The Vision *for* DUKE MEDICINE

Duke University School of Medicine

Strategic Plan Summary

Decades of hard work by dedicated physicians and scientists, along with capable and often inspired leadership, have placed the Duke School of Medicine among the nation's best. Now, on the 75th anniversary of our beginnings, we are faced with choices that will define our course for at least the next 10 years. Our shared vision is that we place equal value on high achievement in five fundamental categories of activity—inquiry, discovery, translation, adoption and service—each of which cuts across our core missions of education, research and patient care. Each specific element of our plan has an underlying premise grounded in an assessment of current strengths and emerging opportunities. This plan has been crafted from the contributions of hundreds of individuals working for almost a year and has been refined during two months of intensive conversations that have involved a large proportion of the medical school community. It blends the vision of senior leaders with ideas and aspirations arising from faculty, students, and staff, and has been designed with flexibility to accommodate the unexpected.

Because women and men of Duke should have bold (yes, "outrageous") ambitions, we should be satisfied with nothing less than a leading role among the world's best academic medical centers. Our strategic plan should ensure that members of our faculty will gain international distinction, and that our students —MD, PhD, and Master's degree candidates, as well as post-graduate residents and fellows—should be selected and prepared for leadership in a rich diversity of career pathways. To do this, our plan emphasizes first and foremost the **people** of the School of Medicine, focusing resources in new ways to attract and retain the finest faculty and learners. The second major dimension of our strategic plan calls a carefully selected number of new thematic initiatives **(programs)** designed to seize current opportunities for Duke to lead, and a structured program of reinvestment in our existing departments, institutes, and centers. Other provisions are made also to provide the best possible physical environment **(places)** in which our faculty, staff, and students will work and communicate.

People

Because we have a unique curriculum and philosophy of medical education, Duke should be the place where self-directed learning reaches its pinnacle. We will accomplish this by curricular innovations using the most advanced educational technologies and adult learning techniques, by investment in new scholarships to expand our MD/PhD program and to empower MD candidates into leadership paths, by new measures to attract the best PhD candidates, by new degree-granting programs in global health, computational medicine, and molecular medicine, and by new measures to facilitate career development of

faculty focused primarily on education. We also will seek creative ways by which the School of Medicine can enrich the quality of the undergraduate experience at Duke.

Because the quality of the faculty is the single most defining element of any academic organization, we will designate a number of senior faculty members as Duke Medicine Distinguished Investigators and the most promising junior investigators as Duke Medicine Scholars, providing exceptional levels of financial support at pivotal career stages for those judged to be engaged in research of exceptional quality. We will support our most gifted teachers and clinical role models through Master Clinician/Teacher awards. We will create a faculty enrichment fund to supplement our regular funds flow mechanisms in special circumstances of need or opportunity. The individuals selected to receive such focused support will include both current faculty and those recruited to bring new strengths to Duke. These awards will be distributed in keeping with the balanced excellence that is one of our distinguishing features as an academic medical center, nurturing basic scientists, translational investigators, patient-oriented researchers, and master clinicians with equal fervor.

Because we have achieved a leadership position among academic medical centers in the diversity of our student body and in faculty leadership positions, we will move forward to gain advantage from this position by increasing the diversity among our other learners (residents and fellows) and among our junior faculty ranks. Reward systems and accountability of decision-makers will be structured to ensure progress toward this goal. Similar attention will be given to the inclusion of women in leadership roles, an area where we have not yet achieved leadership status.

Programs

Because we believe that advances in medicine are driven by greater understanding of fundamental biological principles, we commit ourselves to empower our faculty and their students to exceptional levels of achievement in discovery biology. Our current assessment suggests we have recently lagged in meeting our potential in this area, and we will accept nothing less than top tier performance. Women and men of Duke should do breakthrough research leading to solutions of the most important scientific and social questions of our time. We will promote such achievement through new mechanisms of faculty support (Duke Medicine Distinguished Investigators and Scholars—*vide supra*), by financial redesign (*vide infra*), and by providing all of our researchers with a markedly enhanced level of core laboratories and shared instrumentation support. These will be organized within a new centralized management unit—the Duke Medicine Shared Research Facilities Office—under the auspices of the dean, and will include substantial new investment of space and funds for laboratory

animals, academic imaging, large scale analyses of DNA, RNA, proteins or metabolites, and other services selected as priorities by the faculty. Finally, we will support discovery biology as a component of several new thematic initiatives that build upon current strengths of our faculty in some of the most important emerging areas of biomedical research: Biological Structure & Design, Stem Cell Biology & Regenerative Medicine, Mind & Brain, and Global Health.

Because we have achieved a leadership position in clinical trials research, an emerging leadership position in genomic medicine, and exceptional balance in the distribution of the activities of our faculty across basic, translational, and patient-oriented research, we commit ourselves to use this stature and expertise to transform the practice of medicine within our own clinics and hospitals. Duke should be the setting in which the best scientific evidence is brought to the bedside through the most advanced information systems, interpreted by the most powerful analytical and statistical methods, and most rapidly and effectively brought to bear on decisions that affect the lives of patients. We should be a place where the quality and safety of medical care is measured and improved with a depth and precision that is unmatched. A new organizational superstructure—the Duke Clinical and Translational Science Institute (DCTSI)—will be created to accomplish this, effectively linking the activities of a number of existing and newly created units.

The DCTSI and its component programs will drive the reduction of new medical technologies to practice, promote measurable improvements in the health of our fellow citizens of Durham, and make personalized medicine a reality through functional partnerships among the Duke University Health System, the Duke Clinical Research Institute (DCRI), the Duke Institute for Genome Sciences and Policy (IGSP), physicians from our clinical departments, computational medicine experts, and new units created as part of this plan. A centerpiece of this effort will be a unique Duke Translational Research Institute (DTRI), providing our faculty with the necessary tools to move their ideas and discoveries forward to practical applications in new technologies for prevention, diagnosis, and therapy of disease. In addition, the DCTSI will include an invigorated Department of Biostatistics and Bioinformatics, a newly empowered health outcomes research team, new facilities for early stage human trials of new technologies, a unified and upgraded facility for academic imaging, a biorepository for human tissue samples, and clinical research databases linked seamlessly to patient information systems of the Duke University Health System.

Because the inexorable forces unleashed by globalization increasingly will have profound effects on the pattern of diseases we face and on the nature of health care services we provide, we propose that Duke should step out front of other academic medical centers in assimilating and affecting the future course of globalization as it relates to medicine. Through the creation of the

Duke Global Health Institute, we will provide our students and faculty with unique opportunities to make advances in science and technology relevant to the most formidable problems of global health (e.g. HIV and emerging infections), to generate new ideas powerful enough to influence policy makers, and to serve disadvantaged populations both here and abroad. Two important elements within the global health arena will be the Human Vaccine Institute and the Duke-NUS Graduate Medical School in Singapore.

Because the Duke Medical School enjoys exceptionally close relationships of both a geographic and collegial nature with other academic programs of Duke University, we will form partnerships with other schools with unprecedented enthusiasm. These will include joint recruiting of new faculty, and a carefully selected number of shared programmatic initiatives in Global Health, Biological Structure & Design, Mind & Brain, Translational Research, and Biomedical Ethics & Humanities. In addition, we will build further on existing partnerships that are thriving under the auspices of the IGSP and Medicine-Engineering Partnership.

Because we are entering a time in which, for the foreseeable future, the major historical sources of economic support for schools of medicine (margins earned from clinical operations and NIH grant funding) will be constrained, the manner in which we handle funds internally should be determined not by historical precedent but by transparent and rational principles. Thus we are embarked on the first comprehensive financial redesign of the internal economy of the School of Medicine. Its purposes are to inspire the trust and loyalty of the faculty by the simplicity, clarity and correctness of its principles, and to focus resources on those activities that provide the greatest return in all of the currencies (i.e., not just financial) by which we judge our achievements. We believe we can gain competitive advantage over peer institutions in lean times just as we have done over the past several years of relative prosperity, if we raise standards of accountability and focus.

Places

Because our academic campus in aggregate lacks a coherent identity and fails to facilitate faculty interactions in the manner we should expect, we propose renovations to aggregate teaching space into a Duke Medicine Learning Center, as well as renovations and new construction of research facilities to create a series of research quadrangles that feature gathering areas for intellectual and social exchange among our faculty and students. These will be closely coordinated with new patient care facilities under a master facility plan for Duke Medicine. Changes to our physical campus are intended to provide greater visual excitement and tangible identity to the academic programs of the school, to facilitate contact among the people of the School of Medicine, and to maximize opportunities for the faculty to aggregate their laboratories as they would choose.

Because the reputation of Duke Medical Center as a premier site for health care has been built largely by exceptionally skilled clinical specialists caring for adult and pediatric patients, we will invest in partnership with DUHS in a series of disease specialty centers. These will focus on areas of greatest medical need, such as cancer, cardiovascular disease, neurological and musculoskeletal disorders, obesity/diabetes, children's health, and wellness/integrative medicine. Through a combination of new facilities for patient care, new organizational structures to provide patient-centric service, and links to clinical and translational research activities, we will establish a series of such centers in a stepwise manner. This will allow patients to access care at Duke more simply and easily, and provide our physicians with a working environment geared for efficient clinical practice and improved support for their academic work.

Conclusion

These are the appropriate activities of a great school of medicine, and this is what we can do at Duke if we can build a consensus of support for this plan from faculty, leaders, trustees and supporters. It is our intent that future observers will look back on the decade from 2006 through 2015 as a time of remarkable people doing extraordinary things at the Duke University School of Medicine.

For more information, please visit th School of Medicine Web site at:
medschool.duke.edu