPLARY PRACTICES

Subcommittee Members: Lyn Bingham (Co-Chair), Kitt Carpenter (Co-Chair), Anita Wilhelm (Co-Chair), Lizzie Hale, Graham Reside, Kiley Stokes, Tim Vogus, August Washington

This document summarizes the activities of the Exemplary Practices Subcommittee. As we interpret the charge to our subcommittee, we are to catalog/inventory the MHW activities, offices, and infrastructure of our competitors, peers, and aspirational institutions to identify deficits at Vanderbilt as well as exemplary practices. We supplemented the focus on educational institutions with exploration of corporations (i.e., private sector) and nonprofit organizations (e.g., Specialisterne) recognized for innovative practices in mental health and wellbeing.

Since the committee began in fall 2016, Exemplary Practices Subcommittee members have:

1. Met regularly in person or by email to assign the work of the subcommittee, provide feedback to each other, and strategically plan our activities through fall 2017. Broadly we divided the work of the sub-committee in the following manner: neurodiversity topics at academic and nonacademic institutions [Bingham]; innovative examples and practices from the private sector [Vogus]; exemplary practices for faculty and staff MHW at academic institutions [Carpenter, Stokes, Wilhelm]; exemplary practices for student MHW at academic institutions [Hale, Reside]; and lessons from peer PDs [Washington].

2. Actively participated in the various committee-related town halls, listening sessions, alumni board meeting, and Chancellor's events (e.g., Kay Redfield Jamison lecture/dinner). Attended the University of Connecticut President's Symposium on Mental Health [Hale].

3. Performed an inventory of MHW resources and activities at numerous peer institutions based on detailed website searches. The peer set included other Southern privates (e.g., Emory University, Duke University, Rice University, Washington University in St. Louis), other non-Southern privates (e.g., Northwestern University, Johns Hopkins University), aspirational schools (e.g., Harvard University, Princeton University, Stanford University, Yale University), and "Public Ivies" (e.g., University of California, Berkeley, University of Michigan–Ann Arbor, and University of Virginia). Given the unique composition of our subcommittee, we also gathered data on a cross-section of campus departments of public safety (specifically, Northwestern University, Rice University, Tennessee State University, University of Tennessee, Knoxville, and the Tennessee Association of Chiefs of Police University Committee) and their practices regarding mental health and wellbeing regarding employees.

4. Investigated a set of corporate and nonprofit organizations (mainly academic medical centers) with exemplary practices for mental health and wellbeing (e.g., award-winning organizations [C. Everett Koop National Health Award]). We also explored closely related research literatures on organizational climate and culture (e.g., Denison, 1996) and psychological safety (e.g., Edmondson and Lei, 2014). We supplemented our archival research with an interview with Mary Yarbrough, executive director of Vanderbilt's faculty/staff health and wellness programs, to gain insights regarding exemplary practices for staff at other universities, and with research on occupational health. We also interviewed Thorkil Sonne, director and president of Specialisterne, which has gained international acclaim for placing individuals with autism in the workplace. He provided insights on the culture and practices supportive of neurodiversity at work and on campus.

Several findings and themes have emerged from our work. These include:

1. It is difficult to clearly identify "best practices" or even "exemplary" practices among peers, other private sector organizations, and nonprofits with respect to MHW. Many different types of organizations are doing many different types of things in this area, but we often lack a clear evidence-based method by which to evaluate specific interventions and programs and their efficacy. Despite these limits we tried to identify exemplary practices through other markers of efficacy (e.g., awards), expert opinions, or support in related organizational research.

2. Institutions with more resources seem to be doing more, such as having more counselors/therapists per student, having newer/larger/better facilities, etc. However, across educational institutions the differences were mostly of degree rather than qualitative. More resources beget the ability to do more, but not necessarily to undertake fundamentally new activities.

3. Our discussions with G.L. Black and our own detailed searches of websites have not identified obvious deficits at Vanderbilt in terms of key offices, programs, or activities. For example, of our peer academic institutions, all offer the same basic suite of services (i.e., PCC, EAP, recreation, student health center, etc.). However, some institutions have incorporated services or roles that VU does not offer into their spaces (e.g., ombudsman office, volunteer groups, support groups, a CWO).

4. There is a trend toward unified, integrated, and physically proximate MHW services at academic institutions identified as leaders in this space. It is common for one facility or an integrated set of physically proximate facilities to house student recreation, student health services, the psychological counseling center, and related offices. Typically, satellite services are offered as well.

5. Where we observed more innovation was in noneducational settings. Specifically, private sector organizations and other nonprofits illustrate practices worth considering for adoption at Vanderbilt. The interrelated practices begin to outline how to foster a more inclusive and supportive culture for students, staff, and faculty that encourages disclosure and enhances mental health and wellbeing. Specifically, we find that, first, mental, physical, and financial health are all treated as interrelated. Second, leading organizations (e.g., C. Everett Koop Award–winning organizations such as Citi, Dell, Johnson & Johnson, LL Bean, and USAA, Kent, Goetzel, Roemer, Prasad, and Freundlich, 2016) invest in identifying and training to promote positive role modeling of conversational practices (i.e., actions, words) and support to guide others to organizational resources. Third, organizational research and leading organizations (e.g., Google, Duhigg, 2016) suggest that cultivating psychological safety (i.e., the belief that it is safe to take an interpersonal risk without punishment or ridicule, Edmondson, 1999) is foundational to fostering richer conversations regarding health and wellbeing. Last, organizational research on compassion practices and compassion capability suggests that they foster higher quality connections that permeate boundaries (age, category [employee, faculty, student], or hierarchical position) and facilitate learning (Lilius, Worline, Dutton, Kanov, and Maitlis, 2011).

6. Few academic institutions appear to be intentional with respect to neurodivergent (ND) students, faculty, and staff as it pertains to MHW, though there are some innovative nonacademic organizations and growing corporate experience hiring and supporting neurodivergent individuals in the workplace. Our research has identified 28 universities with established academic and residential support programs (e.g., College of William & Mary). Our research has also found that some corporations are known for especially good inclusion and support of neurodiversity in the workplace

(including A&F Wood Products, Dow, Giant Eagle, Hewlett Packard, Microsoft, and Strategic Appliance, Lengnick-Hall, 2007) and nonprofits that partner with them (e.g., Specialisterne). At these organizations, research suggests, there is: a) top-leader support of this form of diversity; b) an emphasis on neurodiversity as differential ability, not disability; c) creating affinity groups; and d) partnering with community-based organizations for training and support as well as accommodations, access, and shaping attitudes. The leader support of neurodiversity includes placing attention and priority on the issue (e.g., formally committing to hiring, emphasizing the importance and value of difference in school and the workplace), training on awareness of and how to constructively engage with difference, and providing support (as suggested in c and d above). The best organizations combine these concrete leader actions with clear statement of four related values—respect for difference, accommodation (creating a comfort zone in the workplace), clarity (clearly set expectations), and accessibility (and guidance regarding where to get help) (interview with Thorkil Sonne).

Recommendations

An overarching theme from our research was organizational culture as a key underpinning of mental health and wellbeing at school and work.

Organizational Culture and Organizational Climate

Organizational culture reflects the shared, tacit assumptions that have come to be taken for granted and shape members' daily behavior (Schein, 2004). The subset of assumptions about mental health and wellbeing in an organization can be loosely labeled the mental health and wellbeing culture, encompassing the organization's values, beliefs, attitudes, social norms, rules, practices, competencies, and behaviors regarding mental health (Mearns and Flin, 1999). In other words, culture can be characterized as the actions taken and decisions made when no one is watching. More formally, Uttal (1983, 66) defines culture as "shared values (*what is important*) and beliefs (*how things work*) that interact with an organization's structures and control systems to produce behavioral norms (*the way we do things around here*)."

Organizational culture is often contrasted with organizational climate that includes specific practices that capture "surface features" of organizational culture (Denison, 1996). These surface features, however, are consequential as organizational climate is the shared perception among members of an organization of the priority of a specific value (e.g., mental health) based on shared assessments of the behaviors expected, rewarded, and supported by the organization and its supervisors and managers (Zohar, 2003). Organizational climate is a snapshot of student, staff, and faculty's current perceptions regarding the perceived status of a given value (e.g., mental health) in the organization (Mearns and Flin, 1999). Members of the organization draw inferences about organizational climate based on the pattern of managerial actions in choosing between competing priorities (i.e., achievement and mental health) because these actions indicate the differences between formally declared and enforced policy and practice (Zohar, 2003). Irrespective of formal policy, for example, whenever psychological safety or mental health issues are ignored or made contingent on task performance and achievement, students, staff, and faculty will infer low priority and a weak climate for mental health (Zohar, 2008). Thus, the organizational climate of an organization sends signals regarding the underlying assumptions and values animating its culture. As such, the climate is an effective target for intervention that can reshape culture over time.

We believe the recommendations that follow constitute a set of actions, interventions, and practices that will help to shape a more inclusive, psychologically safe climate that enhances mental health and wellbeing. Over time, we further believe they will help to change culture.

Recommendation 1: Broaden the range of services offered to people experiencing trauma.

1) Develop rapid response teams that aid people (students, staff, and faculty) experiencing trauma. For example, Code Lavender teams at the Cleveland Clinic that mobilize within 30 minutes of being contacted to aid and comfort those in or near crisis. At Cleveland Clinic, the individuals providing these services resemble our campus chaplain staff. For first responders (e.g., firefighters), EAP providers can intervene.

   a. Both sources for this recommendation would require additional resources to increase staff and bandwidth to deliver these services.

2) Train managers (for staff and faculty) and residential life and peers (for students) in crisis counseling to expand the range of resources that can aid individuals in crisis. Specifically, provide training in facilitating group discussions following adverse events, reaching out to their colleagues after a challenging shift/situation/etc. and organizing wellness activities for their group.

   a. For first responders, these trainings are typically organized in the workplace through EAP.

Recommendation 2: Foster a climate of psychological safety where individuals feel safe to take an interpersonal risk—to disclose, discuss, and seek help for issues related to mental health and wellbeing.

1) *Evidence for recommendation.* Prior research suggests that psychological safety is valuable for individual attitudes (e.g., commitment, engagement with work, satisfaction with life and work), behaviors (information sharing and learning), and task performance (see a meta-analysis by Frazier et al., 2017). Recent articles in the *Vanderbilt Political Review* and the *Chronicle of Higher Education* suggest that Vanderbilt's culture, and university cultures more generally, are not healthy and psychologically safe.

2) *Subcomponents of recommendation*

   a. **Recommendations 2a and 2b.** Leader actions (both at the university and local levels) that are inclusive (i.e., invite and appreciate others' contributions) and model the desired behavior. The GO THERE campaign is emblematic of an initiative that enhances psychological safety. We recommend that GO THERE continue as a regular series and recognition be given to people sharing their stories or supporting those who do (2a). GO THERE training and events should be cascaded throughout Vanderbilt for students, staff, and faculty to give people the tools to have these conversations and to make it part of the Vanderbilt culture such that psychological safety (sharing and supporting through difficult circumstances) results where it is most powerful (in the everyday living and working spaces) (2b).

   b. **Recommendation 2c.** Routinely assess psychological safety using the validated measure developed by Amy Edmondson (1999) as part of other broad-based surveys assessing community (faculty, staff, and student) engagement or mental health and wellbeing to gather baseline data and to track over time to assess whether efforts are having an appreciable impact on an important element of organizational culture.

c. **Recommendation 2d.** Provide a formal, yet anonymous, channel for people to report threats to psychological safety before they are so acute as to activate formal grievances.

Recommendation 3. Foster a supportive educational and workplace environment for neurodivergent individuals that increases disclosure and provides assistance and supports.

1) *Evidence for recommendation.* We talked with Thorkil Sonne, CEO of Specialisterne, who focuses on supporting individuals and creating workplaces that allow people on the autism spectrum to thrive at work. We supplemented our conversation with him by examining cases studies of leading employers (e.g., Hewlett Packard Enterprise, Strategic Appliance) employing individuals on the autism spectrum.

2) *Subcomponents of recommendation.*

a. **Recommendation 3a.** Train local leaders (for staff), faculty, and peers in awareness of neurodiversity and its implications for life and work. Specifically, provide training in how to effectively engage and support difference.

b. **Recommendation 3b.** Provide mentoring and support for individuals disclosing their neurodivergence (e.g., ASD). Partner with external organizations that support neurodivergent individuals (e.g., Specialisterne) with ongoing assessment (of skills), training (e.g., social skills, resilience, and other tools for collaborative work), and mentoring (e.g., coaches). Alternatively, build capabilities (dedicated resources for researching, developing, and testing programming) within Vanderbilt to support these activities through Vanderbilt Kennedy Center or the new Initiative for Autism, Innovation, and the Workplace.

c. **Recommendation 3c.** Formulate employment and staffing goals (presence in leadership positions) for neurodivergent individuals (e.g., a la Strategic Appliance).

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APPENDIX C – SUBCOMMITTEE REPORT: RESEARCH AND DISCOVERY

Subcommittee Members: René Marois (Co-Chair), Sandra Rosenthal (Co-Chair), Dominique Behague, Alyssa Hasty, Craig Philip

Charge

The charge of the Research and Discovery Subcommittee was to first survey the areas of inquiry that Vanderbilt is conducting in mental health and illness, assess the strengths and weaknesses in those efforts, and make recommendations for action to further enhance and improve research and discovery in the domains of mental health and illness at Vanderbilt.

Survey of Research in Mental Health/Illness at Vanderbilt

The first aspect of our charge was to survey the entire research efforts currently deployed by Vanderbilt faculty in the domains of mental health and illness, broadly defined. The committee surveyed webpages and internal documents as well as interviewed key players in the field across all schools and colleges of the university.

Interviews, either live or via email, were conducted with the chairs of Pharmacology, Psychiatry, Psychology and Human Development, and Biological Sciences, and the directors of the Genetics Institute, Vanderbilt Brain Institute, Vanderbilt Center for Neuroscience Drug Discovery, Center for Addiction Research, and the Osher Center for Integrative Medicine, as well with various faculty with research interests in mental health and illness.

The goal of the task was to provide an exhaustive list of Vanderbilt faculty whose research is pertinent to mental health and/or illness, and to present that list both by department/institute/school and by major areas of interest in mental illness and wellbeing, thereby allowing the committee to discern areas of strong representation by Vanderbilt faculty.

The results of our survey report nearly 150 faculty spread across departments, schools, and institutes whose research centers on mental health and illness, broadly defined. Not surprisingly, the distribution of the faculty's specific research interests and approaches is differentially clustered across the campus. Thus, while researchers focusing on the molecular or genetic bases of mental illnesses cluster in medical school departments or institutes, such as the Pharmacology and Psychiatry departments and the Genetics Institute, Psychology and Peabody faculty more frequently use behavioral approaches. There are some exceptions to this broad pattern, however, as in the Psychiatry or Neurology departments where we can find diversified methodological approaches ranging from molecular biology to neuroimaging. There is also a strong contingent of researchers on mental illness in the Department of Psychiatry, while research on mental wellbeing is concentrated in Peabody College, but is also evident in the School of Nursing and the Medicine, Health, and Society program.

The faculty list by research areas provides a means to categorize the distribution of the faculty's research efforts in specific subfields of mental illness and mental health. Perusal of this list highlights a particularly strong representation of research efforts by Vanderbilt faculty in autism. Other strong representations are found in the areas of depression and addiction and, to a lesser extent, age-related dementia (e.g., Alzheimer's), psychotic disorders (e.g., schizophrenia), reading disorders/disabilities, and sleep/cycle disorders. Importantly, not all major illnesses are well represented in terms of research effort at Vanderbilt. For example, there are few faculty whose research focuses on bipolar disorders, personality disorders or eating

disorders, despite the fact that the latter two affect about 9 percent and 4 percent of the adult human population. Finally, while there are notable research efforts devoted to mental wellbeing and positive psychology at Vanderbilt, this research is highly diluted across sub-areas (e.g. resilience, prevention) and scattered across the university.

Interviews with key stakeholders in the field corroborate our data-driven approach. Several chairs and directors highlighted the prominence of research in autism, addiction, and mood disorders (depression) at Vanderbilt. Many stressed the high profile of basic neuroscience at Vanderbilt, while highlighting the relatively weaker footprint in clinical neuroscience. These interviews also highlighted important scientific jewels at Vanderbilt, namely the Vanderbilt Center for Neuroscience Drug Discovery, the Drug Addiction Center, and the Vanderbilt Kennedy Center. Precision medicine (optimization of medical approach in diagnosis and treatment that takes into account individual differences) was also identified as an important and promising research enterprise that is particularly well represented at the Vanderbilt Genetics Institute.

Strengths and Weaknesses in Vanderbilt's Mental Health Research

Strengths. Vanderbilt has an enviable worldwide reputation in the basic neurosciences motored by a large collection of researchers spread across the campus who are loosely connected by the Vanderbilt Brain Institute. The VBI also trains some of the brightest young scientists in the field, placing recent graduates or postdoctoral scholars on the faculty at Harvard, Yale, Johns Hopkins, Emory, and Vanderbilt, to name just a few. This basic neuroscience research can serve as a solid foundation on which clinical neuroscience can build, and is consistent with the National Institute of Mental Health's disposition to favor research on the dysfunction of basic neural mechanisms that may underlie a range of mental disorders instead of focusing on specific disorders.

Vanderbilt shines in specific research domains of mental health/illness. Most notably, it has one of the largest groups of scientists dedicated to the understanding and treatment of autism in the world, along with other developmental disabilities. It is also a hotbed of research on depression, with research spanning from the genetics and molecular underpinnings of this disorder to research on its behavioral treatment. Addiction—particularly alcohol and drug abuse—is another prominent area of research, best illustrated by the recently formed Center for Addiction Research headed by Danny Winder. Another center, the Vanderbilt Center for Neuroscience Drug Discovery, is widely praised as an innovative and promising research thrust on developing drugs for the treatment of neurological and mental disorders. Together with the Genetics Institute, this center holds promise in the growth of precision medicine, both in diagnosis and treatment. Intensive existing investments in functional MRI and mass spectrometry could also be leveraged for the identification of biomarkers for quantitative diagnostics and precision treatment.

When considering the Vanderbilt Kennedy Center together with these other centers and institutes, it is readily evident that Vanderbilt has benefited greatly—both in stature and in scientific dividends—from the targeted creation of research entities that group scientists with common research interests and goals.

Areas for Growth. Given the complexity and diversity of human behavior and brain dysfunction, and the moderate and limited size of the university's campus, it is not surprising that Vanderbilt's research efforts do not encompass all aspects of mental health and illness. Vanderbilt is positioned to be a leading institution in the development of new research on the dynamic interactions between brain and body, between physical and mental health, and between neurological processes and environmental inputs. This provides us with an encouraging and productive platform to think about new ways of maintaining wellbeing,

averting poor prognoses, and attenuating mental illness, for example, through conventional therapies plus "alternatives" such as meditation, mindfulness, spirituality, and the integration of community building/support into university policies. Thus we can reduce stress and attenuate economic, social, and academic inequities among members of our community. Indeed, it would be impractical and likely unwise to attend to all subfields of mental health and mental illness. That said, the committee has observed weaknesses that we believe may hold Vanderbilt back in its efforts to make significant headway in its pursuit of alleviating and eradicating the heavy societal toll of mental illness. First, aside from the aforementioned centers, there is a paucity of collaborative effort across the campus to tackle mental health issues. Scientists seeking to understand a specific disorder, such as major depression, often do so in parallel streams of research. Perhaps also emblematic of a lack of synergy in mental health research efforts, the committee was able to identify only one TIPs program that specifically focused on mental health/illness.

A second major deficiency concerns the relatively weak research emphasis on mental wellbeing/positive psychology. While there are efforts deployed in this field, particularly in Peabody College, at the Osher Center for Integrative Medicine, and in the School of Nursing, they are thinly spread across different aspects of mental health and are mostly focused on behavioral approaches. In particular, we found little research at Vanderbilt that specifically centers on issues that overlap with the charges of the other subcommittees, such as determining effective means of combatting stigmatization about mental illness. Likewise, there is little research currently focused on understanding the biological basis of positive psychological traits. Nevertheless, the nucleus of investigators in positive psychology is clearly present at Vanderbilt from which to build.

Site visits to targeted universities/institutes that focus on mental health/illness research.

In order to assess how Vanderbilt may improve its research efforts in MHW, one of us visited two research centers in mental health and wellbeing, widely seen as the two primary research centers in that field: the Positive Psychology Center at the University of Pennsylvania and the Center for Healthy Minds at the University of Wisconsin–Madison. The two centers have similar goals but different emphases (e.g. University of Wisconsin in meditation and neuroscience, University of Pennsylvania in grit). They both provide, however, clear evidence of the benefit of research in MHW and are only the tip of the iceberg of such centers popping up (e.g., at Harvard, Berkeley, and Michigan).

Why invest in MHW research? It has been neglected compared to research on mental illness. Yet, there is strong evidence that it pays dividends in the mental health of individuals and their resilience to events or insults that can have detrimental effects on mental health. Thus, there is reasonable expectation that positive psychology could lead not only to happier lives, but also individuals who are less likely to succumb to mental illnesses. Although mental wellbeing is not the same as absence of mental illness, there is also the possibility that research in mental illness might inform mental wellbeing, and vice versa. For example, it is conceptually possible that traits like optimism and positivity may be directly relevant in understanding the mechanisms that render an individual susceptible to depressive episodes.

Recommendations

1) **Short-term.** Build on existing strengths. There is widespread agreement, both within the subcommittee and across Vanderbilt's scientific community, that Vanderbilt should further invest in its current research strengths, namely in basic neuroscience, autism, drug/alcohol addiction, mood disorders, and precision medicine. It also should continue to foster the research centers dedicated to the study and treatment of mental disorders, namely the Vanderbilt Center for Neuroscience Drug Discovery, the Vanderbilt Center for Addiction Research, the Vanderbilt Kennedy Center, and the Vanderbilt Genetics Institute.

   We also recommend fostering collaborative and trans-institutional research in mental health/illness, and catalyzing the integration of research efforts in mental health/illness with existing centers and institutes, in particular the VBI and VKC. In particular, we propose that Vanderbilt send out to the community an RFA about mental health/illness research. Finally, Vanderbilt should try to capitalize on its visibility in neuroscience to promote philanthropic investment in mental health and illness research.

2) **Mid-term**. Invest in research on mental wellbeing, including in regards to developing effective means to educate, rationalize, and change mindsets about mental health. There are too few researchers who focus on this domain, and they are scattered in isolated pockets (Peabody, Osher, Nursing). Moreover, the domain of positive psychology should be broadened to include related disciplines in the social sciences. We recommend that interaction be promoted across all of these disciplines (e.g., via TIPs) but also that faculty lines be created for the recruitment of scholars in positive psychology, broadly speaking.

   The university would also do well in continuing to invest, both in resources and faculty, in the domain of quantitative diagnostics and precision treatment; two aspects of mental illness research that Vanderbilt is well poised to capitalize on.

3) **Long-term.** We propose a bold new model for promoting research in mental health and mental illness. While there are several institutes and centers that target mental illnesses, and positive psychology/MHW centers are sprouting across the nation, there are none that truly encompass both mental health and mental illness. This would be Vanderbilt's "moonshot" on mental health research. Scientific inquiries in mental health and mental illness have historically been carried out separately. There may be great promise in bringing these two fields together, for example, by identifying common biological mechanisms underlying individual differences in behavioral traits that have implications for both mental health and illness. We believe that "mood" research may be particularly appropriate to target such an approach, as Vanderbilt already has great strengths in the area of mood disorders (particularly depression, ranging from research on its molecular underpinnings to its prevention), and positively valent mood traits (such as happiness), given that these are behavioral hallmarks of flourishing individuals.

SITE VISITS

Co-chair René Marois carried out two site visits, one to the Positive Psychology Center at the University of Pennsylvania and the other at the Center for Healthy Minds at the University of Wisconsin–Madison. Both visits consisted of a half day of meetings with key constituents, including a tour of the centers. Below I report my impressions for each center before presenting general conclusions and possible action plans.

MHW/Positive Psychology research is the scientific study of the strengths that enable individuals and communities to thrive.

A. Positive Psychology Center at the University of Pennsylvania

The mission of the Positive Psychology Center at the University of Pennsylvania is to promote research, training, education, and the dissemination of positive psychology, resilience, and grit.

Includes four faculty and six core staff support personnel.

Contacts made:
Martin Seligman, Director
James Pawelski, Director of Education and Senior Scholar
Allyson Mackey, Assistant Professor of Psychology
Peter Schulman, Executive Director

Current Activities at the Center:

• Conduct empirical research in positive psychology, resilience, grit, positive neuroscience, positive health, prospective psychology, and science of imagination.

• Develop and empirically validate curricula and train-the-trainer programs designed to enhance resilience, wellbeing, and performance.

• Deliver resilience programs and positive psychology programs using the train-the-trainer model. These programs have shown efficacy in preventing depression and anxiety and increasing wellbeing and resilience. Currently conduct large-scale resilience programs for educational institutions around the world and for the U.S. Army's Comprehensive Soldier and Family Fitness program.

• Administer a master of applied positive psychology program (MAPP), in which students learn to apply the principles of positive psychology to professional domains, or prepare for further study in a Ph.D., M.D., or J.D. program.

• Disseminate research findings through academic publications in peer-reviewed journals, which are listed throughout the website (> 20 publications in 2017).

• Host conferences and meetings where scholars share and discuss the latest empirical findings in positive psychology.

The PPC is financially self-sustaining and contributes substantial overhead to the University of Pennsylvania. The university pays for the center's faculty. Otherwise, the center is self-sufficient.

Revenue Streams:

- Philanthropic donations
- Private foundations (e.g., Temple Religion Trust, Walton Family Foundation, Mellon Family Foundation
- Templeton Foundation, Robert Wood Johnson Foundation 2.5M grant
- A few federal grants: NICHD, NIA, NIMH
- Master's program (Master of Applied Positive Psychology, $300K in revenue/year
- Training contracts (over $50M since 2007) to public institutions and private foundations

If Vanderbilt were to invest in research in positive psychology:

- It would require major investment.
- It should be clearly dissociated from the clinical research, and research on mental illness. Primarily, it would require recruitment of a visionary, high-profile scientist.
- Creation of a center would require a five-year plan and cost mid-seven-figures/year.
- Could invest in more than positive psychology: Positive studies encompassing positive psychiatry, positive education, and positive sociology (center in human flourishing)

Stumbling Blocks:

- Relative paucity of talent (still a small field)
- Limited access to federal funding
- Often faculty homes are scattered across departments

B. Center for Healthy Minds at the University of Wisconsin–Madison

The Center for Healthy Minds conducts rigorous scientific research to bring new insights and tools aimed at improving the wellbeing of people of all backgrounds and ages. They investigate the science of emotions, contemplative practices (meditation), and qualities of mind they believe affect wellbeing, including attention, resilience, equanimity, savoring positive emotions, kindness, compassion, gratitude, and empathy. The Center for Healthy Minds was created in 2009 at the University of Wisconsin's Waisman Center and moved into its own building in 2017 (leased by the university).

The center consists of five faculty (with fundraising, six more to be added later, to be assigned to different departments but with split start-up budgets) with appointments at Wisconsin. There are many staff and research scientists that support the center's work. The Center for Healthy Minds is also home to Healthy Minds Innovations, Inc., a 501(c)(3) nonprofit organization dedicated to expanding insights from the center's research and developing services, tools, and technologies (e.g., kindness curriculum) to support the center's mission to promote wellbeing and relieve suffering in the world.

Contacts made:
Richard Davidson, Director
Isa Dolski, Director of Administration
Robin Goldman, Scientific Co-Director
Barb Mathison, Executive Director
Sarah Short, Scientific Co-Director

- The center promotes and conducts research (> 15 publications in 2017) on wellbeing, and creates goods and services (through Healthy Minds Innovations Inc., a nonprofit; about 200–300K revenue from services and speaking fees). It also educates (Flourishing Initiative course for college freshmen at Wisconsin, Virginia, and Penn State) and informs (Talks).
- Its revenues consist of 63% federal grants (NIH, NIA, DOE, DOJ, NSF), 27% gifts, 3% nonfederal grants (e.g., George Family Foundation), and 7% other.
- Their budget: 6–12 M, and they have research endowment funds of 10M.

To start a new research center in MHW at Vanderbilt:

- Have a visionary
- Have a structured plan: (one-, five-, and 10-year plans). 140M fundraising goal (including building, but they did not need that much)

Other MHW Centers:

Harvard Center for Health and Happiness (2016)
https://sites.sph.harvard.edu/health-happiness/

Greater Good Science Center at Berkeley (Dacher Keltner) 2001
http://greatergood.berkeley.edu/about

Michigan University Center for Positive Organizations at Ross School of Business (2002)
http://positiveorgs.bus.umich.edu/

Centers for Mental Illness

Stanley Center at the Broad Institute of Harvard and MIT

Columbia University Department of Psychiatry/New York State Psychiatric Institute

Yale University School of Medicine/Psychiatric Biomarkers Program

Conclusions

The two centers have similar goals but different emphases (e.g., Wisconsin in meditation and neuroscience, Penn in grit). Both have produced peer-reviewed research articles demonstrating the efficacy of positive psychology (PP) approaches to improve MHW. Both centers are financially sustainable and support research, education, and training. Both centers emphasized the need to recruit a scientist who can lead research efforts in MHW/PP and to establish short-term and long-term operating budget plans. Funding sources are different than for mental illness; while the latter depends heavily on federal grants, these represent less than 50 percent of the revenues for MHW/PP centers, which seek additional funding from private foundations and donations.

Why invest in MHW research? It has been neglected compared to research on mental illness. Right now, Vanderbilt invests little in MHW research; the research is mostly at Peabody and focuses on children or adolescent populations. The exceptions are pockets of research on meditation at the Osher Center and resilience research at the School of Nursing. Importantly, MHW is not simply absence of mental illness. PP traits, such as grit and resilience, not only contribute to happier and more fulfilling lives, they also help insulate individuals from factors that could lead to mental illness.

NIH and research universities have invested large sums of money in research on mental illness. Yet, the dividends from this research on alleviating mental illness are still to be realized. Balancing an investment in MHW/PP may help bring more fulfilling and healthy lives to many individuals at a fraction of the price invested in mental illness.

APPENDIX D – SUBCOMMITTEE REPORT: ADDRESSING AND REDUCING STIGMA

Subcommittee Members: Stephanie Brooks Barger, Kitt Carpenter, Craig Philip

The Stigma Reduction Subcommittee was formed to assess the state of the research on mental health stigma in the university setting and to develop formal recommendations to present to the larger committee. Our formal recommendations below are the products of three major sets of activities: 1) conversations (in-person, online, and by email) with leading academic experts on mental health stigma, including Professor Patrick Corrigan from the Illinois Institute of Technology, Professor Daniel Eisenberg from the University of Michigan, and Vanderbilt's own Professor Craig-Anne Heflinger; 2) careful review of a recent 2016 National Academy of Sciences volume on the topic titled *Ending Discrimination Against People with Mental and Substance Use Disorders: The Evidence for Stigma Change;* and 3) finding and reading the peer-reviewed academic literature on the topic.

Our review identifies three main types of stigma: public stigma, institutional/structural stigma, and self-stigma. Public stigma refers to false attitudes and beliefs held by the general public about people with mental health challenges. Institutional or structural stigma refers to societal-level conditions, societal norms, and institutional practices that constrain the opportunities, resources, and wellbeing for stigmatized populations. Self-stigma refers to the internalization of public stigma by a person with a mental or substance use disorder.

There are many reasons we want to reduce stigma at Vanderbilt. At a basic level, negative, false, internalized messages about mental and substance use disorders create needless suffering and reduce self-efficacy. More pressing, however, is that there is broad consensus that stigma is associated with reduced help-seeking behavior. Further, while mental health and substance use disorder stigma crosses all demographic barriers, the populations of heightened focus and interest to the university—undergraduate and graduate/professional students, faculty, and staff of color and students with fewer economic resources—experience higher rates of self-stigma.

We have summarized the key takeaways from our work in the form of six concrete recommendations to be considered by the CSPCMHW. Each represents an affirmative step that Vanderbilt could undertake as part of its broader focus on the mental health and wellbeing of our community. There is very strong consensus that a key requirement for success of any of these is commitment to a multiyear program. Creating a culture within the university that supports mental health education, mental wellbeing, and support for mental illness—and more specifically reduces stigma for mental illness and help-seeking behaviors—will require an ongoing, coordinated effort by the university. Following the recommendations, we provide additional summaries of the main academic and policy reports that provide much of the underlying evidence base.

STIGMA REDUCTION SUBCOMMITTEE RECOMMENDATIONS

Recommendation 1: Target Messaging

Employ communication scientists to: perform a tailored, targeted assessment of what messages would be effective at reducing stigma in key groups within Vanderbilt and develop a deployment strategy that includes duration and scope of the communications plan. *Rationale: A recurring theme in the research on reducing public stigma—the false attitudes and beliefs held by the general public about people with*

mental health challenges—is that the most effective messages are finely tailored to the targeted population. What works for college student populations in an urban setting, for example, might not work for high school age youths in rural areas. Some organizations and communications firms have the expertise needed to identify effectively tailored messages. An example of such an organization is FrameWorks Institute [www.frameworksinstitute.org], a nonprofit organization that "designs, conducts, and publishes multi-method, multi-disciplinary communications research to empirically identify the most effective ways of reframing social and scientific topics." This process often involves detailed qualitative interviews with campus stakeholders and testing of several alternatives. While FrameWorks is likely to be cost-prohibitive, there are other communications firms that may be appropriate. Vanderbilt may also have this communication science expertise in house. This recommendation builds upon the continuing rollout of the GO THERE campaign to ensure that the messages are as effective as possible.

Recommendation 2: Increase Contact

Identify individuals within the Vanderbilt community who have successfully faced mental illness, addiction, or other mental health challenges and who are comfortable sharing their experiences and establish appropriate forums and venues for those individuals to share their experiences on a continuing basis. *Rationale: A recurring theme in the research on reducing public stigma is that "contact works." That is, individual contact with people who have lived experience with mental health challenges is one of the most consistently proven ways at reducing the public stigma associated with mental illness. Together with the finding that the most effective messages are those that are highly tailored, this recommendation will be most directly addressed by identifying members of all the different Vanderbilt constituencies (faculty, staff, and undergraduate and graduate/professional students). For example, a high-profile student-athlete discussing struggles with anxiety or a popular professor revealing a history of addiction could be quite effective at reducing stigma. This effort will require finding these members of the Vanderbilt community and also determining the most appropriate forum for engaging the 'contact' (e.g., during student orientation, faculty lectures, etc.).*

Recommendation 3: Correct Misperceptions

Implement a public messaging campaign to correct common misperceptions about mental health services at Vanderbilt and their use. *Rationale: One aspect of stigma is "self-stigma," which occurs when individuals embrace the false attitudes and beliefs in the population about people with mental health challenges. Since the root of stigma is the idea that those beliefs are not correct, this recommendation would rectify two of the most common misperceptions held by members of the campus community. One is that students systematically underestimate the extent of use of mental health care services among their peers (nationally about 1 in 5 students accesses counseling services at some point in their college career). The second is that students systematically overestimate the extent of negative views held by community members about people who use campus mental health services. The magnitude of these discrepancies varies from institution to institution, but these figures can be estimated for Vanderbilt from our participation in the Healthy Minds study and from administrative data from the Psychological and Counseling Center. This "correcting common misperceptions" messaging could be effectively rolled out as part of the GO THERE AY 2017–18 campaign. The Chancellor's Office could also seek consultation for the most effective way to package these messages, in conjunction with Recommendation 1 (above).*

Recommendation 4: Educate and Equip

Integrate mental health discussions into the regular academic fabric of the university by increasing faculty, staff, and student participation in Kognito trainings; making mental health and wellbeing part of the core of regular academic advising (i.e., a "default option"); and/or linking mental health care with positive academic outcomes (for undergraduate and graduate/professional students) and better job satisfaction/performance (for faculty/staff). Incentivize ongoing training for faculty/staff and undergraduate and graduate/professional students that teaches mental health basics, the maintenance of mental wellbeing and resiliency skills, as well as warning signs for mental illness and suicide risk. *Rationale: A third aspect of stigma is "institutional stigma," which refers to an organization's policies or culture of negative attitudes or beliefs about mental health and mental illness. While other subcommittees are addressing specific policies and practices, we think the culture surrounding mental health and wellbeing could be improved—thus reducing stigma—by providing Vanderbilt community members more confidence in knowing how to help undergraduate and graduate/professional students, faculty, and staff members who may be experiencing mental health challenges. A key component of this is increasing participation in gatekeeper training. Given that Vanderbilt has invested substantially in the Kognito training system, it would be useful to evaluate the extent of Kognito training among campus constituencies and increase Kognito participation where possible (but especially among key stakeholders such as resident advisers, faculty heads of house, deans, student affairs staff, supervisory staff, and others). Another way to integrate mental health discussions into Vanderbilt's academic fabric—thus normalizing mental health and reducing institutional stigma—would be to make health and wellbeing a regular component of periodic academic advising. The university could also try messaging that might be likely to resonate particularly strongly with Vanderbilt undergraduate and graduate/professional students by linking good mental health with outcomes our students are likely to care about such as good grades and better job opportunities. In addition to a gatekeeper training like Kognito, invest in broad training for all faculty, staff, and undergraduate and graduate/professional students that teaches the basics of mental health, how to maintain one's mental wellbeing, resiliency skills, recognition of the warning signs for mental illness or suicidality, and awareness of available resources for both maintaining mental wellbeing and addressing mental illness.*

Recommendation 5: Mobilize Students

Increase support for and strengthen relationships with Vanderbilt's student-led mental health education and support organizations, both LEAP and Active Minds. *Rationale: Active Minds is a national nonprofit organization whose main purpose is to "empower students to change the perception about mental health on college campuses." It has over 400 campus chapters, including one at Vanderbilt. Active Minds has numerous resources available to help reduce mental health stigma on campus. The university could encourage increased participation in Active Minds and/or increase financial support for the organization to enable increased programming. Even more directly relevant to stigma reduction at the university is LEAP, whose mission is to promote positive mental health and wellbeing on campus and which has as its explicit goal to reduce stigma associated with seeking help. We recommend additional support for and partnership with this organization to bolster its impact. While Active Minds and LEAP are both primarily student-focused organizations, their goals are for campuswide stigma change, which would be of benefit for the broader Vanderbilt community. We also support the creation of similar faculty/staff-led organizations working toward stigma reduction on campus.*

Recommendation 6: Measure Impact

Develop and implement direct and indirect measurements of stigma on campus to assess the impact of stigma-reduction initiatives over time. *Rationale: Currently the university has no measure of the degree of mental health stigma on campus. In order to measure the effectiveness of these stigma-reduction initiatives, use surveys to measure self-stigma, institutional stigma, and public stigma. Measure both perceptions and feelings of stigma as well as behaviors potentially motivated by stigma, such as help-seeking behaviors or the lack thereof. Assess the extent of psychological safety reported by undergraduate and graduate students, staff, and faculty. Capture demographic data for evaluation of the effectiveness of stigma reduction on different subsets of the university community such as: role within the community, race, national origin, sex, sexual orientation, gender identity, age, religiosity, etc. The stigma committee's literature review highlighted the lack of evidence demonstrating the effectiveness of stigma reduction community-wide. There was particularly limited evidence regarding the impact of stigma-reduction efforts on help-seeking behaviors. The university's outcomes will be better over time if initiatives are correlated with reductions in stigma. In addition, if successful in both reducing stigma and measuring that improvement, the university could make significant contribution to this area of study and become a model for other universities.*

SUPPORTING MATERIAL

Beyond these six key recommendations, additional relevant, summative information regarding stigma reduction follows. This background information forms some of the foundation for the recommendations above.

Key Takeaways from *Ending Discrimination against People with Mental and Substance Use Disorders: The Evidence for Stigma Change,* 2016, National Academies of Sciences, Engineering, and Medicine

This study, published in 2016, provides a synthesis related to stigma and efforts to address it, including an examination of national initiatives in the UK, Canada, and Australia. While the recommendations have a strong focus on national policymakers, it is a timely assessment and offers significant insights and conclusions that can inform the work of our committee.

OVERALL

- Improving the lives of people with mental and substance use disorders has been a priority in the U.S. for more than 50 years.

- As mental health began to shift from the hospital to the community, recovery became a goal or desired outcome—recovery in this context is not synonymous with cure.

- Positive change in American public attitudes and beliefs about mental and substance use disorders has lagged behind other advances.

STIGMA

- "Stigma" is used in the peer-reviewed literature and by the general public to refer to a range of negative attitudes, beliefs, and behaviors.

- While the risk of violence in people with mental illness is higher than average, the increase is small; further, people with mental illness are more likely to be victims than perpetrators of crime.

- Stigma is not a problem that affects just a few. Most estimates agree that roughly 1 in 4 Americans will experience a mental health or substance use problem.

PUBLIC KNOWLEDGE AND NORMS

- Studies through 1976 documented an extreme lack of public knowledge about the nature and causes of mental illness and a deep unwillingness to discuss it.

- From 1996 to 2006, stigma decreased and support for treatment-seeking increased among the general public.

- But: 50 percent of adults felt that treatment for a child would result in discrimination and have long-term negative consequences on a child's future.

- Schizophrenia and substance use disorders are more highly stigmatized than other mental disorders.

- Belief about underlying causes of substance use disorders has shifted from illness toward blame.

CONSEQUENCES OF STIGMA

- **Structural**—in public and private institutions, businesses, including universities, and can appear to endorse discrimination

- **Public**—including media and social media can both increase and decrease stigma

- **Self**—can reduce self-efficacy and discourage help-seeking and treatment-seeking

EVIDENCE-BASED STRATEGIES TO REDUCE STIGMA

STRONGEST

- **Contact-Based Programs:** Facilitate social contact between people with and without behavioral disorders

- **Contact-Based Education Programs:** Combine contact with educational contact to raise public awareness and knowledge

- **Contact Method:** In-person contact has roughly twice the effect of video contact

MIXED

- **Education:** such as mental health literacy campaigns, not effective with adults, effective with younger people

- **Media:** often fail for lack of audience clarity, not frequent or sustained enough

- **Protest and Advocacy:** Can increase stakeholder engagement, unclear on stigma reduction

OTHER STUDY CONCLUSIONS (Relevant to the committee's work)

- **Success Is a Long Game:** Sustained and coordinated effort is required over one to two decades, recognizing that relevant norms and beliefs are created and reinforced on multiple levels.

- **Communications Campaigns:** Develop well-defined goals for each specific group being targeted and determine messaging from that; make strong appeals that are relevant and personally consequential to particular audiences. Use research to determine the effectiveness of message concepts to various populations. Those with lived experience of mental illness should be consulted at every stage of message planning and evaluation.

- **Peers:** Can play an essential role in combating stigma as they can model personal recovery, concern, and disagreement about risks and benefits of "professionalizing" the peer role.

OTHER STUDY OBSERVATIONS (Relevant to the committee's work)

- Lack of consensus in the U.S. about the origin, definition, and diagnosis of mental illnesses may contribute to the maintenance of stigma.

- For racial and ethnic minorities, integrated delivery of physical and behavioral health services increases participation in mental health treatment.

- Non-traditional media are better for accessing younger audiences, with increasing use of online peer support platforms.

- One-time-only sessions about mental health do not work. Boosters are needed (e.g., immunization model). Biogenic stigma reduction efforts have unintended consequences, which can highlight difference, over time increasing stigma. A focus on genetic underpinnings of mental illness can create a "why try?" effect with regard to help-seeking behaviors.

Key Takeaways from review of studies by Daniel Eisenberg, professor at the University of Michigan

"Mental Health Problems and Help-Seeking Behavior among College Students" (Hunt and Eisenberg, 2009)

"Help-Seeking and Access to Mental Health Care in a University Student Population" (Eisenberg, 2007)

"Stigma and Help-Seeking for Mental Health among College Students" (Eisenberg, 2009)

- There are two stages to help-seeking: recognizing the need for help and acting to seek help. Those who believe services help are more likely to seek services. Those who perceive services as available are more likely to seek services.

- University populations are unique in that most are insured. However, growing up poor makes individuals less likely to seek care, regardless of their current financial situation.

- Factors that make a person more likely to have high levels of personal stigma include being male, more religious, Hispanic or Asian, heterosexual, younger age, an international student, or from a poor family. Asian men reported the highest levels of personal stigma of those surveyed.

- Personal stigma is significantly associated with lower likelihood of help-seeking. Students believe the presence of stigma around them to be higher than it is. This can be challenged with a norms campaign that gives statistics on percentages of students accessing mental health care and about stigma for those who do.

- Promising practices include American Foundation for Suicide Prevention's College Screening Project, the National College Depression Partnership, the use of phone triage programs to offer prompt evaluations, and gatekeeper programs such as QPR (Question, Persuade, Refer). "Because of the multiple channels by which students can be reached on college campuses, practices and policies based on a holistic, public health approach seem particularly promising. These strategies would view mental health as a foundation for the wellbeing and success of the student, and would emphasize not only treatment but also prevention and the promotion of positive mental health" (Eisenberg, "Mental Health Problems and Help-Seeking Behavior among College Students," page 5).

APPENDIX E – PROPOSAL FOR VANDERBILT CENTER FOR PRECISION MEDICINE FOR MENTAL ILLNESS (SANDRA ROSENTHAL)

The goal of this center is to determine molecular mechanisms, develop quantitative diagnostics, and create improved and personalized therapeutics for mental illness. Epigenetic studies that could reveal clues concerning onset of illness would be included in this center, but behavioral therapies or "positive psychology" would not.

The need to create quantitative mental health diagnostics, improve and personalize treatments, and ultimately find cures, is both urgent and overwhelming. Statistics, which tell a disturbing story, include the following:[1-4]

- Suicide is the second leading cause of death in college-age students.

- 1 in 10 high school students has seriously considered suicide.

- 95% of suicide victims are mentally ill.

- 20% of all adults will experience a period of major depression in their lifetime.

- 2% of adult Americans are schizophrenic.

- 3% of adult Americans are bipolar.

- The aggregate economic cost of mental disorders in the U.S. exceeds 2.5% of GNP.

- Mental illness affects nearly half of all families globally.

- The average length of time to a bipolar diagnosis is 10 years.

- Mental illness has an average burden of 13.6 disability-adjusted life years.

- Virtually all drugs approved for mental illness have been incremental changes of drugs available four decades ago.

The center would build on the following existing strengths at Vanderbilt and capitalize on previous investments (geographically listed SW to SE-compact campus)

- The Department of Psychiatry (Stephan Heckers)

- The Department of Pharmacology

- The Vanderbilt Center for Neuroscience Drug Discovery (Jeff Conn)

- The Genomics Institute and BioVU (Nancy Cox)

- Neuroimaging in VUIIS (fMRI and PET) (John Gore)

- Core strength in neuroscience in the Vanderbilt Brain Institute

- Nanotechnology for molecular mechanisms developed in VINSE (Sandra Rosenthal)

- Phenomics from the Center for Innovative Technology (John McLean)

- Diagnostics from the Laboratory for Innovations in Global Health Technologies (David Wright)

There are four goals for the center:

1) Determine the underlying mechanisms of mental illness (including epigenetics)

2) Develop quantitative diagnostics for mental illness, ultimately applied globally

3) Develop improved therapeutics

4) Combine 2 and 3 to develop precision medicine, ultimately applied globally

Below is a chart that approximately matches the goals to the existing strengths.
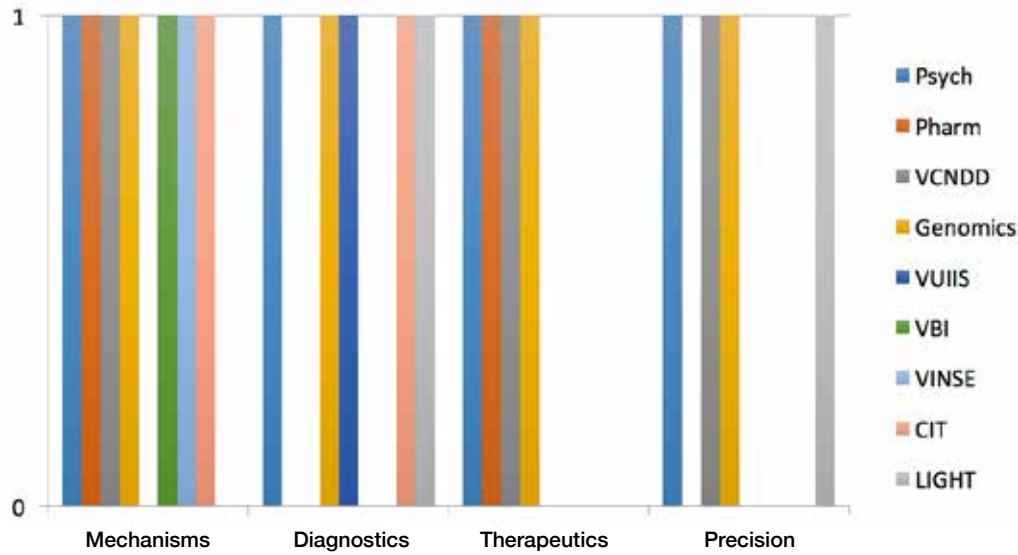
Center Activities

- Research (70%): Determining molecular mechanisms for mental illness will point to both quantitative diagnostics and new therapeutic interventions. Diagnostics can also be developed in an empirical approach through phenomics, fMRI, PET, and psychiatry. VCNDD has the ability to develop and take through trials new therapeutics. All of these activities performed in conjunction with genomics yield precision. LIGHT will focus on creating diagnostics that can be applied globally.

- Graduate Education (20%): Explore training grant opportunities through both NSF and NIH.

- Undergraduate Education (5%): Provide funds for immersive summer research experiences to complement academic-year research.

- Outreach (5%): General education activities (campus and public) regarding the underlying biological origins of mental illness. These activities should aim to reduce stigma and encourage help-seeking behavior.

Examples of Possible Research Objectives

a) Develop a point-of-care diagnostic that prevents individuals who cannot tolerate an SSRI from receiving them (same as diagnose bipolar at first onset).

b) Develop therapeutics for schizophrenia that do not have cognitive side effects.

c) Ensure individuals with depression receive the right medication, the first time, every time.

d) Create therapeutics that do not have metabolic side effects.

Funding: The center would be seeded by the university and development efforts (development would be an ongoing effort). Agencies that would support aspects of this work include NIH, NSF, and DOD. Center grants and training grants would be pursued.

Outcomes

The realization of precision medicine for mental illness would reduce the burden of mental illness on society. Developing quantitative diagnostics from biomarkers would instantly reduce stigma associated with having mental illness. Having improved, precise therapeutics available would strongly encourage help-seeking behavior and improve medication compliance, as well as reduce stigma. The DALYs for mental illness would be sharply reduced. Medical costs and the "clog" on the health care system would decrease. Homelessness would decrease. Lives would be spared. Establishing this center should also help Vanderbilt with development: The WHO reports that there is mental illness in 50 percent of families globally. By extension, there is mental illness in 50 percent of the families of Vanderbilt alumni. Development and Alumni Relations should be able to put a name on this center. Successes in diagnostics and/or therapeutics would lead to income for the university.

Tentative Structure

• A minimum of 20 faculty have to self-identify with the VCPMMI in order for the center to be feasible.

• The leaders of the nine constituents above would form the advisory board with a director, program coordinator, administrative assistant, and communication director/proposal writer.

• An external advisory board would meet annually.

• One core facility would be created. The role of the core would be to differentiate stem cells into neurons from genetically identified individuals with characterized illness. These neurons would be available to the VCPMMI.

• In addition to the original self-identifying faculty, five faculty that bridge two or more of the core constituents would be hired.

• The initial charter and funding for the VCPMMI would last five years.

Comments

• Where a name is listed above, the individual has read and discussed this white paper and indicated support/willingness to participate.

• Social science is a missing piece in this document. Social science can provide "input" (e.g., epigenetic studies on large populations). Social science can also help with output (e.g., navigating cultural differences as we aim for global reach).

• The Center for Addiction should also be a core constituent.

References:

1. *Night Falls Fast: Understanding Suicide*, Kay Redfield Jamison (Johns Hopkins University). Vintage Press, 2000.

2. "From Discovery to Cure: Accelerating the Development of New and Personalized Interventions for Mental Illnesses." Report of the National Advisory Mental Health Council's Workgroup. August 2010. http://www.nimh.nih.gov/about/advisory-boards-and-groups/namhc/reports/fromdiscovery-tocure.pdf accessed December 5, 2013.

3. The World Health Report 2001: "Mental Health: New Understanding, New Hope," World Health Organization; http://www.who.int/whr/2001/en/whr01_en.pdf, accessed December 9, 2013.

4. C.J. Murray, et al., "Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study," *Lancet,* 380, 2197 (2012).