

From: Laurie Mecham
Subject: Utah Stable Isotope Courses - Application period open

Announcing the Stable Isotope Short Courses at the University of Utah, June 2017

Stable Isotope Biogeochemistry and Ecology, June 12-23, 2017

Isotopes in Spatial Ecology and Biogeochemistry, June 12-23, 2017

<https://itce.utah.edu/courses.html>

We are pleased to announce that the application period for the **2017 Stable Isotope Short Courses** at the University of Utah will open **December 5, 2016**.

*[Stable Isotope Biogeochemistry and Ecology Course](#) (aka "Iso-Camp"), emphasizes fundamental environmental and biological theory underlying isotope fractionation processes and a broad spectrum of ecological and environmental applications

*Isotopes in [Spatial Ecology and Biogeochemistry](#) (aka "The **SPATIAL** Short Course"), focuses on large datasets, programming, GIS analysis and modeling, and applying isotopic data to solve problems in diverse systems using these tools

Both classes will be limited-enrollment, multi-instructor lecture (morning) and laboratory (afternoon) short courses. The courses are targeted to graduate students and postdoctoral investigators interested in learning more about the applications of stable isotopes at natural abundance levels to environmental, biogeochemical, marine, and ecological studies. A limited number of lecture-only slots will be reserved for postdocs and faculty looking to gain exposure to scientific and technical course content without the full immersion experience offered by the full lecture+lab sequence. The courses will:

- 1) be offered at the University of Utah in Salt Lake City,
- 2) offer limited enrollment in order to maximize interaction and access to laboratory resources,
- 3) consist of morning lecture/discussions and afternoon laboratory; each course will feature ~17 instructors, experts selected from across the country for their breadth of experience and for their interest in teaching and interacting with students,
- 4) include hands-on laboratory experiences.

For Iso-Camp, the laboratory experiences will include full access and use of ThermoElectron isotope ratio mass spectrometers and Picarro cavity-ring down spectrometers. The IRMS is equipped with elemental analyzers, continuous flow capacities, GC, TCEA, pre-con, laser, common-acid-bath. Available also are vacuum preparation lines for organic and inorganic compounds of biological and environmental interest.

For the SPATIAL short course, students will work with Picarro CRDS analyzers and a range of geospatial data management and modeling environments, including MySQL, ArcGIS, IsoMAP, R, and various research software packages developed and used by the instructors, their students, and collaborators.

Many of the evenings in both courses will be set aside for discussions of current research interests, group dinners and additional talks. There will also be opportunities for social events in the nearby Wasatch Mountains.

IsoCamp and SPATIAL participants have come from all across the United States as well as from many different foreign countries. We select students with a diversity of academic interests, geographical diversity, and research experiences in mind. We seek students who are interested in learning broadly about stable isotope applications and in interacting with other students and faculty. **We encourage applications from members of underrepresented groups.** Past participants have had backgrounds in disciplines including animal and plant physiology, ecology and ecosystem science, biogeochemistry, anthropology, atmospheric science, marine science, oceanography, paleontology, forensic science, industry, and geology.

Applications will be accepted from December 5, 2016 until February 3, 2017. Application forms for both courses can be reached through <https://itce.utah.edu/apply.html>.

We will be offering a limited number of participant support awards to offset expenses related to participation in the courses. If you are interested in being considered for one of the awards, additional information beyond the initial application is required. Details are posted on the application website. We will announce recipients by the last week of February 2017, as well.

On behalf of the other instructors who participate in these courses from our campus as well as from across (and beyond!) the United States, we look forward to your application and encourage you to explore the program information on our website.

Warm regards,

Gabe Bowen, Thure Cerling, and Jim Ehleringer

<https://itce.utah.edu/courses.html>