



Cynthia Herbrandson, professor of human anatomy at Kellogg Community College, talks about the advantages of having a plasticized human cadaver. [@JIM GRANT/THE ENQUIRER](#)

# IN DEATH, A BODY BECOMES A TEACHER

Donation on permanent loan from U-M

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In a laboratory class room at Kellogg Community College, matters of life and death become very real for health students.

The school has acquired a human body that has undergone a process known as plastination, which preserves it and allows it to be used as a teaching tool for those in KCC's Allied Health programs and anatomy and biology classes.

KCC has other body parts, such as a brain and heart, that have been preserved as well, but the man staff members affectionately refer to as Sir Edward II is the school's first full-body

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## SEE THE VIDEO

To watch an interview with Kellogg Community College teachers talking about using a cadaver in the classroom, go to this story at [www.battlecreekenquirer.com](http://www.battlecreekenquirer.com).

## DONATING TO SCIENCE

For more information on how to make a body donation to the University of Michigan, go to [www.mcd.umich.edu/anatomy/donors](http://www.mcd.umich.edu/anatomy/donors).

## BODY

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cadaver. Whoever he was during his life, his name is unknown to the school. He may have thought highly of medical education and wanted his body to be used for that purpose.

This donation came from the University of Michigan Medical School's plastination lab. U-M Anatomical Donations Program Coordinator Dean Mueller said it was one of the first in the nation, engaging in a science that's been around since the 1970s but only recently has made the advancements that make donations such as the one at KCC easier.

"Some people will donate because they want somebody to learn what they suffered from so somebody else doesn't have to do that," Mueller said. "We have a lot of educators donate, a lot of people who believe in education and want to continue to teach after their death. People even donate to U of M just because they like our football team. Everybody has their own reasons."

KCC Math and Science Chairwoman Carole Davis said Tuesday the school got the donation on a permanent loan basis from U-M in March with federal funding from the Carl D. Perkins Vocational and Applied Technology Act. However, Mueller said, there is no "owner" of the body.

"Nobody ever owns those donors," Mueller said. "We don't, even. We're caretakers. We're custodians of the donors."

In the lab, the body rests on a moveable platform. Many organs and other structures are removable, showing students perspectives not possible through other, simulated means. Pieces sat next to the body on a protective covering, a not-quite-final resting place.

Although his name is unknown, there are a few details about the man's life that can be determined. He was in his mid to late 70s. He had a large tumor in his urinary bladder. His gallbladder didn't appear healthy.

Other details were custom-ordered by KCC. One of the man's eyes is open, as is his mouth, so students can see inside. One arm still has its musculature, the other arm is nothing but bone.

The brain is in multiple pieces. KCC Human Anatomy Professor Kathy Mann pointed out how that allows students to actually see how the layers of meninges wrap around the organ, sliding her fingers underneath as an example.

"I have a few students that are hesitant," Mann said. "I never push them to get right in, but I



Plastic human figures in the Kellogg Community College anatomy lab. [@JIM GRANT/THE ENQUIRER](#)

would say typically most of them will sneak over and touch, and once that barrier's broken, the door really opens."

As part of the agreement with U-M, the Enquirer was not allowed to photograph the body.



Kathy Mann

However, KCC Human Anatomy Professor Cynthia Herbrandson held up a preserved human heart acquired from another donor under another agreement, showing how it's the size of her own fist.

"This is learning; this heart lived in a human body," Herbrandson said. Then she picked up an artificial classroom heart. "This heart was made in West Germany, from plastic."

It's the same story with the body, the professor said.

"I think a good example was the moment when I grabbed a liver out of our plastic torso and inserted the liver from the actual body in place, and that 'aha' moment of, 'it's real,'" Herbrandson said. "The plastic specimens that they use in our lab and the human body are so close that learning is achieved by both."

That learning is possible because of the U-M plastination lab.

Mueller said the entire specimen is first dehydrated. The organic material is then impregnated with silicone rubber that's been treated with a chemical that leaves the body feeling as though it's made of plastic, which also preserves it.

Mueller said this process leaves the specimens safe to handle, since toxic preservation chemicals aren't used. The modular nature of a

body such as the one at KCC means no cutting has to be done by students, which also increases safety.

As part of the loan, if KCC shuts down or otherwise has no use for the body, it is returned to U-M. Additionally, family members of the donor can request to have the body returned.

Mueller and Davis said it's somewhat uncommon for a school the size of KCC to have a full cadaver. KCC once had a female torso, Herbrandson said, but the goal had always been a full body.

For now, "Sir Edward II" is a teacher and the students have been eager to learn.

"I immediately set the stage that this is a person, not a model," Mann said. "I respectfully show them our cadaver, talk a little bit about how we were able to get it, and just say this is part of our lab and talk about respect. I've never really found any of my students to cross that line."

Herbrandson said she had just come from teaching a class with the body, and the students immediately took to working with it.

"It was really exciting to watch them," Herbrandson said. "That's as good as it gets."

The work made possible by someone deciding to donate to science goes beyond the classroom, though.

"It takes a very generous person to donate their body, somebody who really believes in somebody, frankly, who they don't know," Mueller said. "Those donors have really stepped forward and taken that faith, if you will, to pass on education and train people so they can help the world."

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