

University of Wisconsin School of Medicine and Public Health *A Century of Inspiration*

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Editor's Note: This issue of the Wisconsin Medical Journal commemorates the University of Wisconsin School of Medicine and Public Health's 100th anniversary. All scientific articles in this issue have some sort of connection or affiliation with the school.

The University of Wisconsin School of Medicine and Public Health (SMPH) is commemorating its 100th birthday with several exhibits and events during the 2007-2008 academic year. From its humble beginnings in the attic of Science Hall, where the first gross anatomy labs were held, to its current home in the bustling Health Sciences Learning Center, the story of the school reads like a best-selling novel—full of narrative twists, political and economic intrigue, fascinating characters, internationally-relevant discoveries, and individual prowess.

The following brief summary and 3 “snapshots” touch on some of the highlights of this “Century of Inspiration.” Naturally, for every entry included, dozens go unmentioned. Missing, for example, are Dr Joseph Spragg Evans and his early attempts at a

Student Health Service, the 1918 influenza epidemic's effect on campus, the school's association with the State Laboratory of Hygiene, Middleton's Brown Derby, medical student skits, the drama of the Deans and Acting Deans of the '60s and '70s, and the move to the Clinical Sciences Center. Of course the individual faculty who molded hundreds of students, the numerous women who left their marks as students and faculty, the faculty and students who served in the military, and the alumni association are all important pieces of the school's history as well. And perhaps most crucial to the school's longevity is the relationship—which was so important to our first dean Charles Bardeen—between the triumvirate of teaching, research and clinical training and service, which continues to afford the SMPH its lasting national prominence.

Leaders

Charles R. Bardeen, MD, led the school for 28 years. He expanded the 2-year curriculum, begun in 1907, into a 4-year program, approved in 1927. He cre-

A Passion for Medical History

Two years after the school was created, William Snow Miller, MD, an anatomist with a passion for medical history, invited medical students to join him informally, first at the University Club and later in his Madison home, to consider some of the great names and achievements in anatomy. He believed that studying history was a critical part of medical student education. Miller later opened the seminars to faculty members, and for many years an active group of influential physicians and others gave papers on great medical discoveries and heroic doctors. The popular gatherings, which continued well after Miller bowed out, inspired students and physicians alike, and stimulated the creation of the Department of the History of Medicine (now the Department of Medical History and Bioethics), one of the first in the country, in 1950.



ated the highly successful Preceptorial Plan and lobbied hard for the construction of Wisconsin General Hospital. Bardeen's young College of Medicine curriculum earned praise in the 1910 Flexner Report.

For most of his tenure as Dean, 1934-1955, William S. Middleton, MD, judiciously split his time between his administrative duties and clinical and teaching duties. Middleton was heavily invested in his students, both in the classroom and the clinic. Anecdotes abound regarding Middleton's interactions with students, staff, faculty, and fellow military personnel.

Fast forward to Dean Philip Farrell, MD, PhD, 1995-2005, and witness major facility improvements materializing into a vibrant health sciences campus at UW-Madison. Farrell also was responsible for our re-naming as the School of Medicine and Public Health.

Robert Golden, MD, who became dean in 2006, promises to maintain SMPH on its current trajectory into its second century.

Learning

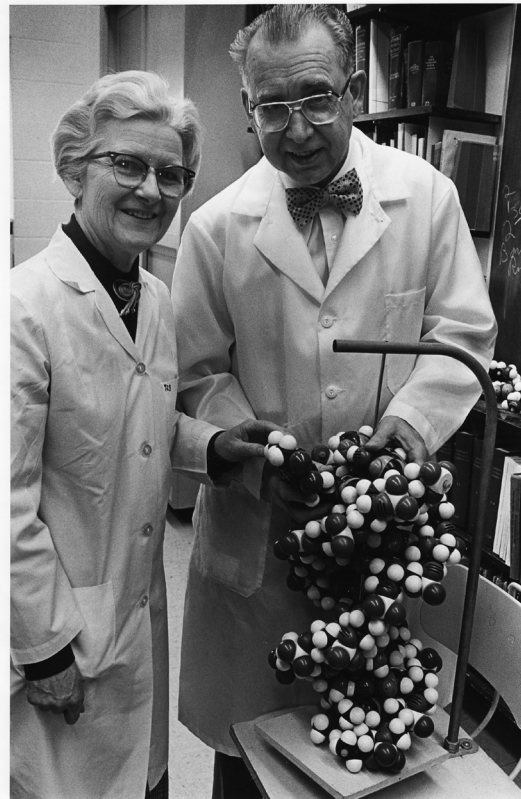
The Preceptorial Plan, created in 1926, ensured that students would learn and "practice" at the side of established clinicians. Its innovative approach was adopted by medical schools across the country, and it remains a central part of SMPH student training.

In the early years, students passively memorized the material they were presented. But with growing amounts of information, they later were taught to become life-long learners active in their own ongoing acquisition of knowledge.

Assessment of clinical skills became an important corollary to book learning. Teams began to enhance the curriculum with significant additions of cultural competency, communications, and professionalism. New learning opportunities expanded with the creation of allied health programs. The latest offerings: the master's in public health degree and the rural health medical degree.

Research

Well before the National Institutes of Health (NIH) existed, SMPH pathologists, toxicologists, pharmacologists, and physiologists were making important discoveries. Over the years, the School developed strong research programs in cancer, neuroscience, cardiovascular and respiratory medicine, and ophthalmology. One important indicator of research progress has been the growth of extramural support. In 2007,



Heady Times for Cancer Research

Elizabeth Miller, PhD, and James Miller, PhD, were part of a cadre of top-notch scientists based at the McArdle Laboratory for Cancer Research during very heady times—the 1950s, '60s, and '70s. Created in 1940, the laboratory was the first basic science cancer center at an academic institution, and it represented a new form of problem-oriented research. The work, centered in the early years on chemical carcinogenesis and the role of viruses, yielded many basic and clinical "firsts," including Howard Temin's Nobel Prize. McArdle's first director, Harold Rusch, MD, went on to lead the UW Paul P. Carbone Comprehensive Cancer Center (UWCCC), one of the first established by the National Cancer Institute in 1973. Today, in addition to its role as an SMPH basic science department, McArdle is an integral part of the UWCCC, which remains at the forefront of cancer treatment and research.

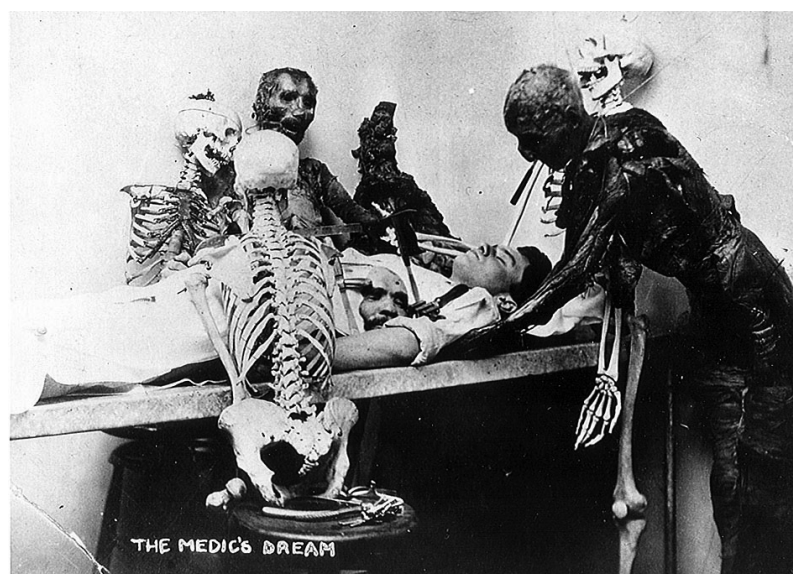
the School's NIH funding for research was just under \$118 million.

Some of the notable breakthroughs at the SMPH: Howard Temin, PhD, discovers reverse transcriptase, explaining how retroviruses cause cancer and AIDS; Folkert Belzer, MD, and James Southard, PhD, develop UW Solution to extend the time organs can be

Students and Cadaver-based Humor

Medical students have always been known to push the envelope of cadaver-based humor. One of the best examples may have been Oscar Nadeau, a student during the early days of the College of Medicine. He earned his school expenses by taking and selling photographs, including some classic portraiture of Dean Bardeen. He also earned a reputation as a rascal. The first of his 3 expulsions from the university occurred when he created "The Medic's Dream," which, in a reversal of the usual arrangement, depicted cadavers from the Science Hall "stiff laboratory" hovering over a medical student prone on the table. Was it Nadeau using a self-timer? We will never know. The depiction,

while likely lucrative for the student, was not viewed sympathetically by the administration. Nadeau, however, did go on to become a surgical chief at Chicago's Augustana Hospital.



preserved for transplantation; Charles Mistretta, PhD, creates digital subtraction angiography—now the gold standard in medical imaging of blood vessels and the heart; and James Thomson, PhD, isolates human embryonic stem cells, which has opened the door to regenerative medicine.

Bricks and Mortar

Some 20 years following its genesis in Science Hall, the school grew substantially with the opening of Wisconsin General Hospital. This provided a setting for greatly expanded clinical training as well as much needed service for the people of Wisconsin. Abutting the hospital, Service Memorial Institutes was the school's first real home, allowing scientific and clinical staff to work together.

The completion of the Clinical Sciences Center (UW Hospital and Clinics) in 1979 represented unprecedented opportunities for the school's clinical operations. The adjacent Health Sciences Learning Center is the SMPH's new home, housing administrative and educational programs and the Ebling Library

for the Health Sciences. With construction on the Interdisciplinary Research Complex well under way, the school looks forward to having most of its family together again in one setting soon.

Partnerships

Since the early days, school leaders have cultivated statewide relationships with physicians, hospitals, and clinics as a way to expand training options and support the Wisconsin Idea, which extends the University to all corners of the state. The school created academic campuses at Marshfield Clinic, Gundersen Lutheran in La Crosse, and Aurora Healthcare in Milwaukee.

A gift from Blue Cross/Blue Shield resulted in the Wisconsin Partnership Program, which joins with local, regional, and statewide groups to address the most important health issues in the Badger state.

With the recent creation of the Institute for Clinical and Translational Research, which aims to more effectively transfer research from academia to communities, SMPH will strengthen its relationships across Wisconsin, now more than ever before.

An exhibit in the Ebling Library through June, 2008—called "Skeletons in the Attic, Life in the Atrium," 100 Years of Medical Education at UW—provides an overview of the "Century of Inspiration." Commemorative panels in the Health Sciences Learning Center atrium and vintage photographs in the third floor of the Ebling add vibrancy to the story of a remarkable institution. For details on the "Skeletons" exhibit and other upcoming events, go to <http://100years.med.wisc.edu/>.

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WMJ

WMJ (ISSN 1098-1861) is published through a collaboration between The Medical College of Wisconsin and The University of Wisconsin School of Medicine and Public Health. The mission of *WMJ* is to provide an opportunity to publish original research, case reports, review articles, and essays about current medical and public health issues.

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