



NEWSLETTER

OCTOBER 2014

Dean's Message

In this newsletter, we highlight a graduate student, who we believe serve as an excellent example of many graduate students at University of Idaho. Ms. Leslie Kerby won the 2014 Out to Innovate™



Graduate Scholarship of the National Organization of Gay and Lesbian Scientists and Technical Professionals, who currently is a Ph.D. candidate in Nuclear Engineering at the University of Idaho. The story about her tells us what our graduate students can achieve, and how our graduate programs can help them achieve their goals in their academic study and scholarly research. UI is fortunate to have these highly motivated and creative students, who flourish in their graduate programs at UI.

In this newsletter, you will also find a news release about a major grant that College of Graduate Studies has received from the National Science Foundation. This grant will be used to support important initiatives for the recruitment and retention of American Indian and Native Alaskan students in STEM areas. We hope that the initiatives supported by this grant will help UI raise its profile as a hub for graduate education among American Indians and Native Alaskans, and help improve STEM education for Native students regionally and nationally.

In addition, several important changes for graduate admissions and thesis/dissertation submission are explained in the newsletter. We hope that these changes can help graduate students pursue their graduate degree at UI and assist faculty and staff members in managing graduate programs.

Finally, I want to let you know that the numbers of applications for and new graduate students enrolled in our graduate programs for Fall 2014 are higher than those for Fall 2013!

Out to Innovate™ 2014/2015 Scholarship Recipients Announced for LGBTQ STEM Students

PRESS RELEASE: National Organization of Gay and Lesbian Scientists and Technical Professionals, Inc. (NOGLSTP)



The winner of the 2014 Out to Innovate™ Graduate Scholarship is Leslie Kerby. Ms. Kerby is a Ph.D. candidate in Nuclear Engineering at the University of Idaho. Growing up in a predominantly Mormon culture, she completed her BS in Physics in 1998 and then paused her science career to focus on raising her children. Following a divorce (and coming out) over a decade later, she re-entered the

science field to support herself and her five children. Her research is in applied nuclear physics. She has partnered with Los Alamos National Laboratory to upgrade parts of the spallation reaction models used within the transport code, MCNP6, for her dissertation. She completed her Masters in May of 2013. She was awarded the American Physical Society M. Hildred Blewett Fellowship in 2013-2014, one of only three female physicists across the US to be so recognized. In addition, she was a Roy G. Post Foundation Scholarship recipient in 2013, recently was chosen by the American Nuclear Society as a John and Muriel Landis Scholar (2014), and is a member of the US Delegation for the 2014 International Conference on Women in Physics. "I am deeply honored to be selected as the NOGLSTP Out To Innovate™ graduate scholar. I recognize the many applicants who were also deserving and I am grateful to be acknowledged with this prestigious award. I promise to represent LGBTQ scientists well and to continue my efforts to promote awareness and acceptance in both the workplace and society. I am also extremely grateful for the financial aspect of this award. As a student supporting five children, this scholarship is very welcome."

Rance Larsen Named Director of Graduate Admissions



The College of Graduate Studies is excited to welcome Rance Larsen as our new Director of Graduate Admissions. Rance brings over 15 years of admission experience at institutions in Washington, Colorado, Minnesota, and Missouri. He is coming to us most recently from Missouri University of Science and Technology in Rolla, Missouri, where he served as Director of Admissions and Manager of Enrollment Development. He brings both an understanding of the enrollment function and a passion for technological solutions.

Working with the graduate admissions staff, he will lead our efforts to strengthen our services to all potential graduate students, both international and domestic.

Celebrating 60 Years

The College of Graduate Studies would like to congratulate the faculty, staff and students at the Idaho Falls campus for 60 years of advanced education and research. The IF campus works diligently to serve the needs of it's students and business and industry partners in addressing not only state but national energy needs.





The College of Graduate Studies encourages you to submit feature stories. If you have a news item you would like to highlight in our next newsletter please forward it to **Sue Branting** at sueb@uidaho.edu.

UI Receives Grant for Recruitment, Retention of Native STEM Students

Story by Tara Roberts

The National Science Foundation recently awarded the UI College of Graduate Studies nearly \$600,000 to support this program, which will be implemented through the Pacific Northwest Alliance: Collaborative Opportunities for Success and Mentoring of Students, or COSMOS.

UI will work collaboratively with Montana State University, the University of Montana and Washington State University, which have received similar grants to focus on recruiting and retaining other minority students who are underrepresented in STEM. Together, the institutions received a total of \$2.4 million, the largest grant of its kind NSF has awarded to date.

The grant will support UI's work as it develops, implements and studies the effectiveness of a discipline-focused, culturally relevant model for recruiting and mentoring Native students. Once a model is developed, the university could adapt it for other minority student groups and share it with other institutions.

Jie Chen, dean of the UI College of Graduate Studies, said he hopes this will raise UI's profile as a hub for graduate education among American Indians and Native Alaskans, and help improve STEM education for Native students regionally and nationally.

"Recruitment and retention of minority students, particularly with underrepresented students, is part of the mission of graduate education at this university. It is one of our most important strategic goals," Chen said. "Fundamentally we believe that diversity serves as an engine that drives excellence. If we want to promote excellence in graduate education, we have to put effort into promoting diversity."

COSMOS co-primary investigator Ed Galindo, associate director of the Idaho Space Grant at UI and director of the nonprofit Native American Research and Education Foundation, said retention efforts are a particularly important piece of the puzzle.

"It's one thing to get our Native students here on campus. It's another thing that they walk across that stage with diploma in hand," Galindo said. "I'm very pleased we have the opportunity to focus on getting Native students here and getting those students their degree."

UI will study ways to help Native graduate students succeed, including mentorship programs. Galindo said all students, but particularly American Indian and Native Alaskan students, benefit from finding a sense of place at a university, which includes feeling welcomed, finding support systems and being part of a larger academic community.

This four-year program will work hand-in-hand with the Indigenous STEM Research and Graduate Education program, or ISTEM, which is a UI-led national network of institutions collaborating to increase the number of Native students entering and completing master's and doctoral programs in

STEM fields. UI received a grant to launch the ISTEM program from the National Science Foundation in June.

"UI can lead the nation on STEM education with American Indians. I'm not saying we have all the answers, but we have some very talented people on our team. We can look at things critically and can ask some questions that have needed to be asked for a long time," Galindo said. "I think we're well on the way to using good research, asking good questions and working with other institutions to help find those answers."

Also working with COSMOS at UI are Yolanda Bisbee, the university's tribal liaison, who will help the project staff coordinate with Native populations, and Jerry McMurtry, associate dean of the College of Graduate Studies, who will be the project's liaison to university faculty and the alliance with other institutions.

The grant was funded through the National Science Foundation's Alliances for Graduate Education and the Professoriate program.

Leading Them to the Palouse

He hasn't traveled to an obscure location in India to recruit for a championship athletic team. That concept has already been tried by Jon Hamm in Disney's "Million Dollar Arm." Jerry McMurtry, Associate Dean of the College of Graduate Studies, has traveled to the second most populous country in the world because research shows that the 25% of India's population with the highest IQ's...is greater than the total population of the United States. This means that India has more honors kids than America has kids.



Jerry has taken his 18 years of University of Idaho legacy information, leadership experience and knowledge of the Vandal story to recruit academic talent. He wants to bring to the Palouse some of the best and brightest that can enhance campus innovation and expand research. He spent much of September visiting cities like Hyderabad, Vizag, Vijayawada and Khammam in India. He spoke to hundreds of India's prospective student population that look to America to further expand their academic foundation.

"It's going to be a lot of work," Jerry said, as he left on his 13-day recruiting experience. This is the type of energy that needs to be expended to compete in a market where the domestic population of college bound high school seniors is shrinking and changing. In addition, student financial aid resources are being reduced and competition for quality domestic and international graduate students is increasing.

Gone are the days of "If you build it they will come." Academic institutions that intend to grow in this era need to focus on customer service, electronic outreach, social media and personalized communication. And, yes, they still need to take their message to the streets. Sometimes that means halfway around the world.

Admissions

Another graduate school class is embarking upon a transformational chapter in their lives. It has been our pleasure to work together with you to help bring in this fall class. By the time we are finished we will have worked with over 2720 Graduate School admission applications this year. Our Spring 2015 application deadlines have just past. It is time for students to begin applying for fall.

- **The Fall 2015 application priority date is February 1st**
- **The final date to receive and process international admission paperwork for fall is May 1, 2015**

From now through the middle of April is when we process the largest number of applications for the year. We recognize that some departments have earlier admission dates and we will work to accommodate your decision timelines.

So, as we enter this Fall/Summer application processing period, we ask your patience as we meticulously process each and every applicant document for another great Summer/Fall semester. Thank you for your diligent effort and help as we work together to serve our graduate student applicants.

Policy Updates

Thesis/Dissertation Submission Changes

- ⇒ Defenses may NOT be scheduled during the last 3 weeks of the semester.
- ⇒ Major professors will receive ETD formatting comments that were previously sent only to the student.
- ⇒ The College of Graduate Studies requires only one copy of the document, on bond paper, and only after the student has been told officially that their document was ready.
- ⇒ Original signatures ONLY are acceptable on the Authorization to Submit page. We will no longer cut, paste, photocopy, etc. any signatures. Students need to either get the signatures at their defense or send the page to the professor via FedEx, UPS, USPS, etc.

Fall 2014 Deadlines

Nov. 21

Last date to submit your document for the FIRST format review. Submitting later may delay the review of your document and delay the approval of your format.

***Nov. 26 LAST DATE FOR FINAL DEFENSES.**

Dec. 5

Last day to submit the final version of your document in ETD (this is the fully revised—both content and format—version of your document that will be published online, if you are planning to make the Dec. 19th deadline. If you are unable to meet this deadline please contact Melinda for assistance in submitting your document.

Dec. 12

Final day that the bond copy of your document can be delivered to Morrill 207; this is the print copy of the final ETD version that will be housed in the library.

Dec. 19

Final day for Non-Thesis Report (NTR) submissions.

Mark Your Calendar

Upcoming Events



Innovation Showcase
research • scholarship • vision

2015 Innovation Showcase

Wednesday, April 22, 2015

Idaho Commons

For More Information

Contact Sue Branting

208-885-2647 or sueb@uidaho.edu

Thesis/Dissertation

Electronic Submission (ETD) Workshops

October 8th - 9:00am - Whitewater Room

October 14th - 10am - Horizon Room

October 17th - 12pm - Horizon Room

October 20th - 1:30pm - Whitewater Room

All sessions are 1 hour

Contact Us

Jie Chen

Dean

208-885-6245

jiechen@uidaho.edu

_Cheri Cole

Management Assistant

208-885-6243

cheric@uidaho.edu

Jerry McMurtry

Associate Dean

208-885-2337

mcmurtry@uidaho.edu

Melinda Deyasi

Thesis & Dissertation Advisor

208-885-6242

melindad@uidaho.edu

Rance Larsen

Director Graduate Admissions

208-885-2809

rance@uidaho.edu

Pam Beutler

Int'l Applicants

208-885-4665

beutler@uidaho.edu

Kathy Duke

Assistant to the Dean

208-885-6245

kduke@uidaho.edu

Roxane Fredrickson

Domestic Applicants / A-M

208-885-4663

roxanef@uidaho.edu

Sue Branting

Assistant to the Associate Dean

208-885-2647

sueb@uidaho.edu

Tammy Renfrow

Domestic Applicants / N-Z

208-885-4422

trenfrow@uidaho.edu

Idaho Falls Engineering Professor Improves Designs for Small Reactors

By Tara Roberts



A common nuclear power plant costs billions of dollars, thousands of tons of material and years of construction to complete. Fatih Aydogan, an assistant professor in the University of Idaho College of Engineering's Nuclear Engineering Program in Idaho Falls, is studying much smaller nuclear reactors that have greater potential for affordability, reliability and safety.

Aydogan and his graduate students study small modular reactors, or SMRs, which have an energy output of less than 300 megawatts electrical, in contrast to the average large reactor's 1,000 MWe output. Small reactors are growing in popularity worldwide, and the U.S. Department of Energy has increased support for their use in the United States in recent years.

Aydogan's team focuses on improving standard SMR designs.

"We are trying to improve the current systems so they will be safer, more simple and more economical," says Aydogan, who conducts research at the Center for Advanced Energy Studies (CAES), an Idaho Falls-based research center that brings together the UI, Boise State University, Idaho State University and the Idaho National Laboratory.

One aspect of his team's research is studying how to downscale reactor design so an SMR can be manufactured whole at an outside facility and shipped to the site where it will operate.

"If we decrease the size, we can also decrease the capital cost," Aydogan says.

Aydogan and his students also are investigating safety systems for SMRs, which can be easier to manage than traditional nuclear plants, reducing the potential for large-scale accidents. One method to increase safety is using passive safety systems.

"Passive safety means that in the accident conditions, such as an earthquake or a tsunami, the reactor can shut down itself by using the basic nature of physics, such as gravity. Emergency water-cooling systems could run by gravity rather than pump to make the system passive," Aydogan says.

SMRs also have the potential to be placed underground. If terrorists want to crash an airplane into the reactor, there will be no reactor over the ground, Aydogan say.

Aydogan also is developing computational tools to analyze SMRs and other nuclear reactors to better understand how efficiently nuclear systems work during nuclear accidents and abnormal events as well as how components, especially new designed components, within a reactor interact with each other for various operating conditions and scenarios.

Before he came to the UI, Aydogan studied SMRs for Westinghouse-Toshiba. The company will soon use one of his designs, for which he recently published a patent, for its SMRs. Aydogan says his team at CAES will continue partnering with nuclear industry leaders to conduct research and transfer technology.



Mailing Address Line 1
Mailing Address Line 2
Mailing Address Line 3
Mailing Address Line 4
Mailing Address Line 5

PLEASE
PLACE
STAMP
HERE

University of Idaho
College of Graduate Studies
875 Perimeter Drive MS 3017
Moscow ID 83844-3017