

# the epic ADVANTAGE

## Alaska: People, Plants, and Culture

### EPIC Advantage Experience 2018

July 12 – 29, 2018

**Leader:** Courtney Scerbak



### Description of Experience, Location and Research:

The goal of this research experience is to study the cultural uses of plants (ethnobotany) in three regions of Alaska (i.e. Interior boreal forest, Southwest tundra, Southeast rainforest), with an additional focus on the connections between the health of animals, humans, and the environment.

With its extreme weather and photoperiods, life in Alaska is challenging for both humans and plants. Alaskan peoples have adapted to life in this extreme environment, in part, by making use of a diverse collection of plants as foods, as medicines, and for building connections with others (i.e. culture). Importantly, Alaskan traditional ecological knowledge holds that a diverse collection of local plants and fungi benefit human health and acknowledges that changes in the climate are changing humans' interactions with animals and plants. This EPIC Advantage research experience will provide an opportunity for first-hand experience of the importance and relevance of the interconnectedness of the health of humans, animals, and their environment, or "One Health," by pursuing ethnobotany projects designed in collaboration with Courtney in three regions in Alaska.

To this end, we will visit three distinct locations in Alaska:

- Fairbanks (Interior), known for its boreal forest ecosystem and proximity to large interior mountain ranges and home to the University of Alaska Fairbanks, one research hub in the state
- Bethel (Southwest), a town of about 6,000 inhabitants accessible only by air or boat in the tundra of Southwest Alaska and home to Ethnobotany Certificate Program at the UAF Kuskokwim campus
- Ketchikan (Southeast), the Southeastern-most town in Alaska located on a large island covered in rainforests

At each of these locations, we will study the cultural uses of seasonal plants through informal learning experiences (e.g. museums, nature centers), meetings with local people and researchers, and outdoor experiences (e.g. hiking). In all three regions, we will also attend and/or participate in cultural events (e.g. festivals, art events) whenever possible.



### **Expectations for Students:**

Participate in a 1-credit EPIC Advantage Orientation Seminar in the Spring of 2018. This course will allow the research group to study relevant background information, design more impactful research projects, develop our research community, and organize the trip logistics (e.g. purchase plane tickets) before the summer begins.

While in Alaska, student researchers will:

1. Maintain a research notebook (including observations, drawings, and personal reflections of experiences)
2. Create three ethnobotanical objects and three voucher specimens, one in each of the three regions
3. Design a culminating research poster (i.e. research background, photos, description of work, reflections)
4. Design and present a group Presentation of Learning

**Participating Faculty:** Courtney Scerbak is an Assistant Professor of Biochemistry whose scholarly interests center around aging and the role foods and chemicals derived from plants (phytochemicals) play in this process. Before coming to Earlham, she lived in Alaska for nearly 10 years, studying for her B.S. and Ph.D. at the University of Alaska Fairbanks. While training to be a biochemist in Alaska, Courtney encountered the broader field of ethnobotany, which informed the latter part of her Ph.D. research and set the stage for her to bring Earlham students to Alaska to study!

**Student Eligibility:** Any rising sophomores, rising juniors, or rising seniors, and May 2018 graduates who have not yet claimed their EPIC Advantage opportunity, may apply for this experience. There are no prerequisites for this experience.

**Cost to Students:** This EPIC Advantage student experience is funded. This includes travel to, from and within Alaska, room and board, and other expenses required by the program. Personal expenses (e.g. souvenirs, coffee breaks) will be covered by the student.

**Application:** If you would like more information or have questions about this experience please email or drop by Courtney's office ([scerbco@earlham.edu](mailto:scerbco@earlham.edu); SH138). Applications can be received from students starting on October 15, 2017. Application window closes on November 13, 2017. Apply in Handshake.

*PROGRAM PLANS SUBJECT TO CHANGE*

