

*Discovery*  
**VANDERBILT**  
*Learning*

*An Academic Strategic Plan  
in Service to Humanity*



VANDERBILT  
UNIVERSITY

# Academic Strategic Plan for Vanderbilt University

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July 2014

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# Academic Strategic Plan for Vanderbilt University

## Executive Summary

July 2014 - Draft

Vanderbilt University aspires to shape the future of higher education and to foster the creation of knowledge that together improve the human condition.

Vanderbilt embraces this vision by focusing on the following goals:

- to pursue excellence in education by offering experiences that merge the advantages of a liberal arts college with those of a world-class research university
- to pursue excellence in scholarship, creative expression, and research that address important problems and questions facing our community, our country, and the world
- to leverage the many synergies between discovery, learning, and service across our entire community of scholars and learners to seek accomplishment and seize opportunities
- to be transparent and accountable to all the University's constituencies
- in sum, to be among the very best research universities in the world

In pursuing these goals, Vanderbilt will fully commit to cultivating an environment for learning across a broad base of humanist, social, and natural science disciplines. We also commit to investing in *creative* expression and *fundamental* research. Further, we commit to ensuring diversity of all forms in the pursuit of excellence in learning and discovery.

### **Vanderbilt's Distinctions and Institutional Identity**

Vanderbilt is exceptionally well positioned to meet current and future challenges facing higher education and society. We will capitalize on our distinctive strengths and the substantial gains established over the past decade, including:

- a *One Vanderbilt* philosophy that unites ten outstanding schools and colleges all connected by a compact central campus
- a culture of collaboration, creativity, and civility
- a commitment to affordability and accessibility
- the establishment of a residential college system
- a scholarly community where learning advances discovery and discovery advances learning
- being located in one of the most dynamic cities in the country

## Strategic Thinking for Vanderbilt's Future

Four foundational principles frame our aspirations as one of the world's great teaching and research universities.

### **1. Offering students a rich and diverse intellectual community that educates *the whole person* and cultivates *lifelong learning***

Our graduates must be able *to solve problems*. Toward that end, a Vanderbilt education will instill in our students an ability to engage, to question, and to forge positive change.

#### *Strategic Initiatives*

1. Fully endow *Opportunity Vanderbilt* to ensure accessibility and affordability
2. Enrich the educational experience by completing and extending the residential college system and developing new infrastructure to foster further interconnections between discovery and learning
3. Establish *Immersion Vanderbilt* to ensure that *every* undergraduate engages in a creative and independent project
4. Launch new curriculum to enable foundational skills for lifelong learning, including those in the languages, the arts, and new technology
5. Establish a *Cross-College Teaching Initiative* that allows *all* faculty to work together to educate our undergraduate, graduate and professional students

### **2. Investing in multi- and inter-disciplinary programs to lead in defining and addressing important problems facing society, while pursuing new and exciting opportunities**

Vanderbilt is poised to excel in discovery and learning by leveraging the tremendous expertise from across *One Vanderbilt* while further strengthening our training of future leaders and scholars.

Trans-institutional programs will focus on issues of wide-ranging significance, create and/or extend collaborations across multiple fields, and include both research and teaching components, positioning Vanderbilt to be a world leader.

#### *Strategic Initiatives*

1. Establish a university-wide council to oversee Trans-institutional Programs (TIPs), developing and applying criteria for guiding investments in new and existing TIPs.
2. Provide seed money for creative ideas with clear benchmarks for ongoing support, and establish sustainable platforms and environments for incubating innovative ventures for discovery and learning.
3. Invest in graduate education to make dramatic improvements that advance recruiting and

special training, and strengthen our intellectually rich culture across the entire campus.

### **3. Building distinctive and distinguished programs that develop and offer effective solutions to pressing health and healthcare problems**

Vanderbilt must harness its widely recognized strengths in healthcare and considerable disciplinary breadth across our compact campus.

We recommend support for efforts to develop and implement innovative, aggressive and multi-disciplinary solutions that improve personal and community health, impact disease prevention, advance the quality, equity, and accountability of healthcare services, improve public policy tied to disease prevention and healthcare delivery, and train future leaders and scholars in healthcare.

#### *Strategic Initiatives*

1. Create sustainable platforms to support fundamental research yielding discoveries about the molecular basis of disease
2. Launch efforts to infuse health and biomedical science initiatives with university strengths in the humanities and social sciences, and provide forums for understanding the cultural, economic, legal, political, and social attributes that affect health and disease prevention
3. Develop specialized curriculum that will train future leaders to address complex health and healthcare issues from innovative interdisciplinary perspectives, including endowing and expanding dual degree programs
4. Make Vanderbilt a national “hub” for identifying solutions in healthcare delivery and policy

### **4. Transforming education models through technology and research**

Vanderbilt must build on its international reputation and conduct cutting-edge research that will assess effectiveness of new education technologies, which, in turn, will allow us to be a leader in best practices. We must embrace those new education technologies that foster innovation in learning, teaching, and discovery.

#### *Strategic Initiatives*

1. Create new infrastructure that supports emerging education technologies and enables personalized and connected learning for all Vanderbilt students – current, past, and future
2. Build partnerships between the new Vanderbilt Institute for Digital Learning, the Center for Teaching, the libraries, and all campus programs to most efficiently and effectively advance new technologies
3. Launch new curriculum in communications and information technology, data analysis, data visualization, and analytics

4. Invest in research on the impact of new education technologies on learning
5. Employ new education technologies to forge partnerships, collaborations, and global outreach

## **Stewardship of Our Future**

Vanderbilt has a profound responsibility to society and all its stakeholders to be good stewards of its precious resources. The following are key criteria for stewardship offered by this strategic plan:

- Vanderbilt will assess outcomes and be accountable for the efficient use of resources
- Vanderbilt will assess the achievements and satisfaction of students and faculty
- Vanderbilt will assess the impact of research and the effectiveness of learning
- Vanderbilt will periodically review its activities in these thematic areas, eliminating or improving underperforming areas and setting priorities so the University can be truly distinctive

As we look toward our 150<sup>th</sup> anniversary in 2023, Vanderbilt's 2013-14 Strategic Plan will bring *all* schools, *all* hands, and *all* minds together in the joint missions of learning, discovery, and service. We are indeed *One Vanderbilt*, and we will meet our challenges and continue our rise to the top together.

# Academic Strategic Plan for Vanderbilt University

**DRAFT: July 2014**

## Introduction

Vanderbilt University seeks to improve the human condition through excellence in teaching, research, and service. With the tremendous gains Vanderbilt has made during the last decade, our future burns bright. As a world-class research university with a residential college system linked together on a shared central campus in a thriving metropolitan area, we are ideally positioned to educate the next generation of leaders and pursue path-breaking discoveries that address the most pressing problems and questions confronting society. Vanderbilt's remarkable promise will require new investments, new programs, and a shared commitment to innovation.

In the summer of 2013, Vanderbilt launched an intensive and bold strategic planning process. The resulting plan leverages our distinctive culture of civility, creativity and collaboration in the pursuit of new levels of achievement. Our future excellence will converge at the intersection of teaching and discovery, where the best of the liberal arts college tradition meets the creativity of a world-class research university.

Vanderbilt's goals for excellence rest on the following aspirations:

- to pursue excellence in education by offering an experience to our students that merges the advantages of a liberal arts college with those of a world-class research university
- to pursue excellence in research by generating new and creative discoveries that address the important problems and questions facing our community, our country, and the world
- to offer truly distinctive teaching and research by leveraging the many synergies between these two critical endeavors
- to be transparent and accountable to all the University's constituencies
- in sum, to be among the very best research universities in the world

# Vanderbilt's Values

As we map Vanderbilt's future, our plan must reflect key commitments that give voice to the core values that define this great institution.

## **Commitment to a Liberal Education**

Vanderbilt's support for a broad based liberal education is unwavering. This steadfast commitment provides us a unique opportunity to advance the country's ongoing conversations about the purpose of a college education. Some observers argue that universities should educate students in the humanities and social and natural sciences because such broad training holds the key to productive citizenship in an increasingly global and competitive world. Others disagree, arguing that a practical education offers the clearest route to a productive, professional career. Both sides are passionate about their positions. The Vanderbilt experience shows that the issue is not whether students are "better off" being philosophy majors or public policy majors or engineering majors, but whether they are prepared by their education to make the world a better place. Students interested, for instance, in tackling inequality—a truly important problem facing society—would greatly benefit knowing both philosophy and public policy. Or, students inspired to seize opportunities to design and implement new solutions for energy production would profit from learning both public policy and engineering. By focusing a Vanderbilt education on seeking opportunities to solve problems and achieve discovery, we begin to see the merits of a liberal education as a vehicle for students to be productive and successful citizens. No problem, especially the complicated issues that confront society today, can be solved from one perspective or through one discipline. Moreover, creating ideas of positive impact requires diverse approaches. To understand the human condition, we must ensure our students have both an appreciation for the broader social, historical, and political contexts of current challenges and a set of specific skills to navigate the technical aspects of a field and strive for excellence and creativity.

Given this commitment to a broad-based education, we must infuse our students and our faculty with the desire to work together to tackle the pressing challenges that confront society and to generate discoveries with impact. We must leverage our excellence in disciplinary thinking while taking aggressive steps towards new approaches in both our teaching and our research to advance discovery and learning. Excellence requires building a culture of creativity that also supports the pursuit of calculated risks. Through this balanced approach, Vanderbilt will ensure its standing as a great research and teaching university.

## **Commitment to Research**

We must continue to invest in scholarship, creative expression, and fundamental research in order to realize the long-term vision of new and creative discoveries. Unlike some businesses that might be motivated by short-term profits or political institutions that are often shaped by two to four year electoral cycles, universities offer nurturing for truly rare and creative environments for ideas that often come from unexpected sources. None of our crystal balls can anticipate which research and speculative endeavors will actually prove transformative, nor can they foretell the time and effort

needed for such innovation. Vanderbilt, therefore, must support a culture that embraces seeking accomplishment and excellence wherein fundamental breakthroughs are possible. We are defined by those rare findings and need to provide core support so to ensure that transformative discoveries result and ultimately improve the human condition.

### **Commitment to Diverse Perspectives**

Vanderbilt aims to be an institution that fosters and engages diverse perspectives. Diversity, in the broadest sense of the term, is absolutely critical to ensuring excellence in our core missions of discovery and learning. The human condition is fundamentally shaped by the context in which we have lived, learned, and now reside. A university offers an exceptional opportunity to bring together people from different personal and scholastic backgrounds in the name of higher learning. The experience of being an African-American is different from that of being a Hispanic. The same is true for gender, ethnic groups, social class, place of origin, sexual orientation, and countless other genetic, cultural and environmental parameters. It is also true that engineers have different perspectives than lawyers, as well as classicists compared to chemists. At one level, all such claims are obvious. The human condition, and human lives, is shaped by these different experiences, and they give rise to very different prisms by which each individual thinks about problems and opportunities and then approaches solutions.

Diverse perspectives, in short, seed discovery and learning and Vanderbilt strongly supports and defends expressions of diverse thought and opinion. Our geographical advantages of a shared central campus offer great opportunities to pursue the benefits of multiple academic perspectives, and we must ensure that the right incentives and structures are in place to embrace diverse thought and opinion. Our amazing colleges must share ideas, insights, and perspectives with each other through a range of trans-institutional programs. We must also make sure there is true diversity of perspective among faculty, students, and staff. Importantly, we also must continue to ensure the very best undergraduates can attend Vanderbilt regardless of financial standing. This commitment to diversity and equality is fundamental to the University's future.

# The 2013-14 Strategic Planning Process

In launching this strategic planning process, Chancellor Zeppos charged the Executive Committee and its Steering Committees to be bold and creative. To meet this charge, the planning process employed a number of unique features.

First, this planning process included for the first time the entire campus—all ten colleges and schools. This inclusive process was inspired by the success of the 2002 University Central and 2006-08 Medical Center strategic plans. The benefits of a campus-wide approach were apparent from the start, and the range of perspectives gave rise to a rich variety of innovative ideas and recommendations.

Second, the planning process followed an ambitious timeline for completion, within one calendar year. The resulting intense process provoked new conversations and ideas that provided genuine momentum to our planning.

Third, and perhaps most notable, is that the process relied on a bottom up approach with the faculty leading the way. Over 600 faculty participated formally or informally in the process. This attribute is quite distinct in comparison to the organization of strategic plans at other universities. As the year unfolded, great care was also given to securing feedback from key university stakeholders. The end result allowed great ideas to flourish, and the plan benefited directly from the input of the Board of Trust, donors, alumni, students, and staff. In total, well over 1,250 colleagues and friends contributed to this process, providing constructive insights and opinions from the important constituencies that comprise Vanderbilt. With this approach, the values, visions, and initiatives that define this Strategic Plan should be positioned to not only shape the direction of the University for the coming years, but also to serve as a collective blueprint for the future.

Fourth, a set of dynamic and inter-connected themes drove Vanderbilt's 2013-14 Strategic Plan: *Undergraduate Residential Experience*, *Trans-institutional Programs*, *Healthcare Solutions*, and *Education Technologies*. These overlapping themes encouraged creative exploration of new ideas that can thrive in an intimate learning environment nested within a leading research university. These themes also force us to confront important challenges; whether it be the rise of new technologies, the many criticisms facing higher education, or the tough problems facing society, such as healthcare.

The purpose of the 2013-14 Strategic Plan is to develop broad and compelling ideas that blaze a path for the University to follow as we approach our 150th anniversary. This ambition reflects Chancellor Kirkland's (1893-1937) insightful observation that in "building a university there is never an occasion for finishing touches. The task is always one of laying foundations." We strive to follow this sage advice by laying foundations for Vanderbilt for the coming years and decades.

In what follows, we discuss the past, the present, and the future of Vanderbilt. The discussion of the past and the present provides the context for the new strategic plan. With that context in place, we turn to a discussion of how Vanderbilt should move forward in the coming years, using

the four themes as the main drivers for the ideas and initiatives that arose from the many conversations that took place during the 2013-2014 strategic planning process. This report concludes by discussing the role of stewardship as we strive to guarantee Vanderbilt's future success.

## The Past: What a Difference a Decade Makes

Vanderbilt's 2002 Strategic Plan outlined a series of bold proposals to enhance Vanderbilt's standing as a premier research and teaching university. When the 2002 process began, Vanderbilt had reached a number of impressive firsts, including a record number of freshman applications (9,838), a record high graduation rate (84.1%), a record 171 graduating doctoral students, and an all-time high of \$219 million in sponsored research. Major gifts were in place for the construction of a new children's hospital and the first phase of a new residential college system. Our endowment stood at an unprecedented \$1.9 billion. These numbers seem modest compared to our current achievements (which include an endowment now over \$4 billion and close to \$600 million in sponsored research), but they provided a sturdy springboard.

The 2002 Strategic Plan strove "to declare what is unique about Vanderbilt and fuse that mission into an institutional identity that serves as our compass for the future." The 2002 plan established four overarching goals:

1. Establish the best undergraduate experience
2. Improve graduate education
3. Develop and retain an outstanding faculty
4. Build creative and competitive research and teaching environments

Few would have predicted the strides Vanderbilt has made over the last twelve years in realizing these goals. Briefly reviewing these past accomplishments helps set the stage for the 2013-14 Strategic Plan.

### Establishing the Best Undergraduate Experience

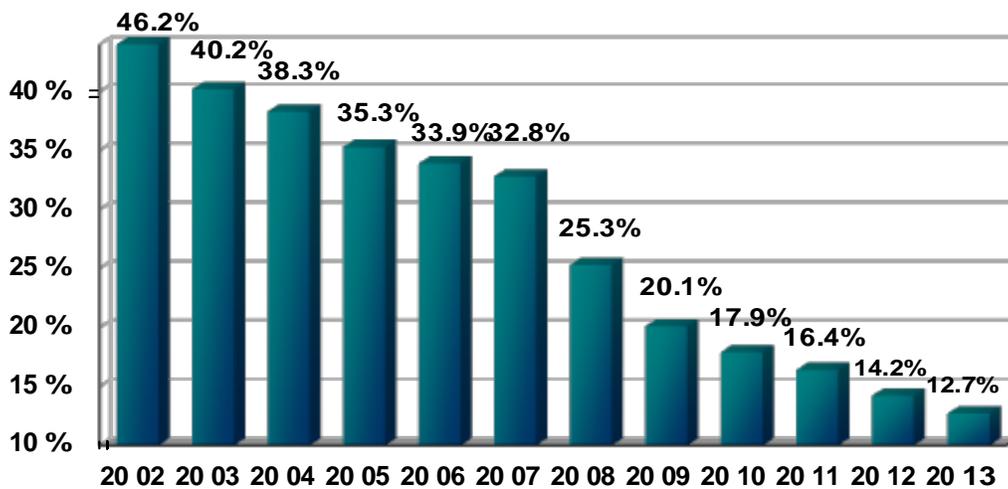
The 2002 Strategic Plan redefined the undergraduate experience at Vanderbilt in two important ways. First, Vanderbilt committed itself to establishing an undergraduate residential college system. Six years later, Vanderbilt opened The Martha Rivers Ingram Commons, a unique first-year living-learning experience comprised of ten houses and guided by residential faculty. At the heart of The Commons is a dining-activity complex intended to foster a sense of community between students, faculty and staff. All first-year students begin in The Ingram Commons and the residential living and learning experience aims to transform the diverse collection of highly talented individuals into actively engaged university citizens. The opening of the Warren and Moore College Halls at Kissam in the fall of 2014 will mark the next step in the development of the residential college system.

Second, Vanderbilt took the dramatic step in 2009 to abolish all need-based undergraduate student loans and replace them with scholarships and grants. While many universities retrenched on such financial commitments given the difficult economic times tied to the Great Recession, we stayed the course due to a special endowment—*Opportunity Vanderbilt*—designed to support Vanderbilt's affordability and accessibility. To date, Vanderbilt has raised more than \$179 million in gifts and pledges to help ensure that all deserving students, regardless of their economic circumstances, are able to attend Vanderbilt.

These steps paid major dividends. Vanderbilt is now competing for the best and the brightest. In 2002, Vanderbilt’s top competitors for our best undergraduates were Duke, Washington University, Emory, and University of Virginia. Little more than a decade later, we now are competing with Harvard, Yale, and Princeton. The number of freshman applications has jumped from almost 11,000 in 2003 to over 31,000 in 2013. As Figure 1 shows, admission to Vanderbilt has become increasingly difficult, with only one of eight applicants admitted in 2013. With this level of selectivity, it is no surprise that over 90 percent of admitted students in 2013-14 were in the top 10 percent of their high school classes and the middle 50 percent of SAT scores were between 1410 and 1570. This transformation now means that many of the metrics of Vanderbilt’s admitted students now surpass those at schools such as Duke, Penn, and Dartmouth.

Vanderbilt has also advanced the diversity of the student body. Over the past decade, freshman classes have become more diverse with regard to race, culture, religion and socio-economic background. In 2003, 20 percent of our students were from under-represented racial or ethnic groups. By 2013, the proportion stood at 34 percent—a 70 percent jump over ten years.

**Figure 1: Undergraduate Student Selectivity**  
**Percent of Applicants Admitted from 2002 to 2013**



### Improving Graduate Education

Vanderbilt has long had an important role in training the next generation of scholars and academic leaders. In 1879, when the U.S. consisted of only 38 states, Vanderbilt awarded its first M.A. and Ph.D. degrees. The 2002 Strategic Plan and the 2003 Report on Graduate Education built upon these historical roots to identify ways to improve graduate education. Those ideas gave rise to the 2009 Task Force on Graduate Education that called for enhanced funding for graduate stipends, along with increased support for student recruitment, career development, and

faculty mentoring. Responding to these recommendations, Chancellor Zeppos increased stipends for graduate students by 33 percent and sponsored a five-year pilot program—The Vanderbilt International Scholar Program (VISP)—to recruit and to support outstanding international students in Vanderbilt's biomedical training programs. The professional schools also engaged in significant curricular innovations. As an example, the School of Medicine launched Curriculum 2.0 in the fall of 2013 to better train the next generation of physician leaders.

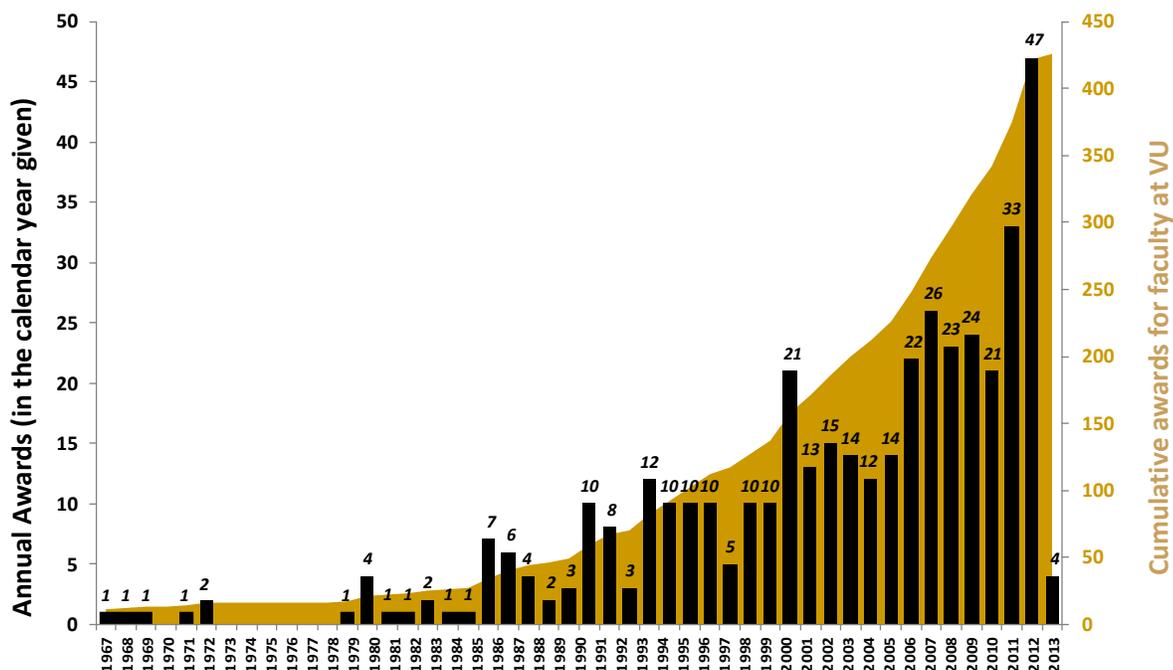
The results have been notable—the annual number of doctoral degree recipients has grown from 171 in 2002 to 286 in 2013. Applicant selectivity and quality for the graduate and professional students have steadily improved. Both the Verbal and Quantitative GRE scores in the Graduate School rose between 2003 and 2013. In the School of Medicine, the MCAT for entering medical students increased from 10.8 to 11.6. The Vanderbilt University Law School saw the LSAT 25th/75th percentile ranks improve from 162-166 to 165-170. Students entering Owen Graduate School of Management had notably higher GMAT scores in 2013 than just a decade earlier (688 compared to 638). Vanderbilt has also experienced remarkable improvement in competing for NSF Graduate Fellowships. Over the last five years, there has been a three-fold increase in the number of fellowships, putting us at 12th in the nation on this dimension.

### **Developing and Retaining Outstanding Faculty**

Recruiting and retaining outstanding faculty has been, and will always continue to be, a top priority. Our faculty create the very best opportunities for discovery, teaching and service that define Vanderbilt. The 2002 Strategic Plan encouraged a dramatic increase in the number of endowed chairs aimed at both recruiting and retaining Vanderbilt's most outstanding faculty. Since then, the number of endowed chairs in University Central has increased from 76 in 2002 to 186 in 2013, with an additional 155 in the Medical Center as of 2014.

Indicators of growing excellence in the faculty comes, as Figure 2 shows, from the three-fold increase in the number of national and international honorific awards given to our faculty between 2003 and 2013, and the 161% increase in total sponsored research—\$219 million was awarded in 2002 compared to \$571 million worth of awards in 2013. In fact, the National Science Foundation ranked Vanderbilt 22nd among U.S. colleges and universities based on all federal obligations for research and development funding, and the School of Medicine now ranks among the top 10 in funding from the National Institutes of Health. This growth is even more remarkable given the constraints on federal research budgets over this period; Vanderbilt's faculty are clearly competing successfully in an increasingly difficult environment for research funding.

**Figure 2: Honorific External Awards to Vanderbilt Faculty Over Time**



As of April 30, 2014. Note: Award counts based on calendar year. Therefore, 2014 is a partial year. These data represent one year's faculty roster and the date of all their awards. It is answering the question of when did our current faculty receive their AAU+ awards and how did those grow over time. Source: VIRG

### Building Creative and Competitive Research and Teaching Environments

The 2002 Strategic Plan underscored the importance of collaborative teaching and research programs that reach across disciplines and colleges. To leverage the unique strengths of Vanderbilt's contiguous campus, the 2002 Strategic Plan launched the Academic Venture Capital Fund (AVCF). This initiative enabled significant investments in research programs to bring talented faculty and students together from across disciplinary boundaries to achieve meaningful new insights and discoveries. Vanderbilt faculty now work together as never before. Interdisciplinary work has merged with disciplinary work as a recognized and accepted feature of intellectual life at Vanderbilt. Indeed, the trans-institutional efforts include both educational programs (e.g., Medicine, Health and Society) as well as research programs (e.g., the Institute of Chemical Biology). Some of these efforts are housed in virtual "centers/institutes," while others are located in new spaces; regardless, promoting trans-institutional and inter-disciplinary initiatives creates environments that draw outstanding faculty, graduate students and undergraduates to Vanderbilt.

A distinctive strength of Vanderbilt is the presence of a Medical Center (medical school, nursing school, and both adult and children's hospitals) headquartered on campus. From 2002 to 2014,

the Medical Center achieved significant progress on many levels. The Monroe Carell Jr. Children's Hospital at Vanderbilt opened in 2004, and it recently added additional beds to meet demand for young patient care. At the regional level, the Vanderbilt Health Affiliated Network (VHAN) composed to date of 30 hospitals in Tennessee and adjacent states recently launched to help coordinate standards of care and extend the reach of Vanderbilt. The strategic planning efforts conducted by the Medical Center in 1998 and 2006-08 focused on building basic science, public health, drug discovery, and personalized medicine, and it also seeded growth and excellence in faculty and trainees. As home to the world's largest DNA bank that is linked to electronic health records, Vanderbilt is a global leader in personalized medicine. We are also a leader in translational research—serving as the coordinating center for all of NIH's Clinical and Translational Science Awards centers in the country.

Vanderbilt fostered cutting edge education technology. Following the successful 1998 launch of video streamed faculty lectures, the School of Nursing began implementing in 2002 a variety of distance learning strategies ranging from videoconferencing, clinical logs, asynchronous interactive learning modules, webinars, clinical simulations, remote proctor devices, and the use of virtual reality. The School of Medicine developed a series of information technology tools with both its Curriculum 1.0 and now Curriculum 2.0 innovations, including KnowledgeMap—a full-featured content management system designed to enhance the delivery to medical education content to students and faculty. In 2012, as part of a campus-wide effort to embrace newly developed digital technologies, Vanderbilt announced its partnership with Coursera and the subsequent launching of five free online courses in January 2013. The Vanderbilt Institute for Digital Learning is now poised to develop and implement new online tools to increase student engagement, enhance research, and bring the knowledge generated by our faculty to students around the globe.

In recent years, Vanderbilt has also established key institutional partnerships abroad. These partnerships now include the University of Melbourne, the University of Sao Paulo, Leipzig University, and Queens University in Belfast. Each school at Vanderbilt has also developed its own international partners, ranging from the development of the Americas MBA program at Owen to Peabody's efforts in Abu Dhabi. Vanderbilt is also home to a federally-designated National Resource Center for Latin American Studies, and the Vanderbilt Institute for Global Health in the Medical Center helps promote health in resource-limited regions around the world.

## **Summary**

The gains over the last decade have laid the foundation for Vanderbilt to make even more progress. We cannot rest on our laurels. We must, as in 2002, pursue bold and innovative ideas that will secure Vanderbilt's future. The key is to empower our talented faculty and students to make the most of their many gifts. By fostering more and better connections between students and faculty, we will encourage genuine discovery that will help solve pressing problems facing society, seize novel opportunities, educate future leaders and scholars, and, as a result, improve the human condition.

## The Present: Challenges and Distinctions

In any strategic planning process, there must be an acknowledgment of existing challenges that pose obstacles to the organization's future. The ambitions represented in our planning process must, therefore, reflect these headwinds that confront higher education, research universities, and academic medical centers. These challenges are not likely to fade any time soon, making it even more important that they be addressed.

Globally, we face problems ranging from environmental and economic sustainability to a growing gap between the rich and poor and the constant threat of terrorism and political turmoil. Domestically, America's economic and political future faces increasing uncertainty fueled in large part by polarization and gridlock. At this same time, society is poised to capitalize on the deep intellect and base of knowledge gained from cultural, technological and scientific insights. Consider the opportunities only now available due to human genome analysis, enhanced computing power, and globalization. However, resources for both education and fundamental research are experiencing unprecedented constraints. Institutionally, how can Vanderbilt best address rising concerns regarding the growing cost of a college education while at the same time offering its students a diverse living and learning environment that prepares them to lead in the twenty-first century? How can we further innovate in healthcare in the face of rising costs, system restructuring, and the pressing need to prevent disease not just treat it? How can we leverage interdisciplinary teaching and research so as to ensure Vanderbilt addresses the problems confronting society and humanity and seizes opportunities for novel discoveries? How do we harness the most effective new education technologies that can advance our teaching and research? These critical questions have no easy answers. Vanderbilt's response must be both vigorous and effective.

### The Vanderbilt Advantage

Fortunately, Vanderbilt is exceptionally well positioned to meet today's challenges and continue leading and defining the future of higher education. This optimism springs from five distinctive attributes:

#### *One Vanderbilt*

Vanderbilt's shared central campus is an integral part of the *One Vanderbilt* philosophy. Access to ten highly ranked colleges offers our students and faculty a unique environment for learning and discovery. Students can engage in research with scientists in the School of Medicine while also working with humanists from the College of Arts and Science. Faculty at the Blair School can collaborate with colleagues at Peabody College to consider how music can affect childhood education. Students can learn about computer design with faculty in the School of Engineering and the Owen School, producing new software that could lead to more efficient businesses and privacy protection. Vanderbilt also has a robust healthcare system that provides tremendous opportunities to address the many deep and complex issues related to health and healthcare. *One Vanderbilt* reflects a deep commitment to a unique culture of collaboration, creativity, and civility across a wide array of disciplines. Vanderbilt faculty, staff and students at all levels—

undergraduate, graduate, and professional—work together to explore critical questions across disciplinary boundaries, develop crucially important intellectual and civic capabilities, and use those insights to forge change that helps to address the big problems facing society.

### ***Opportunity Vanderbilt***

Our commitment to *Opportunity Vanderbilt* is absolutely fundamental to our educational mission in the twenty-first century. By replacing need-based loans with scholarships and grants in 2009, all outstanding undergraduates, regardless of financial standing, can now join our living and learning community. *Opportunity Vanderbilt* exemplifies our core values, and it advances our steadfast dedication to equality, diversity, accessibility and affordability.

### ***Residential College System***

Vanderbilt's commitment to a rich and balanced residential college experience underscores our commitment to leadership, friendship and community. The Martha Rivers Ingram Commons for all first-year students and the new Warren and Moore Colleges for upperclassmen are critical to educating the whole person and establishing a passion in our students for life-long learning. With both the opening of The Ingram Commons and the establishment of *Opportunity Vanderbilt* in 2008, the result has been a shared experience where undergraduates, regardless of interests, background, or financial standing, create an engaged community of students and faculty. When truly exceptional and diverse individuals are brought together to live and learn, the resulting experiences cultivate the values we seek to instill in our students. They learn to grapple with different perspectives that can lead them to question or to affirm their own thinking and work collaboratively with one another to forge change.

### ***Collaborative Teaching and Research Environment***

The combination of *One Vanderbilt*, outstanding students, and world-class faculty provides a unique opportunity to build a coherent and collaborative intellectual community where learning advances discovery and discovery advances learning. All too often, these important missions are viewed as in conflict with each other—as faculty teach more, they might do less research, and vice versa. However, great faculty teaching great students provides valuable opportunities to yield both learning and discovery. In addition, our compact geography also makes real collaboration possible among disciplines and across our ten colleges and schools. All Vanderbilt faculty and students must continue to work together to explore critical questions that cross disciplinary boundaries, and use the resulting insights to re-imagine teaching and research partnerships. This rich context allows our students to make a real difference when tackling the big questions and problems confronting our society. These transformative partnerships can and will help our students develop critically important intellectual and civic capabilities while ensuring our faculty are immersed in a vibrant environment of learning and discovery.

## *Nashville*

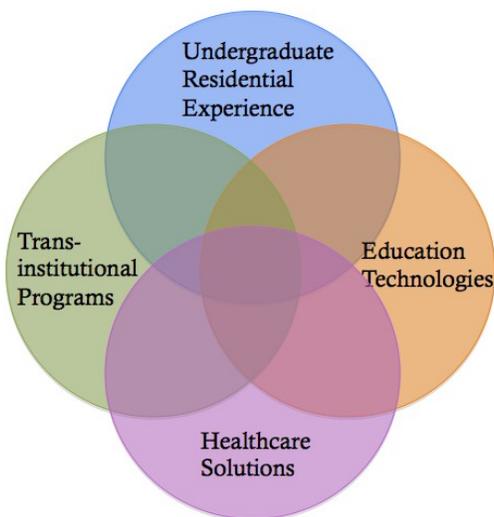
Vanderbilt is located in a dynamic city that offers a rich context for learning and discovery. Its nickname of “Music City” underscores Nashville’s potential for creativity. It provides our faculty and students with access to one of the leading arts environments in the country, offering near limitless possibilities for music, visual arts, professional development in graphics, video production, publishing, and broadcast television. Nashville also has a long history of healthcare innovation and has become a magnet for many dynamic businesses. As a state capital, Nashville is a center of political activity, providing students an opportunity to make a difference in public affairs and public service along with strong connections to critical social and political movements in our country’s history. Nashville is now being touted as one of the most exciting cities in the country and that fact redounds to Vanderbilt’s advantage.

# Strategic Thinking for Vanderbilt’s Future: The Four Themes

Each of the four themes driving this strategic plan support and advance Vanderbilt’s goals and aspirations. Importantly, the four themes intersect in scope and in vision. They are not constructed as or intended to be competing “silos.” Instead, the themes reinforce each other and the resulting initiatives gain power from those synergies and interconnections. It is easy, for instance, to imagine how enhanced education technologies could enrich the undergraduate residential experience. Likewise, the activities surrounding the development of new healthcare solutions will embrace the entire campus and, as a result, offer new curriculum for undergraduates and initiatives in the Trans-institutional Programs. The opportunity for collaborations among faculty, students, and staff is evident in each theme and across themes, resulting in countless synergies—many of which we cannot even anticipate at this point. The concept underlying these interconnections is illustrated by Figure 3. At the center of the diagram lies shared space across all four themes, which constitute those initiatives that will enrich Vanderbilt’s future on many different dimensions. For example, investments in research are obvious actions that benefit all four themes and, thus, advance Vanderbilt’s important missions.

It should be clear that not only is there significant overlap between the four themes, but also that each theme has great breadth. This breadth allows each theme to cover important topics that are not necessarily singled out and given explicit billing. For example, graduate and professional education, although not formal themes, receive specific attention through proposed initiatives in each of the four themes. As such, this plan will build upon and augment the critical advances that have been made in graduate education since 2002. The same is true for Vanderbilt’s global reach and international presence. Global initiatives cut across all aspects of the university and, consequently, each of the strategic plan themes. We refer to these critically important topics as “cross-theme threads,” and they are mainstays of Vanderbilt’s future.

**Figure 3: Four Central Themes drive the Strategic Plan**



## 1. Undergraduate Residential Experience (URE)

We aspire to offer students an intellectually rich, diverse and dynamic education. Our ability to provide a compelling learning environment is possible because Vanderbilt's residential college experience is housed within a geographically compact and world class research university that operates as a meritocracy, drawing the very best students and faculty from around the globe. To realize this vision, we must innovate through daring thinking that draws on Vanderbilt's many distinctions. We must harness the outstanding research and teaching strengths of our faculty to create a dynamic living-learning environment that will instill critical human and intellectual qualities in all our graduates. This rich intellectual setting must expose our students to a wide variety of perspectives and experiences and educate the whole person while cultivating life-long learning.

### Why Now?

The exciting opportunities for Vanderbilt are set against a background of daunting challenges for American higher education, as noted in the previous section. Vanderbilt's response to these serious challenges has been vigorous and impressive. We have increased the affordability of our undergraduate education while making key investments within the University that will ensure we stay true to our missions of discovery, teaching, and service. Vanderbilt offers a way forward that can benefit our University- as well as others -by offering wise leadership that creatively addresses these issues.

### Why Vanderbilt?

Our undergraduate student body and our faculty are stronger than ever. We must now build upon this exceptional foundation of increasingly talented students living in a residential college system within one of the great research universities in the world. How can we more fully harness the outstanding research and teaching strengths of our faculty in synergy with our commitment to a dynamic living-learning environment for undergraduates? How can we develop unique experiences that result from having undergraduate, graduate, and professional students from our ten colleges/schools collectively together on one campus? To answer these questions, we must innovate.

### Strategic Vision

We seek to develop a distinctive vision for higher education in the twenty-first century by offering a broad and analytically coherent framework that reflects the values that are central to this great institution. Our graduates must be active citizens who **solve important problems** that confront the world and seek opportunities for discovery. The strategic planning process has identified the qualities we seek to instill in our student at Vanderbilt, enabling them to tackle, with success, the many problems facing our community, our country, and our world.

### Vanderbilt's Educational Aspirations

We want Vanderbilt students **to engage**. Our students must develop a deep sense of compassion that encourages them to give back to their community and to be good global citizens. We must

instill in our students a passion and ability to identify pressing issues both in the present and in the future. This passion must rest on a foundation of ethical behavior. To tackle effectively the truly critical problems and opportunities, our students must be open-minded and sensitive to the many afflictions facing humankind and the social and cultural context that shape humanity.

We want Vanderbilt students **to question**. Our students must be continually curious and view the workings of the world with a critical eye. They must leave Vanderbilt with the essential skills needed to solve problems and discover: the capacity to think independently, an ability to communicate effectively, a knack for listening carefully, and a desire to collaborate. Questioning must be done thoughtfully, with all the relevant facts and evidence, and with integrity. Such skills will allow our students to question and to think boldly and creatively.

We want Vanderbilt students **to forge change**. Our students need to be able to make a difference through leadership and collaboration. Our students are among the best and brightest in the world. They have access to resources and knowledge that provide them with an opportunity to change the world. For this potential to be realized, our students must be able to translate their inquisitiveness and skills into new and creative solutions to the many problems that face society. Vanderbilt students will be leaders, but will also know how and when to work collaboratively with others.

Vanderbilt's legacy will depend on the students it produces and the impact they have on the world. As a result, we must be vigilant in ensuring we instill in our students those qualities that will allow them to make a difference in the world.

### **Strategic Initiatives**

To achieve these educational goals, we recommend the following:

#### *Expand Opportunity Vanderbilt*

We must fully endow *Opportunity Vanderbilt*, including new support that would allow all our students to have the chance to study abroad and pursue specialized courses available in various topflight summer programs (e.g., Maymester). It is critical that all our students develop a sense of belonging and feel valued as part of our community. *Opportunity Vanderbilt* is absolutely central to the university's mission, and it speaks to our values, visions, and charge as a great institution of learning and discovery.

#### *Enrich the Residential College System*

We must deepen the educational experience by completing the residential college system. These efforts should include our graduate and professional students from all schools – both as part of the undergraduate residences and eventually as independent residential opportunities. Only then will we fulfill the promise of *One Vanderbilt*. The logic is compelling. The opportunity for all our students, whether they be undergraduate, graduate, or professional, to interact with each other and with internationally recognized faculty brings us much closer to ideals behind educating the whole person in preparation for life-long learning.

### *Invest in Critical Skills*

We must launch new opportunities for creative expression in foreign languages, in the fine and performing arts, and in information technology. To prepare our students to lead in a rapidly changing world and succeed in a globalized economy and culture, they must have the skills required to solve problems coupled with an appreciation and respect for human diversity. By significantly increasing investments in language training and study abroad programs, we would, for example, help internationalize our students in important ways and build synergies with the Immersion Vanderbilt initiative (see below). Similarly, students must have a chance to engage the emerging technologies that are reshaping society on a nearly daily basis and be able to function in an increasingly complex and data-driven world. New coursework supported by the initiatives in the Trans-institutional Programs, Education Technologies, and Healthcare Solutions themes should enable such skills. We must also be sure to have support and career services in place that allows students to translate their skills into professions to make a difference in the world.

### *Support Individualized, Creative, Research-Based Instruction*

We must pursue new ideas that capitalize on the increased talents of our students and faculty and our geography. Vanderbilt is uniquely positioned to demonstrate that the core missions of research and teaching are mutually reinforcing and can lead to innovation in each. To realize more fully the interplay between discovery and learning, we recommend developing mechanisms that encourage and reimagine collaborations among students and faculty to move away from the classic lecture format of teaching to more individualized, creative, and research-based instruction. To enable faculty and students to engage in such collaborations, we must:

1. launch *Immersion Vanderbilt*. We recommend that all undergraduates immerse themselves in a creative and independent project that gives each student an opportunity **to engage, to question, and to forge change**. *Immersion Vanderbilt* will be tailored to fit the needs of each college and will take on many different forms. It could be a senior thesis, it could be a semester spent learning the language and culture of Japan, it could be working at the medical school on a research team at the cutting edge of healthcare discovery, or it could be working on a matter of public policy facing Nashville.

For some students this experience might involve an internship, a design project, or a substantial creative performance. Others may want to branch out and expand their college experience beyond their major to a related or entirely different field. This could include students who participate by writing about an experience—creatively or analytically—or who produce something tangible from their experience. *Immersion Vanderbilt* will be inherently flexible to allow the student to work closely with a faculty mentor on a project that provides a depth of experience that will shape them for the rest of their lives. Such experiences already happen on our campus for many of our students, but this needs to be a defining part of the undergraduate experience at Vanderbilt for all students. By so doing, we will make a Vanderbilt education even more distinctive.

To help make this initiative a success, “immersion” grants will be needed to support these deepening experiences. We must significantly expand undergraduate research awards, as well as move to a more flexible model of credit that rewards and

recognizes the learning involved as students pursue an experience that enriches their understanding of the world. Our talented faculty must be engaged, rewarded, and recognized for participation in *Immersion Vanderbilt*. These projects will enrich the intellectual lives of faculty as well, reinforcing the synergy between teaching and discovery.

2. develop new discovery and learning infrastructure. We must be vigilant in ensuring that *all* academic and research spaces are magnets for student- faculty innovation that promotes problem solving and creativity. Such “innovation centers” should be intentional in design, and dedicated to welcoming multiple disciplines and students across all years of education. Our physical infrastructure should, therefore, be designed—and in some cases redesigned—toward this important goal, especially with the new demands for space that might arise from the implementation of *Immersion Vanderbilt*.

Drawing on our status as a research university, we must also be more innovative in promoting additional mechanisms to enable interactions between faculty and students. Three lectures a week is one way to share knowledge, but there are other ways to support student and faculty collaborations to produce new knowledge (as suggested in both the Education Technologies strategic theme and *Immersion Vanderbilt*). The Martha Rivers Ingram Commons offers great examples for fostering these ties and rich opportunities for learning and discovery. The new Warren and Moore Halls go a step further by integrating graduate students into the living-learning experience. The recently approved new Engineering and Science Building offers a great example of such infrastructure since it will feature student-centered space designed to spark learning and discovery.

3. launch a *Cross-College Teaching Initiative*. To leverage *One Vanderbilt*, we must continue to create opportunities for faculty to work together to educate our undergraduate, graduate, and professional students. The *Cross-College Teaching Initiative* aims to exploit the natural synergies between learning and discovery across ten diverse and intellectually rich colleges. As we strive to be *One Vanderbilt*, we must nurture and capitalize on the positive synergies that exist between teaching and research with all faculty across all colleges. A qualified member of the faculty should be able to teach courses regardless of what college they hail from. Further, team teaching should be encouraged in situations where it will expose students to different perspectives on important topics. We should ensure that faculty not only can teach such innovative courses, but there are incentives to do so. We must, therefore, provide faculty, their departments, and their colleges the support to make such teaching possible.

An important source of support will be available through successful proposals for innovative teaching made to the newly created TIPs Council (see page 22). The *Cross-College Teaching Initiative* should make possible a curriculum “incubator” that seeds faculty to develop new courses across the undergraduate and professional school boundaries (such as “demography and health” or “medicine and the humanities”). A working group of the TIPs Council should examine how multi-department and multi-school courses that would span multiple semester sequences could take a cutting-edge approach to broad humanistic themes (e.g., arts, languages, and literature).

Our unified and compact geography makes it both possible and desirable for faculty to collaborate on inspired cross-college courses that give real life to the notion of inter-disciplinary learning and discovery. Both the teaching and research missions will be enriched by such interactions. These synergies will also help to develop new and exciting curricula both in the classroom and as part of the residential experience. These important new teaching investments will be well positioned to partner with the initiatives arising from Vanderbilt's major new investment in Trans-institutional Programs.

## **2. Trans-institutional Programs (TIPs)**

We aspire to generate new insights and discoveries, while training future leaders and scholars, by leveraging Vanderbilt's distinctive resources and expertise from across the entire campus. Vanderbilt will take the lead in defining, addressing, and solving important problems and questions facing society.

To realize this vision, Vanderbilt's Trans-institutional Programs—both existing and new—must focus on critical challenges at the local, national, and global level, connect our diverse disciplinary strengths, foster increased collaboration and integration, enable and instill critical qualities in our students, and provide an enriched environment that transcends disciplinary boundaries.

For this strategic plan, Trans-institutional Programs (TIPs) are operationally defined as cross-campus initiatives involving transformative partnerships that create new and valuable knowledge by interweaving relevant perspectives, features, methods, and information from two or more disciplines; thus, encompassing both “inter-disciplinary” and “multi-disciplinary” approaches. We must build upon and broaden the TIPs themes of the 2002 Strategic Plan that focused on “Humans, the Human Condition, and Humanity.” The support and development of transformative collaborations advance Vanderbilt's international leadership in education and research.

### **Why Now?**

The Strategic Planning Executive Committee's support of strategic TIP initiatives rests on three fundamental principles.

First, the challenges in the twenty-first century are increasingly global and complex. How, for example, might we best understand the workings of the human brain? How does the brain give rise to the conscious mind that, in turn, results in decision-making that drives human behavior? To answer these types of critical questions, we must understand both the science and the context of the behavior and choices being made. This requires integrating knowledge from the natural sciences (e.g., molecular, evolutionary, organismic, and computational biology), the humanities (e.g., philosophy, English, history, religion) and the social sciences (e.g., psychology, economics, sociology, political science), as well as research in education, law, and business that explores the development and consequences of cognition. By developing and supporting TIPs, faculty and

students with different backgrounds, perspectives, and knowledge will be able to work together on the most pressing questions and problems and rise above the often artificial constraints of disciplinary boundaries that tend to characterize research universities.

Second, great research universities are defined not just by the disciplines in which they excel, but also by how they identify and respond to society's grand challenges and opportunities. This is increasingly true as research universities come under additional scrutiny meant to hold them more accountable. We certainly want to train the best and brightest physicians; however, we also need to find new ways to treat cancer and prevent obesity. Likewise, we should be training the best lawyers, while also developing blueprints for a fairer national criminal justice system. By harnessing, coordinating, and directing our talents and resources from across campus through TIPs, we will ensure that Vanderbilt continues to advance its missions of leading in exciting discovery, new learning, and invaluable service.

Third, teaching and research should be reinforcing endeavors. By engaging our students and faculty in TIPs partnerships, Vanderbilt offers distinctive opportunities for learning and discovery. This interconnection builds directly from our vision of instilling in our students the desire and ability to solve big problems and to forge positive societal change. The integration of teaching and learning into our cross-campus collaborations has been central to Vanderbilt's rise. Students, especially of the caliber we recruit, bring exciting, fresh perspectives and energy to the research enterprise that augment the chances for new and important discoveries. This context provides a more personalized educational experience that will educate the whole person and prepare our students for life-long learning. This vision is further supported by the Undergraduate Residential Experience theme proposal for a Cross-College Teaching Initiative wherein faculty will engage in cutting-edge curriculum collaborations. By building bridges across disciplines, TIPs also allow the teaching and research enterprises to innovate quickly in response to new and unanticipated opportunities and challenges. Just consider the rapid rise of undergraduate inter-disciplinary majors (e.g., neuroscience or medicine, health and society). Such majors not only make new forms of learning and discovery possible, but also underscore the intellectual payoff from investing in such inter-disciplinary initiatives.

### **Why Vanderbilt?**

The commitment to *One Vanderbilt* infuses our campus with a broad and deep philosophy of collaboration and cooperation, directed towards a common mission. Further, our compact and contiguous geography provides a compelling setting within which our culture of trans-institutional collaborations can flourish. By leveraging our unique geographic strengths and promoting cross-campus connections, we will empower students and faculty to address, define, and advance meaningful progress on grand challenges facing society.

Further, the past decade has also seen outstanding gains in faculty strength at Vanderbilt, as well as a dramatic rise in the talent and diversity of our students. The human capital now available at Vanderbilt positions us to make the most of transformative partnerships between students and faculty in the pursuit of new discovery and creative learning opportunities.

Finally, Vanderbilt has a rich history of TIPs. In 1947, Vanderbilt launched the Center for Latin American Studies, which has been a linchpin of efforts to examine this part of the world from an inter-disciplinary vantage point. Twenty-five years ago the Robert Penn Warren Center for the Humanities opened its doors, bringing scholars from across the humanities and social sciences together around common themes. The Divinity School's graduate program in religion is top ranked in the country due in large part to its inter-disciplinary faculty drawn from all corners of our campus. This rich context was the backdrop to the 2002 Strategic Plan's launching of the Academic Venture Capital Fund (AVCF). The AVCF resulted in a number of cutting-edge research centers, such as the Institute of Chemical Biology and the Institute of Nanoscale Science and Engineering. These kinds of investments have paid many dividends for faculty and students, and we have learned much from the successes and failures of prior initiatives to allow for even greater achievements going forward.

While many universities understand the need to think beyond disciplinary boundaries, Vanderbilt's culture, history, and geography uniquely position us to translate the potential of TIPs into reality.

### **Strategic Visions**

We seek to address the daunting questions and problems and tremendous opportunities facing society by deepening and expanding our efforts in building TIPs. These efforts have important spillover effects for other aspects of Vanderbilt's future. Consider the recommendation in the Undergraduate Residential Experience theme that all undergraduates have an immersion experience during their time at Vanderbilt. The existence of TIPs will allow students to pursue creative opportunities and provide potential additional connections between faculty and students from different departments who are united by their interest in a common question.

Given our substantial experience with TIPs, we are especially mindful of the prescient observation from the 2002 Strategic Plan: "[I]t is simply impossible to plan or know in advance where the new disciplines, breakthroughs or discoveries will be made [and] this tells us that if we fail to put in place a process by which we encourage innovation that calls for investment we are likely to be followers rather than leaders." We must be nimble, but also visionary. Towards this important end, we recommend that TIPs should exemplify the following key features:

- aim to identify or address problems or questions of wide-ranging significance that are ambitious, innovative, and inspiring
- create or extend collaborations and synergies across multiple fields, advancing the commitment to *One Vanderbilt*
- have the potential to position Vanderbilt to be a world leader in the area
- include both research and teaching/training components, ensuring a role for both faculty and students (undergraduate, professional, graduate, and/or postgraduate)

By meeting these criteria and building on our distinctive strengths, new and existing TIPs can tackle many of the challenges confronting the world today.

## **Strategic Initiatives**

We call for an innovative extension of the 2002 AVCF approach that will position Vanderbilt to respond to new opportunities to build transformative partnerships and fully leverage the potential of discovery and learning. To best guarantee success, we propose both short-term and long-term strategic actions.

### *TIPs Council*

We recommend establishing a school-wide TIPs Council to develop criteria for guiding investments in new and existing trans-institutional programs. The Council's charge will be to diversify and strengthen our research and teaching portfolio. However, we know from past experience that it is often hard to predict which proposals will blossom and flourish. Success of any TIP depends upon a myriad of hard-to-predict factors such as the talents, skills, and interests of scholars on campus and the nature of the inquiries being conducted. More important, given the rapid and evolving changes in global and national challenges, new questions and problems are always on the horizon. To be both opportunistic and responsive, as well as to leverage most effectively precious institutional resources, we propose that priority be given to initial "incubator" phases for small scale collaborations (or initiatives) to be tested before advancing to bigger programs, and hence, greater investments—which will also likely require new buildings and research spaces. This strategy also allows opportunistic actions when unexpected, exciting, new collaborations arise. At the same time, such a commitment to "incubator" initiatives should not preclude substantial investments in other full-scale TIPs. It is important we make larger investments when warranted. By these strategies, Vanderbilt will maximize its return on TIPs and be strongly positioned for continuing success.

The current Vanderbilt initiative in Surgery and Engineering (ViSE) is a great example of the benefits of this "incubator" approach. In less than three years, seed funding and an organizational framework have allowed ViSE leaders to make remarkable progress facilitating the exchange of ideas between physicians, engineers, and computer scientists. ViSE promotes the training of the next generation of researchers and clinicians capable of working symbiotically on new solutions to complex interventional problems, ultimately resulting in improved patient care. ViSE has also engaged with industrial partners for the commercialization of the intellectual property it generates, the early evaluation of industrial devices and techniques, and the joint development of innovative solutions. ViSE is now positioned to become a fully-funded and supported trans-institutional program that will enable Vanderbilt to become a world leader in this critical area of research and teaching.

In important instances, opportunities for powerful trans-institutional initiatives might evolve from pedagogical practice; for example, as faculty seek to teach students new material or offer interdisciplinary cutting-edge courses. There are so many exciting opportunities to consider in this area. As an illustration, one objective might be to enhance the current communication of science & technology major to build a strong science writing program that further brings together scientists, humanities scholars, creative writers, and perhaps even visual artists to design and share topics, curricula, and communication exercises. To assure that TIPs are sufficiently robust

in building our educational luster, as detailed further in the Undergraduate Residential Experience (URE) theme (see page 15), we see much merit in the Cross-College Teaching Initiative. This initiative (see page 18) would involve mechanisms to stimulate and incentivize teaching collaborations that forge opportunities for faculty from all colleges to work together in creating distinctive courses for educating our undergraduate, graduate, and professional students that leverage the full breadth of expertise on the campus. The TIPs Council (or a working group thereof) should consider proposal calls that support Cross-College Teaching Initiatives. While there is no prohibition on faculty teaching courses outside of their departments and/or colleges of primary appointment, it remains the case that new mechanisms which expand cross-college teaching activity will further enhance the atmosphere for learning and discovery.

The TIPs Council will vet all proposals in a fair and transparent process. The TIPs Council should be as representative as possible of all of our colleges, leverage current executive committees of existing interdisciplinary centers (e.g. the Robert Penn Warren Center), and help define and refine the scope and vision of Vanderbilt TIPs. The TIPs Council would also review and evaluate existing TIPs for reinvestments, as well as issue calls for new TIPs. These new calls should be 1) “open” in scope taking advantage of “grass-roots” processes and creativity, and 2) directed at defined problems that allow us to leverage our distinctive strengths to impact society. To cultivate faculty interactions and define these problems, the TIPs Council should also host biennial retreats that gather cross-campus cohorts of faculty. The retreat format should be designed to define the grand challenges facing society for which Vanderbilt teaching and research initiatives might best address finding solutions and answers.

#### *Vanderbilt Collaborative for Transformative Study (VCTS)*

For the longer term, we recommend that the TIPs “incubator” research and education activities (inclusive of the Cross-College Teaching Initiative) and TIPs Council evolve into a collective initiative designated the Vanderbilt Collaborative for Transformative Study (VCTS). Creating a physical location that can serve as a focal point on campus for scholars to share ideas, perspectives, and knowledge, should also be considered so as to increase the chances of truly creative and transformative teaching and discovery. Through VCTS, resources would be dedicated to bring faculty and students from across campus together to develop even more cutting-edge collaborative research and teaching activities. Once formed, the VCTS will serve as *the* academic equivalent of an “incubator” for collaborations to advance *One Vanderbilt*, to better train our students, and to provide opportunities for new and important discoveries. In this later phase of development, selected VCTS initiatives might also involve support for both internal and external visiting scholars, who would be funded for a defined period of time, allowing the participants to pursue collaborative research or teaching that would enrich the Vanderbilt community.

As we move forward at this point in time, we recommend that the TIPs Council, and ultimately the VCTS, prioritize a broad theme of “Humans, the Human Condition, and Humanity” that builds upon the theme that drove the successful 2002 Strategic Plan. It is important there be intellectual coherence as we make new investments. However, we do not want to be overly narrow, or limited. Fortunately, the discussions that arose during the strategic planning process cast a wide net. Below are three fundamental questions that ensure breadth and creativity:

*What makes us human?* This inquiry is foundational, giving rise to creative thinking from across Vanderbilt's vast disciplinary landscape. How do we identify what makes us who we are and what is the potential for better knowing ourselves and one another? How is human emotion raised from historical and methodological issues bridging across disciplines? Exploring how art, science, culture, music, education, religion, social interactions, government, and law contribute to our conceptions of self and how that is also related to genetics, development, and cognition are important for obtaining a richer conceptualization of what makes us human.

*What is the human condition?* Building on the strategic plan's focus in the Healthcare Solutions theme, how can we combine the science of physiology and disease with important insights related to how an individual is situated in their cultural and historical contexts? How should we understand the ways in which humans interact with one another and with their environment and nature, and what are the causes and consequences of those interactions on both individual and collective well-being? By asking such critical questions, we will be in a prime position to better understand and help address the many challenges affecting modern life.

*What is the past, present, and future of humanity?* Better understanding and identifying the context for broad and persistent societal problems is a necessary first step in finding solutions to the pressing challenges of poverty, education, the arts, inequality, conflict, social justice, sustainability and globalization. The rapid changes in technology and our growing capability to probe massive sums of information, ranging from collecting the genetic codes of millions of people to digitizing every book ever written, have recast how we think about assembling and analyzing evidence. The handling and synthesis of such "big data" are truly trans-institutional, cutting at the fabric of issues of privacy, utility, ethics, access, and persuasion. Understanding the workings of humanity must serve as a cornerstone for any great research university in the twenty-first century.

#### *Trans-Institutional Investments in Graduate Education*

To facilitate innovative discovery and learning interfaces in TIPs, we recommend specific new investments in graduate education. Collectively, our graduate programs have improved substantially, but we need to do more. Our graduate training must be innovative and aggressive going forward. Elevating the standing of our research programs with strategic TIPs investments will certainly facilitate recruiting of the best and brightest graduate students, while ensuring our continued ability to both recruit and retain the best faculty. We recommend:

1. undertaking independent efforts to foster and support inter-disciplinary graduate programs should be undertaken. We suggest that teams of faculty engaged in multi-disciplinary TIPs could compete for graduate fellowship lines and post-doctoral positions to support trainees engaged in these research and teaching initiatives. The development of post-doctoral positions versus expanding graduate fellowship lines, in particular, can also provide a compelling way to advance our training of the next generation of scholars, while enriching the research mission of the University.
2. following the ideas advanced in the Cross-College Teaching Initiative in the Undergraduate Residential Experience theme, so existing disciplinary-based graduate

programs are enriched by enabling graduate students to take courses across the colleges. For example, Ph.D. students in a humanities-based or natural science-based discipline might greatly benefit from taking courses that tackle law, divinity, education, or business. Such mechanisms allow for personalized curriculum and will serve as recruiting tools to lure the best students to Vanderbilt, and, in turn, prepare our students to be the most marketable in highly competitive fields. We must be vigilant in integrating graduate students on as many fronts as possible in our TIPs and other innovative educational experiences. This integration should also include greater interactions between graduate/professional students and undergraduates, which could include tutorial instruction that would provide personalized instruction.

3. fostering learning and discovery by developing physical space that brings all our graduate students together. This space could also serve as a location for a career development office to ensure our students are well prepared for their next journey. Of note, this call is independent from that detailed in the Undergraduate Residential Experience theme (see page 15) suggesting new opportunities for graduate and professional students to both take part in the residential colleges and to potentially have devoted residential living facilities. Our commitment to *One Vanderbilt* requires we bring all students together in environments that promote creative learning and discovery.

### **3. Healthcare Solutions (HS)**

We aspire to be the world's leader in developing and pursuing effective solutions to pressing health and healthcare problems through creative discoveries and pioneering educational initiatives.

To realize this vision, Vanderbilt is committed to improving personal and community health by developing innovative, aggressive, and multi-disciplinary solutions. Over the last decade, our efforts have been focused on becoming a national leader in personalized medicine, drug discovery, and public health, and we have set in motion forces that have made these goals a reality. Moving forward, our collaborative discovery and training efforts must be increasingly focused on caring for the whole person by ensuring that our healthcare solutions attend not only to a person's physical conditions, but also to the social, political, and historical contexts that greatly impact the health, disease prevention, and the cost of healthcare for individuals and populations. This broad contextual approach will enable us to integrate all disciplines across Vanderbilt to make discoveries that:

- improve health
- prevent disease
- advance the quality, equity, and accountability of healthcare services
- improve public policy tied to disease prevention and healthcare delivery
- prepare leaders and scholars to make healthier living possible in all corners of the world

## **Why Now?**

The need to undertake this multi-pronged mission could not be more urgent. Rapid changes in our population are unfolding during an era of fiscal and economic constraints. Current healthcare demands threaten to engulf the nation as the population ages and the burden of chronic disease increases. The new global environment brings additional challenges of newly arising infectious diseases and widely disparate resources in developing countries. These problems become even more demanding as the costs of healthcare show little sign of abating and as the realities of health disparities appear increasingly intractable. These complex structural problems require that we think carefully about how to ensure that healthcare is safe, high quality, and affordable.

Fortunately, there are reasons to be optimistic. First, the delivery of healthcare can improve if we encourage broad innovative thinking that engages diverse disciplines—from the humanities to engineering to medical and biological sciences. Second, important discoveries over the past decade have resulted in tremendous progress in understanding the genetic, epigenetic, neuroscientific, evolutionary, psychological, and social foundations of health. Although future discoveries will require an even more focused commitment (given increasing constraints on federal, state, local and institutional support), they are within reach if we leverage all existing opportunities to translate health and healthcare research discoveries into practice.

A broader, more inclusive conception of personal health coupled with greater understanding of the changing healthcare landscape require revising the traditional model for how we educate students to become future leaders in these domains. Those best able to navigate these complexities will be those who are fluent in multiple disciplines and diverse perspectives. We must be inclusive: no one field or discipline has all the answers. Knowledge of biological sciences remains essential. But successful curricula must also educate students about the cultural, historical, political, religious, and social factors that influence health. Changing healthcare delivery models also call for a redefinition of what constitutes a healthcare leader, and require integrated training in fields and disciplines beyond the traditional medical approaches. To excel in addressing current and future challenges, universities need to establish new, nimble, and cutting-edge models to train the next generation of leaders and healthcare professionals. In sum, research universities are distinctly positioned to generate and implement new strategies from a wide array of perspectives for an ever-changing and demanding healthcare world.

## **Why Vanderbilt?**

Vanderbilt is in a key position to lead in developing and implementing innovative healthcare solutions at local, national, and international levels. With a world-class faculty committed to discovery and learning, across a set of ten highly ranked colleges all on a compact campus, Vanderbilt offers a powerful setting to address the many challenges in healthcare. Vanderbilt has a wealth of resources, including medical and nursing schools ranked in the top 15, nationally-recognized basic and clinical science departments, highly ranked business and law schools, top tier social science departments, and long-standing excellence across the humanities. This rich and varied setting is distinct among the major research universities and makes possible new ideas and approaches for teaching, discovery, and service. Our firm commitment to *One Vanderbilt*, which encourages cooperation and collaboration across diverse colleges and disciplines, offers the ideal platform to become a world leader in healthcare innovation for the twenty-first century.

Alongside these distinctive features, Vanderbilt has long invested in multiple healthcare solution arenas and is leading critical initiatives. Of particular note for this strategic plan are the following:

1. We have built an international reputation in biomedical informatics and health information technology. Building on this, personalized medicine became a pillar of the Medical Center's 2006-08 Strategic Plan. Since 2010, Vanderbilt has launched multiple personalized medicine initiatives focused on incorporation of genetic fingerprints into patient care. This work has defined Vanderbilt's standing as a national leader and serves as a vigorous platform upon which to build additional capabilities in research focused on understanding health and improving healthcare.
2. A focus on public health initiatives was also a central goal of the 2006-08 Strategic Plan for the Medical Center. Over the past 15 years, Vanderbilt has recruited and/or engaged over 200 faculty to the study of public health and healthcare delivery with appointments in multiple colleges across the University. Within the Medical Center, the Institute for Medicine and Public Health (IMPH) comprises many initiatives that address various aspects of healthcare delivery. A partial list includes the Center for Health Services Research, the Epidemiology Center, the Center for Surgical Quality and Outcomes Research, the Center for Interdisciplinary Health Workforce Studies, the Evidence-Based Practice Center, the Center for Research and Innovation in Systems Safety, the Center for Quality Aging, the Institute for Global Health, the Center for Effective Health Communication, and the Center for Health Behavior and Health Education. In addition to seeding cutting-edge research initiatives that currently garner more than \$100 million in annual extramural funding, new graduate education efforts have flourished including the M.P.H. degree and Ph.D. programs in biostatistics and epidemiology.
3. Health, Society and Policy: Within the College of Arts and Science, the Center for Medicine, Health and Society (MHS) was created to study the social dimensions of health and illness, and it has thrived as a new major on campus. MHS has attracted new faculty with scholarly interests across multiple research domains while recent recruitments in sociology and economics have further expanded strengths in this area. Many of these faculty are actively engaged in collaborations with IMPH faculty. Such inter-disciplinary research and/or curricular innovation also finds voice elsewhere on campus. For example, the School of Medicine trains a select group of physician leaders with Curriculum 2.0; the School of Nursing produces more advanced practice nurses than any other institution in the country and leads in national healthcare workforce research; the Owen School has a nationally-recognized healthcare management program. Both the Law School and Owen School have noted health policy experts from various disciplinary perspectives and devote important parts of their curricula to understanding healthcare. In addition, the School of Medicine has recently launched a Department of Health Policy, hiring a new chair and committing to recruit additional faculty representing diverse disciplinary backgrounds.
4. Importantly, Vanderbilt is a prime national location for conducting health and healthcare research. The Vanderbilt University Medical Center (VUMC) and the newly launched Vanderbilt Health Affiliated Network (VHAN) of hospitals, provider organizations and independent physicians in the mid-south region, offer unusual capacity for exploring, designing, and developing innovative healthcare solutions. Nationally, VUMC offers a

health system with a recognized depth of experience in navigating successfully economic, demographic, and political changes.

5. Finally, the greater Nashville metropolitan area is a hub for innovation in healthcare delivery with more than 250 healthcare companies and over \$70 billion in annual revenue headquartered in Nashville alone; thus, making this “the Silicon Valley of healthcare management” and the prime place to lead and drive healthcare delivery research and training.

These distinctive features also draw strength from Vanderbilt’s core values and mission. The inclusive philosophy underlying *Opportunity Vanderbilt* and its commitment to access and equality can be further reflected in our foundational approaches to leading in healthcare access and accountability. Through scholarly research, education and service, Vanderbilt can iteratively improve and disseminate knowledge, drive new public policy, and improve healthcare nationally and internationally.

### **Strategic Vision**

We are committed to fostering fundamental discovery that integrates and builds on knowledge from a wide array of academic disciplines in medicine, nursing, humanities, social sciences, natural and physical sciences, engineering, law, management, and education, among others. The greatest advances will occur at the interface between disciplines, and Vanderbilt must maximize its impact on health and healthcare by focusing effort in this space. Investments are most critical in basic research that can advance biomedical science, impact global disease challenges and disease prevention, effectively target healthcare resources, uncover the social underpinnings of health and illness, and, ultimately, advance individual and community well-being.

As part of this vision, we want the scope and context for our personalized medicine and public health initiatives to be infused by knowledge from the humanities and social sciences that can underpin effective and successful solutions to the many challenges in healthcare. By so doing, Vanderbilt’s broad commitment will make it possible to treat, educate, and heal the whole person in an equitable manner. Our efforts should point the way for others by promoting discovery and teaching that inform health policy at the local, state, national, and global levels.

Finally, we want to foster new partnerships with others by which Vanderbilt can develop, analyze, pilot, and evaluate possible multifaceted, novel, and relevant health and healthcare solutions for individuals, populations, and society.

### **Strategic Initiatives**

To harness the considerable expertise and disciplinary breadth across campus and to leverage Vanderbilt’s recognized strengths in healthcare, we must update our core approaches while innovating in teaching and discovery. These proposals include supporting existing programs, launching new initiatives, and developing sustainable infrastructure for education and research in healthcare. The process for evaluating existing programs, and the criteria for selecting new programs, should parallel the guidelines laid out in the Trans-institutional Programs (TIPs) theme.

### *Expand Personalized Medicine*

We must expand our efforts in personalized medicine with the ultimate goal of caring for the whole person within their social and cultural context. Vanderbilt must lead by broadening what is conventionally considered personalized medicine. What is referred to as “molecularly- informed” or “molecularly-guided” or even “precision” medicine should be only one part of our personalized medicine strategy. We must reach beyond multiple levels of biological and behavior systems to the environmental, social, economic, and cultural context of each whole person. Our initiatives should embrace a lifelong view of health and disease prevention, identifying processes that lessen disparities in healthcare. By emphasizing health over the course of one’s entire life, context comes to the fore. To lead in solutions for caring for the whole person, we recommend:

1. creating sustainable platforms to elevate support for fundamental research yielding discoveries about the molecular basis of disease and its treatment and prevention. Focus on investments in implementation science should also be considered so as to ensure molecular and genomic discoveries are moved appropriately and efficiently into practice for improving health.
2. launching new initiatives focused on understanding the cultural, economic, legal, political, and social attributes that affect health and disease prevention across all ages as people move through the beginning of their lives to the end
3. providing forums for interactions that infuse health and biomedical science focused initiatives with the strengths the campus has in the humanities and social sciences. We must have continued campus-wide conversations to utilize fully our distinct environment, to capture the momentum, and to move forward in unison. Incentives should be in place to encourage these important exchanges. Initiatives in the Trans-institutional Programs theme (e.g., spearheaded by the TIPs Council and the Vanderbilt Collaborative for Transformative Study), and the Undergraduate Residential Experience theme (e.g., the Cross College Teaching Initiative) should be deployed in these efforts.

### *Focus on Educating Healthcare Leaders*

New opportunities for curricular development and endowment of our education programs must be seized—from undergraduate to graduate to professional students—with a vision to educating future leaders in all aspects of health and healthcare, and providing opportunities for all to learn about how the structure of society affects healthcare and health outcomes. The aim must be for research and curriculum initiatives to go hand in hand. Thus, we recommend curricular innovations that enable an understanding of how to treat patients, why those people may be facing those particular diseases and health problems, and how to educate people about disease prevention and healthy living. Further, our learners should be exposed to population-based health research and the intersection with personal health. In sum, to educate future leaders to address the complex health and healthcare issues from innovative interdisciplinary perspectives, our efforts should encompass:

1. endowing and expanding the current M.D./Ph.D. dual degree program. By actively training physician-scientist leaders for the past 36 years, Vanderbilt’s Medical Scientist Training Program is having a clear impact and is a nationally-recognized model. Moreover, with the new Curriculum 2.0 launched in fall 2013, our physician training

curriculum is fully focused on educating leaders with a perspective on the whole patient and the need for immersive research experiences. Scholarships to support and to expand current training in the biomedical and biological sciences Ph.D. track are a priority. In addition, options for joint Ph.D. training in the humanities and social sciences should be enabled (e.g., a Ph.D. in Economics with an M.D.).

2. creating mechanisms that allow for, and provide support for, novel dual degree programs focused on educating twenty-first century health and healthcare leaders; for example, J.D./M.D., Ph.D./H.C.M.B.A., Ph.D./M.P.H., Ph.D./M.H.P.E., and M.B.A./M.D. joint degrees. All Ph.D. and professional degree granting departments across the University should be encouraged to develop and participate in these new dual degree programs.
3. facilitating new undergraduate majors, or new tracks within majors, that advance new approaches to education. For example, we should support new majors or tracks that arise from existing curricula within or even across our colleges. We also should develop offerings that integrate upper level undergraduate curricula and complementary graduate school curricula. The initiative described below for health policy and healthcare quality could be considered for computational biology, biochemistry or genetics—again reaching across boundaries to involve our diverse faculty in such efforts. These initiatives should also leverage the proposed Immersion Vanderbilt initiative in the Undergraduate Residential Experience theme.

#### *Broaden Education Programs in Health Policy*

Vanderbilt recently launched an initiative to build outstanding research and educational programs in health policy. To make the most of this opportunity, we must consider specific campus-wide investments, including:

1. offering new undergraduate curriculum with introductory health policy and healthcare quality courses and strengthening existing introductory courses on health across Vanderbilt's departments. The focus on health policy and healthcare quality should also be considered for current masters programs across campus, and all should cut across disciplines and offer a perspective that allows for students to understand health care from diverse perspectives.
2. building on Vanderbilt's M.P.H. program to make public health and health policy training available to more students. For example, a health policy track in the M.P.H. program could provide a master's degree option for non-clinicians—(e.g., graduates in medicine, health and society from the College of Arts and Science)—add additional opportunities for graduate, nursing and medical students to pursue joint degrees.
3. instituting broadly defined doctoral-level training in healthcare. Doctoral students are pursuing research related to health and health policy at Peabody, in the social sciences at the College of Arts and Science, and in various other programs at the Schools of Medicine and Nursing. Thus, there are untapped connections across the campus that could yield coordinated, cutting-edge training in way that could brand nationally our graduate training. Our *One Vanderbilt* approach provides the foundation for new and important educational initiatives in healthcare and health policy.

### *Vanderbilt Collaborative for Innovations in Healthcare Policy and Delivery (VC)*

We must fully develop our shared resources for healthcare delivery and policy by creating a framework for external entities to view us as a national “hub” for identifying solutions to current and emerging challenges. There is a growing recognition that our crisis in national healthcare cost is inextricably tied to pervasive administrative inefficiencies. Vanderbilt is an ideal venue for conducting innovative research into ways to improve the organization and delivery of care while influencing public policy. For example, teams of researchers around campus are investigating ways to reduce readmissions, improve primary care continuity for patients with chronic disease, construct evidence-based care guidelines, develop effective models for transitions of care, use social marketing to combat health disparities, and apply engineering principles to healthcare delivery, among many other healthcare delivery innovations. However, as currently structured, each of these efforts exists to support an externally-funded project for a defined period of time. As a result, despite our highly collaborative environment, researchers rarely bring an integrated, strategic perspective to their projects. We recommend launching a Vanderbilt Collaborative for Innovations in Healthcare Policy and Delivery (the “VC”) to function as strategic partner for researchers and practitioners seeking to improve healthcare policy and delivery. The VC roles could include:

1. facilitating increased collaboration and information sharing among Vanderbilt faculty and students to help during the planning stages of research projects, to reduce start-up times and create a greater capacity to take on time-sensitive questions or test cutting-edge multidisciplinary ideas
2. serving as a first stop resource for external stakeholders to also bring critical questions to the VC: for example, a state Department of Health might seek assistance with novel ways to reduce asthma-related ER visits for low-income children; oncologists at affiliated hospitals might seek assistance with designing care transition protocols for patients receiving follow-up care at community hospitals; Nashville-based national healthcare companies might seek partnerships for developing, implementing and evaluating new solutions; or the federal government might seek data on the impact of regulatory changes on academic medical facilities
3. identifying opportunities to invest in core services needed to support health policy and delivery system research such as new data cores and an integrated health informatics platform
4. pinpointing critical gaps in our knowledge, connecting teams of scholars to the proposed structures in the Trans-institutional Programs theme initiatives for securing seed money to launch these new ideas, providing strategic input as appropriate, and ensuring that key initiatives become self-sustaining over the long run

## **4. Education Technologies (ET)**

We aspire to embrace new Education Technologies to foster innovation in learning, teaching, and discovery, serving as a leader in best practices for higher education.

To realize this vision, we must employ new Educational Technologies that advance our ability to educate the whole student and make lifelong learning a reality for all of our students—current, past, and future. We must leverage our expertise in the assessment and development of these technologies with the goal of identifying the innovations that most strengthen faculty-student interactions, enabling more personalized and connected learning. Further, we must utilize new technologies that expand both Vanderbilt’s impact on campus and our reach across the globe. By so doing, we also will extend the concept of *One Vanderbilt* to millions across all seven continents, advancing learning and discovery for our current students, alumni, and key stakeholders.

### **Why Now?**

In modern society, technological change is continuous and occasionally disruptive. Leaders are constantly challenged to assess the impacts while ensuring that the potential of new technologies squares with reality. Over the last two hundred years, higher education has witnessed multiple cycles of technological change that have each promised to revolutionize how we teach and learn. In the 1800s, the development of a more affordable postal system made it possible for universities to engage in “distance learning,” extending, in effect, the classroom beyond its brick and mortar confines. In the first part of the twentieth century, the advent of radio gave rise to a new platform for teachers to communicate with more students than ever before. This led some to predict an impending transformation of higher education. Just a few decades later, the rise of television was also touted by many observers as another major technological breakthrough that would recast traditional models of teaching through this expansive audio-visual medium. In the 1970s, the rise of multiple and targeted channels via cable television was again projected as a way to change the traditional model of learning in higher education. Despite the prior predictions, the supposed transformative power of these new platforms has remained elusive. The traditional model of education has long assumed that learning best flows from faculty to students through largely a one-way exchange of information. Past technological innovations did not in fact alter this “top-down” model of teaching. Television and radio may have expanded the size of the audience, but the fundamental relationship between faculty and student remained much the same as in any large lecture class; thus, the core assumptions underlying our approach to teaching were unchanged. In contrast, the meteoric rise of the internet and its accompanying technologies present genuine opportunities for changing the traditional model of teaching. There is now a chance to forge a two-way exchange of information between faculty and students on a large scale through social media, which moves well beyond the classic top-down model. Further, social media foster many more opportunities for communication between students than existed in the past. In other words, there is a transformative potential in the newly developed (and developing) education technologies that can recast the pathways of communication between faculty, students, and alumni. Moreover, the dynamic interfaces offered by the internet and emerging social media introduce exciting and unprecedented approaches for instruction. As a result, we have a real opportunity to move past the old “top-down” approach and engage in learning that is not only more bottom-up, but also horizontal in allowing information to be shared symmetrically between all faculty and all students.

The internet and related technologies also increase our research capacity by allowing rapid exchange of information (data, theories, and methodologies), amassing vast repositories of “big data,” and building new collaborative networks that are unconstrained by geography. As a

research university, we must harness these connections so as to maximize our capacity to produce and disseminate new knowledge and cutting-edge discoveries.

To compete at the highest level and to ensure excellence, we must develop and employ new technologies that enhance our core missions of teaching, discovery, and service. Our matriculating students' prior exposures to ET in secondary schools and their corresponding expectations further heighten the need to be ahead in our vision and strategy. Moreover, in such a complex and rapidly changing environment, it is essential that we evaluate all the new Education Technologies skeptically and critically to identify the ones that are truly transformative and worthy of our investment.

### **Why Vanderbilt?**

Vanderbilt is uniquely positioned to identify, develop, and assess cutting-edge technologies that leverage our strengths, yielding the greatest benefits for our students and faculty. Between the recently created Vanderbilt Institute for Digital Learning (VIDL), the Center for Teaching (CFT), the Advanced Computing Center for Research and Education (ACCRE), the Institute for Software Integrated Systems and the NSF-funded VaNTH-ERC on bioengineering in our engineering school, the blended distance learning program in our nursing school, and the new VSTAR informatics platforms in our medical school, Vanderbilt has constructed an exceptionally strong foundation in Education Technologies upon which we can build. In addition, Vanderbilt's partnership with Coursera and focus on our existing strengths are proving to be very wise strategic moves. We are gaining significant recognition as a leader in Coursera through our innovation (for example, in launching the first trans-institutional "specialization" with a multi-semester sequence of coordinated MOOCs on "Mobile Cloud Computing with Android") and in best practices for on campus links. Vanderbilt is also distinctly positioned to be a worldwide leader in understanding how best to maximize Education Technologies and conduct cutting-edge research that discovers how, when, and why new education technologies advance learning. Our highly-ranked education school is co-located with leading scientists researching brain function and cognition, as well as with many existing programs, institutes, and resources devoted to new technologies.

Our integrated campus, collaborative spirit, and *One Vanderbilt* philosophy already allow students and faculty from across all our schools and colleges to interact in person. Importantly, strategic investments have our students and faculty living and learning together in The Martha River Ingram Commons and soon in the Warren and Moore Colleges. By being a model for best practices in re-purposing Vanderbilt MOOCs and employing education technologies on campus, we are extending and enhancing the distinct opportunities afforded by our residential college system. Technology offers an important avenue to integrating more faculty and more students into our intellectual community, allowing the educational experience to reach its full potential and burnish the Vanderbilt brand. At the same time, deploying these new technologies ensures Vanderbilt's increasing global presence that highlights to the world our excellence and our commitment to discovery and learning.

Focusing on Education Technologies is also timely because we are in the midst of centralizing and standardizing Information Technologies (IT) across the campus. Offering a systematic and

complementary vision for our future Educational Technology strategies will be integral to defining the needed organization and scaling of our Vanderbilt IT infrastructure. As we continue to work toward the vision underlying *One Vanderbilt*, it is important these new technologies, in conjunction with IT, foster ties between colleges, students, and faculty, and build bridges within our community.

### **Strategic Vision**

At Vanderbilt, Education Technologies will improve both teaching and learning while coincidentally enhancing our discovery missions. Rather than replacing core face-to-face faculty-student interactions and the role of faculty in engaging students through lecturing or leading discussions, our Education Technologies should seek to enrich and expand opportunities for learning on campus and, at the same time, to enhance Vanderbilt's reputation. Vanderbilt is committed to adopting, using, creating, and evaluating platforms that enhance learning on campus. This strategic vision enables more time for critical thinking and faculty-guided work. Importantly, we must link the use of new technologies to developing the fundamental capabilities and qualities we want to instill in our graduates: to engage, to question, and to forge change. By adopting this strategy, new Education Technologies will advance our students' personalized and collaborative learning experience. In addition, these efforts should also leverage Vanderbilt's curricula and expertise to support lifelong learning by alumni, as well as reach wider audiences of students, peers, and interested parties around the globe. Any time we can expand Vanderbilt's ability to educate people, whether on our campus or on another continent, we must evaluate the opportunity carefully.

The excitement tied to all these new technologies and opportunities for new methods of teaching is understandable. But we must avoid falling prey to fads. Vanderbilt's strategic visions must, therefore, rely on aggressive support of research initiatives aimed at thoughtful analysis and assessment of these new approaches for teaching. We must employ our exceptional research talent in the field of education to become a world leader in understanding the impact of cutting-edge technologies on learning. By so doing, we will not only be fully accountable to our mission of offering the best possible education, but we will ensure our continued leadership in key areas of discovery.

### **Strategic Initiatives**

Investments in Vanderbilt's future ET landscape require a multi-prong approach to development, use, and impact of new technology-enabled curriculum. Each of the initiatives noted below is interconnected, offering the potential for new and exciting synergies while keeping the focus on enabling Vanderbilt's strategic visions.

#### *Focus on Personalized and Connected Learning*

We must leverage Education Technology to enable more personalized and connected learning for all Vanderbilt students—current, past, and future. To do this, we must:

1. create new classroom and laboratory infrastructure that fosters the full potential of new ETs. This effort should encompass all of our teaching spaces, as needed, in formats that

are adaptable for emerging types of innovative pedagogy. In this way, infrastructure must include hardware, software, and support personnel. This approach will enable even more innovations and encourage additional interactions between students and faculty. A fundamental goal should be to use technologies to promote learning outside the classroom with the aim of educating the whole person via personalized learning. As Vanderbilt expands its use of Education Technologies, it is critical that these innovations work in partnership with IT. There are many exciting changes underway in IT at Vanderbilt, and close collaboration will ensure the prospects for success of both these new Education Technology initiatives and IT. As we build these connections, we need to ensure that all investments made in Education Technologies work across all colleges and, thus, advance *One Vanderbilt*.

2. develop an open knowledge repository of curriculum material for the entire campus, taking full advantage of Vanderbilt's existing investment in KnowledgeMap and VSTAR information technology platforms. This One Vanderbilt Portal (OVP) should be a web-accessible repository housing, with first priority, course syllabi and lectures, and with plans to move to even broader content, for example, with the intellectual and creative productions of faculty and students from their research. This wealth of searchable content will greatly enable students to engage in personalized learning and should integrate with various learning management tools. Students could access OVP to develop a personalized approach and supplement their majors with related courses in other fields and schools, as well as find lectures and events germane to their educational focus. More so, OVP should underpin the *Cross-College Teaching Initiative* by supporting multiple simultaneous curricula from all the different schools and departments at Vanderbilt. Faculty would be able to search the repository to build collaborations with colleagues who do research or teach on similar topics. Further, the OVP should allow for greater mentorship of graduate students as we prepare them for a life of teaching and instruction. Overall, the sharing of such information will help the entire campus to move closer to the goals underlying One Vanderbilt.
3. the Vanderbilt Institute for Digital Learning (VIDL) and the Center for Teaching (CTF) must partner in serving as platforms for advancing these efforts and ensuring that these initiatives are flexible and responsive to faculty needs. Our faculty must be able to explore the use of new Education Technologies and receive assistance in the adoption, implementation and development of Educational Technologies to help advance curriculum innovations. Vanderbilt must avoid a "one size fits all" approach to new Education Technologies, with the investment in technical expertise and training at the VIDL and CTF ideally aimed at faculty and students creating, customizing, and sharing effective Educational Technologies. The VIDL should also be empowered to evaluate when and where centralized infrastructure resources would be most effective (e.g. common video production and studio facilities, distributed personnel support for new endeavors). Resources should also be provided to support faculty and/or students (from undergraduates, to graduates, to professional students) to use new Education Technologies in teaching and learning. Our faculty and students must have access to the most effective Education Technologies, with the faculty playing a lead role in these endeavors.

### *Leverage ET to Connect Generations of Vanderbilt Students*

This will require that we:

1. launch new curriculum in communications and information technology proficiency, data analysis, data visualization and analytics; all designed to allow students to be successful in an increasingly complex, twenty-first century global society. It is imperative that our students have the ability to understand, visualize, and analyze the vast amount of information that is now available due to changing technologies—so-called “big data.” Given the wealth of data that we increasingly confront in our day-to-day lives, it is imperative that we provide our students the ability to discern the benefits and limits of massive amounts of information. That is, we need to ensure our students worry not about data per se, but how data can shed light on solving the pressing problems in society. We must, therefore, instill key analytical skills so our students can manage effectively the array of information that is often available at their fingertips. These efforts are important to the entire campus, as this flood of information goes well beyond the natural sciences. Consider the rise of digital humanities and the data that are now available to allow scholars and students to better understand the arts, broadly defined.
2. foster connections for faculty, students, and alumni by leveraging MOOCs, libraries, and other ET innovations. With *Immersion Vanderbilt* as described in the Undergraduate Residential Experience theme (see page 17), some students might need to pursue specialized courses or languages not offered at Vanderbilt. In addition, as we invest more in language training and the arts, there may be unique resources online that we will want our faculty, students, and alumni to use. Moreover, the OVP should also allow Vanderbilt students and faculty to connect with colleagues at other universities, key stakeholders in the private and governmental sector, and alumni from around the world. This infrastructure will provide a pathway for greater learning and collaboration, ensuring that our students and alumni have rich and exciting opportunities for lifelong learning. In addition, these investments will further leverage the many synergies between discovery and learning.

### *Leadership in Education Technology Research*

We must support research on the impact of new Education Technologies on learning. Vanderbilt is uniquely positioned to be a leader in this area, and we need to find ways to support those new discoveries. One way would be through the new funding available through proposals for initiatives in the Trans-institutional Programs theme via oversight of the proposed TIPs Council. By providing seed money for new research ideas in this area, Vanderbilt can make real strides in delineating and prioritizing what technologies work and do not work. Additional internal grant money will also incentivize this important area of research. The rate of technological change has outpaced recent efforts to study these innovations. We need to close that gap. With one of the nation’s leading schools of education on our campus linked to research centers studying brain function and cognition, we have a golden opportunity to become a world leader in assessing the impact of new Education Technologies.

### *Strategic Partnerships and Outreach*

We must use new ETs to help forge partnerships, collaborations, and global outreach. With an increasingly complex and interdependent world, Vanderbilt should aim for a more visible presence across the globe and bring key stakeholders to our campus virtually. The globalization of our teaching, research, and service missions should be made possible by effective use of new technologies. To some degree, these efforts happen organically as faculty, students, and staff interact with each other through various portals. However, a more organized effort through the VIDL and other institutional entities should be considered. Such investments will ensure that we continue to compete as an elite research and teaching university building our international presence and reputation.

# Stewardship

Vanderbilt has a deep responsibility to society and to all its stakeholders to be good stewards of its precious resources, both today and going forward. For those who have given so much to make Vanderbilt possible, accountability is vital. The development of any new initiative, therefore, must be accompanied by reliable and valid ways to determine whether that change has advanced Vanderbilt's mission. No one expects all innovations to work. Thus, plans must be in place to evaluate and assess the activities of the University allowing for midcourse corrections. Without those checks, Vanderbilt risks not only wasting resources, but would also break the commitment made to supporters of the University and those we serve.

The following are key criteria for stewardship of this strategic plan:

- Vanderbilt will assess outcomes and be accountable for the efficient use of resources
- Vanderbilt will assess the achievements and satisfaction of students and faculty
- Vanderbilt will assess the impact of research and the effectiveness of learning
- Vanderbilt will periodically review its activities in these thematic areas, eliminating or improving underperforming areas and setting priorities so Vanderbilt can be truly distinctive.

As we go forward, we must analyze the merits of specific ideas in each new proposal with respect to funding sources, incentives, evaluation, renewal, and adherence to fundamental institutional values and principles. An example of such stewardship is the call for a TIPs Council that will have broad and inclusive representation and be responsible for evaluating proposals for possible interdisciplinary research and teaching collaborations.

Good stewardship and setting clear priorities are critical at this juncture in our history. Research universities are facing an environment of increasingly limited resources and pressures to contain expenses and reduce revenue. As such, we must learn how to operate more efficiently, improve productivity, and control costs. Vanderbilt's strategy and future rest on a sound, sustainable, and long-term economic model and financial platform. Together, these efforts will strengthen Vanderbilt's foundation for generations to come.

# Final Thoughts

Vanderbilt's research and education enterprises have never been stronger. Over the last decade, all of our colleges have improved, with Peabody College being one of the top education schools in the country and the medical, nursing, and law schools all well placed in the top echelon. The College of Arts and Science is home to outstanding programs and departments. The business, divinity, engineering, graduate, and music schools are all on the rise. There are many reasons for this dramatic progress at Vanderbilt. Chief among them are our investments in human capital — faculty, students, staff—which have allowed them to become truly distinctive, and those many talents are enhanced by the new learning environments borne from *Opportunity Vanderbilt* and the residential college system. In addition, Vanderbilt's long-standing commitment to forging cross-campus collaborations and interdisciplinary work has given rise to a truly ideal setting for these gifted faculty, students, and staff to forge new discoveries and to advance creative learning.

From this strong foundation, Vanderbilt must now continue and augment the progress made over the last decade. Our ambitions demand bold action.

- We must offer an absolutely outstanding educational experience for all our students.
- We must undertake world-class research that produces new and important discoveries that address important problems.
- We must guarantee these first two goals are mutually reinforcing so as to ensure Vanderbilt's impact on society is deep and enduring.

With our eye on these aspirations, the four themes and the resulting initiatives have yielded another “compass for our future” that will place Vanderbilt at the very pinnacle of great universities in the coming years.

During the 12 months of intense planning, new partnerships and friendships have already been forged by bringing together faculty, students, and staff from across all parts of campus to engage in discussions of the future and the four theme areas. There is no doubt that there are cultural differences among, and even within, our ten great schools and colleges. Proposals in this new plan call for increasing the opportunities to bring together different groups for dialogue, sharing, and brainstorming—celebrating, in effect, our differences. We need to treasure our greatest resources: our students, staff, and faculty. As we look toward our 150<sup>th</sup> anniversary in 2023, Vanderbilt's 2013-14 Strategic Plan will bring *all* schools, *all* hands, and *all* minds together in the joint missions of learning, discovery, and service. We are indeed *One Vanderbilt*, and we will meet our challenges and continue our rise to the top together.

# Appendices

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# Addendum

On June 19-20, 2014, Vanderbilt University's Board of Trust, senior administrators, and select faculty gathered in Chicago to review the draft 2013-14 Strategic Plan.

The comprehensive review process provided opportunities for Trustees to:

- Read through the draft Strategic Plan in advance of the meeting
- Review the year-long process and resulting theme and initiative plan organization by hearing directly from the co-chairs.
- Appreciate the essential aspects of a successful strategy, and strategic planning process, through a presentation by Michael Porter.
- Envision Vanderbilt's future through talks from faculty members who brought three potential scenarios to life based on initiatives within the plan
- Participate in breakout sessions for two of four Strategic Themes to provide feedback on success expectations and potential barriers to implementing the described initiatives.

Trustee's reported their breakout work back to the large group. This overarching synthesis of all eight reports recognizes both the unique opportunities and potential barriers discussed by Trustee's.

- Recruitment – the themes and initiatives provide opportunities for both students and faculty desiring to contribute to Vanderbilt's education and research goals.
- Engagement – the plan leverages Vanderbilt's distinctive qualities to create truly unique opportunities in how students and faculty facilitate each other's learning and discovery.
- Resources – the comprehensiveness of the plan challenges Vanderbilt to capitalize initiatives financially, as well as, through redistribution of the activities of which faculty and students spend their time.
- Measurement – the themes provide challenges for how to measure outcomes related to concepts like experience, collaboration, and engagement, as well as, potential solutions through advancements in how technology is leveraged.
- Organization – the initiatives challenge Vanderbilt to create new models for how faculty and students can participate across internal organizational and professional silos to advance learning and discovery.
- Momentum– the initiatives call for new committees to facilitate collaboration through inclusion of passionate faculty leadership, transparent rules of engagement, and cycling appointments to allow adaptation over time.

After reviewing the feedback, the board gave affirmation to the process and continued development of the strategic initiatives in the Plan.

# Strategic Planning Process: Organization Chart

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# Strategic Planning Process: Executive Committee

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## CO-CHAIRS:

Susan Wente	Professor	SOM, Cell & Developmental Biology
John Geer	Professor	A&S, Political Science

## MEMBERS:

Dale Andrews	Professor	Divinity, Homiletics & Social Justice
Donald Brady	Professor	SOM, Medicine
Joy Calico	Associate Professor	Blair, Musicology
Ken Catania	Professor	A&S, Biological Sciences
Joshua Clinton	Professor	A&S, Political Science
Roger Cone	Professor	SOM, Molecular Physiology & Biophysics,
Katharine Donato	Professor	A&S, Sociology
Lynn Enterline	Professor	A&S, English
Maureen Gannon	Associate Professor	SOM, Medicine
Isabel Gauthier	Professor	A&S, Psychology
Michael Goldfarb	Professor	SOE, Mechanical Engineering
Ellen Goldring	Professor	Peabody, Educational Leadership & Policy
Sarah Igo	Associate Professor	A&S, History
Kevin Johnson	Professor	SOM, Biomedical Informatics
Jeffrey Johnston	Professor	A&S, Chemistry
Owen Jones	Professor	Law
Christopher Loss	Associate Professor	Peabody, Public Policy & Education
Anita Mahadevan-Jansen	Professor	SOE, Biomedical Engineering
Bunmi Olatunji	Associate Professor	A&S, Psychology
William Pao	Professor	SOM, Cancer Biology
Betsey Robinson	Associate Professor	A&S, History of Art
Eric Skaar	Associate Professor	SOM, Pathology, Microbiology & Immunology
John Sloop	Professor	A&S, Communication Studies
Elizabeth Weiner	Professor	SON
Robert Whaley	Professor	Owen, Management

# Strategic Planning Process: Steering Committees

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## Trans-institutional Programs

### CO- CHAIRS

Tracey George	Professor	Law
John York	Professor	SOM, Biochemistry

### MEMBERS

Brian Bachmann	Associate Professor	A&S, Chemistry
Bruce Compas	Professor	Peabody, Psychology & Human Development
Gary Gerstle	Professor	A&S, History
John Gore	Professor	SOM, Radiology & Radiological Sciences
Kathy Gould	Professor	SOM, Cell & Developmental Biology
Derek Griffith	Associate Professor	A&S, Medicine, Health & Society
Antonis Rokas	Associate Professor	A&S, Biological Sciences
Jennifer Reinganum	Professor	A&S, Economics
Holly Tucker	Professor	A&S, French

## Undergraduate Residential Experience

### CO- CHAIRS

Bill Collins	Professor	A&S, Economics
Cindy Kam	Professor	A&S, Political Science

### MEMBERS

David Bader	Professor	SOM, Cell and Developmental Biology
Gregory Barz	Associate Professor	Blair, Musicology
Jennifer Fay	Associate Professor	A&S, Cinema and Media Arts
Douglas Fisher	Associate Professor	SOE, Computer Science
Robert Jimenez	Professor	Peabody, Language, Literacy & Culture
Cathy Jrade	Professor	A&S, Spanish
Kyla Terhune	Assistant Professor	SOM, Surgery
David Weintraub	Professor	A&S, Physics and Astronomy

## Healthcare Solutions

### CO- CHAIRS

Jonathan Metzl	Professor	A&S, Sociology
Mary Zutter	Professor	SOM, Pathology, Microbiology & Immunology

### MEMBERS

Melinda Buntin	Professor	SOM, Health Policy
Andre Christie-Mizell	Associate Professor	A&S, Sociology
Peter Cummings	Professor	SOE, Chemical & Biomolecular Engineering
Robert Dittus	Professor	SOM, Medicine
Reed Omary	Professor	SOM, Radiology & Radiological Sciences
Ranga Ramanujam	Professor	Owen, Management
Tiffany Tung	Associate Professor	A&S, Anthropology
Kip Viscusi	Professor	Law
Alan Wiseman	Associate Professor	A&S, Political Science

## Education Technologies

### CO- CHAIRS

Rogers Hall	Professor	Peabody, Education
Sohee Park	Professor	A&S, Psychology

### MEMBERS

Derek Bruff	Senior Lecturer	A&S, Mathematics
Jay Clayton	Professor	A&S, English
Jennifer Escalas	Associate Professor	Owen, Marketing
Paul Harris	Associate Professor	SOM, Biomedical Informatics
Kimberly Lomis	Associate Professor	SOM, Medical Education & Administration
Jamie Pope	Instructor	SON, Nursing
Douglas Schmidt	Professor	SOE, Computer Science
Anderson Spickard III	Associate Professor	SOM, Medicine
Keivan Stassun	Professor	A&S, Physics and Astronomy

# Strategic Planning Process: Academic Planning Groups

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## Trans-institutional Programs

Adam Anderson	Associate Professor	SOE, Biomedical Engineering
Brett Benson	Associate Professor	A&S, Political Science
David Cortez	Professor	SOM, Biochemistry
James Crowe Jr.	Professor	SOM, Pediatrics
Josh Denny	Associate Professor	SOM, Biomedical Informatics
Roland Eavey	Professor	SOM, Otolaryngology
Brandt Eichman	Associate Professor	A&S, Biological Sciences
Raymond Friedman	Professor	Owen, Management
Scott Hiebert	Professor	SOM, Biochemistry
Shaul Kelner	Associate Professor	A&S, Jewish Studies
D. Borden Lacy	Associate Professor	SOM, Pathology, Microbiology & Immunology
Melanie Lutenbacher	Associate Professor	SON, Nursing
Sankaran Mahadevan	Professor	SOE, Civil & Environmental Engineering
Clare McCabe	Professor	SOE, Chemical & Biomolecular Engineering
Thomas McGinn	Professor	A&S, Classics
Anna Roe	Professor	A&S, Psychology
Sandra Rosenthal	Professor	A&S, Chemistry
Mark Schoenfield	Professor	A&S, English
Michael Slayton	Assistant Professor	Blair, Composition & Theory
Christopher Slobogin	Professor	Law
Tony Stewart	Professor	A&S, Religious Studies
Mark Wallace	Professor	SOM, Hearing & Speech Sciences
Thomas Wang	Professor	SOM, Medicine

## Healthcare Solutions

Shari Barkin	Professor	SOM, Pediatrics
Vanessa Beasley	Associate Professor	A&S, Communication Studies
Dominique P. Béhague	Associate Professor	A&S, Medicine, Health, & Society
Gautam Biswas	Professor	SOE, Computer Science
Christopher Carpenter	Professor	A&S, Economics
Ed Cheng	Professor	Law
Andrew Daughety	Professor	A&S, Economics
Benoit Dawant	Professor	SOE, Electrical Engineering
Michael DeBaun	Professor	SOM, Pediatrics
Terence Dermody	Professor	SOM, Pediatrics
Elisabeth Dykens	Professor	Peabody, Psychology & Human Development

Volney Gay	Professor	A&S, Religious Studies
Todd Giorgio	Professor	SOE, Biomedical Engineering
Tina Hartert	Professor	SOM, Medicine
Alan Herline	Associate Professor	SOM, Surgery
Sarah Hoper	Assistant Professor	SOM, Emergency Medicine
Catherine Ivory	Assistant Professor	SON, Nursing
Madan Jagasia	Associate Professor	SOM, Medicine
Ethan Lee	Associate Professor	SOM, Cell & Developmental Biology
Christoph Lehmann	Professor	SOM, Pediatrics
Cecilia Mo	Assistant Professor	A&S, Political Science
Neal Patel	Professor	SOM, Pediatrics
David Penson	Professor	SOM, Urologic Surgery
Matthew Ramsey	Associate Professor	A&S, History
Mavis Schorn	Professor	SON, Nursing
R. Lawrence Van Horn	Associate Professor	Owen, Management
David Wright	Professor	A&S, Chemistry
Laurence Zwiebel	Professor	A&S, Biological Sciences

## Undergraduate Residential Experience

Jo-Anne Bachorowski	Associate Professor	A&S, Psychology
David Calkins	Professor	SOM, Ophthalmology & Visual Sciences
Laura Carpenter	Associate Professor	A&S, Sociology
Cynthia Cyrus	Professor	Blair, Musicology
Bonnie Dow	Associate Professor	A&S, Communication Studies
Stacey Floyd-Thomas	Associate Professor	Divinity, Ethics & Society
Katherine Friedman	Associate Professor	A&S, Biological Sciences
Catherine Fuchs	Professor	SOM, Psychiatry
David Furbish	Professor	A&S, Earth & Environmental Science
Alyssa Hasty	Associate Professor	SOM, Molecular Physiology & Biophysics
Billy Hudson	Professor	SOM, Medicine
John Lachs	Professor	A&S, Philosophy
Jonathan Lamb	Professor	A&S, Humanities
Jana Lauderdale	Associate Professor	SON, Nursing
Salvatore March	Professor	Owen, Management
Lawrence Marnett	Professor	SOM, Biochemistry & Chemistry
Rob Mikos	Professor	Law
Tracy Miller	Associate Professor	A&S, History of Art
Marilyn Murphy	Professor	A&S, Art
Ryoma Ohi	Associate Professor	SOM, Cell & Developmental Biology
Megan Saylor	Associate Professor	Peabody, Psychology & Human Development
Ronald Schrimpf	Professor	SOE, Electrical Engineering
Yuan Xue	Associate Professor	SOE, Computer Science
Elizabeth Zechmeister	Associate Professor	A&S, Political Science

## Education Technologies

Toufeeq Ahmed	Assistant Professor	SOM, Biomedical Informatics
Clifford Anderson	Director	Central Library
Bruce Barry	Professor	Owen, Management
Daniel Cornfield	Professor	A&S, Sociology
Corbette Doyle	Lecturer	Peabody, Organizational Studies
Daniel Fleetwood	Professor	SOE, Electrical Engineering
Cindy Gadd	Professor	SOM, Biomedical Informatics
Jeffry Gordon	Professor	SON, Educational Technologies & Informatics
George Hornberger	Professor	SOE, Civil & Environmental Engineering
Todd Hughes	Director	Center for Second Language Studies
Paul Lim	Associate Professor	Divinity, History of Christianity
Holly McCammon	Professor	A&S, Sociology
Karoly Mirnics	Professor	SOM, Psychiatry
Thomas Palmeri	Associate Professor	A&S, Psychology
James Patton	Professor	A&S, Biological Sciences
Lynn Ramey	Associate Professor	A&S, French
Russell Rothman	Associate Professor	SOM, Medicine
Charles Sanders	Professor	SOM, Biochemistry
Nilanjan Sarkar	Professor	SOE, Mechanical Engineering
Andrew Tomarken	Associate Professor	A&S, Psychology
Michael Vandenberg	Professor	Law
Greg Walker	Associate Professor	SOE, Mechanical Engineering
Christopher Wright	Professor	SOM, Cell & Developmental Biology

# Strategic Planning Process: Concept Development

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## Board of Trust Strategic Planning Session Nov. 15, 2013

### TRUSTEES

Michael L. Ainslie  
M. Chandler Anthony  
Darryl D. Berger  
Camilla D. Bergeron  
Dennis C. Bottorff  
Billy Ray Caldwell  
Mark F. Dalton  
Bruce R. Evans  
Joanne F. Hayes  
David W. Head  
John J. Hindle  
Edith C. Johnson  
Leslie C. Labruto  
Mark P. Mays  
Jackson W. Moore  
Courtney C. Pastrick  
David W. Patterson, MD  
Robert C. Schiff, Jr. MD  
Eugene B. Shanks, Jr.  
Richard H. Sinkfield  
Wyatt H. Smith  
J. Stephen Turner  
William M. Wilson  
Jon Winkelried  
Nicholas S. Zeppos

### GENERAL OFFICERS

Audrey J. Anderson	Vice Chancellor, General Counsel, and Secretary of the University
Jeffrey R. Balsler, MD	Vice Chancellor for Health Affairs
Jerry G. Fife	Vice Chancellor for Administration
Beth A. Fortune	Vice Chancellor for Public Affairs
Anders W. Hall	Vice Chancellor for Investments and Chief Investment Officer

John M. Lutz	Vice Chancellor for Information Technology
Richard C. McCarty	Provost and Vice Chancellor for Academic Affairs
Susie S. Stalcup	Vice Chancellor for Development and Alumni Relations
Brett C. Sweet	Vice Chancellor for Finance and Chief Financial Officer
David Williams II	Vice Chancellor for Athletics and University Affairs

#### INVITED DEANS, FACULTY AND STAFF

Susan Barge	Associate Provost for Strategic Initiatives
John S. Beasley, II	Vice Chancellor Emeritus
Joshua Clinton	Associate Professor, Political Science
Carolyn Dever	Dean, College of Arts and Science
Robert Early	Executive Associate Vice Chancellor
Philippe Fauchet	Dean, School of Engineering
John Geer	Chair, Political Science, Co-chair, Strategic Plan
Jeffrey Johnston	Professor, Chemistry
Christopher Loss	Associate Professor, Public Policy and Education
Mark Wait	Dean, Blair School of Music
Susan Wentz	Associate Vice Chancellor for Research, Co-chair, Strategic Plan

# Board of Trust Strategic Planning Session

## Feb. 7, 2014

### TRUSTEES

M. Chandler Anthony  
John D. Arnold  
Lee M. Bass  
Darryl D. Berger  
Dennis C. Bottorff  
Billy Ray Caldwell  
Mark F. Dalton  
Claiborne P. Deming  
Charles H. Esserman  
Bruce R. Evans  
Joanne F. Hayes  
John J. Hindle  
Edith C. Johnson  
Leslie C. Labruto  
Mark P. Mays  
Jackson W. Moore  
Courtney C. Pastrick  
David W. Patterson, MD  
Nancy Perot  
Robert C. Schiff, Jr., MD  
Eugene B. Shanks, Jr.  
Richard H. Sinkfield  
Wyatt Smith  
J. Stephen Turner  
Rebecca Webb Wilson  
William M. Wilson  
Jon Winkelried  
Nicholas S. Zeppos

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Audrey J. Anderson	Vice Chancellor, General Counsel, and Secretary of the University
Jeffrey R. Balsler, MD	Vice Chancellor for Health Affairs
Jerry G. Fife	Vice Chancellor for Administration
Beth A. Fortune	Vice Chancellor for Public Affairs
Anders W. Hall	Vice Chancellor for Investments and Chief Investment Officer
John M Lutz	Vice Chancellor for Information Technology
Richard C. McCarty	Provost and Vice Chancellor for Academic Affairs
Susie S. Stalcup	Vice Chancellor for Development and Alumni Relations
Brett C. Sweet	Vice Chancellor for Finance and Chief Financial Officer
David Williams II	Vice Chancellor for Athletics and University Affairs

## INVITED DEANS, FACULTY AND STAFF

Susan Barge	Assoc Provost for Strategic Initiatives
John S. Beasley, II	Vice Chancellor Emeritus
Brett Benson	Professor of Political Science
Melinda Buntin	Chair & Professor, Health Policy
Robert Early	Executive Associate Vice Chancellor
Lynn Enterline	Professor of English
Philippe Fauchet	Dean, Engineering
John Geer	Chair, Political Science, Co-chair Strategic Plan
Tracey George	Professor, Law
Kevin Johnson	Chair & Professor, Biomedical Informatics
Jennifer Pietenpol	Director, Vanderbilt-Ingram Cancer Center
Michael Porter	Consultant, Harvard University
Antonis Rokas	Associate Professor, Biological Sciences
John Sloop	Interim Dean, A&S
Mark Wallace	Director, Vanderbilt Brain Institute
Susan Wentz	Associate Vice Chancellor for Research, Co-chair Strategic Plan

# Board of Trust Strategic Planning Session

## April 25, 2014

### TRUSTEES

Michael L. Ainslie  
M. Chandler Anthony  
John D. Arnold  
Darryl D. Berger  
Dennis C. Bottorff  
Billy Ray Caldwell  
Mark F. Dalton  
Bruce R. Evans  
Joanne F. Hayes  
David W. Head  
John J. Hindle  
Edith C. Johnson  
Leslie C. Labruto  
Jackson W. Moore  
Courtney C. Pastrick  
David W. Patterson, MD  
Nancy Perot  
Robert C. Schiff, Jr., MD  
Eugene B. Shanks, Jr.  
Wyatt Smith  
J. Stephen Turner  
Rebecca Webb Wilson  
William M. Wilson  
Jon Winkelried  
Nicholas S. Zeppos  
Richard B. Johnston, MD

### GENERAL OFFICERS

Audrey J. Anderson	Vice Chancellor, General Counsel, and Secretary of the University
Jeffrey R. Balser	Vice Chancellor for Health Affairs
Jerry G. Fife	Vice Chancellor for Administration
Beth A. Fortune	Vice Chancellor for Public Affairs
Anders W. Hall	Vice Chancellor for Investments and Chief Investment Officer
John M Lutz	Vice Chancellor for Information Technology
Richard C. McCarty	Provost and Vice Chancellor for Academic Affairs
Susie S. Stalcup	Vice Chancellor for Development and Alumni Relations
Brett C. Sweet	Vice Chancellor for Finance and Chief Financial Officer
David Williams II	Vice Chancellor for Athletics and University Affairs

## INVITED DEANS, FACULTY AND STAFF

Susan Barge	Associate Provost for Strategic Initiatives
John Beasley	Vice Chancellor Emeritus
Trey Beasley	Assistant Vice Chancellor for Treasury
Lindsay Burgener	Chief of Staff, Vice Chancellor for Finance
Robert Early	Executive Associate Vice Chancellor
John Geer	Chair, Political Science, Co-chair, Strategic Plan
Cecelia Moore	Associate Vice Chancellor, Finance
Michael Porter	Consultant, Harvard University
Susan Wentz	Associate Vice Chancellor for Research, Co-chair, Strategic Plan

# Strategic Planning Process: Concept Development

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CO-CHAIR MEETINGS	DATE
Executive Committee Meeting	6/21/2013
Executive Committee Meeting	6/24/2013
Executive Committee Meeting	7/19/2013
Executive Committee Meeting	7/29/2013
Steering Committee Chair Organizational Meeting	8/28/2013
Executive Committee Kick-Off Retreat	8/30/2013
Trans-institutional Programs Steering Committee Retreat	9/4/2013
Healthcare Solutions Steering Committee Retreat	9/9/2013
Undergraduate Residential Experience Steering Committee Retreat	9/13/2013
Education Technologies Steering Committee Retreat	9/16/2013
Executive Committee Subgroup on Trans-institutional Programs	10/29/2013
Executive Committee Subgroup on Healthcare Solutions	10/30/2013
Executive Committee Subgroup on Undergraduate Residential Experience	10/30/2013
Executive Committee Subgroup on Education Technologies	10/31/2013
Full Executive Committee Meeting	1/27/2014
Board of Trust Strategic Planning Session	11/15/2013
Board of Trust Strategic Planning Session	2/7/2014
Board of Trust Strategic Planning Session	4/24/2014
Board of Trust Retreat	6/18/2014

# Strategic Planning Process: Communication and Outreach

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KEY UNIVERSITY STAKEHOLDERS	MEETING DATE	PARTICIPANTS
<b>Alumni Association Board of Directors</b>	3/21/14	35
<b>Deans</b>	2/03/14	20
<b>Board of Visitors</b>		
Engineering	4/11/14	50
Owen	4/11/14	15
<b>Faculty</b>		
All Faculty (Town Halls)	2/27/14 3/11/14 3/24/14	60 50 70
Engineering Department Chairs, Center Directors, Deans	1/13/14	20
Faculty Senate	8/26/14	60
Faculty Senate	2/13/14	54
Medicine Department Chairs, Center Directors, Deans	2/19/14	75
Peabody Department Chairs and Deans	4/30/14	12
<b>Students</b>		
Divinity	4/10/14	10
Graduate	4/01/14	13
Medicine	3/28/14	22
Nursing	3/31/14	12
Owen	3/25/14	8
Multicultural Leadership Council	4/21/14	20
Student Leaders Summit Meeting	3/25/14	25
Vanderbilt Student Government	4/02/14	20

**Staff**

Arts and Science	4/11/14	45
Development and Alumni Relations	1/23/14	240
Medical Center	3/13/14	100
Medical Center Staff Advisory Council	5/20/14	20
University Leaders	5/21/14	75
University Staff Advisory Council	4/8/14	60
<b>Top Leaders Forum</b>	5/20/14	60
<b>TOTAL</b>		<b>1251</b>

# Abbreviations

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<b>A&amp;S</b>	<b><i>College of Arts and Science</i></b>
<b>ACCRE</b>	<b><i>Advanced Computing Center for Research and Education</i></b>
<b>AVCF</b>	<b><i>Academic Venture Capital Fund</i></b>
<b>CFT</b>	<b><i>Center for Teaching</i></b>
<b>ER</b>	<b><i>Emergency Room</i></b>
<b>ET</b>	<b><i>Education Technologies</i></b>
<b>GMAT</b>	<b><i>Graduate Management Admissions Test</i></b>
<b>GRE</b>	<b><i>Graduate Record Examination</i></b>
<b>H.C.M.B.A.</b>	<b><i>MBA for Health Care Professionals</i></b>
<b>HS</b>	<b><i>Healthcare Solutions</i></b>
<b>IMPH</b>	<b><i>Institute for Medicine and Public Health</i></b>
<b>IT</b>	<b><i>Information Technology</i></b>
<b>J.D.</b>	<b><i>Juris Doctor</i></b>
<b>LSAT</b>	<b><i>Law School Admissions Test</i></b>
<b>M.B.A.</b>	<b><i>Master of Business Administration</i></b>
<b>MCAT</b>	<b><i>Medical College Admissions Test</i></b>
<b>M.D.</b>	<b><i>Doctor of Medicine</i></b>
<b>MHPE</b>	<b><i>Master of Health Professions Education</i></b>
<b>MOOCs</b>	<b><i>Massive Open Online Courses</i></b>
<b>M.P.H.</b>	<b><i>Master of Public Health</i></b>
<b>NIH</b>	<b><i>National Institute of Health</i></b>
<b>NSF</b>	<b><i>National Science Foundation</i></b>

<b><i>OVP</i></b>	<b><i>One Vanderbilt Portal</i></b>
<b><i>Ph.D.</i></b>	<b><i>Doctor of Philosophy</i></b>
<b><i>SON</i></b>	<b><i>Vanderbilt School of Nursing</i></b>
<b><i>SOM</i></b>	<b><i>Vanderbilt School of Medicine</i></b>
<b><i>TIPs</i></b>	<b><i>Trans-institutional Programs</i></b>
<b><i>URE</i></b>	<b><i>Undergraduate Residential Experience</i></b>
<b><i>VaNTH-ERC</i></b>	<b><i>Vanderbilt-Northwestern-University of Texas-Harvard-MIT Engineering Research Center</i></b>
<b><i>VC</i></b>	<b><i>Vanderbilt Collaborative for Innovations in Healthcare Policy and Delivery</i></b>
<b><i>VCTS</i></b>	<b><i>Vanderbilt Collaborative for Transformative Study</i></b>
<b><i>VHAN</i></b>	<b><i>Vanderbilt Health Affiliated Network</i></b>
<b><i>VIDL</i></b>	<b><i>Vanderbilt Institute for Digital Learning</i></b>
<b><i>ViSE</i></b>	<b><i>Vanderbilt initiative in Surgery and Engineering</i></b>
<b><i>VSTAR</i></b>	<b><i>Informatics platform in the Vanderbilt School of Medicine</i></b>
<b><i>VUMC</i></b>	<b><i>Vanderbilt University Medical Center</i></b>

*08/12/2014*



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