

Duke University's 2016 Strategic Plan for the Decade Ahead: TITLE TBD

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I. Prologue

A university is a crucible for ideas that can be examined, combined, pulled apart, tested, recombined, and refined. But the transformation of these ideas into groundbreaking scholarship, effective teaching and engaged learning requires robust communities in which faculty and students freely exchange ideas, learn from each other, confidently question premises, and collaboratively gain deeper and richer understandings. Since most new concepts are inspired by older ideas, the creation of new knowledge and understanding is most effectively fostered by exposure to diverse ways of thinking, researching, and knowing. At its essence, a university provides this exposure by promoting the collisions that generate novel approaches to the arts, science, law, literature, medicine, and other fields, new insights which in turn reshape our world.

For more than a century after the industrial and scientific revolutions, universities possessed huge comparative advantages as accumulators, curators, and transmitters of knowledge. Today, however, in an increasingly complex society where access to information is instantaneous and ubiquitous, the research university's most significant function has shifted. It now contributes most effectively by encouraging faculty and students to place information in its historical, cultural, political, and scientific context, and by facilitating the kind of interactions that generate new questions, analytical approaches, and innovative modes of problem-solving. Thus, in the twenty-first century, it is all the more vital to maintain and strengthen academic communities.

A focus on these communities represents a turning point for the modern university. The dynamic university today must foster recurring encounters among talented individuals with grounding in different backgrounds, perspectives, histories, politics, and identities. It must welcome scholars, students, and ideas that have not always been welcome. It must develop new angles of vision and the ambition to seek solutions to society's thorniest dilemmas, while retaining space for critical reflection. It must encourage intellectual collaborations and recombinations within and across disciplines. It must forge partnerships with local and global communities and institutions. In essence, the university must embrace the essential role of a robust and diverse academic community: to bring faculty and students together for the purpose of generating new knowledge and critical insights.

Central to this vision is a university campus that facilitates community – where spaces are thoughtfully designed to promote collisions, and where programs maximize the use of those spaces so that ideas are explored both inside and outside the classroom. These ingredients have the greatest impact when faculty are committed not only to excellence in their own research and teaching, but also to full participation in the exchange of ideas across the divides of schools, departments, and programs. A century ago, the French composer Claude Debussy defined music as “what happens between the notes.” To strengthen and enrich our community, we need to pay attention to the ‘spaces’ between and among classrooms, laboratories and

studios. We must encourage and incentivize not only path-breaking faculty research and first-rate teaching, but also engagement and ownership in the broader university community.

Today, with the work of the university stretching from Durham to sites across the globe, our campus borders have become more figurative than physical. An array of programs has increased the speed at which Duke's work has spread across the world and, in turn, has allowed the work of the university to be advanced by the world's ideas, innovations, and people. These interactive and multi-directional engagements have broadened our concept of community and highlighted the need—and opportunity—for the university's transformative work to have an impact upon local and global communities.

At its heart, a university is all about people. Indeed, Duke's core strengths are its faculty, students and staff, as well as the relationships and connections they forge. The opportunity before Duke now is to capture the power of our diverse communities to address the fundamental conundrums of the natural world and the human condition as well as humanity's most pressing challenges.

II. Duke's rise to prominence

From an 1838 wooden schoolhouse in Randolph County to a modern research university whose work and influence extends around the globe, Duke has ascended, fueled by a commitment to excellence and a willingness to adapt and redefine itself in the pursuit of that excellence. Because Duke lacked the heritage and resources of many of our peer institutions and because of our relative youth and nimbleness, we developed a culture of collaboration and teamwork that presaged the kind of connections today's complex challenges require. While other universities were building disciplinary strength bounded by high walls, Duke was building bridges to draw creative thinkers together. Through partnerships between engineering and medicine, for example, we have advanced the frontiers of biomedical engineering. More recently, to better facilitate the connection of theory with practical and policy applications, we elevated our Sanford Institute of Public Policy to Duke's tenth school, and to leverage the collective strength of our distinctive humanities departments, we established the Franklin Humanities Institute.

While not all changes have come easily, their effects have been transformative. Speaking before the Academic Council in March of 2012, leading up to the 50th anniversary of the enrollment of the first African-American undergraduates at Duke, President Richard Brodhead argued that the commitment Duke made to desegregation in 1963 "is rivaled by only two others for its impact on what Duke has become. Without the move to Durham from Randolph County in 1892, this school would have been nowhere and would probably have failed. Without the transformational gift from James B. Duke in 1924, we would still be a distinguished regional liberal arts college, not a world-renowned university. Without the repeal of racial exclusion policies, this would not be the place where the brightest minds come from every origin to deepen and expand our knowledge of our world." Clearly, embracing change has driven Duke's upward trajectory.

III. Strategic planning at Duke

For a top university in a rapidly evolving world, the need for adaptation remains a constant. At critical points in Duke's history, strategic planning has served as a powerful means for the university to refine its mission in light of emerging issues, challenges, and opportunities. In Duke's first strategic plan, begun in 1958, President Hollis Edens posed a series of questions to the University Committee on Long-Range Planning: *In what areas are we lagging behind? What new directions should we emphasize? In short, what ought Duke University to be in the future?* In essence, these are still the questions we are asking today.

A decade ago, these questions framed the last strategic plan, *Making a Difference* (2006). The goals set out in that document charted a new course for Duke's preeminence by expanding the faculty; building a strong research infrastructure; creating advances in teaching, learning, discovery and outreach; and designing and implementing programs focused on what are now considered Duke's signature themes: interdisciplinarity, knowledge in the service of society, and globalization.

The collective impact of the past decade's investment in these priorities has propelled Duke's rise to the top tier of universities. It has allowed Duke to attract some of the world's finest faculty, build first-rate facilities, and launch model interdisciplinary institutes and global partnerships. We have opened the minds of a new generation of students – passionate world citizens who push humanity forward and blaze new paths in research and education.

But, as Duke has been transformed over the past decades, so has the world. Recognizing pivotal changes in the academy, at Duke, and in the national and international landscape, in January 2015, Provost Sally Kornbluth charged the Strategic Planning Steering Committee with gathering broad community input on the direction of Duke's academic mission in the coming decade. This effort led to the development of an initial *Framework for Discussion and Development of Duke's Strategic Plan* (November 2015), which defined in broad strokes our future academic goals. Built on the university's signature themes, these goals signify the importance of deep fundamental basic research and scholarship, the centrality of disciplinary work to Duke's intellectual foundation, and a commitment to access and affordability. Furthermore, the goals reflect a serious response to a significant shift in career pathways for PhD graduates; a growing demand for public communication of university work; the increase in the number of Duke graduate and professional students; and the ongoing transformations in the demographics of our campus and our nation.

The planning process was also influenced by the recognition that the past strategic plan led to a period of intense experimentation with new programs. Any phase of experimentation and innovation is wisely followed by a period of reflection, consolidation, and integration. The 2016 strategic plan seeks to do just that: identify the programs and strategies that have most effectively enhanced our research, education, and outreach efforts, and focus further development and resources there. We will always remain open to innovation and new ideas, yet we understand that over the next decade the integration of our finest programs and sustained commitment to their excellence will give us the best opportunity to make an impact on campus and beyond.

IV. Overall vision and academic goals

Duke has been intertwining disciplines, experimenting with learning methods, and extending our reach around the globe for decades. These investments have prepared Duke well for the current complexity of our research, teaching and service missions. We are now well positioned to solidify Duke's stature within the highest rank of American higher education and accelerate Duke's distinction as a global leader in research and education by intentionally focusing on the collective ability of Duke's scholars and learners. **Our overarching imperative for the next decade is to grow, connect, and empower communities to enhance the creation, delivery and translation of knowledge.**

To achieve this vision, we have four central goals:

1. Empower the Duke faculty as scholars and leaders of the university's intellectual communities
2. Provide a transformative educational experience for all students
3. Strengthen Duke's capacity to address challenges—locally and globally
4. Create a supportive environment for research, learning and academic communities

GOAL 1: Empower the Duke faculty as scholars and leaders of the university's intellectual communities

The bedrock of a university is its faculty. Thus, the university's first goal must always be to attract, retain, and nurture a diverse community of faculty of true distinction, where distinction is understood to include both powerful intellectual creativity and the eagerness to stimulate and support the creativity of students. Whether their scholarship is disciplinary, multidisciplinary or interdisciplinary, our faculty need support for research that, according to Duke's mission statement, "advances the frontiers of knowledge and contributes boldly to the international community of scholarship." We must also attract faculty committed to pedagogical innovation inside and outside of the classroom. Excellent teaching should be everywhere on campus. Supporting the *work* of the faculty—scholarship, teaching and engagement—must go hand in hand with supporting faculty themselves, through mentoring and leadership development efforts that span all career stages and encompass all faculty ranks. Such support goes a long way toward building community at each stage of the faculty member's career.

While individual efforts underpin all scholarly inquiry, research communities play a vital role in amplifying the intellectual work of individuals. Collaborative research, both interdisciplinary and within a single discipline, is necessary for tackling research questions that call for a wider range of skills, perspectives, and knowledge bases than any one scholar can possibly possess. To build a strong community of scholars, we will encourage the establishment of collaborative

efforts, as well as modes of constructive criticism and community input that propel the research of individual scholars to new levels of distinction.

To empower the Duke faculty as scholars and leaders of the university's intellectual communities, we will:

- *Build on the excellence of the faculty through a strategic hiring program*
- *Develop a diverse and vibrant faculty community*
- *Invest in the sciences*
- *Provide new resources to support faculty and their work*

Build on the excellence of the faculty through a strategic hiring program

While deans have developed annual hiring plans and the central administration has considered faculty hiring from the university perspective, we have not been as deliberate as we might have been in integrating department, school, and university opportunities. To this end, in addition to the normal hiring process, the Provost will make available to Deans targeted recruitment funds through a **Strategic Hiring for Faculty Excellence (SHFE) initiative**. This program will support the appointment of outstanding faculty members, at any rank, who can advance disciplinary areas of true distinction, enrich the diversity of our faculty, bridge scholarship in creative new directions, and/or address an emerging societal or scholarly issue in a way that leverages the unique strengths and expertise of our existing faculty.

Overall, the SHFE initiative will emphasize faculty as *the* key nodes in scholarly networks that link communities both within and outside of Duke. For example, the Mellon-funded *Humanities Writ Large* project, with its Humanities Labs, such as *Borderworks*, and its Emerging Humanities Networks, such as *Art, Law, and Markets*, has piloted the sort of creative partnerships that we hope to catalyze across the campus with strategic faculty hires. Similarly, materials science faculty from across the campus have come together and developed a blueprint for developing distinction in research, teaching, and service, which can be enabled by strategic hiring. We seek to promote such opportunities across other fields and disciplines where synergies can build real Duke distinction. For example, we will more intentionally consider the advancement of the social sciences, not solely through the lens of the relevant Trinity College departments, but in conjunction with schools such as Sanford and Law, and institutes and centers such as the Social Science Research Institute.

Develop a diverse and vibrant faculty community

Faculty with diverse histories, backgrounds, experiences, and expertise are necessary for an academic community that values unique perspectives, histories, and ways of thinking about important, complicated questions. While we have made remarkable strides in diversifying our student populations, our success with faculty has not kept pace. Thus, we must focus efforts on

building the broad and diverse faculty community that underpins all scholarship, teaching, and service. We must expand the recruitment of talented faculty from a wide array of backgrounds, particularly underrepresented minorities. Thus, within the SHFE initiative, we will highlight the crucial need to diversify our faculty and the criticality of embracing the full range of human talent. Accordingly, **resources within the SHFE will be specifically earmarked for increasing the diversity of our faculty.** These resources will be used to fulfill the goals and aspirations set forth in the Faculty Diversity Task Force report and the more recent implementation plan [provide links here], such as the provision of funds for strategic opportunity hires. In contrast to Duke's previous target of opportunity program that focused primarily on hiring senior faculty, these reserved funds will be directed, on a competitive basis, toward faculty at all levels. These funds can also be used to identify potential candidates through visiting professorships, speaker series, and seminars; provide incentives for hiring underrepresented faculty in traditional searches; provide supplemental funds for faculty retention packages; and support newly hired faculty through such means as start-ups or graduate student support.

To catalyze the diversification of our faculty, **Duke has established a new position, the Vice Provost for Faculty Advancement.** This individual, once appointed, will work closely with the senior administration and deans to provide intellectual leadership, guidance, and oversight of university-wide strategy to enhance faculty excellence. The Vice Provost for Faculty Advancement will also help to identify areas where Duke might have a singular opportunity to recruit a minority faculty member, initiate programs and support structures to attract and retain talented minority faculty, promote collaboration within and across schools, and serve as a resource for faculty development across the lifespan.

We also understand that it is not enough to have a diverse faculty community. We must build a community that fosters a culture in which contributions not only add value but are publicly recognized and respected for the value they add. As discussed further in Goal 4, the Vice Provost for Faculty Advancement will partner with key stakeholders from across the campus to implement recommendations of the Diversity Task Force report and work towards a truly inclusive environment in which all members of the Duke community can flourish.

Invest in the sciences

Duke has a unique and timely opportunity to develop the sciences. Since the mid-1980s the University has made important investments in the humanities and social sciences, and Duke has concomitantly risen rapidly in national rankings, in large part due to the hiring of excellent faculty in these areas. We have not, however, developed the sciences in the same way, and we lag behind our peers. This was, of course, a strategic choice at the time: Duke could not afford to double or triple the number of our science faculty for the simple reason that science faculty require relatively large start-up costs, laboratories and specialized instruments, as well as teams of postdocs, lab managers, and materials. Increasingly, however, we have come to realize that Duke cannot be a great university without great sciences. While we will continue to support and build excellence across all of our schools and divisions, in the coming decade we seek to **focus institutional effort on building the sciences**, so that they can be as distinctive for Duke as are our humanities, social sciences, and professional school programs.

For example, with excellent faculty in data analytics, mathematics, computational biology, and statistics, we believe that we can build a signature program in the quantitative sciences.

Enhancing our cadre of quantitative scientists through a quantitative initiative will allow us to fully leverage the tremendous amount of data generated by our health care system as well as by analytic initiatives in the social sciences. Scholars in the Sanford and Nicholas Schools, in Global Health, in the Social Science Research Institute, in the Information Initiative, in Duke's Health Policy Center, as well as in many other units across campus, study and engage with issues increasingly undergirded by data. Of course, the impact of quantitative analysis is not limited to the sciences and social sciences. A premier Duke mathematics faculty member is using wavelet transforms and other image analysis tools to reveal artists' unique styles and to identify art forgeries.

We will bolster the sciences through targeted hiring of both junior and senior faculty in areas such as mathematics, statistics, energy, materials sciences, and in physics, particularly faculty working at the interface of fields such as medicine and engineering. We will also aggressively **recruit and support women and underrepresented minorities in STEM** fields. These efforts will be reinforced by an intentional effort to proactively retain successful faculty through targeted investment in areas that can facilitate their research creativity.

Although there has been a recent emphasis nationally on the funding of translational science—and there is no doubt that an investment in quantitative sciences will help to accelerate data-based translation—the **university must also be the epicenter of deep curiosity-driven basic research**. We must provide the necessary resources to engage in research that is not immediately “applied”—for without investment, there would ultimately be nothing to translate.

To enable such discovery research, Duke must invest in the laboratory sciences, which means a **commitment to modernizing its science infrastructure**. We cannot deliver world-class, 21st century science in outmoded laboratories and classrooms. We do not have the requisite natural science and engineering facilities needed to accommodate the emerging technologies and the sophisticated, costly instrumentation vital for faculty research and innovation, particularly in chemistry and physics. Moreover, the continued growth and success of our engineering enterprise requires new laboratory space that will accommodate anticipated faculty hiring in the coming decade.

Provide new resources to support the faculty and their work

Excellent faculty research rests on a foundation of discovery, debate, curiosity, artistic creation and inspiration. To nurture and strengthen that foundation, we will provide new resources to support our faculty. In addition to regular school and institute funding, the Provost's Office will release an annual Request for Proposals to **provide seed funding for pilot programs to explore research** that may not be eligible for external support without preliminary investigation. Pilot funding will also **provide incentives for group collaborations and community building** through Institute and Initiative calls for proposals and Intellectual Community Planning Grants available to faculty interested in convening a group of colleagues to begin or test a new collaboration around a shared intellectual interest. In addition to search tools available through the Office of Research Support, the Vice Provost for Research will develop a web-based system to publicize and track internal grant opportunities. For tenure-track junior faculty in the humanities and social sciences, the Provost's Office will support the

expansion of the current faculty manuscript workshops, which generate constructive, informed criticism from colleagues within and outside the university. For junior faculty in the sciences and engineering, the Vice Provost for Research will help **organize internal panels for grant review** and offer coordinated support of complex, multi-investigator grants to critique and bolster high impact grant applications.

Duke's commitment to quality education starts with quality teaching. While technology in the 21st century has allowed for a plethora of online courses, their emergence has highlighted the valuable elements of an education not easily provisioned in digital format: presence, participation, and physical access. Thus, the digital age has presented Duke with the opportunity for experimentation with the use of technology to enrich learning, and the imperative to focus on the central values of the university in the classroom: critical thinking, hands-on learning and collaborative exploration. Charting a path forward for innovation teaching needs to involve the collective wisdom and creativity of all faculty. To work toward this goal, Duke will **expand the Center for Instructional Technology into the Center for Innovative Teaching**. This reconfigured center will retain the functions of the current CIT, but will also work with groups of faculty in departments and schools to assess needs, develop programs, and help with assessment and evaluation. In addition to a strong focus on classroom pedagogy, the CIT will help develop online programs and courses, promote collaborations and exchange best practices, and continue to experiment with emerging technologies. To further build a community of faculty interested in and committed to teaching, we will **expand the Duke Faculty Mentoring Program on Teaching**, which currently pairs senior professors with interested junior faculty members in Nicholas, Pratt, Sanford and Trinity. We will also **further develop the TEACH-X program**, in which Duke faculty visit their colleagues' classes campus-wide, and link it to CIT's Visit a Classroom program and the annual CIT Showcase.

Creative pedagogical approaches and an abundance of technology are not sufficient to fully engage students in the classroom if they feel unwelcome. As revealed in the 2016 report of the Task Force on Hate and Bias Issues, underrepresented students at Duke report feeling isolated and marginalized in classrooms where professors may lack the skills for navigating issues of race, ethnicity, sexual orientation, and gender identity. Thus, **it is critical that we confront issues of race and racism in the classroom**. Peer institutions have deployed a range of programs to address these issues, but it is not yet clear which approaches are most effective. Thus, **funds will be available for experimental programs**, such as the Teaching for Social Equity program offered in 2016 by the Duke Human Rights Center of the Franklin Humanities Institute, and to support the expansion of successful efforts. Without an inclusive classroom environment, we cannot achieve our goal of providing every student a transformative education.

Duke's expectations of a faculty member to produce excellence in research, teaching and service must be accompanied by a commitment to support the scholar-teacher at every phase of the career span. Thus, Duke will **develop a culture of mentoring** so that all faculty can succeed to their full potential. Leadership development for faculty will also be stressed. While leadership training in the past was reserved for faculty in formal leadership positions, today's expansive view of leadership skills—the ability to collaborate, convene and inspire; to elicit candid feedback; to listen broadly and gain wide input before making decisions—considerably expands the pool of faculty that would gain from leadership education. Moreover, this capacious view of leadership dovetails nicely with Duke's emerging emphases on communities

and collaborative research. The Vice Provost for Faculty Advancement will work with the Deans to **develop mentoring and leadership programs** and share best practices. Support for the diversity of activities and service that regular rank non-tenure track faculty provide will also be stressed. The Provost will establish guidelines for new appointments, annual reviews and reappointment reviews to ensure that the crucial contributions provided by these faculty are appropriately recognized and rewarded. Finally, retirement from active faculty status at Duke need not signal an end to active university participation. Many emeritus faculty members desire continued engagement in a community of scholars and they represent an untapped font of expertise, both in their own areas of academic interest and as Duke faculty with deep experience in teaching, research and service. We will **establish an Emeritus College** to draw on their experience and continue their intellectual engagement.

Finally, we recognize that **increasingly diverse forms of scholarship** have not been taken into account in our appointment, promotion and tenure processes. While progress has been made on the consideration of interdisciplinary efforts, criteria for rigor and impact in less traditional, alternative, or emerging forms of scholarly expression, including online education, public scholarship, and policy outreach, have not been well defined. Furthermore, while **new modes of communicating scholarship** have allowed for the work of the University to be expressed creatively to a broader audience, these contributions have also not been adequately considered. For example, academic presses publish monographs that are accompanied by author-designed websites offering video, audio, and interactive applications that support text-based arguments. Indeed, in fields such as the arts, sound studies, performance studies, and emerging areas of the digital humanities, these media may displace text from the center of an argument. Under the auspices of the Vice Provost for Faculty Advancement, the Provost will charge a committee to **re-evaluate the criteria for tenure and promotion** in order to clearly define criteria that reward the many scholarly activities we value as a community. Furthermore, to support the work of the faculty in this direction, the Duke Libraries will provide platforms for creating, exhibiting, and communicating new forms of scholarship and expression.

GOAL 2: Provide a transformative educational experience for all students

The university has no greater responsibility than the delivery of deep and meaningful education to our students. Every student who comes to Duke should expect to be intellectually engaged and challenged and to forge deep and lasting relationships with members of the Duke community. Duke's focus on innovative education over the past decade has largely concentrated on the undergraduate program. Programs have been developed to encourage students to join hands-on research teams, delve into interesting and complex issues, and engage in intellectual communities outside of the classroom. While these programs have been highly successful, their reach has been limited due to funding constraints. Furthermore, graduate and professional students in general have not been sufficiently connected to these innovative programs. Our overall goal then is to take the best of the innovation over the past decade to ensure that interactive intellectual engagement inside and outside of the classroom is a normative and transformative experience for undergraduate, graduate and professional students. We want all students to be valued as partners in the process of inquiry and discovery, to be fully engaged and supported in their intellectual pursuits and to leave Duke fully aware of their potential.

A focus in this plan on innovation for graduate education is especially important in light of the significant increase in the proportion of Duke's graduate and professional students. Twenty years ago, there were 6,326 undergraduate and 5,263 graduate and professional students on campus. Today, those numbers are 6,638 and 9,345, respectively. These numbers not only illustrate Duke's growth as a major research university, they remind us of the obligation and opportunity to more fully engage graduate and professional students in all aspects of our research, teaching and service missions.

To provide a transformative educational experience for all students, we will:

- *Expand signature learning communities, including for disciplinary inquiry*
- *Expand opportunities for graduate and professional school students to prepare for an increasing array of career options*
- *Strengthen efforts to diversify our graduate and professional schools and address issues of access and affordability*
- *Consolidate and strengthen educational opportunities that intensely engage undergraduates with faculty*
- *Give all undergraduates an equal opportunity to access and benefit from the best of Duke*

Expand signature learning communities, including for disciplinary inquiry

Learning communities of faculty, students and staff are at the core of academic inquiry and, as such, are crucial for the development of students' intellectual engagement. The purpose of these learning communities, as defined in the 2007 Campus Culture Initiative report, is to provide an "ongoing conversation in which the community and its members grow in wisdom and understanding through inquiry and interaction. This conversation is not just confined to the classroom, but extends to every aspect of campus life and is the underlying narrative running through both academic and social encounters." We have been progressively building these communities, and with greater investment, they could have an even greater influence on intellectual culture at Duke. Bass Connections and other programs have succeeded in providing these ongoing conversations, yet their reach has been limited due to funding—and also because the focus of these communities was intentionally focused on interdisciplinary and problem-focused inquiry. To **make learning communities a signature of a Duke education**, we plan to provide funding for vertically-integrated teams of undergraduates, graduate students and faculty to work within and between schools and departments on a broader range of scholarship, including within disciplines. Our more expansive definition of a learning community would include, for example, enterprises like DukeCreate, a faculty-student workshop collaboration in the studio arts, video, photography, and audio engineering and also the graduate student communities in the Center for Philosophy, Arts and Literature, focused on philosophical perspectives on literature and the arts.

As these learning communities evolve, we will connect them more closely to the scholarly experience for undergraduates, and, where possible, to masters' and professional student projects and doctoral dissertations. To create a more integrated intellectual experience, efforts will also be made to **link new and existing learning communities to residential communities**. Widely used technologies for gathering and sharing data, and for simply communicating, will be used to enrich the experience for students and faculty in these learning communities so that they can stay connected and share information in real time through streaming apps and mobile communication tools. We will increasingly **build technological capability into informal communal spaces**—dorm lounges, common areas of buildings, labs and studios—in order to enhance the number of collision spaces for these learning communities. Finally, in addition to a focus on these learning communities led by faculty, we will promote a bottom-up approach to learning communities. Building on the successful model of *Duke Conversations*, a program for intellectual discussion between faculty and students outside of the classroom initiated and led by undergraduates, we will provide funding to other student groups desiring to organize their own student-faculty conversations.

Expand opportunities for graduate and professional school students to transfer their education into an increasing array of career options

Duke PhDs, along with recipients of our master's and professional degrees, embark on careers that expand the frontiers of scholarship and embody the values of knowledge in the service of society. They make a difference in the public sector and the private sector, within and outside of the academy, at home and abroad. The capacity of Duke graduate students to make their mark in so many arenas depends on the excellent training they receive in research methods and analysis. But to meet the great societal challenges that confront us, we must combine these essential elements with a wider set of competencies: the capacity to work collaboratively within and across disciplines, proficiency in communicating, and experience with organizational leadership. For several years, The Graduate School has invested considerable resources to foster these wider capacities, through professional development workshops, extensive resources on mentoring, an Emerging Leaders Institute, and an acclaimed program in Preparing Future Faculty. We can do much more, however, to amplify these efforts. Duke possesses superb professional and graduate programs set in a highly interdisciplinary, liberal arts environment. This combination enables us to seize new opportunities in graduate education so that our graduate and professional students are able to increasingly navigate a diverse and quickly evolving career landscape.

Accordingly, we will **fund Interdisciplinary Graduate Networks (D-SIGN) Grants** and encourage graduate and professional student groups to propose interdisciplinary projects, training or experiences. These proposals will give students experience in designing a plan of work, articulating anticipated outcomes and working collaboratively. We will also **provide graduate student training enhancement grants**, where individual graduate students can propose an experience outside or within their discipline, such as an internship or field work, to enhance their training. Based on the success of the undergraduate certificate offered by the Innovation & Entrepreneurship Initiative (I&E), we will **offer an I&E certificate to graduate and professional students**. Students in this program will collaborate on the development of solutions to some of the world's most pressing problems, learn the pathways for moving innovations out of Duke's laboratories and research initiatives; and be exposed to career options in research and innovation. Through the enhanced efforts of the Center for the

Advancement of Social Entrepreneurship, graduate students will also be exposed to and involved with **social entrepreneurship**.

Additionally, we will raise graduate and professional student awareness of the I&E StartupConnect Summer Entrepreneurs Network, which connects entrepreneurial Duke students, faculty, and alumni in cities across the country for networking and educational events. Finally, we plan to **build on the successful model of the Data+ program**, a summer research experience offered by the Information Initiative at Duke in which teams of undergraduates learn how to analyze and visualize data, as well as how to communicate with the client providing the data and sponsoring the project. These teams are mentored by graduate students and postdocs who develop skills in team building and client-based work. We plan to **apply this model of student-centered inquiry to programs focused in the humanities and interpretive social sciences**.

While amplifying opportunities for all graduate and professional students is a priority, our education of PhD students needs particular focus because of a marked shift in their career pathways from past decades. Currently, only 25% of Duke PhD recipients pursue academic careers, yet our PhD education, in general, is largely focused on training for just those careers. Duke is not alone in this situation. Across the country there is a growing consensus among government funding agencies and educational thought leaders that high-level doctoral training needs serious reexamination. Given our distinctive innovation of the undergraduate experience and the synergies between our doctoral programs and our professional degree programs, Duke is poised to lead this reexamination. Thus, in partnership with the Graduate School, the Provost will convene a major university-wide committee to **re-imagine doctoral education at Duke**. This committee will examine how to balance the need to sustain disciplinary excellence with our responsibility to offer PhD training that prepares our students to make a difference in a wide array of professional contexts. The committee will be tasked with ascertaining best practices for developing students' skills in communication, leadership, and teaching and mentoring, as well as their ability to work effectively in teams, both within and across disciplines.

Strengthen efforts to diversify our graduate and professional schools and address issues of access and affordability

The intellectual vibrancy of our graduate and professional schools hinges on the diverse experiences and perspectives of admitted students. Furthermore, we must build a strong pipeline of PhD students who are underrepresented minorities (URM) in order to create a diverse faculty of the future. The Office of Biomedical Graduate Diversity in the School of Medicine has developed a model program that has not only greatly increased the inclusiveness of the community and supported and retained URM students, but has doubled the number of matriculating URM PhD students. Similar efforts in other schools will be supported through the Provost's office in partnership with the Graduate School in order to **increase the diversity of our graduate student programs and build a pipeline of future faculty and professionals** across the disciplines. Greater access to our graduate and professional programs is helpful only if these programs are affordable. Although Duke maintains a policy of need-blind admissions for undergraduate students, and PhD students in general receive institutional support, Master's and professional students are largely responsible for their own cost of attendance. This lack of support limits the diversity of the class and constrains career choices

after graduation, limiting the ability of graduates to pursue work in public service fields. In addition to fundraising for resources to offset MA and professional student debt, we will **explore ways to reduce student expense**, such as extending online degree components and providing 4+1 options that allow Duke undergraduates to earn MA degrees in less time through consolidation of undergraduate and graduate education.

Consolidate and strengthen educational opportunities that intensely engage undergraduates with our world-class faculty

The nature of undergraduate education has changed dramatically at Duke over the past decade. Educational opportunities have expanded enormously, not only in the variety and quality of subjects, but also in the creative ways in which education transcends traditional models of teaching and learning and connects classroom learning to real-world experiences. These changes bring with them both opportunities and challenges: opportunities to solidify Duke's position as an innovator and leader in defining best practices in higher education for the next generation, and challenges associated with helping students more fully and deeply engage intellectually with each other and their Duke experience. Duke's leadership in undergraduate education rests on an array of innovative programs that deeply engage its students in and out of the classroom. In the upcoming years, our goal is not to proliferate more such programs; rather, we will build on programs that have demonstrated their ability to authentically engage students in the scholarly community. Our goal is to modify and enhance these programs in ways that further increase their impact and reach.

One program to be expanded is FOCUS, Duke's signature program for freshmen, which provides clusters of seminars around themes such as *Ethics, Leadership & Global Citizenship, Cross-Cultural and Cosmopolitan Medieval and Renaissance Worlds, Modeling in Economic and Social Sciences*, and *Genetics and Genomics*. FOCUS has proven to be one of our most effective means for engaging the intellectual interests of first-year students and for forging deep and lasting relationships among students and faculty, yet only a quarter to a third of each incoming class participates in the program. One limitation to expansion has been a lack of space for weekly cluster dinners; happily, recent dining renovations have removed this constraint. A second limitation has been resources to support faculty participation. We will provide the needed resources to remove this limitation as well as place an emphasis on greater student and faculty outreach.

A second program for expansion is DukeImmerse, a semester-long, full-immersion program in which students participate in an integrated, faculty-led teaching and research project. DukeImmerse provides a collaborative, interdisciplinary learning laboratory that moves Duke's educational approach away from a sole focus on knowledge acquisition to an increasing focus on knowledge construction. The impact of DukeImmerse programs, such as *Governance, Policy & Social Justice: Urban Politics in the American South and South Africa* and *Uprooted/Rerouted: The Ethical Challenges of Displacement*, is clearly demonstrated in the large percentages of participants pursuing senior honors theses. We plan a modest investment to bring DukeImmerse to a steady state with several programs running each semester, and we plan to realign this program with its original goal of primarily providing an on-campus experience, so as to give students more flexibility and increase the possibility of graduate student involvement.

To complement the enhancement of FOCUS and DukeImmerse by providing an opportunity for student discovery on a shorter timescale, **we plan to launch a Spring Breakthrough** program in the spring 2017. This program, taught by some of our best faculty, will provide short courses for first- and second-year students during spring break to immerse them in an intellectual area of inquiry in a risk-free manner. The format for these prerequisite-free, ungraded, intellectual explorations includes a mix of classroom based discussions, hands-on exercises, field trips and group outings, recreation, and common meals to allow for intellectual exchange among the participants outside of the classroom.

Over the past several years, DukeEngage, now one of Duke's signature programs, has been one of the most commonly cited reasons prospective students give for their interest in Duke. This program provides summer funding for undergraduates to pursue an immersive service learning experience locally, domestically, or internationally. DukeEngage students have, for example, designed health education programs, developed microfinance opportunities for disadvantaged families, and helped build bridges in underserved communities. As successful as this program has been, there is an opportunity **to connect students' DukeEngage experiences more intentionally with their academic trajectories** and with Duke faculty. Moving forward, all programs offered through external organizations will be linked to Duke faculty members and will identify appropriate academic goals for their program. We will also work to align and integrate DukeEngage experiences more closely with the curriculum through such means as curricular pre-requisites, as well as follow-up and house courses.

Give all undergraduates an equal opportunity to access and benefit from the best of Duke

By any measure, the undergraduates who matriculate at Duke increasingly represent the very best students the world has to offer, and they increasingly reflect the diverse backgrounds and ethnicities of our entire world. To enhance the excellence of Duke's communities, we must continue to attract and retain students from the full range of ethnic identities, religious and cultural heritages, sexual identities, socioeconomic groups and full life experiences. Recognizing the need to increase the socioeconomic diversity of our undergraduates, in 2015, Duke established the **Washington Duke Scholars** program to support and enrich the experience of first-generation and low-income students. This program provides these students with a special summer orientation program and targeted faculty mentoring to ensure that they succeed and thrive at Duke. We will monitor the success of this year's first class and continue to evaluate and build out this program.

The Office of Undergraduate Scholars and Fellows (OUSF), created in 1998 to provide administrative support for Duke's merit scholarship programs, was reorganized in the 2015-2016 academic year with the **goal of transforming OUSF into a center of intellectual engagement for all students**. To continue to expand the reach and impact of OUSF, we plan to allocate resources to consolidate all scholars and fellows programs under the OUSF umbrella; migrate to OUSF existing successful programs for scholarly engagement, such as the East Campus Chautauqua Lecture series; and launch the publication of an undergraduate research journal administered by OUSF. Additionally, to expose undergraduates to the full range of research opportunities across the university, OUSF will develop a program modeled on MUSER (Matching Undergraduates to Science and Engineering Research), developed in Duke's Department of Biology. MUSER, a central web-based location for Duke researchers to advertise

undergraduate research projects, has provided a clear, accessible view of available scientific and engineering research opportunities.

Duke's innovative curricular and co-curricular opportunities, layered on top of the fundamental curriculum and linked with real-world opportunities such as professional internships, provide a rich landscape on which students can build an exceptional education. But as options have increased, students require additional guidance so that they can navigate those options in a thoughtful and intentional way. Thus, to help each student craft a coherent educational, Duke has implemented a new conceptual approach to advising, one that affirms the essential mentorship that faculty must provide, while at the same time supporting that mentorship through an integrated network of advisers. The College advising system has been supplemented by a cadre of Directors of Academic Engagement (DAEs), full-time professional advisers who help students make deeper and more intentional connections across the curricular, global, and co-curricular opportunities. We seek to **augment the current DAE program by expanding the number and current areas of specialization**. We will further develop our four-year dean relationship to increase the personalization of our advising system, and we will expand the peer advising program, both in scope and number.

A key goal of advising moving forward will be to **encourage students to sample intellectual areas outside of their comfort zones**. As described in "The Heart of the Matter," a national report issued in 2013 by the Commission on Humanities and Social Sciences, organized by the American Academy of Arts and Sciences and co-chaired by President Brodhead:

...a fully balanced curriculum—including the humanities, social sciences, and natural sciences—provides opportunities for integrative thinking and imagination, for creativity and discovery, and for good citizenship. The humanities and social sciences are not merely elective, nor are they elite or elitist. They go beyond the immediate and instrumental to help us understand the past and the future. They are necessary and they require our support in challenging times as well as in times of prosperity. They are critical to our pursuit of life, liberty, and happiness, as described by our nation's founders.

At a time when society desperately needs these broad perspectives, Duke and peer institutions are seeing a drop in humanities majors and decreased enrollment in central courses in the humanities and interpretive social sciences. Thus, it we plan to increase the recruitment of students with interests in these areas and encourage students to seriously explore the rich array of curricular offerings in the humanities and interpretive social sciences.

GOAL 3: Strengthen Duke's capacity to address challenges—both locally and globally

In the past decade, we have built global programs while simultaneously deepening Duke's involvement and investment in Durham. These investments have been thought of as separate endeavors with distinct institutional motivations and goals. Today, with a growing recognition of the common challenges that local and global communities face, there is an imperative and an opportunity to connect and network these initiatives. Thus, as a university of consequence, we plan to address common, pressing issues that cross borders as well as strengthen our traditional emphasis on place-based external engagement. Engagement with outside communities was historically considered a one-way street, largely a matter of transmitting

knowledge *from* the academy *to* society. Duke has gone well beyond this limited conception to imagine and embody engagement as a two-way street, in which society and the academy learn from mutual encounters. Yet we have only begun to tap the ways in which greater engagement could enhance the impact of our current research and teaching, and, importantly, enrich the quality and relevance of both. As we continue to engage with external communities, we aim for deeper, earlier, and more sustained engagement with experts in industry, non-governmental organizations, foundations, governmental agencies, and with those we seek to benefit.

Improving our interactions with outside communities requires that we recognize and support the many forms that engagement takes at Duke, from civic and entrepreneurial ventures to public scholarship and participation in public policy. Understanding the challenges each form faces in developing a new model of engagement will enable Duke to strengthen each and identify opportunities for integration among them. Finally, building a stronger community of alumni across the globe by connecting them more purposefully to the university's mission can only serve to advance the goals outlined in this plan.

To strengthen Duke's capacity to address challenges both locally and globally, we will:

- *Build on Duke's strong institutes and schools to deepen Duke's leadership in strategic areas that address local to global challenges*
- *Build local to global nodes of influence*
- *Strengthen mechanisms for outside engagement*
- *Strengthen links between local and global education*
- *Support local to global alumni engagement*

Build on Duke's strong institutes and schools to deepen Duke's leadership in strategic areas that address local to global challenges

As a research university, a primary mission of Duke is to help solve some of the world's most pressing societal challenges. Deliberate investments in areas such as global health, public policy, ethics, the environment, and biomedical engineering have advanced the university's standing and created an enviable interdisciplinary culture. That culture now sets the stage for the university to differentiate itself from many of its peers and become a recognized leader in several areas that are fundamental to a vibrant future for human societies. Duke has targeted three strategic areas in which to build initially, based on their societal relevance, our internal capacities to address them, and their alignment with our local-to-global strategy: **energy and water resources; race, migration and citizenship; and population health.**

Of course these global challenges will not be solved by Duke alone. Indeed, government agencies, international organizations and non-profits across the globe have been working and will continue to work on these challenges at the local, state, national, and global scale.

However, major research universities have distinctive roles to play as well: they are uniquely positioned as providers of the fundamental research that undergirds knowledge in the service of society. Duke can be a university that distinguishes itself in this regard. Duke has the intellectual resources and organizational nimbleness to convene technical, legal, scientific, ethical and humanistic explorations of these issues. By drawing on our disciplinary depth, our interdisciplinary strengths and our commitment to engagement, we have the capacity to make crucial contributions in these three vital areas.

To do so, we will support faculty and students from across the university who join forces with external partners and stakeholders in addressing each of the identified challenges. These **collaboratories, identified through an open RFP process, will harness Duke's existing human capital and institutional capacities in order to advance solutions to targeted problems**, amenable to tangible contributions in a 5-year window. Collaboratory teams will address specific challenges and share their findings and recommendations widely in ways that **make Duke a hub for local-to-global problem-solving and two-way engagement** with external stakeholders. In addition to foci on local to global and two-way engagement, a critical aspect of these collaboratories will be the participation, support, education and professional development of graduate students. The goal of these collaboratories is to not only produce solutions but also to train graduate students who can leave Duke with a working knowledge of how to engage with societal challenges.

The initial focus on these three areas will not preclude the emergence of other themes over time. Duke provides multiple avenues for faculty to coalesce their efforts and pilot potential larger projects, including university-wide RFPs from the Provost's Office and the institutes and initiatives as well as school-specific funding mechanisms. In this way, other thematic areas will no doubt emerge for central investment over the lifetime of this plan.

Energy and Water Resources in a Changing Environment

Access to secure and sufficient energy and water resources has always been critical for the security, growth, and well-being human communities. Today's changing environment makes planning for that access particularly difficult. Population changes, rapidly developing energy technologies, shifting market conditions, and policy uncertainties would present daunting planning dilemmas even under a stable global climate system. However, even under optimistic scenarios for future reduction of greenhouse gas emissions, we can expect warming temperatures and possibly significant shifts in precipitation patterns in the coming decades. These changes will disrupt our provision of energy and water. Thus, society will need to adapt and build systems that are resilient to the resulting environmental transformations.

The design of those systems is challenging on several fronts. Current access to high quality energy and water resources is uneven across the globe, as are the risks posed by anticipated global climate change. Moreover, the exact nature, scale and location of these future changes is uncertain. Effective plans for adaptation must then account for these regional variations and uncertainties. The task before us is to design, construct and maintain adaptable systems so that societies across the globe can weather the socio-environmental challenges to come. The goal of resilience, moreover, must include accounting for the differential impacts that climate solutions may have on specific groups. We must, in other words, remain alert to the social and ethical dimensions of adaptation.

Duke has the intellectual resources and organizational nimbleness to convene technical, legal, scientific, and humanistic explorations to develop workable solutions around energy and water access. Nicholas and Energy Initiative researchers have deep investments in energy and water issues. Nicholas School faculty have proven expertise in the analysis of model simulations of future climate scenarios. Scholars in Pratt and Nicholas can provide insights into how current and emerging technologies can provide affordable sources of energy and water, while minimizing environmental costs. An *Energy Access* effort to bring electrification to low income countries has begun as a partnership between the Nicholas Institute, Sanford School and the Energy Initiative. Campus wide strengths in data analytics and systems modeling will inform optimal design of electrical grid and water delivery systems, the exploration and design of energy sources, and the analysis and forecasting of vulnerabilities to sea level rise and other environmental threats. Sanford, Fuqua and Duke Law have expertise to bring to bear on likely shifts in public policy, economic incentives for systems change, and implications for property rights and regulation. Finally, expertise in the humanities, social sciences, and the Kenan Institute for Ethics is available for analyses on how benefits and costs could be distributed across regions, neighborhoods, and social groups.

Race, Migration, and Citizenship

The perennial question of how people can live together while recognizing their differences has special force today—an age when communities are rapidly becoming more diverse and blended and simultaneously more divided. Racial and ethnic conflicts shape crucial elements of contemporary life, from the incidents of police force against unarmed African-Americans that has generated the *Blacks Lives Matter* movement to the outpouring of refugees from the Middle East and Africa. Understanding the multifaceted sources of racial and ethnic identities, as well as their political, legal, cultural, and socio-economic consequences, is essential if we are to identify the policies and norms most likely to promote equity and comity. Any such effort entails coming to terms with the meanings and implications of citizenship—always a highly contested concept. Our challenges are framed both by the specificity and emotional dimensions of citizenship (made clear by the Brexit debate) and the devastating consequences of modern statelessness (as in the case of Syrian refugees). Disputes over the implications of mass migration and the appropriate bases of citizenship lie at the heart of conflicts over sovereignty and political community, state formation and disintegration. These conflicts, in turn, are shaped by the evolving relationships among citizenship, gender, and multiculturalism.

Over the past few decades, Duke has greatly expanded its faculty expertise in comparative equity, citizenship and minority rights, immigration and refugee policy, and environmental justice. We have a singular facility to probe different models of civic, racial and ethnic identity, so as to tackle global problems such as racial bias in the criminal justice system, the growth of ethnocentric authoritarianism, and the massive challenges of responding to refugee populations. Our greatest concentration of expertise, however, grapples with the distinctive challenges and promise of the American South, with its vexed history, rapidly changing demography, and sharp social and political fault-lines. Duke resides in Durham, in North Carolina, and in the American South. As such, we have extraordinary opportunities to engage with the dynamics of race, ethnicity and citizenship in our own neighborhood, state, and region. Doing so will involve building on our current linkages to community organizations, NGOs, firms, and government agencies. It will also require the development of new courses, new co-curricular experiences, and more ambitious collaborative research initiatives.

To make progress on these ambitious goals, we will support collaboratories that engage with the interconnected issues of race, and ethnicity, and citizenship. These collaboratories will draw on the convening capacity of our cross-cutting institutes in humanities, social sciences and ethics, our problem-focused institutes in global health and the environment, and other units such as the Samuel Dubois Cook Center. And although this effort will have an important local and regional focus, we will link analyses to global contexts, leveraging recently launched initiatives in Global Asia, Africa, and Brazil.

Population Health

Optimal health is central to well-being in modern societies. Improving and maintaining health involves more than access to individual-level quality health care: socio-economic factors, community or culturally-based health behaviors and environmental factors also impact the health of populations. As such, policymakers across the globe are shifting from an exclusive focus on individual health care toward efforts to optimize health outcomes of groups of individuals. Although population health has been a key focus of Duke Health for some time, the campus side of the university now includes a large number of faculty members interested in this undertaking: faculty drawn from global health, environment, law, engineering, humanities, public policy, statistics, mathematics, the information initiative, business and the social sciences. Furthermore, since a major driver of population health is the quality of food and nutrition, Duke's emerging World Food Policy Center will provide expertise on hunger, obesity, the reciprocal relationship of agriculture with the environment, and food safety and security.

With the collaboratory model, Duke can work toward an improved understanding of population health challenges as well as means to address them. Faculty and students will be able to analyze and visualize data to better understand the root causes of suboptimal health, and to develop, test and evaluate healthcare and health promotion innovations in Durham and communities around the world. Duke will develop and propose health policy improvements that support population health and generally expand the use of implementation science to understand the most effective approaches to improve health under real-world conditions.

Central to this work will be the electronic health record, a rich source of data that, if mined thoughtfully, can track trends in disease, health outcomes, and opportunities for intervention. We will make these data accessible to investigators across campus in a de-identified and secure way. We will support research app development for mobile platforms to collect health information from broad and diverse groups of individuals and for implementing health interventions. These efforts will build upon our university-wide strengths in data analysis, modeling and theory; disciplinary strength in mathematics, statistics, computer science, and machine learning; and broader efforts, such as the Quantitative Initiative and the Information Initiative at Duke. We will create a Center for Data-Driven Health Solutions to analyze complex data to understand population and public health issues. We will partner with Fuqua's Center for the Advancement of Social Entrepreneurship and the Innovation & Entrepreneurship Initiative to translate innovative ideas into solutions that have a positive impact on individuals and communities. And, we will collaborate with our health policy-focused centers at the Sanford School and the Robert J. Margolis, MD, Center for Health Policy to transform promising ideas on health reform into meaningful practice and effective policy.

Build local to global nodes of influence

Virtually every unit on campus has projects and programs with a wide variety of stakeholders in Durham and the Research Triangle, in North Carolina and Washington, DC, and in various part of the globe. Collectively these programs reflect the value of a decentralized approach to engagement that connects faculty and students with communities and collaborators where they live. Without restricting the diversity of efforts underway, Duke will launch or enhance the following key nodes and modes of engagement in order to build local to global influence, as well as support the strategic themes mentioned above.

Duke's leadership has been a central force in the present vibrancy of Durham and the Triangle region. At the same time, the many ways that faculty and students pursue research and education in Durham and the Triangle region imposes an obligation on Duke to ensure that those communities are partners in a two-way process that results in mutual benefits. To this end, Duke will **convene a Durham and the Triangle Working Group** to inventory existing projects and develop a guiding philosophy, best practices and an appropriate infrastructure to maximize these benefits. We will also **expand Duke in DC**. Since Duke in DC opened in 2012, it has grown into a hub of activity in the nation's capital, hosting undergraduate and graduate classes, organizing "think tank-style" public programs, and offering resources to Duke faculty, staff and alumni. We will build out this center, as we connect Duke's intellectual capital more directly to the "thought ecology" in our nation's capital—policy makers, foundations, think tanks, and the media.

And finally, we will **leverage our global platforms**. Talent has no borders or boundaries, and globalization affects every aspect of our lives. For Duke to excel in this environment, we must develop global academic leadership that matches the prominence we have achieved nationally. The establishment of Duke-NUS Medical School and Duke Kunshan University marks significant steps to achieving this goal. Duke will add to these operations a series of global nodes—small, portable offices located in such countries as Brazil, Germany, India, and South Africa, where there is a high level of Duke activity among students, faculty, and alumni. These offices will serve as sites of concentrated engagement for addressing local, regional, and global challenges, serve as a "footprint" for Duke around the world to attract and recruit the best students and faculty, and to function as a convening place for Duke alumni. Such offices could host scholars in residence, coordinate new research collaborations, provide summer courses, short-term learning or research experiences, and conduct long-distance teaching and teleconferencing back to Duke's main campus.

Strengthen mechanisms for outside engagement

Duke's ability to address important societal challenges will be facilitated by a strengthening of its external engagement mechanisms. In particular, a connection of its scholarship more directly with policymakers and practitioners at all levels of governance and civil society has the potential to cement Duke's reputation as a university of influence. Fortunately, Duke has an extraordinary number of centers, initiatives, and individuals involved with policy engagement to facilitate that greater connection. However, there could be greater communication, coordination, and mutual support amongst these efforts. Thus, Duke will **invest in building a policy bridge** situated at the Sanford School that serves the entire university. The policy bridge will support faculty and student engagement by brokering potential research-policy

partnerships, translating research for policy-makers, assisting in acquiring data from policy bodies, identifying and stewarding relevant sources of funding, and providing supplementary funds to catalyze or expand policy relevant projects. The policy bridge will provide an on-campus community that builds connections among Duke programs and faculty focused on local, state, national and/or international policy. In particular, the policy bridge can highlight the work of The North Carolina Leadership Forum, which facilitates problem-focused dialogue among leaders from diverse perspectives and backgrounds, with the goal of identifying and advancing policies to improve the lives of North Carolinians. An NC forum provides an important node in our emerging local to global network.

In addition to local to global impact through research, teaching, and outreach, Duke has made a strong commitment to **support public scholarship** that focuses on how knowledge can be accessible to various peoples and groups as well as help shape local, state and national debates and discussions. While public scholarship can be problem-focused, addressing issues of contemporary concern, it can also be focused on sharing forms of historical and cultural analysis and understanding to enrich the lives of individuals and communities. This work often involves collaboration with journalists, filmmakers, artists, teachers and schools, and community organizations. Duke will build upon programs such as The Forum for Scholars & Publics, Science and Society, and cross-cutting units, such as the Library, to share and communicate knowledge and creative ideas beyond our walls. Finally, as a recognized leader among research universities in civic engagement, Duke aims to become a model for the integrity, consistency and reciprocity of its partnerships around the world. Central to this goal, and consistent with Duke being a signatory to Campus Compact's 30th Anniversary Statement, is the **development of a civic action plan** in spring of 2017.

Support local to global education

Duke's global aspirations also touch our educational mission. Educating students to understand and engage in the world outside of Duke has included a number of opportunities for engagement. These opportunities range from US- and international-based DukeEngage projects to multiple study away programs that add immeasurably to the student experience. In 2005, Duke took a bold step in establishing a partnership with the National University of Singapore to create the Duke-NUS Medical School. This brick-and-mortar educational enterprise quickly led to significant pedagogical innovation; we anticipate the same kind of **bi-directional educational innovation to emerge from Duke Kunshan University**. DKU is poised, pending a positive vote of the Academic Council and the Duke Board of Trustees, to launch a four-year undergraduate degree program founded in the Western liberal arts tradition, deeply cross-cultural in its orientation, infused with Duke's signature strengths, and uniquely adapted for a 21st century global campus. DKU provides Duke an opportunity to see some of its best practices in new combinations and configurations and to explore the relevant implications. As the educational programs at DKU and on the Duke campus evolve, we will make sure that **pedagogical creativity and successes are shared between the two campuses**, a goal that will be facilitated by heightened opportunities for **faculty and student exchanges**. As faculty teaching at Kunshan have already experienced, teaching a student body with significantly different backgrounds from those of Duke students will prompt a revisiting of familiar preconceptions and can spark pedagogical innovations.

Regardless of whether students study at DKU or at other points around the world, we plan to continue work on **connecting global experiences more closely to academic study**. To help undergraduates organize their paths through the curriculum and integrate their experiences abroad, we will support and expand the role of **global advisors**. We will also review and propose ways in which global education—study abroad, DukeEngage, Bass Connections, and other programs—can be better linked with academic courses of study, major academic centers such as schools, institutes and initiatives, and learning communities. Finally, in order to maximize the benefit of a global experience, we plan to improve the training that students receive before going abroad, both in terms of cultural competence, ethical decision-making, and preparation for the country they intend to visit.

Build local to global alumni engagement

Duke's more than 160,000 living alumni comprise a global network that runs through virtually every field and profession. The talent, experience, and resources alumni can offer, particularly when combined with their uncommon Duke commitment, represent an asset that can be more fully leveraged to enhance the experience of Duke students, faculty, and staff. Duke will work to create and support more formal and informal ways for alumni to share perspectives with students, faculty, and staff around topics related to their expertise, allowing them to provide mentorship and feedback, and to foster connections for Duke with industries, NGOs, universities, and other partners that can advance Duke's work.

Duke will support these efforts by **creating an alumni task force** to advise the provost and senior leadership on its vision for alumni engagement.

Goal 4: Create a supportive environment for research, learning and academic communities

To achieve the goals articulated in this plan, we must invest in the infrastructure necessary for our research, teaching and service missions and we must plan for spaces that foster the community engagement that will advance these missions. That said, a conducive physical environment alone will not produce the community that lives up to Duke's promise. We must articulate and constantly reinforce our commitment to a vibrant, diverse and inclusive community. And we must do the hard work to make that commitment a reality.

To create a supportive environment for research, learning and academic communities, we will:

- *Establish an inclusive community culture*
- *Create spaces on campus that facilitate community*
- *Accelerate the establishment of residential house-based living-learning communities*

Establish an inclusive community culture

The *Duke University Community Commitment*, adopted in May of 2016, states: “Because diversity is essential to fulfilling the university’s mission, Duke is committed to building an inclusive and diverse university community. Every student, faculty, and staff member — whatever their race, gender, age, ethnicity, cultural heritage or nationality; religious or political beliefs; sexual orientation or gender identity; or socioeconomic, veteran or ability status—has the right to inclusion, respect, agency and voice in the Duke community. Further, all members of the University community have a responsibility to uphold these values and actively foster full participation in university life.” We have work to do in order to meet this commitment. The *2016 Report of the Duke University Task Force on Hate and Bias Issues*¹ noted that “significant changes are needed to enhance transparency, alter and clarify policies and procedures, build in the areas of prevention and training, and further invest in a climate that is inclusive, open, and supports a diverse Duke community.” Though the charge to the Task Force was focused on the student experience, the committee wrote their recommendations inclusive of students, staff and faculty. The Vice Provost for Faculty Advancement will work with the senior administration in implementing the recommendations of this report.

We understand the hard truth that there is no quick or proven path to building community. Though a plethora of training programs on implicit bias, diversity and inclusion are available, recent scholarship suggests that mandatory training is not the best mechanism for building a diverse and inclusive environment. At the same time, there are no clear consensus alternatives. Thus, we plan to **experiment with new approaches to educate members of the Duke community on issues of diversity, inclusion, hate and bias**. Resources will be made available for each academic unit to experiment with different strategies for enhancing cultural awareness, reducing bias, and encouraging workplaces characterized by open expression and mutual respect. We also plan to facilitate dialogue between and across university communities on pressing and challenging issues such as inequality, race, politics and civil discourse by using pop-up or flash conversations. The structure of these conversations will be fluid so that conversations can “pop up” as issues arise. Moderated conversations will be organized through the office of the Vice Provost for Academic Affairs. Dedicated space for these conversations will be provided to minimize organizational barriers.

However, we understand that programming and conversations alone will not change our campus community. Issues of diversity and inclusion must therefore be understood as central to all the communities of learning that lie at the heart of this plan, and not simply as the subject of training modules or conversations. Indeed, these issues can be perhaps more deeply engaged while working together on common endeavors in which issues of difference have to be navigated in real terms, not abstract ones. This “side-by-side” work forms the core of all communities of learning that genuinely foster growth in wisdom and understanding through inquiry and interaction. Whether in research or learning communities, the collisions and connections that emerge can generate the social capital that bridges differences and promotes active forms of respect.

Finally, we affirm that our Duke academic community is inclusive of all students, faculty *and* staff. Staff members across the university play an increasingly independent and direct role in

¹ <https://spotlight.duke.edu/taskforce/wp-content/uploads/sites/2/2016/05/Final-Report-from-Task-Force-on-Hate-and-Bias-Issues.pdf>

Duke's academic mission. They serve as academic advisors, hold leadership roles in programs, direct co-curricular activities and are primary contacts between Duke and off-campus communities. Understanding that the success of the goals outlined in this plan depends critically on an engaged and well supported cohort of university staff members, we aim to meaningfully increase their participation and inclusion in committees, task forces and planning groups so as to maximize the institutional strength of this human resource.

Create spaces on campus that facilitate community

Space that allows for both planned and unplanned collisions and interactions will foster the types of community engagements envisioned in this plan. In addition to their social, cultural and intellectual purpose, **collision spaces should promote inclusiveness among diverse segments of the Duke community** and support cross-generational connections, both among undergraduates and between undergraduates, graduate students, staff and faculty. The newly renovated West Union Building and the reconfigured Penn Pavilion are communal dining and gathering spaces that allow for these collisions, while collisions around innovation and entrepreneurship are facilitated by The Bullpen, located in the heart of the Durham Innovation District in the Imperial Building. To build on this hub, there are plans to move the Office of Licensing and Ventures (OLV) to the Imperial Building, where OLV staff can more effectively partner with I&E to help Duke investigators bring discoveries to the marketplace. Duke is also investing in collaborative research space in downtown Durham: the Chesterfield building will be home to researchers from both the School of Medicine and the Pratt School of Engineering. As we move forward, we plan to use these spaces to **catalyze student groups and research and learning communities** across campus.

Other new collision spaces have widened the scope of teaching and learning possibilities. *The Link*, located in Perkins Library, affords technological approaches to teaching and learning, and *The Edge* extends the Duke Libraries' commitment to experimental space by providing collaborative space for interdisciplinary, data-driven, digitally reliant and team-based research. Plans are under discussion for the renovation and expansion of Lilly Library so as to create a crossroads on East campus where first-year students engage intellectually with one another and with faculty and graduate students. And, coming in 2017, the Duke Arts Center will have flexible studio space for collaborative projects, thus expanding the reach of the arts by supporting arts-focused collaborations that reach across campus. While Duke has invested well over the past decade in academic and research space, it must continue to do so, particularly in terms of updating our classrooms. Thus, we will **build toward the goal of having all classrooms support 21st century pedagogies**, with customizable space and standard digital technologies.

Accelerate the establishment of residential house-based living-learning communities

One of Duke's greatest strengths is that we are a residential university with a very strong sense of place. We require our students to live on campus for the majority of their undergraduate careers, understanding the value added by integrating all facets of a student's educational experience in the context of a living-learning community. Duke stands out for the deep attachment its students develop for the physical campus itself, however, satisfaction with campus housing waned in the last decade due to the demise of the house-based residential system that had been in place since the 1970s. By the mid-2000s, only social selective groups

lived in socially coherent houses. In response, the new “Duke House” system was launched in 2012, allowing all students to live in house-based communities, with each house having the infrastructure and resources needed to establish a robust sense of community, and with all students having the right to stay in their house in subsequent years if they so choose.

Progress towards building communities in houses not affiliated with a selective living group has been steady since the launch of the new house system: the number of students returning to a house, numbers of house-based community activities, and self-reported student satisfaction with their residential experience have all increased. But this progress has been slow, and the value of residential houses as living-learning communities remains to be fully realized four years into the new housing system. Given the power of the residential experience to augment student engagement in the scholarly life of the university, we plan to **accelerate the re-establishment of residential house-based living-learning communities for undergraduates**. Specifically, we will embark on a comprehensive five-year plan for new residence halls that will include a new residence hall on East Campus, new residence facilities in Edens Quad, a renovation of Crowell and Craven Quads, and replacement of all undergraduate housing currently on Central Campus with new construction along Campus Drive to facilitate a house-based residential system.

Finally, we plan to **encourage and support student-faculty efforts to link academic programs with houses**. In addition to engaging additional FOCUS clusters, Bass Connections themes and the new disciplinary learning communities envisioned in this plan provide other obvious candidates for programmatic linkage with Duke Houses. Importantly, these linkages must emerge from the bottom up, with student interests driving the selection of themes and the recruitment of faculty.

V. Epilogue

By all measures, Duke is an impressive university with a beautiful campus, outstanding undergraduate and graduate students and a world-class faculty. But what sets Duke apart from other universities across the world is its willingness to experiment, its demonstrated ability to innovate, and its unusually collaborative environment. Since these characteristics are precisely what is needed to achieve the goals outlined in this plan, we are optimistic about their realization. However, this realization also depends on the wise use of resources—human, physical, and monetary—to ensure the long-term vibrancy of the university over the coming years. This plan is a roadmap, not a contract, but if implemented well, it can fuel within our institution an ever more vital and robust community of scholars and learners—faculty, staff, graduate and professional students, and undergraduates alike—that will ensure our eminence in the decades to come. Duke University has much to offer to its own internal constituents and to the world at large. This plan is written in the hopes that we, as a community, will extract maximal value from all that we have and will contribute to the world all that we can.

VI. Financial Roadmap for the Strategic Plan

Duke is fortunate to have central resources to support its strategic priorities, enabling the Provost to invest in the goals of this strategic plan. The Provost provides strategic funding to the Deans, Institute and Initiative Directors and Vice Provosts responsible for delivering Duke's academic programs to further specific goals identified in the plan. The Provost expects to invest \$132 million in support of the plan's goals over the next five years.

The table on the following page provides the roadmap for these strategic investments, organized according to the goals of the plan in the following proportions:

- Goal 1 Empower the Duke Faculty: \$70 million (~50%)
- Goal 2 Provide a Transformative Educational Experience: \$25 million (~20%)
- Goal 3 Address Local to Global Challenges: \$25 million (~20%)
- Goal 4 Create a Supportive Environment: \$12 million (~10%)

The roadmap is intended to be a flexible guide to allocation decisions that the Provost will make in collaboration with Deans, Directors and Faculty governance groups as the plan is implemented. Detailed implementation plans for each goal will be developed once the overall planning framework is approved. Implementation plans will include identification of the individuals (e.g., Vice Provosts) primarily responsible for a particular goal; the process for requesting/allocating funds; measures of expected outcomes; and funding criteria such as programmatic impact, potential to attract internal or external matching funds, and long-term sustainability.

The roadmap remains flexible at this stage for several reasons. First, cross-cutting thematic goals of the plan require experimentation and continuous adjustments based on results. Second, philanthropic support could boost some goals, allowing adjustments in the allocation of central funds. Finally, since central strategic funds ultimately depend on DUMAC's investment performance, the pace of investment may have to be modulated based on investment results.

**2016 Strategic Plan
Funding Roadmap**

| Programmatic Goal | Funding Goal (Millions) | Percent of Total | Details/Examples |
|---|-------------------------|------------------|---|
| GOAL 1: Empower the Duke faculty as scholars and leaders of the university's intellectual communities | 70.0 | 53.0% | |
| Build on the excellence of the faculty through a strategic hiring program | 15.0 | 11.4% | Funding allocated by the Provost to Schools and Institutes/Initiatives through a program of Strategic Hiring for Faculty Excellence (SHFE) |
| Develop a diverse and vibrant faculty community | 20.0 | 15.2% | Funding allocated by the Provost through the Vice Provost for Faculty Advancement to Schools and Institutes/Initiatives to increase the diversity of the Duke faculty |
| Invest in the sciences | 15.0 | 11.4% | Funding allocated by the Provost to Schools and Institutes/Initiatives to deepen Duke's capabilities in sciences, including specific support for women in STEM fields |
| Provide new resources to support the faculty and their work | 20.0 | 15.2% | Funding to the Vice Provost for Research to support research activity, to the Vice Provost for Faculty Advancement to support programs focused on mentoring and leadership, and to transform the |
| GOAL 2: Provide a transformative educational experience for all students | 25.0 | 18.9% | |
| Expand signature learning communities, including for disciplinary inquiry | 3.0 | 2.3% | Funding to support new campus learning communities, building on the success of Bass Connections and other programs |
| Expand opportunities for graduate and professional school students to transfer their education into an increasing array of career options | 8.0 | 6.1% | Funding to support deeper involvement of graduate and professional students in interdisciplinary and vertically-integrated programs that will broaden their experience and career options, including D-Sign, graduate student training enhancement grants, I&E certificate to graduate and professional students, Data+ program model focused in the humanities and |
| Strengthen efforts to diversify our graduate and professional schools and address issues of access and affordability | 2.0 | 1.5% | Funding to increase the diversity of graduate student programs and build a pipeline of future faculty and professionals across disciplines |
| Consolidate and strengthen educational opportunities that intensely engage undergraduates with our world-class faculty | 4.5 | 3.4% | Funding to expand existing programs like FOCUS and DukeImmerse and develop new programming like the Spring Breakthrough program |
| Give all undergraduates an equal opportunity to access and benefit from the best of Duke | 7.5 | 5.7% | Funding to support the new Washington Duke Scholars, broaden the role of the Office of Undergraduate Scholars and Fellows, and increase the number of academic engagement advisors |
| GOAL 3: Strengthen Duke's capacity to address challenges -- both locally and globally | 25.0 | 18.9% | |
| Build on Duke's strong institutes and schools to deepen Duke's leadership in strategic areas that address local to global challenges | 15.0 | 11.4% | Funding to support "collaboratories" in critical topical areas in which Duke is poised to make major contributions |
| Build local to global nodes of influence | 7.0 | 5.3% | Funding to support the creation and operation of Duke support centers in Washington DC and several international locations to facilitate the work of Duke faculty and students |
| Strengthen mechanisms for outside engagement | 2.0 | 1.5% | Funding to extend the reach of the Sanford Policy Bridge program and to build upon programs to share and communicate knowledge and creative ideas |
| Support local to global education | 0.5 | 0.4% | Funding to increase faculty and student exchange between Duke and DKU, expand the undergraduate Global Advisors program, and deepen pre- and post-Study Away education |
| Build local to global alumni engagement | 0.5 | 0.4% | Funding in anticipation of the report from an alumni task force to advise the Provost on opportunities to deepen alumni engagement with Duke programs |
| GOAL 4: Create a supportive environment for research, learning and academic communities | 12.0 | 9.1% | |
| Establish an inclusive community culture | 2.0 | 1.5% | Funding to support efforts by academic units to enhance cultural awareness and build more inclusive communities |
| Create spaces on campus that facilitate community | 10.0 | 7.6% | Funding for renovations to teaching and gathering spaces to enhance academic communities |
| Accelerate the establishment of residential house-based living-learning communities | N/A | N/A | Note: Funding for undergraduate housing is developed through the University's capital budget |
| TOTAL | 132.0 | 100.0% | |

Note: This Plan addresses operating costs only and does not include major construction costs, which will require other funding strategies.