



SCSU will use semi trailer from Medtronic to educate, attract youth to science



Times photo by Dave Schwarz, dschwarz@stcloudtimes.com

St. Cloud State associate professor of biology and director of biobusiness outreach Bruce Jacobson stands in the conference room area of a trailer donated by Medtronic. St. Cloud State will use it for a mobile lab to travel to area schools to enhance existing science courses.

NOT MAD SCIENCE, BUT MOBILE SCIENCE

By David Unze
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Efforts to inspire and educate the next generation of scientists and science educators are going mobile.

St. Cloud State University in coming weeks will transform a semi trailer into a mobile science lab that will bring science curriculum to students and pro-

fessional development to teachers. The trailer was donated to the university's foundation by Medtronic and will travel to area schools to enhance existing science curriculum and attract young people to careers in science, technology, engineering and math.

The mobile lab's mission correlates with a directed focus among

educators to increase participation and interest in the so-called STEM courses. Those classes have been cited as a must for students to compete for jobs in the changing global workplace.

Meeting that goal can sometimes be as simple as making science "cool" for young people, said Bruce Jacobson, associate professor of biology and direc-

tor of biobusiness outreach for St. Cloud State.

"If you look back, and are really honest about what influenced the major decisions in your life, something or someone crossed your path that you thought was cool and off you went," Jacobson said.

See TRAILER, 7A ▶

Trailer

Future scientists

His hope is that a semi trailer outfitted with interesting and inviting science equipment and experiments will spark the interest of young people who might never have thought about a career in science. And if it reinforces that field of study for students already committed to a career in science, even better.

Potential targets for the science lab are school districts that don't have the equipment, infrastructure or staff to provide the training or keep up with curriculum changes. And the smallest school districts in the state face the biggest challenges, Jacobson said.

In Minnesota, 62 percent of schools have fewer than 100 students in their graduating classes, he said. Those are the schools he is targeting.

"This is not because people are doing a bad job," he said. "It's because people are doing a difficult job, and we have a responsibility to help provide the tools people need to do that job."

Partnership

St. Cloud State is partnering with St. Cloud Technical College, which will provide help transporting the lab. Curriculum has been reviewed by a team of science educators, and the project recently was presented to area superintendents to discuss how to make the most of the mobile lab's capabilities.

"We're very excited about having this resource in our midst," said Greg Vandal, superintendent in the Sauk Rapids-Rice school district.

"We all struggle with having state-of-the-art equipment and resources in an area (of study) that moves so quickly. Discovery in science is a moment-by-moment phenomenon. We teach in areas of curriculum that are ever-changing. We have the opportunity for a truly state-of-the-art experience."

The mobile lab can help teachers as well, through professional development seminars that will be precursors to having the semi trailer visit a certain school district. The mobile lab is the equivalent of bringing a science museum to the school, Vandal said, and his teachers already are excited about it.

Alumni help

The mobile lab project was initiated with a \$200,000 seed grant as part of the Minnesota State Colleges and Universities Bioscience Initiative.

Jacobson learned about the availability of the semi trailer through his work with a statewide initiative called Strategic Alliance of Bioscience Research and Education or SABRE.

A St. Cloud State graduate and former Medtronic executive mentioned that the company had three semi trailers that were used to instruct physicians nationwide on how to use Medtronic technology and equipment.

The company phased out two of the trailers about 18 months ago as Medtronic developed more regional centers where physicians could get the same training.

They then were contacted by St. Cloud State about donating one of the trailers. The company has a history of supporting science education, and its mission statement specifically mentions main-

ABOUT THE LAB

Dimensions: The semi is 53 feet long by 13 feet, 6 inches high. It has a laboratory space inside of 16 feet by 22 feet when a bump-out area is expanded.

Another bump-out creates a conference room and meeting space.

Comes with a generator to power it and a hydraulic lift that makes it handicapped accessible.

Comes with a fully integrated audio/video system with VHS/DVD, wireless network, satellite Internet and two 42-inch plasma television screens — one in the conference room and one in the laboratory area.

Comes with a kitchen and bathroom. The bathroom will be removed to accommodate a teaching station.

The trailer is heated and air-conditioned, but might not be usable during the coldest winter days.

taining good citizenship as a company, said Cynthia Taylor, director of customer education at Medtronic.

"We've always been a strong community partner," Taylor said.

And the company has an interest in educating the next generation of innovators in science, she said.

Jacobson contacted Medtronic about the semi trailers, and an agreement was reached to donate one to St. Cloud State.

It was introduced last week to St. Cloud State faculty and staff at an open house.

Next week it heads to Willmar as part of a MnSCU teaching conference, where area K-12 teachers are invited to see what will be coming down the road.