The 2014 RAP Retreat will be held September 22-23 with Dr. Thomas Thornton, University of Oxford. See the Coming Up section for additional details.

**Wednesday, September 17**

1:00 -2:00 pm  
Vera Alexander Learning Center (201 O'Neill)  
Climate Change Seminar  
Why is your point of view important in Arctic geocological studies?  
Marcel Buchhorn, Institute of Arctic Biology

2:30 pm  
Murie Auditorium, 104 Murie Building  
2014 Irving Scholander speaker Dr. John Speakman  
*Heat Dissipation Capacity as a Factor Limiting Sustained Energy Intake*

3:30 - 4:30 pm  
Vera Alexander Learning Center (201 O'Neill)  
Institute of Marine Science Seminar  
R/V Sikuliaq IT science deployment  
John Haverlack, School of Fisheries and Ocean Sciences

5:30 – 6:30 pm  
Schaible Auditorium, Bunnell Building  
UAF Research Showcase: Introduction to Research and Creative Scholarship at UAF  
Life on ice: Microbial evolution in the cryosphere  
R. Eric Collins, School of Fisheries and Ocean Sciences  
This series is sponsored by the Undergraduate Research & Scholarly Activity (URSA) office. Presentations are intended for a general audience and all are welcome.

**Friday, September 19**

12:00 -1:00 pm – webinar  
or attend in person at the National Weather Service Conference Room, 351 Akasofu Bldg (IARC)  
Co-sponsored by the National Weather Service and the Alaska Center for Climate Assessment and Policy (ACCAP)  
National Weather Service Alaska climate forecast briefing  
For online access register at [http://accap.adobeconnect](http://accap.adobeconnect).

3:30 – 5:10 pm  
201 Reichardt Building  
Department of Geosciences Seminar  
The birth of earthquakes  
Carl Tape, Department of Geosciences  
(Originally scheduled for 9/12/14)

3:30 -5:00 pm  
531 Duckering Building
Water and Environmental Research Center Seminar
Title & speaker TBA

3:45 pm
Globe Room, 215 Elvey Building (GI)
Department of Physics Journal Club
Check http://ffden-2.phys.uaf.edu/journal_club.htm or call 474-7339 to see if there's a presentation scheduled for this week and to confirm the location.

**Coming up**

2014 RAP Retreat Schedule of Events with guest facilitator Dr. Thomas Thornton, Director of MSc in Environmental Change and Management, Senior Research Fellow, Environmental Change Institute, Associate Professor, University of Oxford

**Monday, September 22**
11:00 am – 4:00 pm Lunch and birchbasket making workshop at the Fairbanks Folkschool. Limited spaces. Please contact Ross Dorendorf (rrdorendorf@alaska.edu)

6:00 pm Public Seminar
Murie Auditorium
*Our Grandparents’ Names on the Land. What Aboriginal Place Names can Teach us about Ecosystems*
Light refreshments to follow.

**Tuesday, September 23**
Murie 301
8:30 Continental breakfast
9:00 Workshop *Pacific herring and in North Pacific social-ecological systems: co-evolution and resilience*
12:00 Lunch
1:15 – 3:00 pm Individual meetings with Dr. Thornton. Please contact Ross Dorendorf (rrdorendorf@alaska.edu) to schedule an appointment.

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**Monday, September 22**
1:00 pm
Wood Center, Conference Room B
Professor Bill Moran, Royal Melbourne Institute of Technology, Fellow, Australian Academy

Abstract: Tracking Rotations
The classical Kalman Filter describes the optimal filter for a linear process with Gaussian noise with linear measurements also with Gaussian noise. This is widely used for tracking of objects under linear motion. Relaxation of the hypotheses inevitably results in approximations rather than closed form solutions.

In this talk I will discuss how to extend these filters to the rotation group. This enables tracking of rotational motion of objects. While ultimately it is necessary to approximate, the approach I will describe is both rigorous and remarkably effective. It requires a study of maximal entropy distributions on the rotation group. The results and accompanying software are largely the work of my postdoc, Sofia Suvorova, in collaboration with Stephen Howard from DSTO and myself. It has a wide range of applications but has, so far, been primarily developed into an arm motion tracker using IMU sensors for recovering stroke patients.
Thesis defense: Chas Jones
Monday, Sept. 29, 2:30 PM
Murie Auditorium, 104 Murie Building

*Ecohydrological Linkages: Connecting the dots between hydrology, climate, and people of the North*

**Abstract:** In my research, I use interdisciplinary research methods to study how changes in hydrology associated with climate affect social-ecological systems in Alaska. Partnerships were established with residents of Fairbanks and Tanana to develop scientific investigations relevant to rural Alaskans. In one project, I incorporated local knowledge into scientific models to identify a social-ecological threshold used to model potential driftwood harvest from the Yukon River. In another project, I developed a physically-based, numerical model to examine the importance of permafrost degradation in explaining unfrozen river conditions in the winter. In addition, field mapping and remote sensing techniques were also used to map dangerous ice conditions on the Tanana River. Unsupervised classification of high-resolution satellite imagery was used to identify and map open water and degraded ice conditions on the Tanana River. My research demonstrates how collaborations between scientists and local stakeholders can create tools that are useful and relevant for non-academics. I conclude that regional-scale adaptations and technological development (such as modeling and remote sensing tools) may help to alleviate the effects of extreme events (such as flooding) or unexpected environmental conditions (such as thin or hazardous ice conditions in the winter) driven by climate.

**ABSTRACTS/MEETINGS/WORKSHOPS/PROFESSIONAL DEVELOPMENT**

Dear Colleagues:
In partnership with the Education and Human Resources Directorate, EPSCoR is hosting a webinar on *Monday, September 22, 4pm (EDT)* for all those interested in learning more about the NSF Graduate Research Fellowship Program (GRFP). The attachment provides instructions for joining the webinar.

The NSF Graduate Research Fellowship Program provides a prestigious award that supports research-oriented students in a wide range of STEM and social science fields during graduate school. This webinar will provide an overview of the GRFP and program updates for the FY 2015 competition (incl. deadlines, application and review processes) and other program activities such as GROW (http://www.nsf.gov/grow).

The intended audience is faculty and university administrators, so please distribute this invitation to all who may be interested. No registration necessary. For more GRFP information visit www.nsfrfp.org. Question regarding the webinar logistics should be forwarded to Liz Lawrence (elawnc@nsf.gov).

Thanks,

Denise Barnes
Head, NSF EPSCoR

The Graduate School will be holding two upcoming Thesis Formatting Workshops. If you are just starting your thesis or dissertation or are in the process of formatting, please plan to attend one of the two scheduled sessions:

**Monday, September 22**
3:30-5:00pm
O'Neill Building #201
(video-conferenced to Juneau SFOS103)

**Wednesday, September 24**
3:00-4:30pm
Library Media Classroom (#340 Rasmuson)
Sign-up by visiting the Graduate School website [http://www.uaf.edu/gradsch/](http://www.uaf.edu/gradsch/)

If you have any questions about this event, please contact the Graduate School at 474-7464 or email uaf-gradschool@alaska.edu.

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2014 Arctic Science Conference
September 27-28, University of Alaska Fairbanks
[http://arctic.aaas.org/](http://arctic.aaas.org/) for abstracts and registration

**UARectic course: The Arctic as extractive industries resource frontier: legal and political economy developments**
November 9-15, 2014, North Eastern Federal University, Yakutsk

From November 9 to November 15, 2014 the North Eastern Federal University in Yakutsk (NEFU named after M.K. Ammosov) will hold a PhD course within the UArctic Thematic Network “Arctic Extractive Industries”. The Arctic is transforming rapidly in the 21st century, becoming a part of the “global world”. This is importantly connected to the development of raw materials: the Arctic is becoming a resource frontier that can compete with any other analogous extraction centres worldwide.

There is a high need for developing a new regional Arctic policy based on thoroughly planned system of impact assessments in the region. This has to consider the significant changes in the relations, interests and possibilities of states, regions, economic actors and the populations living on the land over the resources. Such a policy should be built on the principles of realism, pragmatism and the use of best world practices for the development of economic, social as well as administrative reforms. The Russian Federation has recently increased its focus on the Arctic. The main priorities of this state interest are the following:

- Development of new oil and gas deposits, among others in Eastern Siberia and the Sakha Republic
- The creation of a unified pipeline and energy network system with Northern China, Korea and Japan
- Development and increase of efficiency in oil and gas processing and petrochemistry.
- Development of coal industry
- Maintenance of high volumes in extraction of oil, gas, mineral resources as well as forestry

The current conditions for such industrial development imply a continuous increase in tensions and conflicting interests between indigenous peoples, industrial companies and the authorities. The proposed course shall focus on related topics along the following lines:

1. Regulatory processes in Arctic extractive industries
2. Legal developments in the Arctic region
3. Impact of extractive industries on Arctic social and economic development
4. Environmental processes in the Arctic in connection to industrial development
5. Rights of indigenous peoples in connection to Arctic extractive industrial development.
6. Questions concerning regional categorisation of the Arctic territories

This course will have 40 academic hours of contact teaching, of which the equivalent of one full day will be reserved for PhD students’ papers discussion.

The lectures in this course will be given by professors from Canada, Norway, Finland, and different Russian regions. PhD students eligible for this course shall have a topic related to Arctic extractive industries and present a paper, project, draft chapter or article for discussion in this course. The completed course will be equal to 10 ECTS credits.

The course languages are Russian and English (translation will be provided)

For course participation, please fill out the form below and send it to yktarctic@mail.ru, with copy to Florian fms36@cam.ac.uk For those needing an official invitation for a Russian visa, please fill out all the fields in the
formyks_course_appform_web and attach a copy of your passport. Please do so by August 31st and apply for a Russian visa from the Russian embassy of your home country as soon as you get the invitation. Possible travel funding for North American and Norwegian participants.

The University of Alaska Fairbanks Cooperative Extension Service will host a workshop for individuals interested in starting and operating a specialty food business. The workshop will meet for five sessions beginning Sept. 16 and will be offered by videoconference in Fairbanks, Delta Junction, Homer, Kodiak and Juneau. It will meet Tuesdays and Thursdays from 5:30 to 8 p.m. through Sept. 30. The instructors are Extension food research technician Kate Idzorek and Quentin Fong, a seafood marketing specialist with Alaska Sea Grant’s Marine Advisory Program. Idzorek said specialty foods are manufactured in limited quantity with high-quality ingredients and include products such as handmade chocolates and food truck items. The workshop is intended for individuals who want to sell specialty foods direct to consumers and wholesale. Topics will include business planning and marketing, financing and accounting, permitting, feasibility assessment, and promoting and pricing products. The workshop will also cover options to enter the market, including farmers markets, food trucks and other venues.

The workshop costs $50. See details or register online at www.uaf.edu/ces. For more information, contact Idzorek at 907-474-5391 or kijdzorek@alaska.edu.

**INTERNSHIPS/FELLOWSHIPS/ EMPLOYMENT**

The Department of Anthropology at the University of Colorado Boulder invites applications for an Assistant Professor level appointment in Cultural Anthropology with a research focus on the environment and sustainability to begin August of 2015. We are interested in scholars whose work examines the politics and sociocultural impact of resource management. This would include climate change, conservation, mining, extraction of oil or other resources, air quality, waste management, historical formations of human/nature relations, activism or a similar topic that ties together the environment, development, and sustainability. Geographic area of specialization is open. Review of applications will begin on November 1, 2014 and will continue until finalists are identified. The Search Committee plans to interview a select pool of applicants at the American Anthropological Association Meetings in December. Please submit the following materials: 1. Cover letter 2. Curriculum vitae 3. Course syllabi 4. Teaching evaluations 5. Short statement (one page) of teaching philosophy 6. At least one but no more than three samples of research writing and/or publications 7. Names and addresses of three references. Application materials are accepted electronically at https://www.jobsatcu.com, posting F01741.

Fall 2014-- University of Alaska Legislative Internship Application
Firm deadline: October 15
http://uas.alaska.edu/internprogram/

Interns will spend spring semester in Juneau working on the staff of a member of the House of Representatives or Senate. Grad students will earn 9 credits: 6 from the internship and 3 from a seminar on Alaska government and politics. The program provides a stipend and an allowance for transportation. Students must pay the tuition costs for 9 graduate credits. Questions and application materials (as email attachments) should be sent to Dr. Jonathan Rosenberg, Political Science. jrosenberg@alaska.edu

**GRANT OPPORTUNITIES and OTHER AWARDS**

The University of Alaska Foundation is pleased to announce the availability of the 2015 Angus Gavin Memorial Bird Research Grant.
Proposals for the grant will be accepted from scientists within the University system, which includes graduate students and faculty members employed within the University system. Grants are intended to be used for the support of research on bird species found either permanently or seasonally in Alaska or its coastal waters, including their biology, general ecology and habitat relationships. Research designed to yield information of value in management of bird species will be given preference. This shall include aspects of management directed toward protection, maintenance or enhancement of bird populations and their habitats that may be influenced by development activities. Proposals dealing with the habitat of Alaskan bird species and its effects on such species are acceptable under the terms of the grant.

All proposals will be submitted to a review team composed of qualified professionals for selection and review. Deadline: The deadline for receipt of complete proposals including applications, transcripts and letters of reference shall be November 14, 2014 for the 2015 field season grant. Any proposals received after the deadline will be returned unopened to the applicant. The successful recipient will be notified of the review team's decision in mid-February 2015. The review team's decision on the merits of proposals is final.

Maximum Grant Amount: $15,000
The committee may also fund additional grants depending on available funds and the amounts requested by applicants. Requests for smaller amounts or partial funding will be considered.

For more information or an application: [http://www.alaska.edu/foundation/donor_relations/grants-and-awards](http://www.alaska.edu/foundation/donor_relations/grants-and-awards)

**OTHER**

Master Gardeners Class
Registration is open for a master gardener class that begins Oct. 7 in Fairbanks and in Delta Junction.

Steven Seefeldt, agriculture and horticulture agent for the University of Alaska Fairbanks Cooperative Extension Service, will teach the session Tuesdays from 6 to 9 p.m. through Feb. 3. The class will be offered at the Extension district office at 724 27th Ave., in the Fairbanks Community Food Bank building, and by videoconference at the Delta Career Advancement Center.

Participants will receive 40 hours of instruction on horticultural subjects and gardening skills suited for Interior Alaska. Master gardeners must then give 40 hours of volunteer service to their communities within two years of completing the class.


**ADDITIONAL CONTACTS:** Darcy Etcheverry, 907-474-2422, ddetcheverry@alaska.edu; Ronda Boswell, 907-474-2450, rboswell@alaska.edu.

**ON THE WEB:** [www.uaf.edu/ces/districts/tanana/mg](http://www.uaf.edu/ces/districts/tanana/mg)

**Thesis Editing**
As a Writing Center Tutor at Whitman College, I gained three years of experience editing and revising student work. I have more than a year’s experience providing timely, thorough editing for engineering, geology, and physics theses at UAF. I hold an M.S. in geology and have a liberal arts background, making me comfortable editing papers of most subjects. Please contact me with further questions.

Gabrielle Vance
gtvance@alaska.edu
(907) 321-1515

Please send suggestions, announcements, etc. to Mary van Muelken, fyabnp@uaf.edu or mavanmuelken@alaska.edu