“In the middle of difficulty lies opportunity.” ~ Albert Einstein

by TIM DEAN
In what some health industry experts have called a “perfect storm,” academic medical centers (AMCs) and the medical schools with which they are affiliated have had to weather some dynamic changes in recent years that have made meeting their missions of patient care, research, and the education and training of physicians and scientists more challenging than ever.

Tressors such as an aging patient population, rising health care costs, declining reimbursements from payers, and health care reform initiatives like the Affordable Care Act have prompted many AMCs, as well as insurers and pharmaceutical companies, to pursue mergers in an effort to achieve healthier margins.

An expanding biomedical research workforce, dependent on a stagnant or often declining source of funding from both government and private sectors, has contributed to the pressure facing AMCs and their partnering medical schools.

But in the midst of these difficulties, Geisel, together with Dartmouth College and its primary clinical partner, Dartmouth-Hitchcock, has developed a broader, more forward-thinking strategy—a reorganization of the medical school that supports academic excellence and promotes a more focused and better-supported research environment.

“The decisive steps we’ve taken to fundamentally restructure the school and to align resources within a stable, long-term model will support and augment our mission—to address the world’s health problems through research that discovers new knowledge about human health, evaluate and improve systems of care delivery, and train the best of the future generations of physicians and scientists,” says Duane Compton, PhD, interim dean of Geisel.

To this end, the medical school’s new organizational structure includes five basic science departments—Biochemistry and Cell Biology, Biomedical Data Science, Epidemiology, Microbiology and Immunology, and Molecular and Systems Biology—and a new Department of Medical Education, as well as interdisciplinary centers including Norris Cotton Cancer Center, Dartmouth SYNERGY: Clinical and Translational Science Institute, and The Dartmouth Institute for Health Policy and Clinical Practice.

With its core of dedicated teaching faculty and enhanced curriculum, Geisel’s new centrally organized Department of Medical Education (see pg.16), which became fully operational in July for the new academic year, is designed to help physicians-in-training successfully navigate today’s rapidly changing health care environment.

“The new structure enhances our ability to offer a highly integrated, four-year curriculum that graduates the complete physician—individuals who excel in the basic sciences, deliver high-quality, patient-centered care, discover and share new knowledge, and improve the system of health care delivery,” says Greg Ogrinc, MD, MS, interim senior associate dean of Medical Education at Geisel.

Similarly, the reorganization of the medical school’s basic science enterprise, which included restructuring of administrative support, allows it to deploy resources in a way that catalyzes those functions and supports those faculty best, says Compton.

“The scientific basis of health, and of disease, and the development of effective therapeutic strategies remains elusive for many of the major health challenges facing our society,” he explains. “We’re committed to providing a robust research and educational environment to spur the discovery of the underlying mechanisms for normal health and the causes of disease—an environment that’s conducive to developing effective treatment and preventive strategies for complex health problems.”

Geisel’s physical proximity to the College’s arts and sciences, engineering, and business school programs facilitates these efforts. “Many medical schools are located in urban centers that are hundreds of miles away from their main campuses,” says Compton.

“With our local geography, we have a lot of connections between the science that we’re doing at Geisel and the science and other activities that are going on in Arts and Sciences, the Thayer School of Engineering, and the Tuck School of Business—including sharing graduate programs and collaborating on many large grants and other projects.”

The power of proximity is also being felt in the delivery sciences, with The Dartmouth Institute’s recent move of its research offices to Geisel’s Williamson Translational Research Building on the
CHARTING a COURSE for SUCCESS

Lebanon campus, promoting close collaboration of delivery scientists and health care providers, and its educational programs to the Hanover campus, integrating the educational missions with those of Arts and Sciences and the other professional schools.

“On the research side, it’s greatly strengthened our ability to collaborate with our clinical colleagues,” says Elliott Fisher, MD, MPH, director of The Dartmouth Institute, “and it’s making our educational programs much more integrated and accessible to students.”

As medicine transitions from a “narrow biomedical model to a model that also acknowledges factors like the social and behavioral determinants of health, patients’ preferences, the economics of health care, and how individual clinicians can’t deliver great care without a great system,” Fisher says, “I think we’ve positioned Dartmouth to be a model for what medical schools and medical education should be in the future.”

Compton couldn’t agree more. “With the expertise of our colleagues at The Dartmouth Institute, we’re poised to lead the nation in identifying the sources of health care system inefficiency and in developing new ways to provide affordable, high-performing health care to everyone,” he says.

Another major step in the medical school’s reorganization started in July, when Geisel began to shift financial oversight and operational support for the majority of its clinical research programs to its health system partner Dartmouth-Hitchcock. The two organizations are working closely through the fiscal year to ensure that the full transition of financial, administrative, and compliance activities occur as seamlessly as possible. This includes the Department of Psychiatry—the migration brings psychiatric care into the heart of the health system, and enables psychiatric expertise to enhance overall medical care and population health.

“The restructuring is an opportunity for us to ‘double-down’ on areas of research that are most important to both organizations,” says John Birkmeyer, MD, who as chief academic officer at Dartmouth-Hitchcock has been overseeing the realignment with Compton. “Having the core support infrastructure be explicitly attached to where the patients are and where the data lives is so much more effective and efficient than trying to do it from a distance. And it’s a model that we hope will allow us to grow our research portfolio significantly over the next five years.

“The work we’ve been doing together benefits our collective enterprise and supports the broader strategy of our health system to improve population health in the region,” adds Birkmeyer. “And the respective strengths that we bring will complement each other as faculty initiated projects and grants cut across both organizations, especially in strong shared interest areas like the Cancer Center, SYNERGY, and The Dartmouth Institute.”

“Focusing our resources on our areas of strength and where we think Geisel can have the greatest impact—specifically in medical and graduate education, the discovery sciences, and the delivery sciences—positions us very well for the future,” Compton says. “There is always more work to do, but we’re getting there—I’m very optimistic about our future.”

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NEW DEPT. OF MEDICAL EDUCATION

Rand Swenson, MD, PhD (left), chair of the Department of Medical Education, with Greg Ogrinc, MD, interim senior associate dean of Medical Education

How an organization structures itself can enhance its ability to not only respond to the pressures of the marketplace but anticipate the changing needs of those it serves.

That certainly holds true in the business of undergraduate medical education, and is a primary reason why Dartmouth’s Geisel School of Medicine has created its new Department of Medical Education, which became fully operational for the current academic year.

Centrally located on the Hanover campus near Geisel’s main teaching spaces, and led by a core group of faculty members whose primary focus is the education and support of medical students, the new department “will allow us to deliver a consistent, integrated medical education and develop the faculty who will lead the continuous improvement of our curriculum,” says Greg Ogrinc, MD, MS, interim senior associate dean of Medical Education at Geisel, who notes that courses were previously run by the individual departments.

“Medical education is facing a number of challenges,” says Rand Swenson, MD, PhD, chair of the new department. “One is that we recruit and highly value students from much more diverse backgrounds, which are really important for our classes and for the future physician workforce. But what that means is that the experience transitioning to medical school needs to be more individualized and based on the needs of the particular learners.”

Having a dedicated group of faculty members meeting and talking regularly in a space that is welcoming and homelike for students, faculty, and staff will facilitate that process. “Medical students should see a lot more of their faculty and be able to develop strong relationships with them,” adds Swenson. “This should help us to create a better support system for them.”

Another major challenge for medical schools is that the timeline for the residency application process has been moved up, which requires medical students to start thinking about their careers in medicine earlier in their curriculum.

To help meet that need, the new structure will “strengthen the collaboration between basic and clinical sciences and deliver courses that are truly integrated and life-long for the students,” says Roshini Pinto-Powell, MD, who co-directs the year one and year two On Doctoring course at Geisel—one of the first and most robust experiential learning programs in the country.

“As a result, I think the experience for medical students will feel less segmented and be more seamless between their first two years of basic science and their clerkships in years three and four,” she says.

This structure allows Geisel to be more flexible and innovative in making changes to its educational programs. “It will be easier to incorporate ‘ancillary’ topics such as medical ethics and cultural awareness and make them more central to the students’ learning experience,” Swenson explains.

It also enhances the faculty’s ability to “build out” longitudinal programs like Geisel’s health care delivery science curriculum, says Swenson, which now spans across the first two years but will ultimately span through all four years as an important theme in students’ understanding of health care and their ability to serve as change agents in the future.

“I do think we’re creating one of the strongest curriculums in the country for tomorrow’s physician leaders—in imparting critical knowledge of the scientific basis of medicine, clinical skills, and importantly, optimal systems for health care delivery,” says Ogrinc. “One of the things that makes Geisel and Dartmouth special is the range and number of faculty who can share their expertise in these areas. It’s a very rich and fruitful environment for our students to be embedded in.”

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