



Grant funds advanced scientific research at MU

By Janese Silvey

Columbia Daily Tribune Wednesday, November 30, 2011

The University of Missouri has received a \$3 million grant to train up-and-coming scientists and engineers to incorporate neutron-scattering methods into their research.

The funding is from the National Science Foundation's Integrative Graduate Education and Research Traineeship Program. It is the first time the highly selective program has awarded a grant to MU. The money will create a neutron-scattering program open to graduate students pursuing advanced degrees in physics, biochemistry, biological sciences, electrical and computer engineering or mechanical and aerospace engineering. Faculty members from all five disciplines contributed to the grant proposal and will be involved in the program.

Similar to X-ray scattering, neutron scattering is a technique used to understand materials on the atomic level. Over the past several years, the United States has invested nearly \$2 billion on national labs with the capability of conducting research using neutron-scattering experiments, but right now there's a shortage of people who understand the technique.

During the course of the five-year grant, MU physics Professor Haskell Taub hopes to train as many as 20 students to use neutron scattering. The funding will pay students selected for the two-year traineeship a \$30,000 annual stipend and will help cover tuition and fees.

Taub expects to spend the remainder of this school year developing the curricula and recruiting potential participants who will start this coming fall. The program will rely on technologies at the MU Research Reactor, a unique campus facility that likely helped the university snag the funding.

"I think it's an opportunity to get some of the best students in the country here to use a unique facility," Taub said.

Students likely will take a lab section and three theory-based classes that will emphasize problem-based learning and have a writing intensive focus. While the courses will be modeled for program participants, Taub said other graduate students studying sciences will have a chance to take neutron-scattering classes.

“Hopefully we will have built an infrastructure that will be lasting — an infrastructure in two parts,” he said. “We have some money to upgrade instrumentation at the reactor, and the curriculum we develop, we hope, will make a permanent change in the way we train graduate students in the disciplines represented.”

Other faculty members in related fields also will have a chance to learn about the neutron-scattering technique and how it can apply to their research.

MU is chipping in a \$1.3 million match and is leading the program, which is a collaboration with Indiana University, North Carolina State University and Fisk University.

The latter is a university in Nashville that graduates more black students who go on to earn doctoral degrees in natural sciences than any other school in the nation, Arnold Burger, a physics professor there, said in a statement. “We are delighted to be partnering with MU in training our country’s next generation of neutron-scattering scientists,” he said.

MISSOURIAN

MU awarded \$3 million grant for research and training in neutron scattering experiments

Wednesday, November 30, 2011 | 12:33 p.m. CST

BY [CHRISTINA TRESTER](#)

COLUMBIA — MU announced a \$3 million grant Tuesday for research and training in neutron scattering experiments.

Neutron scattering techniques are used to discover molecular properties of materials, according to an MU news release. It has been used to develop new drugs, high-strength metals and cement, electronic and magnetic devices and hydrogen storage materials.

The National Science Foundation awarded MU the grant to train current and future scientists in this field, according to the release.

Haskell Taub, the project director, hopes the new program will help attract outstanding graduate students throughout the country.

Students working toward doctorates can apply for the training program, according to the release. Taub said MU is in the process of recruiting and plans to start the program in the fall of 2012.

Along with graduate students, faculty whose research could benefit from neutron scattering will have the chance to be trained, Taub said in the release. Faculty who mentor students in the program will have to chance to learn about the technique as well, Taub said.

The project will focus on three areas of research — the molecular structure and dynamics of biological materials, the characterization of materials used for electronic devices, such as lasers and computers, and the structure of nanoscale materials, such as gold nano particles that have many uses including cancer treatments, according to the release.

The MU's Research Reactor allows the trainees to do experiments that cannot be done at other universities, Taub said. MU is unique for having a reactor for conducting neutron scattering experiments.

The program is part of a collaboration among four universities including MU, Indiana University, North Carolina State University and Fisk University in Nashville Tenn., according to the release. MU is the lead institution in the program.

During the five year program, Taub said he hopes to train as many as 20 students, according to the release. Taub said six of those students will be at MU. The program will provide \$30,000 annual stipend plus tuition and fees to those students.

The grant is part of the National Science Foundation's Integrative Graduate Education and Research Traineeship Program. It is the first such award MU has received since the program began in 1998, according to the release. Out of 410 proposals submitted, 18 universities received the award this year. MU will match the grant with \$1.3 million.

Five MU departments will participate in the program — physics, biochemistry, electrical and computer engineering, mechanical and aerospace engineering and biological sciences.

Taub said the hallmark of the program is that it is interdisciplinary.

"The benefit of this program is to attract high quality graduate students to MU," Taub said.

MISSOURIAN

Judge tosses contract breach claim in MU suit

Wednesday, November 30, 2011 1:06 p.m. CST

BY THE ASSOCIATED PRESS

COLUMBIA — A Boone County judge has rejected a **former University of Missouri professor's** claim that the school broke an agreement with her to lead its communications department.

Loreen Olson filed a lawsuit last year after the College of Arts and Sciences withdrew a job offer. Dean Michael O'Brien offered her the job in May 2010 and asked Olson to serve a three-year term starting September.

Olson accepted, but O'Brien withdrew the appointment after they couldn't agree on compensation and job duties. Olson now teaches at the University of North Carolina at Greensboro.

The Columbia Daily-Tribune reported that Circuit Judge Jodie Asel dismissed four of six counts in the suit, ruling that Olson did not have a legal contract because she didn't sign the offer letter

A gender discrimination claim remains pending.

MISSOURIAN

New Mizzou Network set to launch Thursday

Wednesday, November 30, 2011 · 7:03 p.m. CST; updated 7:35 p.m. CST, Wednesday, November 30, 2011
BY ZACH MILLER

COLUMBIA — The Missouri Athletics Department is making sure it doesn't fall behind.

On Thursday, it will launch a new online network, called the Mizzou Network, to bring audio and video content about Missouri athletic events to fans.

The Mizzou Network is a re-branding of Mizzou All-Access, a feature already available to fans on the department's website. Mizzou All-Access offered free on-demand video clips and interviews, as well as live content for subscribers.

Andrew Grinch, Missouri's Associate Athletic Director, said the department didn't put a concentrated effort into Mizzou All-Access, something that will be different with the Mizzou Network.

"There wasn't much activity from a day-to-day standpoint," he said. "Our fans were not used to going to Mizzou All-Access every day."

The department hired three staff members to ensure that it will be able to add content to the network daily. On-demand content will still be free, and live content will cost the same price as it did for Mizzou All-Access: \$9.95 for a monthly subscription and \$79.95 for a full year.

The network is being funded by private donations and a reallocation of department funds. Grinch said he doesn't anticipate that the network will bring in much new revenue, at least not for a while.

He isn't sure if changes to subscriptions will be necessary because the network will be constantly evolving.

"It's not like a movie premiere," he said. "It's an ongoing process."

Several schools across the country have started similar digital networks. In the Big 12 Conference, those schools include Oklahoma and Kansas State. Several Southeastern Conference schools are on board as well, including Alabama and LSU.

"Looking at peers from other places around the country, we felt we were a little behind from a day-to-day video content standpoint," Grinch said. "Our fans were in a position where I felt they had to go elsewhere to get some of that Mizzou content, and ultimately we want them to come to us."

The Mizzou Network will also feature video of classic games, something that other digital networks, such as [Alabama's TideTV](#), feature as well. Grinch said the department is working with KOMU and checking university archives to see what is available.

"When we launch we'll have four or five historic videos, and we'll eventually look to have four or five a month," Grinch said.

The Mizzou Network will not be on the same level as the University of Texas' Longhorn Network — a 24/7 TV station hosted by ESPN. Many point to the Longhorn Network as a major reason that Missouri and three other schools have left the Big 12 in the past two years.

Grinch describes the Longhorn Network and Mizzou Network as "apples and oranges." But, he said, "you had to take notice of what they were doing."

In addition to increasing its reach online, the department is also increasing its reach in the mobile realm.

On Tuesday, the department introduced the [Mizzou Tiger Sports application](#), a version of the department's website compatible with tablets and mobile devices.

Both the app and the Mizzou Network are being produced with CBS Interactive, the Web host for [MUTigers.com](#) and many other collegiate athletic sites.

When videos are posted on the Mizzou Network they will immediately become available on the [CBS sports mobile app](#).

The relationship with CBS also allows content from MUTigers.com to be pushed to outlets such as Yahoo, YouTube and MSN through the CBS Audience Network.

Even though the Mizzou Tiger Sports app and Mizzou Network will both be available on Thursday, Grinch said there is still work to be done.

"The word is getting out there, but it's a little different than promoting a game or, say, a movie," Grinch said. "Part of the promotion will really happen after it launches."

He said people will need to see the network to really understand what it offers.

"It's like explaining TV to someone before TV was invented," he said.

MISSOURIAN

Transitional housing complex for homeless youth set to open in Columbia

Wednesday, November 30, 2011 | 6:00 p.m. CST; updated 6:31 p.m. CST, Wednesday, November 30, 2011
BY HEATHER RISKE

COLUMBIA — Central Missouri Community Action and Rainbow House broke ground at 1004 North 7th St. Wednesday morning for the construction of a transitional housing apartment complex for homeless youth in Columbia.

Rainbow House's transitional living program, Sol House, already has two similar apartments in Columbia. The new building will be set up differently, with room for more residents than the other complexes, said Claire Slama, director of the homeless youth at Rainbow House.

The new apartment will provide housing for 10 homeless youth. More than 190 people are on the Sol House waiting list, said Dianna Moore, director of economic development at Central Missouri Community Action.

"This is just a small portion of helping those youth who are homeless," she said.

The groundbreaking is the last of several Rainbow House events promoting national Homeless Youth Awareness Month.

Central Missouri Community Action is building the facility, and staff from Sol House will be in charge of the day-to-day operations and services for the residents.

"This facility will help the homeless youth get on their feet and become stabilized so that they can eventually move into permanent housing," Moore said.

The energy-efficient, sustainable complex was designed by students in the MU School of Architectural Studies, according to a media release.

"We worked with graduate students to design the facility to utilize passive solar and sustainable materials," Moore said. "Homeless youth were interviewed to gain ideas for the design of the facility, and discussions were held with the neighborhood association to help the design fit into the neighborhood."

The complex will have five 2-bedroom apartments, and will be the first transitional living home in Columbia to have a handicap accessible unit, Slama said.

Funding for the construction of the facility is being provided the U.S. Department of Housing and Urban Development's Supportive Housing Program, the City of Columbia Community Housing Development Organization and Neighborhood Stabilization program and the Missouri Housing Development Commission's Housing Trust Fund, the release stated.

Construction is set to begin by the end of the year, and the complex should open in late May or June 2012, Moore said.

Lawmakers want Army Corps of Engineers to focus on flood prevention

By DAVID GOLDSTEIN

Lawmakers from Missouri and other nearby states insisted Wednesday that the U.S. Army Corps of Engineers emphasize flood prevention above anything else in managing the Missouri River.

The occasion was a hearing before the House Subcommittee on Water Resources and Environment, scheduled to look into the question of how to prepare for the next deluge, even as Missouri and other states in the river basin still reel from the impact of record flooding this year.

Panel members as well as witnesses were nearly unanimous that issues related to fish and wildlife, recreation and other river uses had to take a back seat.

"I believe that we are asking the Corps of Engineers to juggle too many priorities," said Republican Rep. Sam Graves of Missouri. "We must make clear once and for all that the prevention of flooding has to be the number-one priority."

Graves, who said thousands of acres in northwestern Missouri were "utterly devastated," has introduced legislation to remove fish and wildlife management as one of the corps' priorities.

The overall impact of the flooding throughout the basin is more than \$2 billion, according to Congress. It destroyed farmland, homes and infrastructure. Five people died.

In Missouri alone, the combination of rain and snowmelt flooded 207,000 acres of agricultural land, resulting in \$176 million in lost revenue, according to the University of Missouri College of Agriculture, Food and Natural Resources. It also created a spillover effect on local economies.

The Missouri River begins in Montana, and this spring flooded along its path through North and South Dakota, Nebraska, Iowa, Kansas and Missouri.

Brig. Gen. John McMahon, commander of the northwestern division of the corps, said the agency already has begun shifting funds to deal with damaged levees up and down the river. But it won't be enough, he said.

"The wiggle room is narrow," McMahon said. "At some point, we're going to need new funds for repair and restoration of the system."

The corps has come under heated criticism from many who fault it for not doing enough ahead of time to prepare for the water.

"We probably could have - should have - done a better job of communicating," McMahon said. But the "successive bouts of rain really threw us for a loop."

In Holt County, which lies in the northwestern corner of Missouri, the flooding breeched 32 levees on the river's western border. Holt County Clerk Kathy Kunkel told the panel that the breaks in some cases were half a mile wide; in others, 50 feet.

With nearly 20 percent of the county already set aside for wildlife protection by either the federal or state government, she said residents feel like Washington needs to pay less mind to fish and more attention to people.

"We've given enough," Kunkel said in her prepared testimony. "Holt Countians feel threatened and endangered. The American farmer in our region is fast approaching extinction."