

Around the World and Back Again

Former SULI intern returns to Ames Lab

IT'S NOT TRUE THAT "YOU CAN'T GO HOME AGAIN." Just ask Travis Monk, whose journey back to the Ames Laboratory involved a couple of years, the completion of two degrees and a stay in a foreign country. But in the end, at least temporarily, he came home again to the Lab, conducting interesting and important research.

Monk was an undergraduate at Truman State University when he arrived at Ames Lab for the first time in May 2005. He was one of 10 student interns who participated in the Lab's Science Undergraduate Laboratory Internship, or SULI, program. During his 10-week summer internship, he worked in physicist Kai-Ming Ho's group where his job was to fabricate photonic crystals.



Travis Monk with Kai-Ming Ho

"It turned out that he (Monk) was really among the good people we had for undergraduate interns," says Ho. "We quickly added him to our active recruit list for graduate school at Iowa State."

But graduate school at ISU was not in the cards for Monk upon completion of his undergraduate degree at Truman State in May 2006. Instead, a master's degree in neuroscience rather than physics led him thousands of miles away from the Midwest. His destination: the University of Plymouth in Plymouth, England. In September 2007, following one year of intensive study and completion of his thesis, he graduated from the University of Plymouth with a master's in neuroscience.

Upon receiving his master's degree, Monk once again found himself making decisions about his future. This time, he had to decide where to complete his Ph.D. In the end, he was accepted into the neuroscience program at the University of Otago, Dunedin, New Zealand, but there was one hitch — he couldn't begin until June 2008.

"I had some downtime and I needed a job," says Monk. "So I contacted Dr. Ho with whom I'd worked in 2005. I told him I needed a couple of months of intern-

ship, and I was interested in working for him. He offered me a job."

On Oct. 6, 2007, Monk found himself right back at the Ames Lab in an internship involving work on a project similar to the one he'd worked on in 2005.

"I basically did the same work that I did in 2005, fabricating crystals, but this time focused on one particular application for photonic crystals, which is using them as a substance-identification device," he says.

Monk credits the SULI program with providing him the framework to succeed. "I believe it's because I demonstrated to Dr. Ho that I could do good work while I was in the SULI program that he was so willing to offer me a job when I asked," says Monk.

BY STEVE KARSJEN

But that's not the only reason

Monk spoke so highly about SULI. The program also provided him an opportunity to really figure out what he wanted to do.

"When I arrived at the Lab in 2005, I thought I had my career path laid out. I was interested in theoretical physics, came here and did a project in experimental physics with Dr. Ho, and my career path changed," Monk says. "I'm living proof that the SULI program really helps."

SULI really helps scientists too, says Ho, who credits the program with introducing him to a student he's been able to bring back to the Lab to help perform cutting-edge research in his program. And although things did not quite work out as he'd hoped in that Monk did not decide to come to ISU for graduate school, he says the SULI program served its "global" purpose, which is to get students like Monk to see the value in attending graduate school.

"It's a way for students to see what real research looks like," says Ho. "But also it's a way for scientists to show students how much fun it is being a graduate student and for us to have a channel to reach top students."

Monk's opportunity at Ames Lab lasted only a few months before he was off to New Zealand and the next leg of his education journey. But Ho and the SULI program's investment in him is something that will likely resonate with Monk his entire career. Is there a chance that Monk might find his way back to Ames Laboratory again some day? Quoting Monk, "If neuroscience doesn't work out, I can always go back to physics."

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Science Bowl Tradition

High School marks 18th year, Middle School turns five

Ames Laboratory carried on its education tradition hosting the 18th annual High School Science Bowl and the fifth annual Middle School Science Bowl in 2008. Powered by student and staff volunteers from the Lab and Iowa State University, the high school event drew 48 teams from across Iowa on January 26. In April, 16 teams of middle school

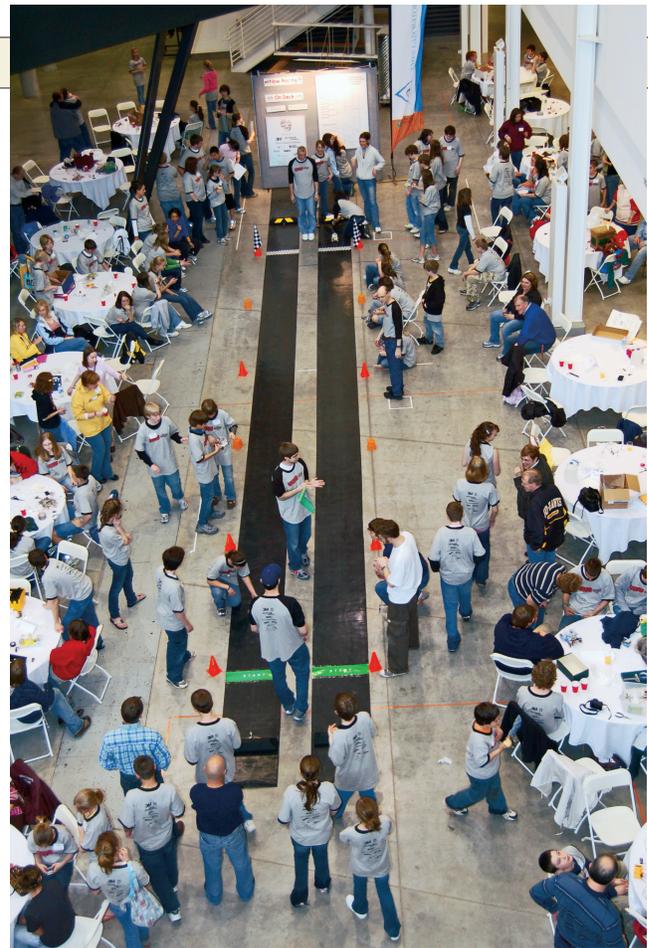


Ready, set, GO!

students competed in a two-day event, racing hydrogen fuel-cell cars on Friday, April 18, and then answering science and math questions on Saturday, April 19.

Cedar Rapids-Marion Home Schools won the high school event in only its second year of competition. The team, comprised of seniors Leif Gaebler and Edward Talmage, juniors Evan Gaebler and Andrew Baskerville and freshman Alan Talmage, had a perfect record for the day. They won all five round-robin matches in the morning and defeated West Des Moines Valley, Ames, Home Schools of Eastern Iowa and Des Moines Central Academy on their way to the championship match. Cedar Rapids-Marion was coached by Sally Gaebler and represented the Ames Lab/ISU Regional in the National Science Bowl® May 1-6 in Washington, D.C.

Evans Middle School of Ottumwa edged out LeMars 34-26 to win the Middle School Science Bowl. Council Bluffs St. Albert was third and Home Schools of Eastern Iowa was fourth. Ogden put on a strong finish to beat South Hamilton in the hydrogen



ISU's Howe Hall became race central for the Middle School Science Bowl hydrogen fuel-cell car competition.

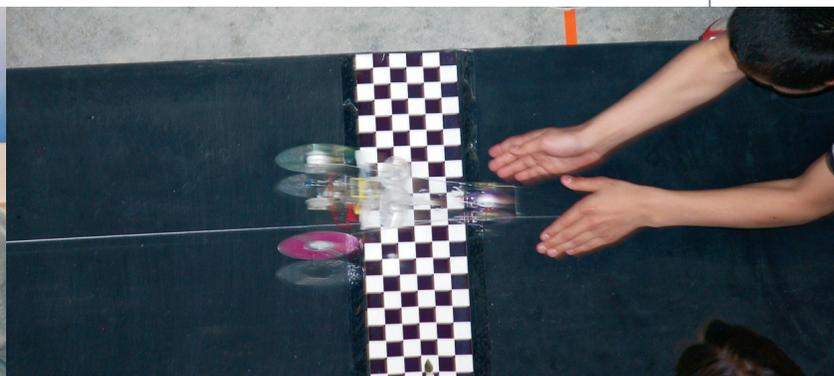
fuel-cell car race portion of the competition.

Evans' victory means the school will participate in the National Middle School Science Bowl for the second time in three years. Evans won the Ames Lab/ISU Regional in 2006 and went on to finish fourth out

of the 25 teams competing in the National Science Bowl event that year. This year's team of Lily Elbaum, Jianwa Bennett, Sarah Beadle, Jacob Huebener and Tivy Wixom will travel to Golden, Colo., June 19-22 for the National Middle School Science Bowl.



Members of the Cedar Rapids-Marion Home Schools team are all smiles as they cruise to victory in the High School Science Bowl.



"Catch me if you can," seems the appropriate quote as the Pella Christian team's car flies across the finish line at the Middle School Science Bowl.