Founding a New College of Medicine at Florida State University

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Abstract

In 2000, the Florida State University (FSU) College of Medicine was founded, becoming the first new allopathic medical school in the United States in over 20 years. The new medical school was to use community-based clinical training for the education of its students, create a technology-rich environment, and address primary care health needs of Florida's citizens, especially the elderly, rural, minorities, and underserved. The challenges faced during the creation of the new school, including accreditation and a leadership change, as well as accomplishments are described here. The new school admits a diverse student body made possible through its extensive outreach programs, fosters a humane learning environment through creation of student learning communities, has a distributed clinical training model—with clinical campuses in Orlando, Pensacola, Sarasota and Tallahassee, and with 70% of training occurring in ambulatory settings—and utilizes 21st-century information technology. The curriculum focuses on patient-centered clinical training, using the biopsychosocial model of patient care throughout the entire medical curriculum, promotes primary care and geriatrics medicine through longitudinal community experiences, relies on a hybrid curriculum for delivery of the first two years of medical education with half of class sessions occurring in small groups and on a continuum of clinical skills development throughout the first three years, and uses an interdisciplinary departmental model for faculty, which greatly facilitates delivery of an integrated curriculum. The first class was admitted in 2001 and graduated in May 2005. In February 2005, the FSU College of Medicine received full accreditation from the Liaison Committee on Medical Education.

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In June 2000, the governor of Florida signed into law a piece of legislation establishing the first new allopathic medical school in the United States in over two decades. The legislation was very prescriptive, mandating that in establishing the new school, the Florida State University (FSU), should build on the university's historical role in medical education and should adhere to the best practices set forth in legislatively mandated studies. The university was directed to establish a new educational model using community-based clinical training for the education of medical students. In this article, we provide a context for the legislature's decision to establish a new medical school based on physician workforce needs for the state, review the university's longstanding role in undergraduate medical education, describe the key features of the new school's educational program, and summarize the challenges and accomplishments to date.

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Florida's Unique Health Care Needs

In the 1990s, while others in the United States talked about a physician glut and Florida's Board of Regents decreed that Florida had enough physicians, the leadership at FSU began to actively study the issue of physician supply and needs in the health care workforce. They found a compelling set of facts regarding Florida's health care needs. Florida is a rapidly changing state, especially regarding its population growth, which picked up speed dramatically in the last half of the 20th century. According to the U.S. Census Bureau, the population of Florida was 2,771,305 in 1950. The size of the population doubled by 1960 and doubled again by 1980. In 2000, Florida's population was 15,982,378, making it the fourth-largest state by population in the United States. In 2004, the U.S. Census Bureau estimated that the Florida population was 17,397,161.[1]

The ethnic diversity of Florida is comparable to that of the three states with larger populations: New York, California, and Texas. The state has a large and growing population of people over 65, comprising nearly 20% of the population. Perhaps less widely known is the fact that Florida's large geographical expanse includes many rural areas, found in all 67 counties in the state. There are medically underserved areas in every county, and the Florida Department of Health has designated 20 entire counties as medically underserved. Fifteen of these medically underserved counties are in North Florida. In the late 1990s, the output of Florida's medical schools (three allopathic and one osteopathic), about 500 graduates, was far short of the demand for physicians in this rapidly growing state.

The number of first-year residency positions was only slightly more than the number of medical school graduates in the late 1990s. By comparison, at that time the state of New York, with a population of 18,000,000, had 13 medical schools, which graduated over 1,700 doctors a year and offered over 3,000 first-year residency positions. To match the national ratio for number of residency positions per 100,000 population, Florida would need to almost double the number of such residency positions.

In Florida, the supply of physicians was and is heavily dependent on "imports" from other states and nations. The large majority of physicians licensed in Florida each year are from outside the state. In the late 1990s, 30% to 40% of the physicians in Florida were foreign-born international medical graduates. More than half of Florida's physicians move to Florida after completing all medical training, and an unknown percentage (not tracked by state records) move to Florida to retire and are in part-time clinical practice.

Many qualified students in the large medical applicant pool within the state did not have the opportunity to study medicine in their home state, Florida, because there was no room for them in the existing medical schools. With this problem and the de facto policy of meeting the demand for physicians by importing them from other states and nations in mind, in 1997 the leadership at FSU and in the Florida legislature began to make plans for a medical school that would build on FSU's 30-year partnership in medical education with the University of Florida.

History of Medical Education at FSU

Florida State University has a long history of undergraduate medical education, beginning in 1970 when the University of Florida College of Medicine established a geographically separate, cooperative program at FSU, with the express purpose of recruiting students from the rural panhandle region of Florida to study and ultimately practice medicine. This program, the Program in Medical Sciences (known as PIMS), delivered the first year of basic science education to 30 medical students annually, who then transferred to the University of Florida College of Medicine for the remaining three years of their medical education.

The first year of medical school at FSU was a three-semester experience, beginning in the summer, which allowed for community-based clinical experiences throughout the first year of medical school. A culture centered on a student learning community developed early. This community structure included a physical space to which the 30 students had access 24 hours a day, seven days a week, and was by philosophy dedicated to encouraging cooperative learning among the class of 30 students.

The PIMS admission process featured recruitment of a diverse class of students, diverse in ethnic and demographic backgrounds, life experiences, and ages. Students from medically underserved communities and nontraditional students were sought. The ideal student applicant had the academic evidence predictive of success in medical school, excellent communication skills, and a record of service to others. In 1994, an outreach pipeline to medically underserved populations, particularly African Americans, was initiated and featured academic enrichment, motivational experiences, and student mentors.

The Program in Medical Sciences was accredited throughout its history as a geographically separate campus of the University of Florida College of Medicine. Its separate admission process was restricted to students from FSU, Florida A&M University, and the University of West Florida until 1992. In 1992, the PIMS at FSU opened its admission process (operated within the American Medical College Application Service) to any legal resident of the state of Florida. From 1993 until 2001, about 1,100–1,200 individuals applied for admission each year. Over the 30 years of the program's existence, about 50% of the PIMS students entered generalist specialties upon graduation from medical school and over 60% of the program's alumni have chosen to practice medicine in Florida, many in North Florida. The final PIMS class transferred to the University of Florida in 2001, graduating in 2004. From almost the first days of the program's history, the leadership of PIMS and FSU talked of founding a medical school, using the PIMS experience as a foundation.

During the 30 years of the program's history, it served as an experimental incubator for new ideas in medical education and admission of medical students. Mission-based admission practices mirrored the practices recommended by Dr. Jordan Cohen, president of the Association of American Medical Colleges (AAMC).[2] Early instruction in clinical skills was coupled with early clinical experiences with community physicians. The use of problem-based learning and the addition of behavioral components to the clinical curriculum were linked with the introduction to common medical problems. The 1961 study "The Ecology of Medical Care" published in the *New England Journal of Medicine*,[3] later reiterated in 2001 with another study,[4] served as inspiration for PIMS practices and underscores the importance of training students for medical practice in community health care centers where most health care is delivered. At about the time FSU began to talk seriously about developing a new model for medical education, Dr. Cohen wrote that there was no time to waste in changing the way doctors are educated, that changes in the culture and value systems in America's medical schools were needed.[5] Because of the geographic and institutional separation of PIMS at Florida State from its partner in medical education, the University of Florida College of Medicine, the stage was set for a nontraditional approach to the reform of education of medical students without the historical obstacles to reform faced in traditional institutions.[6]

In 1993, a plan to expand PIMS to a community-based four-year track in the University of Florida College of Medicine was proposed. This plan consisted of two years of basic science training at FSU, with the clinical training years occurring in Tallahassee, Gainesville, and Jacksonville. Though this plan was not implemented, leaders at FSU—and later, leaders in the Florida legislature—began to talk about building a new, nontraditional medical school on this model.

From 1998 through 2000, legislatively mandated studies regarding Florida's and the nation's physician workforce needs, alternative clinical training models, best practices in rural physician recruitment and retention, the use of information technology in medical education, and other relevant topics were completed by key FSU leaders and consultants. Consultants from medical schools that had established best practices in pertinent areas of these topics were contacted, schools were visited, and workshops conducted in Tallahassee. The recommendations of these studies were codified in law during the 2000 session of the Florida legislature.

Breaking the Mold

In June 2000, the bill enacting the FSU College of Medicine, Chapter C2000-303, Laws of Florida, was signed by Florida's governor. The legislation gave a basic blueprint for the founding of the first new allopathic medical school to be established in the United States since 1982. The FSU College of Medicine was to use community-based clinical training for the education of medical students. A technology-rich environment was to be created, and the new curriculum was to address primary care health needs of Florida's citizens, especially the elderly, rural populations, minorities, and other underserved. Geriatrics medicine content was to be included in all four years of the curriculum. The legislation identified five Florida communities as potential sites for the new college's clinical campuses and named potential clinical affiliates.

The college's admission process was to continue PIMS practices by admitting applicants whose interests and/or backgrounds indicated that they might eventually become primary care or geriatrics medicine physicians or would practice in underserved areas. An admission goal of 120 students per class was established. The law directed the college to increase diversity in the medical profession by outreach to medically underrepresented populations. A department of family medicine, a rural medicine training track, and a partnership with West Florida Area Health Education Center for programs to support practice choices in primary, geriatrics, and rural medicine was to be established. The law also directed the new college of medicine to evolve a strategy to increase opportunities for Florida medical graduates to enter graduate medical education in Florida.

These legislative directives made the initial steps in founding the new college of medicine very clear. Administrators and faculty who could plan and implement programs and curricula consistent with these directives had to be recruited and in place in a very short period of time. The legislative requirement to admit students and begin classes within the first year added urgency to acquisition of provisional accreditation by the Liaison Committee on Medical Education (LCME).

Changing the Culture

Admission and outreach

As directed by law, the college of medicine has retained the admission practices of the PIMS, while enrolling larger number of students as the class size is increased. There is a large applicant pool for medical school in Florida, due to the size of the population and fewer than 600 positions in allopathic medical schools each year. From the beginning, a major issue for meeting the legislative mandate has been to enroll students who are likely to help fulfill the college's mission. These are students who have demonstrated, through life choices, a commitment to service of medically underserved or elderly patients. This enrollment issue is addressed by admission and outreach programs and practices.

The outreach programs, initiated in 1994 under the PIMS to develop a qualified applicant pool of students from medically underserved populations, have been expanded to include

- middle- and high-school components focusing on basic skills and enhancement of test-taking skills (Science Students Together Reaching Instructional Diversity and Excellence, SSTRIDE for short);
- an in-college academic support program open to all prehealth professions students at FSU and Florida Agricultural and Mechanical University, the historically black university located in Tallahassee;
- a postbacculaureate program that serves as a bridge between undergraduate college and medical school and gives applicants from target populations additional preparation for academic success in medical school; and
- three rural SSTRIDE programs in North Florida panhandle counties.

In the short history of the medical school, 35 of the 254 medical students admitted to the college of medicine participated in some component of these outreach programs. The college was cited for its success in recruiting African Americans by the Southern Regional Education Board in 2003 and hopes to use rural outreach activities to enhance the number of applications from rural students in years to come.

Student learning communities

The Florida law directed that Florida State's medical students learn the practice of medicine in a humane environment. Building on the student-centered culture that developed during the PIMS years, the college of medicine has committed substantial resources to facilities and staff to create a cooperative learning environment. One of the key architectural features of the new college's education/administration building is the design of the *student learning communities*. Eight of these communities, four each for years 1 and 2, occupy prime space in the new building. Each community is designed to be the work and study home to 30 medical students and contains a central lounge with galley, bathrooms and shower, lockers for each student, and four rooms equipped for small-group instruction and study. The community is available to students 24 hours a day, seven days a week, for group or independent study. These communities, as well as the rest of the college facilities in Tallahassee and elsewhere, feature wireless access to the Internet. Each student community, a cross section of the entire class, is responsible for organizing itself and is supported by a student affairs support coordinator who acts as a liaison between students and the education program, and by student support services. The values of the student community include mutual respect and a team approach to learning. Students in the learning communities of the college of medicine, like the PIMS students before them, evolve into real communities that study, learn, and play together. Student feedback indicates that the learning community is a valued part of the FSU College of Medicine experience. The regional clinical campuses each have an education/administration building that features a community room like the one on the FSU campus for use by students during their clinical training years.

Distributed clinical training model

The legislative studies that led to the design of the college of medicine's clinical training model examined the educational needs of physicians in the current health care environment, and various funding models for medical education. Based on these studies, a nontraditional clinical training model was recommended. This recommendation was made into law,

which directed FSU to establish clinical campuses in specific Florida communities. These clinical campuses were to utilize existing health care facilities and recruit and train community physicians to serve as clerkship faculty. The establishment of these clinical campuses and the development of a curriculum to support this training model was an important challenge. The initial step taken to establish the model was to establish a community board for each campus and develop affiliations with community partners in each campus region.

Currently, the college of medicine, following the legislation's mandate, has regional clinical campuses in Orlando, Pensacola, Sarasota, and Tallahassee, and has affiliation agreements for the education of medical students with all major hospital systems and other health care providers in the communities where the regional clinical campuses are located. These community partners have a seat on the local community board and participate in the training of medical students, recruitment of community clinical faculty, and other community activities related to the successful operation of the clinical campuses.

Each regional clinical campus is headed by a campus dean who reports to the chief academic officer at the FSU College of Medicine. The individual clerkships on each regional campus are headed by campus clerkship directors recruited from the local physician community. The individual clerkships are coordinated across the college's regional campus sites by a discipline-specific education director who is responsible for coordinating the content, delivery, and assessment of the clerkship curriculum. The education director verifies comparability of the educational experience in the specific discipline across campuses. Student support staff and fiscal and information technology support are also available on all campuses.

An ongoing clerkship faculty development program is critical to the success of the distributed clinical training model. Community physicians who serve as clerkship faculty are required to participate in faculty development sessions at their regional campuses. Regional campus clerkship directors come to the main college of medicine campus in Tallahassee regularly for sessions of curricular planning and development and for sessions on administration and evaluation of clerkships in their regional clinical site.

In the Florida State model, 70% of clerkship experiences are in ambulatory settings, including the many nonhospital settings in which health care is currently delivered. Operating costs for this clinical training model reside in the reimbursement of clerkship faculty for training of students and for the operation of the community campus office. Another critical component of this clinical training model is clinical skills preparation for medical students. Because 70% of the medical students' training occurs in ambulatory settings, students must have excellent clinical skills before they arrive at their regional campus. To a much greater extent than is true for students training in an academic health center, FSU College of Medicine students must be able to easily integrate into physicians' practices, outpatient clinics, and other clerkship sites. Extensive clinical skills training is an important part of the curriculum in the first and second years of medical school.

The 21st-century capabilities for transfer of audio, video, and digital information of all kinds greatly facilitate the operation of this training model. Library holdings, curricular and other college information are immediately available to each student and faculty member, wherever they are. Lectures, committee meetings, conferences, workshops, and seminars are available by video-conferencing across all campuses. All student contacts with patients at all sites are entered into a clinical data collection system for short and long-term educational and research applications. All students are required to have laptops and PDAs and are trained to use the power of information technology in their daily studies and patient interactions. This will hopefully foster lifelong habits in their medical practices.

Patient-centered clinical training

The law directed the new college of medicine to focus on training compassionate physicians to practice patient-centered health care. The college was directed to train its students to focus on patients rather than diseases—to treat the patient, not just the disease. To accomplish this goal, the biopsychosocial model of patient care is integrated into the entire medical curriculum. Case studies throughout years 1 through 3 contain behavioral components, and there are free-standing course modules on psychosocial factors, health and disease, cross-cultural factors in health care, and ethics to reinforce the biopsychosocial model of patient care.

The clinical skills continuum throughout years 1 and 2 utilizes a state-of-the-art clinical learning center, which has a full-time professional staff and features 14 patient rooms for training. The center utilizes the most current digital technology to facilitate simultaneous and digitally recorded evaluation. Faculty and students can critique their performances in communication and clinical examination skills acquisition throughout medical school. A large group of well-trained standardized patients of all ages and cultural backgrounds has been developed and are partners in the clinical training of FSU College of Medicine students. A clinical simulation laboratory, when completed, will add to the clinical training facilities and facilitate the acquisition of procedural skills and the assessment and management of acute and urgent medical presentations.

The achievement of clinical competencies beyond those required for diagnosis and clinical treatment of patients is necessary for graduation from the FSU College of Medicine. These include competencies in communication and development of the doctor–patient relationship. Achieving cultural competencies necessary for the treatment of patients from diverse cultural backgrounds and ages is also required. Evaluation of students' performances in clerkships includes written evaluations by clinic and hospital staff and patients in the clerkship training sites, who assist in evaluation of students' professionalism and cultural competencies.

Promotion of primary care and geriatrics medicine

The only department mandated by the law creating the FSU College of Medicine was a department of family medicine with a rural training track that would provide students with early and frequent clinical experiences in community-based settings. The goal for these actions was to train and produce highly skilled primary care physicians. The law directed the

development of a partnership with the West Florida Area Health Education Center (AHEC) to develop incentives and support for physicians to practice primary care, geriatrics, and rural medicine in underserved parts of Florida.

The University of Minnesota Medical School Rural Physicians Associate Program was used as a model for the rural training program, based upon the FSU studies of programs using practices aimed at rural physician recruitment and retention. In this program, students from the University of Minnesota Medical School complete third-year clerkships in rural communities, with the goal of increasing the number of physicians practicing in rural settings. In 2005, the FSU College of Medicine implemented its first third-year rural training site in Jackson County, about 75 miles west of Tallahassee in the rural panhandle of North Florida.

Other activities that promote FSU medical students' knowledge of and interest in practice in medically underserved settings are part of the curriculum. In partnership with the West Florida AHEC, the college requires each first-year student to complete a three-week practicum at the end of the first year in a medically underserved site. The cost of this experience is underwritten by an allocation to the college of medicine for AHEC activities.

Each of the college's four regional medical campuses have rural sites available for the required clinical clerkship in family medicine. In addition, the college is providing student training opportunities in a migrant workers' center in rural southwest Florida. These settings provide student training in the required clinical skills, but also serve to promote cultural awareness and the mission of the college of medicine to prepare physicians who will care for the underserved.

The legislative study on geriatrics education directed that medical education at FSU should require a continuum of content and experiences to prepare the physician workforce for the aging U.S. population. Therefore, the law directed that FSU students study the health and treatment of aging patients throughout the four-year curriculum. The law also directed that the school establish an academic leadership position in geriatrics. In response to this directive, the college of medicine established a department of geriatrics, one of only five in U.S. medical schools. With the assistance of the faculty in the Department of Geriatrics, the first two years of the curriculum contain integrated content on health and disease of the aging human. The clerkship years require experiences and content with the same goals, and there is a required geriatrics medicine clerkship in the fourth year.

Hybrid curriculum

A study of best practices used in delivery of the first two years of medical education, the basic science years, led to the recommendation that the FSU College of Medicine use a combination of lecture and small-group, case-based instruction. The law establishing FSU's medical school includes this directive and also one requiring a continuum of clinical experiences throughout the basic science years, including experiences with underserved and elderly populations.

The PIMS curriculum for the first year of medical education was used as a foundation with years added sequentially, relying on best practices, until the four-year curriculum was in place. The basic science years were then integrated, with the first year becoming more clinically oriented and hybrid in presentation. There is a strong clinical emphasis throughout years 1 and 2. Just over half of the class sessions in the first two years occur in small groups. The clinical skills curriculum is a continuum throughout the first three years, beginning with training in basic clinical skills, communication, history taking, and physical examination and progressing through training in diagnosis and management of complex medical problems in the third year.

Interdisciplinary departmental structure

An interdisciplinary departmental model for faculty other than those in family medicine and geriatrics facilitates the delivery of an integrated curriculum. The basic science faculty have academic homes in the Department of Biomedical Sciences and the Department of Medical Humanities and Social Sciences. Physician faculty in specialities other than family medicine or geriatrics have their academic appointment in the Department of Clinical Sciences. Clerkship faculty located on the regional clinical campuses have academic appointments in the appropriate clinical department, through which they are evaluated and promoted.

The innovative, integrated departmental structure keeps the college's focus on medical education and fits with the emerging interdisciplinary nature of health care delivery and research across the medical sciences. This interdisciplinary model promotes educational and research collaboration across traditional boundaries. Departmental research facilities in the basic sciences have been built to facilitate collaboration, with open laboratories and shared core facilities. Mutual respect and teamwork are core values among the faculty, as well as the students, in the College of Medicine.

Challenges and Accomplishments

To bring the vision for the new medical school to life, several challenges had to be faced and major tasks had to be accomplished in a relatively short period of time. In response to the law enacted by the legislature, the admission process for the new medical school's first class began in 2000. The Class of 2005 was admitted in May 2001. In February 2005, the FSU College of Medicine received full accreditation from the LCME, becoming the 126th accredited allopathic medical school in the United States, the first such school accredited in over 20 years, the first new allopathic medical school in the United States in the 21st century, and the newest member of the AAMC. The inaugural class, the Class of 2005, graduated on May 21, 2005.

Initial challenges

Accreditation. The greatest challenge which initially faced the new college of medicine was to develop a nontraditional medical education model that fully met the LCME standards for accreditation. The accreditation of the first new medical school in the United States in over two decades, particularly a medical school that is quite different in structure and clinical training model from traditional medical schools, required extensive work and contact between the new college and the LCME.

The LCME accreditation process as it existed in 2001 was set up for mature, fully developed medical schools. The format of the LCME database was designed to report information on such schools, making it difficult for a new nontraditional school to describe its programs and development. Dealing with the accreditation of the first new medical school in over 20 years, one that had been set on a very fast track for development by Florida law, required the LCME to consider various new issues. In terms of meeting the accreditation standards, what had to be in place before provisional accreditation would be granted? What standards should be applied at the early stages of development and how should they be applied? There was a further problem of ambiguity in interpretation of some of the standards.

One concrete example of the problem for the new medical school at FSU was how the LCME dealt with the PIMS experience in the accreditation process. The first-year medical education program had been in place at FSU for 30 years through PIMS. The FSU PIMS was site-visited in the spring of 2000 by the LCME, and reaccredited with the University of Florida College of Medicine in the summer of 2000 for another seven years. Though the FSU faculty who taught the PIMS curriculum were currently teaching the first-year curriculum to the FSU College of Medicine charter class, they were not counted as faculty of the college because they were members of the faculty of the College of Arts and Sciences. This was part of the rationale for denial of accreditation by the LCME in 2002.

The impact of being denied provisional accreditation in 2002 on the new College of Medicine was huge. There was a large amount of negative publicity—local, state, and national—which made recruitment of students, staff, and faculty more difficult during a critical time in the development of the college. Recruitment of students was made even more difficult when FSU was removed from the American Medical College Application Service (AMCAS) after ten years of being a separate AMCAS school. The charter class of the college of medicine was admitted through AMCAS. However, FSU's AMCAS membership was dropped without informing the College of Medicine, two weeks into the new admission cycle for the college's second class. This required that the college of medicine generate its own electronic application process in a very short period of time and resulted in a drastic reduction in total applications for the two admission cycles in which FSU was out of AMCAS (from 1,100 a year while in AMCAS to 470 in the second year outside AMCAS).

The College of Medicine continued to work with the LCME and as a result, provisional accreditation was awarded in the second year of operation. During this time, the LCME completely revised the database format, reduced the number of standards, and added annotations that helped with interpretation of each standard. The current database format and annotations are more flexible, allowing all schools to report information pertinent to their program. This has significantly improved the accreditation process for all U.S. medical schools.

Leadership change. Another challenge early in the college's development was a change in leadership in January 2003 when the dean and associate dean for medical education were replaced. A core group of the college's leaders who had been involved from the earliest stages of its development served to stabilize the college and keep its planning on track. A member of this core group was immediately appointed dean and has continued to serve as dean to the present.

Accomplishments

Almost 100 full-time basic science and clinical faculty, and 600 part-time community clinical faculty were recruited between late 2000 and mid-2005. Five departments, including three interdisciplinary units—Biomedical Sciences, Medical Humanities and Social Sciences, and Clinical Science—as well as departments of family medicine and geriatrics were established. An innovative four-year curriculum leading to the MD degree was developed and implemented. The LCME accreditation standards were met and the college received full accreditation in the spring of 2005.

A 60,000-square-foot existing facility, to serve as the college's temporary home until the new college buildings were constructed, was renovated and occupied in 2002. The $60,000,000 state-of-the-art Jacobean style college of medicine complex—consisting of 300,000 square feet in education, administration, and research space on FSU's main campus—was designed, built, and occupied by the end of 2004. Cutting-edge information technology tools were used to construct wireless facilities, equip students, faculty and staff for education and evaluation, construct one of the world's first predominantly electronic medical libraries (over 90% of the holdings are electronic), and connect the distributed clinical training sites. Four clinical campuses—in Orlando, Pensacola, Sarasota and Tallahassee—were established for the clinical training of students in years 3 and 4. Creating these campuses included building affiliations with all major health care providers in these communities and the renovation or construction of the college of medicine regional clinical campus facility in each of these locations.

The class size was increased from 30 in 2001 to 80 in 2005. Rural outreach programs in Okaloosa, Madison, and Gadsen Counties were added for long-term development of the rural applicant pool. And, the fifth medical class, the Class of 2009, was admitted in June 2005, bringing the number of students in the four current classes (2006–2009) to 224. The first five classes of the college of medicine reflect the ethnic diversity of Florida, with minority representation ranging between 35% and 51%.

All members of the college's first class of graduates have passed Steps 1 and 2 of the United States Medical Licensing Examination, both the knowledge and clinical skills examinations. All members of the Class of 2005 matched with residency programs and began their graduate medical education in the summer of 2005. Feedback from FSU clerkship faculty and elective faculty from other schools and programs, who have had experience with medical students from many schools, is extremely positive. They speak of the ease with which FSU medical students deal with patients in all clinical settings, and their excellent clinical skills for their level of training (the third and fourth year of medical school).

The distributed clinical training model, the use of community physicians, and the issue of comparability of the clinical training experience across multiple sites

were focal issues for full accreditation. Ultimately, comprehensive central management of a common curriculum across all sites, a robust faculty development program (required for all community clinical faculty), and the ability to monitor students' clinical experiences with an electronic clinical data collection system for assessment of comparability of clerkship experience were critical to meeting the accreditation standards.

The planned funding of the school by the state of Florida at full roll-out is $38,000,000 per year. Based on our experience to date using a mission-based funding allocation approach, this will be adequate to fund the operation of the college. To date, the state of Florida has invested $60,000,000 in facilities and $95,480,329 in total operating revenue for the establishment and operation of the FSU College of Medicine. Funding the medical education program with clinical revenue is not part of the business plan for the college of medicine. Financial diversification by building endowment and research funding is occurring and will increase at a steady rate as the college matures.

Staying true to the vision and mission of the FSU College of Medicine as the college grows in size is an ongoing challenge. Changes in class size, beginning at 30 and building to a class size maximum of 120 as directed by law, will undoubtedly affect the culture of the school. It is hoped that the student learning community structure for cohorts of 30 students each will continue to foster a culture of collaboration, cooperation, and teamwork among students, regardless of class size. Changes in the size, composition, and leadership of the faculty and administration will undoubtedly affect the maturation of the college, its values, and its ability to meet the founders' visions.

The ultimate challenge in meeting the mission of the new college involves residency choices and practice sites for the college's graduates. Until the number and types of residency programs in Florida increase, many of Florida's medical graduates will continue to go out of state for graduate medical education. Mitigation of educational debt for practice in underserved areas through a state-funded program would also help to recruit and hopefully retain physicians to practice in these areas. These are urgent issues, which must be addressed if the health care needs of the state are to be addressed and Florida's newest college of medicine is to succeed in fulfilling its mission.

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Did you know?

In 2004, researchers at The Pennsylvania State University College of Medicine discovered that a booster dose of a substance already found in the body appears to be a safe and nontoxic treatment for pancreatic cancer, and shows signs of arresting pancreatic cancer cell growth in patients.

For other important milestones in medical knowledge and practice credited to academic medical centers, visit the "Discoveries and Innovations in Patient Care and Research Database" at ⟨www.aamc.org/innovations⟩.