AINA NEWS

2016 Scholarship Winners

Zoe Panchen, a doctoral candidate in the Department of Biology at Carleton University in Ottawa, is the 2016 recipient of the Jennifer Robinson Memorial Scholarship. For her doctoral research, Zoe is investigating how climate change is affecting the flowering and fruiting times of Arctic plants. Her research involves extensive work with herbarium collections, as well as fieldwork around Iqaluit, Baffin Island, and Lake Hazen, Quttinirpaaq National Park, northern Ellesmere Island.

The 2016 recipient of the Lorraine Allison Scholarship is Yasmine Majchrzak, who is currently a doctoral student in the Department of Biological Sciences, University of Alberta. Yasmine is studying the stress physiology of snowshoe hares and lynx to discover the role of food limitation in the population cycles of both species. Her research project is focused on the Kluane Lake region of Yukon.

Our thanks go to the members of the two scholarship committees for their time and effort in assessing the applications and, as always, to AINA Administrative Assistant Melanie Paulson for facilitating their work.

2016 Grant-in-Aid Recipients

This year the selection committee received 23 applications for grants-in-aid and awarded grants for 2016 to nine successful applicants. Eleanor Bash, University of Calgary, is monitoring and predicting glacier change using unmanned aerial vehicles; Chris Cannon, University of Alaska Fairbanks, is documenting Northern Dene astronomy; John Christian, Penn State University, is studying herbivore use of a changing Low Arctic tundra landscape; and Michelle Duennes, University of California Riverside, is assessing conservation threats to Arctic bumble bees by surveying parasite prevalence. Margaret Oliver, University of Alaska Fairbanks, is studying the evolutionary history of the high-latitude plant genus Therorhodion (Ericaceae); Sarah Shakil, University of Alberta, is investigating the fate of particulate organic carbon released from slumping permafrost in the Peel Plateau, Northwest Territories; Molly Tedesche, University of Alaska Fairbanks, is using satellite data to study changes in perennial snowfields in the Brooks Range, Alaska, and the effects of these changes on caribou; Nelson Zabel, University of Waterloo, is studying the paleoecological history and contemporary controls on mercury accumulation in Kluane Lake, Yukon; and Scott Zolkos, University of Alberta, is studying the influence of massive permafrost thaw slumps on the carbon balance in streams of Yukon and the Northwest Territories.

The members of the Grant-in-Aid Selection Committee for 2016 were Alexander Braun, Mark Johnson, Tom Dunning Newbury, Mary Stapleton, Matthew Sturm, and Ken Tape. Proposals for 2017 are due on 1 February. Please refer to the AINA website for application information.

New AINA Postdoc Fellows

Dr. Ravi Darwin Sankar recently joined the Arctic Institute of North America (AINA) at the University of Calgary as an Eyes High Postdoctoral Fellow. His addition to the team of researchers at the AINA will aid an ongoing project that seeks to determine the interactions between human and marine systems and climate in the Arctic. Prior to joining the institute, Ravi completed his doctoral studies in Geological Sciences at Florida State University (USA). His dissertation focused on quantifying the effects of sealevel change and increased storminess on the morphology of sandy coastlines. His research was instrumental in predicting shoreline retreat and land-loss rates along barrier-island settings. Originally from the Caribbean island of Trinidad and Tobago, Ravi completed his MSc in Geology at Florida State University as a Fulbright scholar and his undergraduate degree in Physics and Environmental Sciences (First Class Hons.) at the University of the West Indies, Trinidad. He is also a former Trinidad and Tobago Government scholar. While his role at AINA is researchfocused, he has a passion for teaching. He has instructed courses in geology, physics, and science at several universities in the USA, Canada, and the Caribbean. Ravi is thrilled to be a part of the research team at AINA as he shifts his focus from climate change studies off the coasts of Florida to the shorelines of the Arctic region!



Dr. Ravi Darwin Sankar.

Mike Moloney recently joined the Arctic Institute to work in collaboration with Executive Director Maribeth Murray on archaeological materials obtained from Mink Island, Alaska. The collection, comprising largely faunal material, represents a 6500-year period of occupation and exploitation of marine resources in the area. For this project, Mike will focus specifically on building a working database of the more than 100,000 faunal samples in order to facilitate a diachronic understanding of the biogeography of the area and investigate the impact of climate change on marine fauna, particularly during the Neoglacial period. Prior to joining the institute, Mike completed his PhD in archaeology at the University of Calgary. For his doctoral studies, Mike investigated the application of innovative computer-based spatial modeling to the examination of shipwrecks and shipboard societies. As an underwater archaeologist, he has worked on submerged sites around the world, including sites in Canada, the United Kingdom, Thailand, and Sweden. Mike is very excited to expand his research horizons by working on climate change studies with the Arctic Institute.



Dr. Mike Moloney.

New ED for IARPC

Congratulations to long-time AINA Fellow Martin O. Jeffries, who was recently appointed Executive Director of the U.S. Interagency Arctic Research Policy Committee (IARPC). Martin is currently on secondment from the Office of Naval Research to the White House Office of Science and Technology Policy, where he is the assistant director of Polar Science. Martin has been involved with IARPC as a co-leader of the Sea Ice Collaboration Team, which seeks to improve the understanding of sea ice in the Beaufort and Chukchi Seas, as well as a section author of the IARPC Arctic Research Plan for 2013 to 2017.

Exploring ASTIS: The Mackenzie River Basin

In 2015–16, with funding from the Walter and Duncan Gordon foundation, the Arctic Science and Technology Information System (ASTIS) significantly expanded and enhanced its coverage of the Mackenzie River Basin.

With 2500 records describing publications and research projects about water quality and quantity in the Mackenzie Basin already in ASTIS, and a large collection of materials about the Mackenzie Basin in the AINA library collection, the Arctic Institute hosted both large online and physical libraries of documentation on the Mackenzie Basin prior to receiving the Foundation funding. Specifically, the ASTIS database contained:

- 2100 records describing publications and 400 records describing research projects about water quality and quantity in the Mackenzie Basin. Approximately 450 of those publications were published between 1965 and 1985. About 350 of the 1965–85 publications, and 1600 of all the publications, are in the AINA Library.
- Two subset databases, the Inuvialuit Settlement Region Database (www.aina.ucalgary.ca/isr) and the Sahtu Settlement Area Database (www.aina.ucalgary.ca/sahtu), cover both historical and modern publications about these two parts of the Mackenzie Basin.
- All of the publications prepared for the 1970s Mackenzie Valley Gas Pipeline application. These works include the entire Canadian Arctic Gas Study Lt1 Library, with a collection of more than 1000 consultants' reports that were not made public until the 1980s and were never widely distributed.
- The Beaufort Sea, Mackenzie Delta, Mackenzie Valley, and Northern Yukon: A Bibliographical Review, funded by DIAND (now INAC) and published in 1984, contained 1547 citations and abstracts, all of which are tagged in ASTIS.
- A collection of records covering the area north of Great Slave Lake prepared for the West Kitikmeot Slave Study contains 630 publications from the 1970s to 1995, all of which are tagged in ASTIS.

With the Foundation funding, ASTIS was able to add or enhance 164 records about the Mackenzie Basin. A full list of these documents, some of which are available only online through ASTIS, can be found here: http://www.aina.ucalgary.ca/scripts/mwimain.dll/144/proe/proeyd/TAG+GOR?COMMANDSEARCH.

The ASTIS database is available for free online from a bilingual website (French and English) at http://www.aina.ucalgary.ca/astis. We would like to thank the Walter and Duncan Gordon Foundation for providing funding and helping to keep information on Canada's North open and accessible.