

AINA NEWS

2014 Bourque Scholarship Winner

Tiana Shea from Sparwood, British Columbia, is the 2014 recipient of the Jim Bourque Scholarship administered by the Arctic Institute. Tiana is currently in her fifth and final year of a combined BSc in Environmental and Conservation Sciences and BA in the Native Studies program at the University of Alberta in Edmonton. During the summer of 2014, she held an Environmental Summer Student position with the Diavik Diamond Mine, during which she conducted water sampling and water quality data retrieval, as well as wildlife monitoring.

ArcticConnect: Connect the North

Over the past millennium, the Arctic has experienced an extraordinary amount of environmental change. Understanding this change, sharing information, and mapping our knowledge about it are critical to developing a sustainable future.

ArcticConnect is a network-enabled platform for Arctic data sharing, analysis, and synthesis. The University of Calgary's Arctic Institute of North America and the Department of Geomatics Engineering at the Schulich School of Engineering have partnered together to create this unique system. ArcticConnect captures data at multiple scales, in diverse formats, from a host of sources, including human observers, down-scale and remote sensors (including satellites), as well as publications, photographs, and even artwork. It enables networking and interoperability of disparate datasets and makes information available across varied applications and devices.

ArcticConnect will enable display of heterogeneous data and information within a coherent geospatial platform consisting of four major components:

- Arctic Web Map (AWM) will provide a web-based mapping tool based on accurate polar projections that will offer researchers scientifically accurate map projections for visualization and analysis, a function that is critical for Arctic system research but missing in existing web mapping platforms. It will also provide a visually appealing tool for education and outreach to a wider audience.
- Arctic Sensor Web (ASW) will enable research stations around the Arctic to connect their sensors, including those that provide near real-time data, to a cloud service for visualization, information sharing, and collaborative analysis.
- Arctic Scholar (AS) will enable researchers, educators, interested private sector entities, government agencies, and the general public to access and share Arctic data and information contained in assorted

formats, including publications, grey literature, research licenses, photo archives, field notes, and project metadata from Arctic field stations.

- Arctic BioMap (ABM) will enable members of the scientific community and northern residents to contribute observations on Arctic wildlife for the purpose of biodiversity and wildlife health monitoring, assessment, research, management, and education.

This innovative approach to data display, management, and sharing will link efforts among northern communities, researchers, the private sector, and government agencies to advance the science and education needed for decision making in the rapidly changing Arctic.

AINA Welcomes a New Research Associate

In August, the Arctic Institute welcomed Research Associate Bindu Panikkar to its Calgary office. At AINA, Bindu holds a postdoctoral position on the ArcticConnect project, where she coordinates the citizen science/community-based monitoring and biomapping program. She is



Dr. Bindu Panikkar on the ferry to Seldovia, Alaska, June 2014.

also the principal investigator of a research project funded by the National Science Foundation, which examines the social, legal, and policy contentions in the permitting process of newly proposed mines in Alaska. Bindu came to us from the United States, where she worked as an adjunct assistant professor in the Program in Science and Technology Studies at Brown University in Providence, Rhode Island, and as a faculty member of the graduate program in Health Arts and Sciences at Goddard College in Plainfield, Vermont. Previously she was a postdoctoral research associate in Environmental Health and Research Ethics at the Social Science Environmental Health Research Institute, Northeastern University, Boston, Massachusetts, and in the Department of Sociology at Brown University, where she coordinated the Community Outreach and Translation Core of the Children's Environmental Health Center, as well as the Community Outreach Core of the Brown University Superfund Research Program.

Bindu's research focus and interests have included the social and political challenges involved in the continued operation past its design life of the Pilgrim Nuclear Power Station in Plymouth, Massachusetts; reflexive research ethics in fetal tissue xenotransplantation research; occupational health issues among immigrant workers; the ethics of uranium mining research; and the teratogenic effects of depleted uranium. Bindu has a PhD in Environmental Health and an MA/MS in Environmental Policy and Planning/Environmental Health from Tufts University, Medford Massachusetts.

AINA U.S. Hosts Arctic Roundtable

For several years, as part of its public outreach programs, the AINA U.S. Corporation has hosted Arctic Roundtables, in which a small group of experts initiate a topic by giving brief statements, followed by discussion with the audience. In mid November, the AINA U.S. Corporation hosted an Arctic Roundtable at the Morris Thompson Cultural and Visitors Center in Fairbanks, Alaska, on the topic, "The Peopling of the Americas: Who, Where, and When?" The Roundtable panel consisted of three professors from the University of Alaska Fairbanks: Daniel Mann from Geology & Geophysics, Mike Kunz from the Bureau of Land Management and the School of Natural Resources and Extension, and Ben Potter from Anthropology. Also participating on the panel was David Meltzer from the Department of Anthropology, Southern Methodist University, Dallas, Texas. AINA acknowledges generous support for the event from the National Park Service.

The ArcticNet Publications Database

The ArcticNet Publications Database is a searchable archive that contains the refereed and non-refereed scientific publications of ArcticNet, a Network of Centres of Excellence of Canada. The database has expanded considerably in the past year and now contains more than 3000 records, including 1865 refereed publications and 425 theses. The database describes 2670 publications from ArcticNet, 342 publications from the Canadian Arctic Shelf Exchange Study (CASES), and 208 publications from the International North Water Polynya Study (NOW), with some overlap for publications that involved more than one program. The ArcticNet Publications Database is a subset of the Arctic Science and Technology Information System and can be accessed at www.aina.ucalgary.ca/arcticnet.

AINA and U of Calgary to Host ACUNS 2015

The Arctic Institute of North America and the University of Calgary are pleased to be hosting the 11th Annual Association of Canadian Universities for Northern Studies (ACUNS) Student Conference in 2015. The conference, entitled "Due North: Next Generation Arctic Research & Leadership," will take place on the University of Calgary campus on 5–8 November 2015. Topics of discussion will include climate change, food security, natural resource development, Arctic policy, sustainable development, northern biodiversity and conservation, education, and circumpolar health.

For more information visit the conference website: <http://arctic.ucalgary.ca/acuns-2015-student-conference> or e-mail the organizers at acuns15@ucalgary.ca.

AINA's 70th Anniversary

2015 marks the 70th anniversary of the Arctic Institute of North America! To celebrate the occasion, the Institute is planning various events throughout the year, beginning with an opening reception in January. Please visit the AINA website at <http://arctic.ucalgary.ca> for updates on anniversary-related activities.