

Sharing Historic Treasures

Rare Books Remain Relevant to Modern Medicine

by Masarah Van Eyck

In a collections area near Micaela Sullivan-Fowler's office, corpses sit straight up, propped by ropes at the neck. The fibers in their back muscles are visible as their slit skin drapes like fabric down their sides. Others recline suggestively, their faces turned to the sides, hands splaying their own flayed skin to reveal tightly packed viscera and organs.

Not actual corpses, these are only sketches of corpses—plates of centuries-old lithographs from some of the most influential medical tomes of their times.

But for Sullivan-Fowler, who heads the Historical Services Unit at the University of Wisconsin-Madison's Ebling Library housed in the Health Sciences Learning Center (HSLC), the illustrations from these early texts are deeply relevant to the health sciences today.

"There are moments of humanity here that we don't have [in anatomical illustration] now," she explains, opening the oversized 1685 edition of Govard Bidloo's *Anatomia humani corporis*. Here the observer can see the fat layers, hands and faces of



Influenced in part by Leonardo da Vinci, the *De humani corporis fabrica* by Vesalius continues to intrigue scholars and casual viewers alike.

the corpses, as well as what Sullivan-Fowler calls the "functional intimacy" of the pins and strings that hold various elements of the drawn cadavers in place. One tableau even depicts a fly perched upon a swath of flesh—undoubtedly something today's medical illustrators would omit.

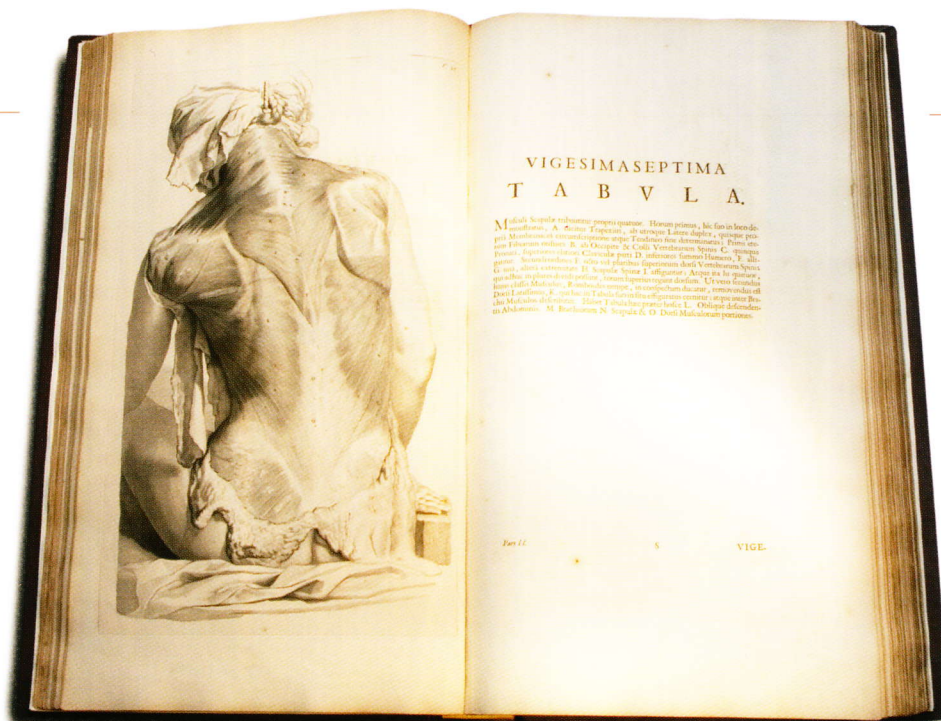
"Now you don't see the essence that makes it *hurt* anymore," she says of contemporary anatomical illustrations. "We have more emotional distancing. We objectify the body more."

To further emphasize this point, Sullivan-Fowler on one occasion took these works—the books themselves—to a UW School of Medicine and Public Health (SMPH) class, for an intimate "show and tell."

There, first-year medical students, still in their lab coats, gathered around what she calls her "usual suspects": Bidloo's volume, a 1555 edition of Andreas Vesalius' *De humani corporis fabrica* and Albinus' *Tables of the Skeleton and Muscles of the Human Body* from 1749.

"I assisted them in turning the pages to the thorax and compared the works with one another, and with what they had just seen in dissection," she says. "Then I asked them: 'What was different about illustrating human anatomy back then?'"

For one, there was no refrigeration. So an artist would have had to render a quick sketch. Only later would an engraver etch it into wood, copper or linoleum. And, of course, there were no X-rays or microscopes—technology that significantly changed



*Slightly macabre by today's anatomical illustration standards, but breathtaking in its impact, the **Anatomia humani corporis** by Govard Bidloo is a favorite of art students.*

how artists see and represent anatomy today. While painstakingly and eloquently detailed, these lithographs betray the limitations of the human eye.

Paging through these three- and four-hundred-year-old textbooks, students begin to understand just how much anatomical illustration—precursors to the illustrations by Netter and Gray that they carry in their backpacks—has evolved, along with medical knowledge itself.

“It really changed what the students saw when they returned to the anatomy suite,” Sullivan-Fowler says. “For some it was an epiphany.”

A “Working Collection”

Epiphanies are not uncommon in Sullivan-Fowler’s days, and she

delights in offering them up to any scholar, student or practitioner interested in Ebling Library’s collection of historic and rare books and journals that date back to the late 1400s. The historical collection now boasts some 35,000 volumes—thanks to donations, curatorial acquisitions and the merging of the UW pharmacy, nursing and medical collections into one health sciences library.

Some of the pieces are quite valuable. The anatomy collection, for example, is replete with unusual copies—such as books with an upside-down plate or uniquely marbled paper—that are precious novelties. Individual volumes have a fascinating history in and of themselves—previous owners, notes in the margin, bird feathers pressed between the

pages or hand-colored plates all add to the engagement between a patron and a book.

The bulk of the collection covers a wide range of health science subjects, with an emphasis on surgery, epidemiology, pediatrics, infectious diseases, women’s health, vaccination, homeopathy, internal medicine and public health.

Recently, the Historical Services Unit and the Ebling Library hosted the Guild of Natural Science Illustrators Annual Exhibition; when some of the guild members handled the library’s rarer holdings, they literally teared up in awe.

Despite the value of the collection, Sullivan-Fowler and colleague Mary Hitchcock insist that their current patrons “use and love” these volumes, just as

generations of practitioners and scholars have done before. Instead of housing a museum of rare and cloistered volumes, the library makes sure that these pages are turned and turned again—albeit, with the utmost care. Though the material from 1492 to 1923 is kept in a secured area called the Vault, the items are included in UW’s MadCat Catalog and can be used in the Ebling’s Historical Reading Room.

“Items this old normally are kept in a display case,” notes Sullivan-Fowler, who worked as a librarian for the American Medical Association in Chicago before joining the Ebling (then called Middleton) Library eight years ago. “You usually don’t get to touch them, turn the pages, see the skin on the cover that came from a pig’s hindquarters.”

For this curator-librarian, that hands-on experience is at the heart of education.

The Serendipity of Discovery

Once a semester, UW-Madison undergraduate students who are enrolled in courses such as “History of Medicine in America” or “The Arts in Sixteenth Century Italy” learn about the collections and the Historical Services Unit. These courses, taught by faculty members such as Judith Levitt, PhD, and Ronald Numbers, PhD, both of the SMPH Department

of Medical History and Bioethics, and Gail L. Geiger, PhD, of the Department of Art History, attract students who are majoring in everything from engineering to women's studies to art history.

"The Ebling Library houses a marvelous collection of primary and secondary sources relating to the history of healthcare in America," says Numbers. "For undergraduates and graduates alike, Micaela Sullivan-Fowler is the mentor par excellence, counseling on topics, sources and interpretations."

As the students view the books, Sullivan-Fowler talks to them about historical research and sources. For many, it is their first opportunity to handle a primary source—a document that was generated in the era being studied.

"Even though there is so much we can access now on the Web—say, article abstracts and even scanned documents—there is still the serendipity of discovery that only primary sources allow," she says. "You do not get that with flat panels and pixilated screens. You can only get it when you're looking right at the pages, the contemporary font—that's when you can really sense an author's 'voice.'"

In turn, the experience can inspire more creative historical inquiry and lead a researcher down unexpected

and instructive paths. "It's the same thing you can't get if you don't browse a shelf," she quips.

For one recent student, a curiosity about a grandfather who died in the 1918 influenza epidemic led him to research, with Sullivan-Fowler's guidance, just how one runs a funeral service amid the influx of bodies during an epidemic.

"I show them my excitement and enthusiasm as we go through the databases of journal articles and lists of primary sources," she says. "But I really engage people with the actual 'stuff'—and I have the resources right here in my living room, so to speak!"

Sullivan-Fowler's mentorship of undergraduate

scholars ensures the collection will be "used and loved" by generations to come. But for her, that's only the beginning of outreach.

She dreams of reviving a daytime lecture series for practitioners and retired physicians that would bring in scholars to talk about various aspects of the collection. The library's location in the HSLC, a stone's throw from the UW Hospital and Clinics, makes this endeavor especially appealing.

"I would love to have healthcare professionals and students in this venue and show them that there are pieces of history that are very accessible, relevant and even practical," she says.

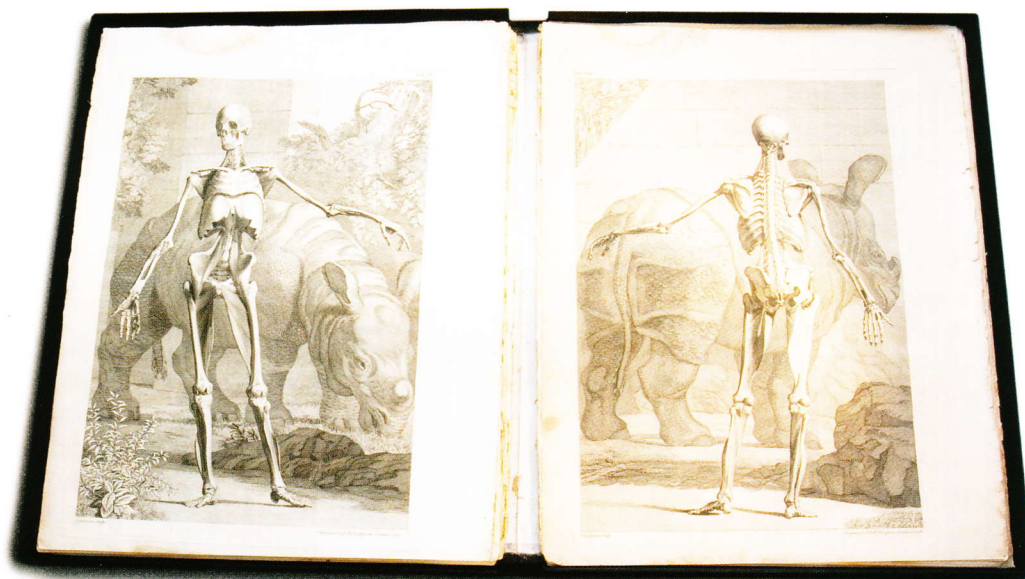
But for now, even just the display cases in the

well-trafficked hallways fulfill Sullivan-Fowler's ambition to "take over the world" when it comes to outreach.

"If I can capture one student going past one display case and have him stop to look and say to himself, 'Oh, they worried about bioterrorism in World War I, too? I thought that was just a modern thing with anthrax,' and then just shrug and say, 'Oh—cool,' and go on, that's enough."

Navigating the "Stuff"

Faculty and graduate students in the UW-Madison medical history and history of science departments are well acquainted with the intellectual value of the medical library. But one look at some of these works, and



*Visitors love the front and back views of the rhinoceros that appeared in the 1749 **Tables in the Skeleton and Muscles of the Human Body** (translated from the Latin) by Bernhard Siegfried Albinus.*

it becomes clear that medical and science researchers aren't the only ones to find worth in such a collection.

Take Sullivan-Fowler's "usual suspects"—her favorites. Inside the books the corpses are often freestanding with one arm artfully raised. Some of the illustrators etched in landscapes behind their models—Vesalius' rendition of Brussels, for example, is recognizable today. Others adorned the bodies with drapes of clothing or head wraps. Still others surrounded their subjects with natural wonders from around the world. A favorite in the library are Albinus' two plates that depict a skeleton (front and back) before a great rhinoceros (also front and back), the path between them lined with exotic plants.

Given the diversity of elements in these works, a veritable university of scholars can find insight into them—and do.

"One art history professor brings in her students every year," Sullivan-Fowler says. "But unlike the medical students, these students stand around with sketchbooks, trying to determine the artistic heritage of the plates—what elements are from the Renaissance, say, and which come from the Classical period."

Everyone brings a different angle to the material, she says. "No matter what the rationale was for printing

these works back then, we bring our own perspectives and expertise to it now," she says. "And everyone sees it differently—botanists, historians, clinicians, curators. I consider myself a concierge. I just help people navigate it all."

The More Things Change...

Natural history, "voices" from the past, pigs' skins, display cases—these are all good reasons to visit the Ebling Library's historical collection. But what, really, can these often fragile pages contribute to modern medicine and healthcare? Clearly, the illustrations are outdated and the artists' observations less than scientific, by our current standards. When it comes down to serious medicine, isn't their value little more than quaint?

Sullivan-Fowler doesn't think so. "You cannot be a fully formed and informed clinician without understanding where you come from," she explains. "And where we come from is actually an extraordinary and quite modern place."


Modern? When readers survey the vast writings on public health issues, such as communicable diseases and disease epidemiology, they can understand just how universal and timeless so much of medicine is, she contends.

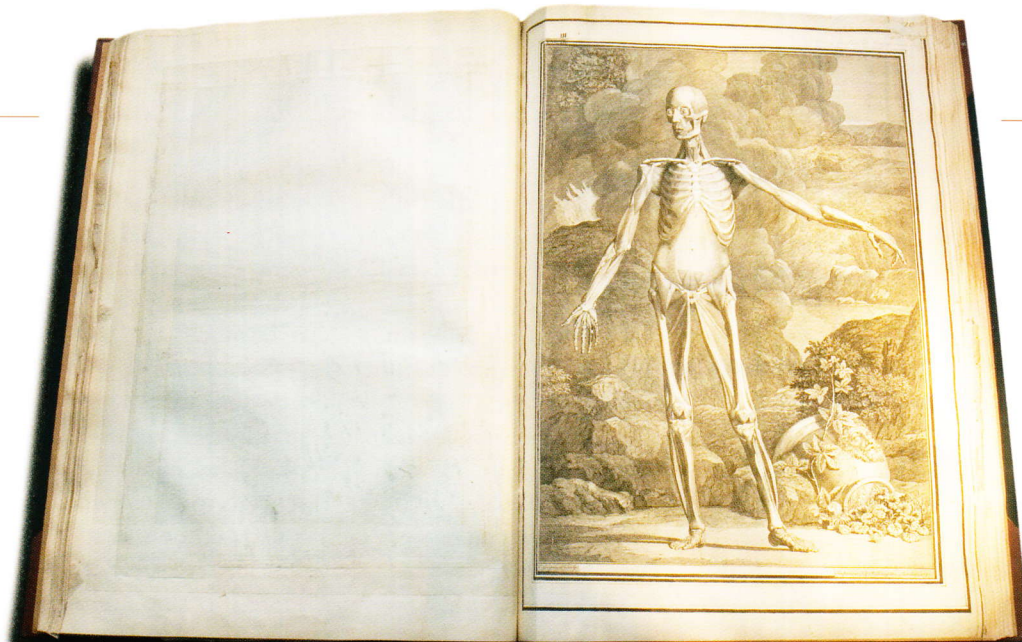
"What you learn when you look at these books is that people have always been afraid of dying, always worried for their loved ones. People have always dreaded pain and a loss of control," she says. In other words, patients have remained largely the same.

"What's more," she says, "societies have always been in the midst of conflicts and wars—in fact, that's where some of the great advancements in medicine have occurred."

In this light, she says, "The only thing that's changed in medicine is the technology and the treatments." And it is precisely this kind of information—the humanistic perspective that historic collections inspire—that helps clinicians understand their patients.

It would seem that clinicians haven't changed a whole lot either.

"Practitioners have always been expected to do the best, informed job for their time," says Sullivan-Fowler. "And the predecessors of our doctors and nurses—they all had the same expectations and worries that healthcare professionals have now." 



*The plates for this illustration, which appeared in Albinus' **Tabulae sceleti et musculorum**, were done by artists Joannem and Hermannum Verbeek.*