



Science Initiative News

Fall 2021

Program Updates

32 faculty and graduate students began their yearlong LAMP Fellows training in active, inclusive pedagogies in the spring of 2021. They attended either an in-person or online summer institute where they were immersed in Place-based Education (PBE). In-person fellows shared an outdoor learning environment in the Snowy Range. Online fellows experienced place from locations around the world - Wyoming to Pennsylvania and all the way to Germany. Throughout the summer, fellows finalized an instructional strategy that they are implementing in their fall and spring courses. This Fall 2021 semester, 19 Learning Assistants from diverse disciplines are partnering with 16 LAMP-trained faculty members to assist in active learning facilitation. While engaging in practicum, LAs also take the Best Practices in Active Learning course where they learn how to do educational research, write a teaching & learning philosophy, and contribute to the [Active Learning Spectrum!](#)

This fall the **SI Roadshow** visited HEM Junior/Senior High School in Hanna on October 15th and will be visiting Skyline Academy in Pinedale later in the fall for hands-on STEM activities in the K-12 classroom. UW undergraduate and graduate students interested in helping with outreach development and implementation can feel free to reach out to learn how to get involved. The Roadshow is continuing to build additional collaborations with K-12 teachers, educators, and community members this fall, and individuals wishing to learn more about possible collaborations are encouraged to get in touch!

The **Wyoming Research Scholars Program (WRSP)** includes 55 scholars for the 2021-22 academic year, continuing to demonstrate steady, positive growth since its initial cohort of four students in 2015. With a return to more in-person experiences in Fall 2021, the WRSP is supporting rich, immersive research experiences with UW faculty mentors, while adhering to current safety guidelines. This fall, WRSP students are leading a recognized student organization (the Wyoming Undergraduate Research Coalition, or WURC) for undergraduate researchers, where they will engage in professional development and design and deliver STEM outreach opportunities. In addition, the program will host an in-person WRSP Symposium with poster presentations in late November.

IMPORTANT DATES

- Every Friday, LAMP Lighters come together for LAMP Coffee & Curriculum from 8-9 AM [on Zoom!](#) During these sessions prior LAMP fellows facilitate sessions about active learning strategies they have implemented.
- WURC meetings occur the 3rd Friday of each month at 6 PM (Location TBD). Contact WURC for more information at WyoURC@gmail.com.
- The WRSP Poster Symposium will occur the last week of November.
- Webinar with Dr. Xueli Wang, author of "On My Own: The Challenge and Promise of Building Equitable STEM Pathways". This webinar will be accessible to broad audiences across institutions and will be held November 12th from noon-1 PM.

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Teen Science Cafe Rural Fellowship

Karagh Brummond, Director of SI Engagement and Outreach, has been accepted as one of 9 new Teen Science Café Fellows who represent a wide range of locales nationwide. [Teen Science Café programs](#), funded by the NSF, are a free, fun way for teens to engage in STEM. In these events, teens socialize and have a lively conversation with local scientists and engineers about current cutting-edge developments in their fields, all in a relaxed and informal out-of-school setting. As part of this program, Karagh will develop and implement Teen Science Cafes, engage in professional development, and learn from the cohort about innovative ways to reach teens in Wyoming communities with exciting STEM opportunities.

LAMP Educator's Learning Community

Educators in the LAMP Educator's Learning Community (ELC) will present 2 years of educational research at the Original Lilly Conference on College Teaching in November in Oxford, Ohio. McKensie Phillips, Reshmi Singh, Deepthi Amarasuriya, Tawfik Elshehabi and Amy Rhoad will present on topics including student learning assessment in meat science, student/faculty/community partnerships, layered active approaches to teaching physics, empowering students' success in diverse classrooms, and using case studies to teach microbiology. Each of these educators will share their Lilly presentations with Wyoming educators during the Friday LAMP Coffee & Curriculum sessions held from 8-9 AM Fridays on Zoom. Attendance is welcome!

LAMP Supports Wyoming's Howard Hughes Medical Institute (HHMI) Inclusive Excellence Efforts

LAMP Director Rachel Watson leads Wyoming's Howard Hughes Medical Institute (HHMI) Inclusive Excellence team. Wyoming is one of only fifteen institutions nationwide to be a part of the [National Learning Community](#) devoted to inclusivity in 2-year to 4-year transfer pathways. Throughout the summer, Rachel has led a book club for the National Learning Community and has organized a webinar by Dr. Xueli Wang, author of "On My Own: The Challenge and Promise of Building Equitable STEM Pathways". This webinar will be accessible to broad audiences across institutions and will be held on November 12th from noon-1 PM.

LAMP Supports Outreach and Engagement Efforts

LAMP Director Rachel Watson serves as the faculty advisor for a graduate student group called the Community Outreach Engagement Program in STEAM Education (COPSE). Committed to melding science and the arts, COPSE engages statewide educators and K-12 students in innovative outreach projects. In August 2021, COPSE hosted the first annual EON conference - a 2-day event held at the Art Museum and the Berry Biodiversity Center. Supported by a Berry Biodiversity Innovative Outreach Grant, the 2-day conference enabled cross-level conversations between student outreach designers and K-12 teachers.

People in the Science Initiative



WRSP Scholar

Austin Stephen
Hometown: Cheyenne, WY
Major: Computer Science
Faculty Mentor: Lars Kotthoff

Austin works under the supervision of Dr. Lars Kotthoff in the MALLET lab helping the research group improve automated algorithm selection. Automated algorithm selection uses machine learning to

take advantage of the complementary nature of existing algorithms that solve challenging problems by applying the optimal algorithm to a given problem.



LAMP Learning Assistant

Bradon Bryngelson
Hometown: Gillette, WY
Major: History
Faculty Mentor: Joe Russo

This semester, Bradon is assisting in teaching Psychology 2450: Fundamentals of Development. Dr. Russo writes of Bradon: "Bradon has been a Godsend. He is always in his seat well before class begins and is therefore available to

students as they arrive. Is knowledgeable about the material and the ways by which I try to lead students to deepened understandings. Delivers lectures on his own and is at all times open to trying new approaches. A solid teaching assistant to be sure!"



LAMP Fellow

Chelsea Duball
Assistant Professor, Grand Valley State University (former UW PhD student)

Chelsea Duball is our featured LAMP Fellow. In the Spring of 2021, as a PhD candidate, Chelsea served as a LAMP Learning Assistant (LA) for Bethann

Merkle's Science Communication course. But Chelsea didn't stop there. This fall, she began a tenure-track professorship, and she applied for and was accepted as a LAMP Fellow. Chelsea excelled in the online Summer Institute and designed an instructional strategy that allows students to "explore the power and potential of graphic design tools to help [learners] expand upon their science communication strategies, style and reach".