

# A death-like model

Joseph Price, MountainHome 10:40 p.m. CDT July 16, 2014



(Photo: Kevin Pieper/The Baxter Bulletin )

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Arkansas State University Mountain Home's funeral science program debuted its new teaching tool this week — a synthetic cadaver — and saying it is "life-like" is not exactly accurate. "Death-like" would be a more apt description.

The synthetic cadaver, or SynDaver, made its first public appearance for members of the Arkansas Board of Embalmers and Funeral Directors, who stopped by to see it.



Synthetic cadaver helps students at ASUMH's funeral science program.

"We not only maintain quality but get to be a flagship program," said Martin Eggenesperger, Vice Chancellor for Academics. "It puts us on the vanguard. It allows students to work like they

would on a cadaver but without all the problems that entails."

The SynDaver, named Wilhelmina for now, is the first of her kind at an educational facility in Arkansas and the first one used as a teaching tool by a funeral arts program in the U.S. A SynDaver is a custom-built synthetic human body that includes skin, bones, articulating joints

and a circulatory system encompassing all major arteries and veins commonly used by embalmers. Its skin feels real, if a bit cold to the touch.

"As part of funeral science we not only train people to be funeral directors, but also embalmers," said Matthew Buel, program director. "There's more science involved in the embalming side of things."

Wilhelmina resides in a pool down in a room on the bottom floor of McClain Hall that smells strongly of cinnamon. The liquid which the SynDaver rests is a mixture of water and cinnamaldehyde, an anti-microbial agent SynDaver labs recommended. If the SynDaver is not kept moist, it dries out and cracks. Cinnamaldehyde is what makes cinnamon smell and taste like cinnamon.



Wilhelmina the SynDaver is a new tool for the Arkansas State University Mountain Home's funeral science program. ASUMH is the first educational facility in Arkansas to use a synthetic cadaver. (Photo: Kevin Pieper/The Baxter Bulletin )

### **An idea is born**

In order to graduate from ASUMH as an embalmer, students have to do field work in funeral homes. "Before we send them off to the funeral homes to do that, we were trying to find a way to get them even better trained before they even arrived at the funeral homes," Buel said.

The idea to use a SynDaver came to Buel while he was watching *Mythbusters*, a show on the Discovery Channel that puts myths to the test. *Mythbusters* used the SynDavers to show potential damage to the human body in their experiments. SynDavers are produced by SynDaver Labs in Tampa, Fla. While synthetic, their organs, bones and skin share the same texture, weight and strength as those of a human. A SynDaver also is playing the role of a tortured and skinned pirate on the TV show *Crossbones*.

"I thought, there you go, that's how you do it," Buel said. "It seemed like a really awesome anatomy tool to use so that students could get an idea of physiology and relative position of things inside the human body before they actually went to work on a real human."

Buel said that the SynDaver would pass for human under an X-ray or a CT scan.

### **First of its kind**

Before the SynDaver, ASUMH would book time at the University of Arkansas for Medical Sciences' cadaver lab. At that lab, the students watched as a technician from there performed the

dissection. The use of cadavers would run approximately \$3,000 each time. SynDavers don't have to be refrigerated or have to go somewhere else for doctors or organ donation, so requiring fewer "bodies."

"Some mortuary science programs have cadaver labs," Buel said. "We're not set up to have a cadaver lab, but we are the first mortuary science program to have a SynDaver. This is the first one in the state of Arkansas, and it's the first one at any mortuary school."

Not even UAMS has a SynDaver. But students at four other school — ASU-Jonesboro, ASU-Beebe, Arkansas Tech University Ozark Campus, and NWACC in Bentonville — will be able to attend classes using the SynDaver remotely from their respective courses via compressed video.

ASUMH still is developing the curriculum for which it will use the SynDaver. Buel said one of the most difficult parts of training an embalmer is teaching the skills to access the arteries and veins they use during the embalming process, known as "raising the vessels."

"Raising the vessels is the thing that intimidates students the most," Buel said. "It's the thing they sometimes have the hardest time with when they get to a funeral home. So, if we have a way of showing them where those vessels are without having to wait till they get to a funeral home, we'll have a head start."

The SynDaver already has sutures on it to allow access to the organs under the skin. Portions of the skin can be pulled back to show the relation of the vessels to the muscles and bone around them.

"It allows us to essentially have a cadaver on our campus but never have to worry about how long it's been here," Buel said.

The SynDaver cost approximately \$40,000, according to Buel. The money came from Path to Accelerated Completion and Employment grant from the U.S. Department of Labor. Each college that receives funds from the program uses them in different ways.

"She arrived in a body bag," Buel said.

Members of the Arkansas Board and Funeral Directors visited campus to see Wilhelmina. The ABFD is the licensing agency for graduates of the program.

"I think that the SynDaver in the department will make us one of the premier mortuary schools in the nation," said Bob Thurman, ABFD vice president.

Other visitors with the ABFD board were its Secretary-Treasurer Amy Goode and Mark Ohrenberger, assistant attorney general for the Arkansas Attorney General Office.

In addition, the SynDaver likely will get a name change this fall.

"We're going to be having a naming contest this fall semester," Buel said.