



Alaska EPSCoR is a partnership devoted to growing Alaska's scientific research capacity, funded by the National Science Foundation and the State of Alaska.

Winter 2007/2008



From the Director

Peter Schweitzer

This is the first newsletter of a new era for Alaska EPSCoR, marked by the recent award of a three-year National Science Foundation research infrastructure improvement grant. We are calling this Phase III, since the grant—which began running on July 1, 2007—is the third such award we have received since the inception of Alaska EPSCoR programs in 2001.

Before I detail our plans for the next few years, I want to thank my predecessor, George Happ. As founding director and leader of the first two phases of Alaska EPSCoR, Happ provided the foundation on which we build today. Thanks to George's efforts, EPSCoR has for many Alaskans become a synonym for efforts to bolster the state's research climate and to foster a culture of research excellence.

Now we are embarking on Phase III, a new approach to integrated research. This phase will bring together physical, biological, and social sciences to address the numerous pressing questions triggered by processes of rapid change—both social and climatic—in the North.

Two factors make this project unique. The first is the introduction of social sciences into the mix: we are the first EPSCoR program in the country to encompass a full-fledged social science component. We believe the understanding of human behavior is a necessary ingredient for analyzing social-ecological

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NSF Green-Lights EPSCoR Phase III

By Tom Moran

Make it a trilogy for Alaska EPSCoR.

The National Science Foundation has rewarded EPSCoR's continuing efforts at growing Alaskan research by granting a third round of research funding to the organization. A total of \$9 million in NSF funding for EPSCoR Phase III, entitled "Resilience and Vulnerability in a Rapidly Changing North: The Integration of Physical, Biological and Social Processes," kicked in July 1, 2007 and runs through June 30, 2010.

As the title suggests, the focus of Phase III will vary from those of earlier phases, which dealt with discrete and separate research in areas such as high latitude contaminants and cold regions engineering. While Phase III will encompass research in three different subject areas—biology, physical, and social sciences—there will be an increased emphasis on combining the results to deepen understanding of the connections between these processes, particularly in the light of intensifying climate change.

"Global warming and rapid social change are transforming the North at unprecedented rates," states the funding proposal. "To mitigate the effects of these changes, we must deepen our understanding of the interactions among physical, biological and social processes."

The innovative approach drew praise from federal reviewers, all of whom rated the Phase III proposal "very good" or "excellent."

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photo by Todd Paris

A researcher follows the Toolik Lake Research Station boardwalk as the northern flanks of the Brooks Range loom in the background. Considerable Alaska EPSCoR-funded research is conducted at the station, located on the arctic tundra 171 miles north of the Arctic Circle.



Photo courtesy James Sowerwine

Alaska EPSCoR graduate fellow James Sowerwine poses with a willow shoot in front of a greenhouse on the UAA campus. Sowerwine is using the greenhouse to further his research on the effects of the invasive species *melilotus alba* (white sweet-clover) on moose browse.

“If successful, this research could have a major impact on our knowledge and understanding of sustainability in the face of virtually every type of change we encounter in science and society today,” commented one reviewer. “It certainly is a creative concept.”

The new phase will bring with it some new faces at the top. Peter Schweitzer of the University of Alaska Fairbanks is director of the program. The co-principal investigators are Terry Chapin of the University of Alaska Fairbanks and Lilian Alessa of the University of Alaska Anchorage.

“We will be addressing one of the most critical issues in the North—socio-economic sustainability—and we will be doing so by inviting researchers from all different fields to the table,” Schweitzer said.

Phase III will encompass all three main UA campuses as well as rural campuses, and will entail funding new faculty and postdoctoral fellow hires, undergraduate and graduate student fellowships, awards for early-career researchers, and education and outreach programs for K-12 students.

Alaska EPSCoR first received NSF funding in 2001. Its first three-year phase encompassed four research areas: infrastructure and systems for cold regions; high latitude contaminants; environmental physiology; and genome diversity. A second three-year grant came in 2004, concentrating on three areas: cold regions engineering; environmental physiology; and population genetics of adaptation. Together, these first two phases involved more than 120 faculty positions, received more than \$50 million in funding and resulted in more than 290 refereed articles.

While Phase III’s research will focus on physical science, biology, and social sciences, it also contains an “Integration Core” which will seek to combine all of the research to draw broader conclusions. In addition to pure research, Phase III will build on community outreach efforts begun in the first two phases.

The main Phase III focus areas are:

1. PHYSICAL SCIENCE

The physical science element will center on permafrost research, zeroing in on the relationships between climate changes and the extent of permafrost. The principal benefit will be a better understanding of climate-permafrost interactions, which can be incorporated into future building plans.

The central hypothesis to be tested by the research is that climate change has a direct effect on permafrost extent in some areas and an indirect one in others. Specifically, the theory holds that in Alaska’s continuous permafrost zone, where permafrost covers the entire landscape, rising temperatures will directly influence permafrost extent by melting it in places. However, in the zone of discontinuous, or irregular, permafrost that covers most of the state, the hypothesis holds that climate change indirectly affects the extent of permafrost through altering other factors, such as the extent of forest fires and the range of types of vegetation.

2. BIOLOGY

Biological research in Phase III will document shifts in the territory of a variety Alaska flora and fauna, concentrating on subsistence species. Census data, museum specimens, population genetic patterns, and landform patterns will all come into play as examiners study the home turf of species in the past, present and future.

One research focus will be the interactions between plants and symbiotic organisms such as N-fixers and mycorrhizae, which are crucial to maintaining the plants’ roles in the ecosystem. There has been a general lack of study in this area, and one theory is that such pathogens can have a major and abrupt impact on plants’ territories, as these symbiotes can have different climatic limitations than their hosts.

3. SOCIAL SCIENCE

Social research in Phase III will center on Alaskan communities and how they are responding to climatic and social change, with a focus on food systems, cultural institutions and social networks. The ultimate issue will be whether and why Native communities exhibit “resilience,” the ability to withstand large-scale changes, or “vulnerability,” the inability to do so.

Of particular interest is how communities make use of “ecosystem services,” i.e. the food, water and other benefits provided by their environment. Other areas of study include the efficacy of community social networks and the effects of urban-rural mobility on Native lifestyles.

4. INTEGRATION CORE

The integration core will use the technology and facilities of the University of Alaska to draw together information from these diverse areas of research to reach conclusions about the changing arctic environment and its effects on Alaskans. The core will utilize the UA’s considerable computing capacity, and will draw together information from sources ranging from the UA Museum of the North’s flora and fauna database, to UAA’s Institute of Social and Economic Research, to climate models from the International Arctic Research Center.

The intent is to identify the challenges created by changing conditions, to craft models based on the results, to share the knowledge gleaned with affected communities, and to help communities to develop frameworks to work out solutions.

systems. Humans, after all, trigger most of the processes of change we are studying, and are also heavily affected by them.

Second, a hallmark of our program will be its interdisciplinary nature. The intent of this program is to break down the barriers between disciplines, to find ways of relating and applying the results of research in multiple fields. The effects of different vectors of change are all ultimately interrelated and cumulative, and it takes novel science approaches to conceptualize them.

To that end, we have created an “Integration Core” charged with finding ways to translate and to integrate between disciplines using a set of data management and computing tools. Through seed grants and other incentives, we will encourage scholars to collaborate across disciplines and to explore new frontiers. The National Science Foundation and other agencies strongly support such collaborative and interdisciplinary research and we are excited to be part of this innovative science movement.

Although I am new in my position as Alaska EPSCoR director, I feel like an old hand: I have worked as “project director designate” for the last two years, organizing the team that put together the successful grant proposal. My own background is in cultural anthropology and my current research interests focus on patterns of migration and relocations in the Russian Far East and in Alaska and on the anthropology of climate change. Being an anthropologist has taught me to ask broad questions and to look for answers from multiple sources.

As mentioned above, understanding human behavior is central to our research efforts. But we seek not just to examine human development but to foster it: extensive outreach efforts to schools, businesses, government agencies, and rural communities are integral to EPSCoR Phase III, and will enable us to share our knowledge and our conclusions. Furthermore, the development of human resources – primarily in the form of support for graduate students, postdocs, and faculty – is the key element in our efforts to build research capacity. And finally, we couldn’t do this without the people of the EPSCoR office, whose ability to make sure that newsletters appear, that travel arrangements are made, and that paychecks are cut enables the whole enterprise.



Alessa Adds New Voice to EPSCoR Leadership

By Tom Moran

Lilian Alessa’s scientific interest in complex systems is an apt one.

As a leader of the Integration Team that is coordinating the research of Phase III of EPSCoR, Alessa’s task is complex indeed: to weld together research in the diverse fields of physical science, biology and social science into a coherent whole.

“Our goal in the Team is to develop that big-picture framework,” said Alessa, an associate professor of biology at the University of Alaska Anchorage and the only UA representative on the Integration Team. “It involves translating across disciplines – coming up with a common process, common rules.”

Alessa, who also serves as a member of EPSCoR’s Management Team and as a group leader of UAA’s Resilience and Adaptive Management group, holds a doctorate in cytoarchitecture – the study of cell structure – from the University of British Columbia. She said the parallels between the behavior of cells and of humans are what first got her interested in larger questions of human behavior toward the land and its resources. “Human social-ecological and cellular systems are almost identical,” she said.

From there, Alessa moved into the study of intertidal zones, an appropriate field given her background: a woman of mixed heritage from Salish lands on the British Columbia coast, her childhood name, Na’ia, roughly translates to “water which is clear.” Through her studies, Alessa said she came to see the intertidal zones—which are treated in widely disparate ways by different user groups—as microcosms, leading to her interest in the all-encompassing field of complexity theory.

“The complex system conceptual framework is basic: everything we see, and the diversity of structure and function, arises from a few simple interactions, and that’s it—that applies from the tops of mountains to the deep seas to the birth of universes,” she said. “What we’re doing now is we’re trying to understand those simple interactions as far as social-ecological systems are concerned.”

While the Management and Integration teams at EPSCoR aren’t so far-reaching in thought, they’re clearly thinking along the same lines. A hallmark of Phase III of EPSCoR is bringing together the results from studies on various disciplines and using them to create models to better predict the overall outcomes of human action in regards to resource use and climate change. It’s an area of keen interest to Alessa, who believes the work can break new ground in linking up the disciplines for practical results.

“We are in the process of articulating an integration framework that can then be carried on to quantitative and qualitative analysis, and that is a major next step,” said Alessa, who shares Integration Team leadership duties with Terry Chapin. “We are developing frameworks that will allow us to use next-generation modeling tools to actually look at the consequences of decisions made about natural resources.”

But Phase III has an even grander goal at heart, Alessa notes, one that involves a fundamental change in the organization of scientific research. “One [goal of the program] is to actually change the way that we do science, that would be a huge accomplishment,” Alessa said. “To actually get people to think of systems as being influenced by many different factors, rather than just those articulated by disciplines.”



Pips Veazey

Alaska EPSCoR Communication Outreach Coordinator

By Pips Veazey

In an effort to improve outreach to the research community and to the general public, Alaska EPSCoR officials recently made two new hires: a part-time communication/outreach coordinator and a part-time graduate student assistant who will work as a writer and editor.

As the new communication/outreach coordinator, my job will be to help develop and implement a comprehensive plan to better inform and engage all of EPSCoR's stakeholders, including industries, communities, policy-makers and the public.

campuses, making corrections for minor problems (grammar, clarity, style) and suggestions for larger ones (emphasis, organization). Tom holds a bachelor's in English and environmental science from the University of Notre Dame and is studying for his master's in creative writing at UAF. He has a varied professional writing background, including four years working as a reporter for the Fairbanks Daily News-Miner.

Any University of Alaska rural campus director submitting a grant proposal is strongly encouraged to forward it to Tom at thomasmoran@gmail.com. When you send him a draft, please also include a copy of the Program Solicitation for the proposal, and also copy the email to Alaska EPSCoR Executive Officer Anne Sudkamp at anne.sudkamp@alaska.edu.

EPSCoR thrives on the partnerships created with stakeholders and the ability to reach out to and involve interested parties across the state. Over the next year Tom and I will work on a variety of ongoing projects including our newsletter, the EPSCoR website and printed materials such as brochures and posters. In addition, we look forward to continuing and expanding our current programs which attend to the needs of the rural campuses, students and young professionals.

Please feel free to contact me with questions or comments at fnadv@uaf.edu. We look forward to meeting and working with many of you in the future.



Tom Moran

I hold a bachelor's in psychology from Bates College and a master's in oceanography from the University of Alaska Fairbanks, and I am continuing graduate studies at UAF. I also have experience organizing professional conferences at the University of Alaska and am a board member of several local education associations. I look forward to bringing my two strongest attributes to EPSCoR: a love of science and an ability to share information and experiences with people.

Our new graduate student assistant is Tom Moran. His principal duty will be to help craft and edit grant proposals for Alaska's rural

Anthropologist is EPSCoR's First Phase III Hire

By Tom Moran

Erica Hill's diverse career in anthropology has taken her from investigating human sacrifices in Peru to excavating walrus heads in Siberia. But wide-ranging is the way EPSCoR's newest faculty member prefers it.

"I just am fascinated by a lot of different things, and anthropology is a field that fosters that," said Hill. "Basically, you can study anything that relates to humans."

Hill just began work as an assistant professor of anthropology at the University of Alaska Southeast, a position half funded by EPSCoR and half by UAS. It's the first faculty hire made by EPSCoR under their Phase III NSF grant, which began in July 2007, as well as EPSCoR's first hire in the social sciences.

Hill's research focus throughout her career has mostly been prehistoric death rituals. Her interest in the subject comes from the way different cultures tackle a universal topic.

"I'm just fascinated by the creative ways that humans around the world have dealt with this common concern," she said. "Everybody dies, but the way that humans deal with this issue is incredibly diverse and incredibly fascinating. Death is a problem, but people have solved it in all kinds of different ways."

Hill, who holds both a master's and doctorate in archeology from the University of New Mexico, moved to Alaska with her husband in 2002 and spent five years working at the University of Alaska Museum of the North and the UA Press before relocating to Juneau for her new position. Her research focus in the north has shifted to zooarcheology, including spending time this summer studying the apparently ritual disposal of walrus heads at a site in the Russian Far East. She's researching what caused the area's ancient inhabitants to lug the skulls up a hill after killing the walruses.



NSF Grant Hopefuls Gather for Workshop

By Tom Moran

Research takes money.

To that end, more than 70 people from across the country gathered in late August on the University of Alaska Fairbanks campus to take part in Alaska EPSCoR's first National Science Foundation proposal-writing workshop. The two-day event offered attendees a useful look at how to craft the kind of proposals that will get the all-important thumbs-up from the NSF.

"I thought it was terrific," said attendee Lee Haugen, director of UAF's Northwest Campus in Nome. "It was a good overview."

Held August 23-24 in the UAF Wood Center, the workshop officially drew 68 people, but latecomers increased that number. Attendees got their information right from the horse's mouth, as six different current and former NSF directors were on hand to offer detailed information on what the agency is looking for in applications. The format of the workshop mixed several large-group presentations with smaller panels in which mock proposals were presented, evaluated and then reworked.

Haugen, one of several representatives of UAF's rural campuses to attend the workshop, said the networking opportunities were invaluable. Debi McLean, director of UAF's Bristol Bay Campus in Dillingham, said it gave her a chance to pitch the pluses of the rural campuses to urban researchers who had



Dr. George Hazelrigg, head of the National Science Foundation's Manufacturing Machines and Equipment program, addresses the crowd at the NSF Proposal-Writing Workshop. The workshop, co-sponsored by Alaska EPSCoR, was held at the UAF Wood Center in August.

planned to incorporate Alaska Native outreach into their grant proposals, but weren't sure how.

McLean also said the workshop also gave her a chance to learn more about the various funding opportunities available, and more specific information about what the NSF needs in a grant proposal. "I think it clarified the intellectual merit and broader impact (requirements,)" she said.

Most of the conference attendees came from the University of Alaska system, while a few others came from Georgia, Illinois, Kansas, Massachusetts, Florida, Texas and New Mexico. University-based attendees were joined by several people representing non-profit organizations.

Major presentations included: "Funding Opportunities at NSF," by Dr. Ken Chong, NSF's Mechanics and Materials program director; A "Research Program Development Workshop" by Dr. George Hazelrigg, NSF's Manufacturing Machines and Equipment program director; "Writing an Interdisciplinary Social-ecological Proposal (Lessons from doing it wrong)" by Dr. Terry Chapin of the University of Alaska; and "Writing a Successful CAREER Proposal - My Personal Experience," by Dr. Hong Liang of Texas A&M University, who received a prestigious NSF CAREER grant in 2002.

Reaction to the workshop was overwhelmingly positive, with many attendees calling Hazelrigg's workshop and the mock panels the highlights.

"I thought the objectives of the workshop were great and I learned a lot about writing better proposals," noted one attendee. "The presentations were terrific and the proposal discussion really forced some hands-on work and practice."

The workshop was co-hosted by Kansas State University, Wichita State University and UAF. Alaska EPSCoR and Kansas State partnered to provide travel funding for Alaskans from across the state.



"They're incredibly heavy," she said. "Their skulls are some of the densest bone around...what was the need to carry these walrus heads up the hill and place so many of them in the site itself?"

Hill plans to compare the site to others, and also examine how these ancient practices may relate to modern ones. She sees her study of these relations as the key to why EPSCoR has taken her on. "I think my interest in how ancient and modern peoples have conceptualized the animals that are so important to their existence is the aspect that most reflects the interests of EPSCoR," she said.

Hill will be followed by two full-time and six quarter-time social scientist hires, among other hires, in the current grant cycle as EPSCoR researchers seek to integrate physical and biological science findings with social science ones. In addition to her research, she's teaching a variety of courses in Juneau, including zooarcheology, bioanthropology, cultural dynamics, and ethnohistory.



Alaska EPSCoR graduate fellow Jennifer Rohrs- Richey looks over a crop of green alders in the UAF greenhouse. Rohrs-Richey, a Ph.D. candidate at UAF, is studying the interactions between green alders and pathogens.

photo courtesy Jennifer Rohrs-Richey



Springer Trades Open Ocean for Academia

By Tom Moran

Emilie Springer's office at the University of Alaska Fairbanks may lie a few hundred miles from the ocean, but the Homer native and longtime commercial salmon

fisher clearly still has both feet on a boat deck.

"I've worked all over the gulf ... and I always loved it," Springer said. "My undergraduate degree is in English and creative writing, and the creative writing part almost always focused on Alaska, and fisheries quite a bit of the time, and boating in general and being on the water."

Springer, who holds a bachelor's from Stanford University and a master's in Marine Affairs from the University of Washington, just began studying toward a doctorate in anthropology at UAF under the Resilience and Adaptation Program. She's one of 26 2007-08 UA grad students funded by EPSCoR. Springer, who grew up in Ninilchik, is of mixed Aleut heritage, making one of two EPSCoR-funded students this year with Native roots.

Springer has spent much of her life on the water, first toiling as a deckhand on the boats of family members, then as a grad student interviewing fishermen for her Master's thesis on the Bering Sea Pacific cod industry.

"I interviewed about 40-50 people from several different gear types for the project," she said. "It's pretty much impossible to

get them to sit down anywhere, so I got a lot of those interviews on boats, just getting to know who the people were, how they got into the industry."

Springer described her master's work as a mixture of policy and anthropology, and said her doctoral thesis is likely to continue along those lines. She admits her nascent thesis is still nebulous and her intentions too large, but said her general plan is to study various Gulf of Alaska fishing communities and look at ways they can adapt to changes in the industry.

"I see a lot of changes and transition in the communities," she said. "I plan to look at how effort is leaving those communities in terms of fisheries and what opportunities there are to make the changes necessary to keep some kind of industry, it could be tourism, it could be some kind of adaptive change in fisheries."

In the long term, Springer is hoping her study leads to conclusions that can be incorporated into state or federal fisheries guidelines. She figures her first-hand familiarity with the sometimes insular world of commercial fisheries will help her to that end.

"I'm working on the social side of fisheries, which I think is an upcoming field and there are a lot of opportunities to bring this kind of research into policy, because I see a separation between the fishing community and the people responsible for creating a sustainable future for the industry."

Check us out on the web >>> <http://www.alaska.edu/epscor/>

As part of Alaska EPSCoR's continuing outreach efforts, we're redesigning our website. The new site, which is expected to go online in early 2008, features more current and easily accessible information on Alaska EPSCoR as well as a new graphic interface. Other new interactive web features are also under consideration for the site. It'll be a useful link for all of EPSCoR's stakeholders, from schoolkids to community leaders. Take a look at <http://www.alaska.edu/epscor/>.

There are 26 2007-08 EPSCoR graduate student fellows, 25 of whom work in the fields of physical science, biology and social science. The last fellow is focused on education and outreach efforts. Fellows hail from all three main University of Alaska campuses and are enrolled in a variety of master's and doctoral programs.

PHYSICAL SCIENCE FELLOWS

Megan Leach, M.S. candidate

UAF (Advisor: Vladimir Romanovsky)

Research focus: Feedbacks in ecosystems important to permafrost stability under climate change and human/natural disturbances.

Matthew Bray, Ph.D. candidate

UAF (Advisor: Yuri Shur)

Research focus: The effects of cryogenic structure on the creep behavior of ice-rich permafrost.

Jianfeng Xu, Ph.D. candidate

UAF (Advisor: Douglas Goering)

Research focus: Methods for protection of man-made infrastructure from physical damage due to changing permafrost conditions.

Koui Kim, Ph.D. candidate

UAF (Advisor: Scott Huang)

Research focus: Problems of differential frost heaving caused by a buried chilled gas pipeline.

Amanda Rinehart, Ph.D. candidate

UAF (Advisor: Jeremy Jones)

Research focus: Carbon fluxes in headwater streams.

Debashish PaiMazumder, Ph.D. candidate

UAF (Advisor: Nicole Molder)

Research focus: Interactions between climate, permafrost and vegetation changes.

Laura Brosius, M.S. candidate

UAF (Advisor: Katey Walter)

Research focus: Quantifying the distribution and bubbling rates of methane hotspots along Alaska lakes.

BIOLOGY FELLOWS

Joshua Schmidt, Ph.D. candidate

UAF (Advisor: Mark Lindberg)

Research focus: The effect and implications of climate warming on trumpeter swan populations.

Jennifer Rohrs-Richey, Ph.D. candidate

UAF (Advisor: Christa Mulder)

Research focus: The interactions between green alders and pathogens, particularly in relation to plant-water relations.

Kenneth Tape, Ph.D. candidate

UAA-UAF (Advisor: Jeffrey Welker/Roger Reuss)

Research focus: The processes and feedbacks governing shrub expansion on Alaskan tundra.

Ina Timling, Ph.D. candidate

UAF (Advisor: Lee Taylor)

Research focus: Monitoring the responses of Alaskan fungi to climate change.

Colin Shanley, M.S. candidate

UAS (Advisor: Sanjay Pyare)

Research focus: Balancing access and subsistence needs against effective wildlife habitat conservation.

James Sowerwine, M.S. candidate

UAA (Advisor: Matthew Carlson)

Research focus: Invasive species, in particular *melilotus alba* (white sweetclover), and their effect on moose browse and moose populations.

Dawn Magness, Ph.D. candidate

UAF (Advisor: Falk Huettman)

Research focus: Building habitat distribution models for selected vegetation and migratory bird species on Kenai National Wildlife Refuge.

Audrey Taylor, Ph.D. candidate

UAF (Advisor: Abby Powell)

Research focus: The distribution, movements, and physiology of shorebirds staging on Alaska's North Slope, particularly in light of climate change.

SOCIAL SCIENCE FELLOWS

Miranda Wright, Ph.D. candidate

UAF (Advisor: Craig Gerlach)

Research focus: How and why traditional food systems and indigenous leadership intertwine among Koyukon Athabascans.

Paula Williams, Ph.D. candidate

UAA (Advisor: Andrew Kliskey)

Research focus: The effect of perception on decision-making, particularly in regards to arctic resource management.

Emilie Springer, Ph.D. candidate

UAF (Advisor: Maribeth Murray)

Research focus: The cultural, economic and environmental factors that influence the sustainability of commercial fishing in small Alaskan communities.

Jill Maynard, M.S. candidate

UAF (Advisor: Julie Lurman)

Research focus: Adaptation and resilience of Alaska villages, as related to the National Environmental Policy Act and non-renewable resource development.

Marcy Okada, M.S. candidate

UAF (Advisor: Gary Kofinas)

Research focus: Modeling and projecting the possible social-ecological changes to selected Alaska villages due to oil and gas development.

Robin Bronen, M.S. candidate

UAF (Advisor: Amy Lovecraft)

Research focus: Developing a human rights framework to address the issue of Alaskans forced to relocate or leave their communities due to climate change.

Chanda Meek, Ph.D. candidate

UAF (Advisor: Gary Kofinas)

Research focus: Barrow's whaling and polar-bear hunting and the flexibility of the local, regional, federal and international institutions which oversee it.

Brodie Halford, M.A. candidate

UAA (Advisor: David Yesner)

Research focus: Examining sea mammal, fish and bird remains from Kenai Fjords archeological sites to study how Alutiiq people responded to climate change.

Alison Meadow, Ph.D. candidate

UAF (Advisor: Craig Gerlach)

Research focus: Fairbanks local food initiatives (such as the Farmer's Market) and how they reduce vulnerabilities and drawbacks of food supply in Alaska.

Martin Robards, Ph.D. candidate

UAF (Advisor: Terry Chapin/ Peter Schweitzer)

Research focus: Impacts of climatic changes on the sustainability of walrus populations and their relationship to indigenous communities.

EDUCATION/OUTREACH FELLOW

Tom Moran, M.F.A. candidate

UAF (Advisor: EPSCoR)

Focus: Grant writing, editing, and community outreach.



photo courtesy Jennifer Rohrs-Richey

Alaska EPSCoR graduate fellow Jennifer Rohrs-Richey takes field measurements of green alder leaves.



Alaska EPSCoR Management Team members Matt Berman and Lilian Alessa and postdoc Jennifer Schmidt in the midst of discussion at an EPSCoR retreat on the UAF campus, October 19, 2007.

The EPSCoR Management Team

The administration of Phase III of EPSCoR is being handled by a statewide Management Team consisting of the leaders of the various components of the program, as well as a UAS representative and a rural campus representative.

Team members are:

- Peter Schweitzer, Alaska EPSCoR Director (UAF)
- F. Stuart Chapin, III, Co-Principal Investigator (UAF)
- Lilian Alessa, Co-Principal Investigator (UAA)
- Mary Pete, Rural Campus Representative (UAF-Kuskokwim Campus, Bethel)
- Sanjay Pyare, UAS Representative (UAS)
- Roger W. Ruess, Biology Component Leader (UAF)
- Matt Olson, Biology Component Leader (UAF)
- Matt Berman, Social Science Component Leader (UAA)
- Yuri Shur, Physical Science Component Leader (UAF)
- Elena Sparrow, Education Outreach Component Leader (UAF)
- Anne Sudkamp, Alaska EPSCoR Executive Officer (UAF)

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