"Bath salts" stimulants prompt state bans [PAGE 18]

PHOTO BY TYLER MALLORY

A more humanistic approach to dissection helps "bring back the patient as the focus during the first days of medical school," says Ernest F. Talarico Jr., PhD, Indiana University School of Medicine Northwest anatomy instructor (in white coat). His first-year medical students include Jacob Roshanmanesh (left), Rania Kaoukis and Karrmann McHaffie.

Humanizing anatomy

HOW STUDENTS RELATE TO THE CADAVERS THEY DISSECT HAS CHANGED. SOME SAY TEACHING EMPATHY BEGINS IN THE ANATOMY LAB.

Story by Kevin B. O'Reilly

Most people do not choose their names, but they can choose to love them, loathe them or change them. About a decade ago, one woman was known as Mercedes — like the German luxury car. It was not the name her parents gave her. It was not how she was listed on her death certificate.

Mercedes was the name she was given by a medical student dissecting her cadaver as part of the gross anatomy course at Indiana University School of Medicine Northwest in Gary.

"Why do you call her Mercedes?" asked anatomy instructor Ernest F. Talarico Jr., PhD.

"Because," the student said, "she's going to enable me to purchase a bunch of Mercedes."

For Talarico, the student's comment was the wake-up call that things needed to change. "That wasn't what we were trying to communicate or trying to teach," he said.

The experience of dissecting a cadaver in a lab always has separated the medical profession from the rest of society, but ideas about what — beyond basic anatomy — that rite of passage should teach have evolved.

In the late 19th and early 20th centuries, dissection was seen as a transformative event, and medical students used black humor to defuse tensions surrounding what was then seen as a quasi-legal and ethically questionable activity. In the mid-20th century, anatomy became an opportunity for physicians in training to develop a skill that medical sociologists called "detached concern."

Today, most medical schools opt for a more humanistic approach that uses ritual ceremonies to thank cadaver donors, encourages students to reflect on their experiences and, in some cases, allows students to meet and correspond with donors' loved ones.

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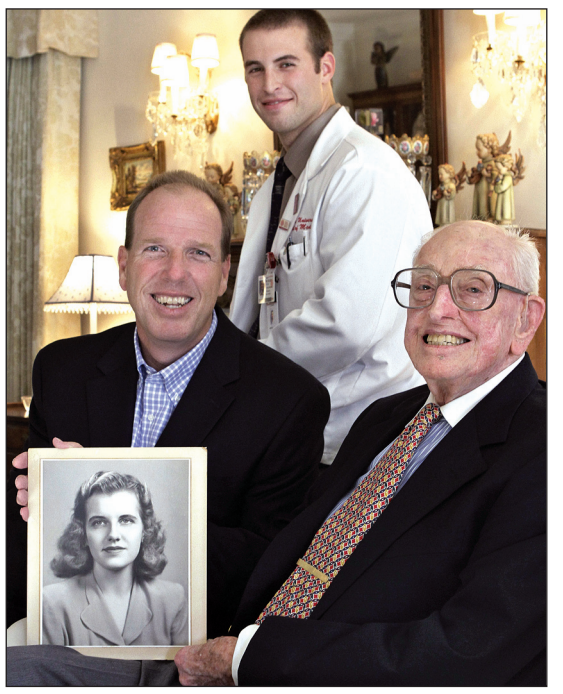

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Jim Purcell (right) holds a photo of his late wife, Dorothy, along with son Mike (left) and IU Northwest medical student Lucas Buchler. Dorothy Purcell donated her body to anatomical education and became part of Buchler's anatomy class. Buchler has kept in touch with the Purcells about research he is doing on the medical conditions that afflicted Dorothy.

Humanizing anatomy

Continued from preceding page

Anatomy is usually medical students' first introduction to the life — and death — they will deal with in a privileged position as physicians, said Pauline W. Chen, MD, a Boston-area general surgeon who wrote about dissection in her 2007 book, *Final Exam: A Surgeon's Reflections on Mortality*.

"What you're asking people to do in dissection is to approach a human body — whether it's dead or alive, it's a very human body — and to do things to it that you normally don't do," said Dr. Chen, who writes the "Doctor and Patient" column for *The New York Times*. "It's shocking for somebody who just a few months ago was not in the medical profession, not a medical student, not a doctor in training, to be suddenly faced with a fellow human being and to dissect that person — to cut away at structures that once performed the essential functions of life."

That all-too-intimate encounter with a cadaver is bound to affect many medical students emotionally, experts say. The questions are how to deal with those feelings, and how the approach to anatomy can help or hinder medical students' ability to empathize with patients.

"Freezing up" human feeling

The potential danger dissection posed to medical students was recognized early on. In an 1847 valedictory address to the first graduating class of the Medical College of Memphis, a professor warned students, "Anatomy, however indispensable it may be, tends certainly to freeze up the springs of human feeling and destroy our sympathy for human suffering."

With the sources of cadavers often uncertain — and frequently the result of grave-robbing — medical students in the late 19th and early 20th centuries sometimes took a cavalier approach to dealing with dissection. Many medical schools took group portraits of students posing with cadavers, often in offensive scenarios.

For example, an 1890 photograph shows a group of medical students playing a card game and posing with a seated cadaver in the anatomy lab, a lit cigarette dangling from its mouth. Another photograph from near the turn of the century shows seven medical students standing behind a dissection table upon which lies a cadaver. Painted on the side of the table, in an apparent attempt at humor, are the words, "He lived for others. He was killed for us."

A collection of 138 such photos was published in the 2009 book *Dissection: Photographs of a Rite of Passage in American Medicine: 1880-1930*. Many of the images were sent home to students' families as postcards, said co-author John Harley Warner, PhD. "The dark humor in these photographs is a comment on students' own affective response to dissection," said Warner, a medical historian at Yale School of Medicine.

As medicine evolved through the 1950s and 1960s, students were encouraged to have a respectful yet emotionally distant attitude toward the cadavers they dissected. "Talking about or expressing your affective response to learning was jettisoned, because it became illegitimate or unprofessional — not something you were supposed to do," Warner said.

Away from anonymity

The first "memorial service" for cadavers at the conclusion of an anatomy course was in England in the mid-1960s. Such ceremonies honoring donors' gifts started to penetrate American medical schools in the early 1970s, according to a July 2006 *Clinical Anatomy* article that Warner co-wrote.

Today, most U.S. medical schools have a cadaver service since the late-1990s. Last year, for the first time, four donors' relatives attended the service, traditionally restricted to students and faculty and held in an auditorium.

In the decade since the Mercedes comment, things have changed for students taking gross anatomy at Indiana University School of Medicine Northwest.

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They learn the first names of their cadaver donors, are encouraged to correspond with the decedents' relatives and often meet them at a ceremony in the anatomy lab — with cadavers present but covered — after the course is completed.

"If you're working on a cadaver and you don't have a name, then that cadaver's a specimen," said Talarico, who developed the humanistic approach at IU Northwest and is assistant professor of anatomy and cell biology there. "But if you have a name, that puts a whole different spin on things, because that's a person.

"This helps teach things that are difficult to teach in academia," Talarico said. "It's hard to teach professionalism; it's hard to teach respect; it's hard to teach empathy. But our relationships with the donors and the donors' families do that, with the core principle that the student's first patient is the cadaver."

A more personal approach

Knowing more about the cadaver can make dissection more difficult, said Karrmann McHaffie, one of Talarico's students this year. She met her cadaver donor's family at a memorial service in January.

"The natural tendency is to want to remove yourself from the situation. It's not real," McHaffie said. "But it's a patient, and the patient has a name and a story, and you need to know that as their doctor."

Fellow student Jacob Roshanmanesh said getting to know the donors and their families helped humanize the anatomy experience.

"A friend of mine said, 'You [doctors] are just educated butchers, just mechanics of the body,' " Roshanmanesh said. "But you're dealing with people, not animals or inanimate objects. With the memorial service we had, you have to imagine if it was your mother or father. … We wanted the families to know that we really cared about our first patient."

When permitted, the state's anatomical education program gives next-of-kin contact information to Talarico. He writes a letter inviting relatives to come to the closing ceremony and respond to students with information, pictures and videos about their loved ones.

When JoAnn Aldrich got the letter from Talarico about a cadaver service that would include honoring her father, she was nervous and took a while before responding. But after interacting with students and learning more from Talarico about how a traumatic head injury had affected her father's behavior, she described herself as "ecstatic" about the IU program.

"I think doctors and nurses should be allowed to know their patients — alive, or in this case, as cadavers," said Aldrich, of South Bend, Ind. "I think they should use their names and become more gentle doctors and have a personal relationship with them. They're the ones who are going to be dealing with our future children and grandchildren."

At Yale, students are encouraged to create prose, poetry and other art reflecting on their dissection experience for a closing ceremony.

But cadavers are called donors, not patients, said anatomy instructor Lawrence J. Rizzolo, PhD. "We make this clear: You are not going to cure this 'patient' or make them feel better," said Rizzolo, associate professor in the Surgery Dept. "You are going to take them apart, and you are not going to put them together again, all without consulting them before each procedure. This is all very counter to what the physician would normally do with a patient."

Whether it helps students to relate with cadavers as if they were patients, one thing is clear to students of Talarico's such as Rania Kaoukis. Getting to know about the donors and families helps drill home a critical element of a career in medical practice, she said. "You are treating a person and not just a body." ◆

PHOTO COURTESY OF BLAST BOOKS / DITTRICK MEDICAL HISTORY CENTER AND MUSEUM

This photo, circa 1905, shows medical students with a cadaver and was printed as a postcard but never mailed. The epigraph, "He lived for others. He was killed for us," refers not to murder but to the questionable sources of cadavers in an era when dissection's legal status varied widely.