### Tentative calendar

#### September 2018
- September 14: ADAC Fellows fall kick-off meeting
- September 18-20: ADAC co-hosted North American Arctic Maritime & Environmental Security workshop, University of Alaska Anchorage, AK
- September 27: Water test for ADAC led LRAV project, Monterey Bay, CA.

#### October 2018
- October 4: ADAC Customers and Partners roundtable via teleconference
- October 10-11: Canada’s Arctic priorities workshop, Ottawa, Canada, ADAC Executive Director Kee attending
- October 29-30: ADAC to participate in Alaska Regional Response Team meeting, University of Alaska Anchorage, AK

#### November 2018
- November 8: ADAC quarterly review with project research teams
- November 12-14: U.S. Coast Guard Maritime Risk Symposium, Oak Ridge, TN, ADAC Executive Director attending
- November 12-24: Canada Maritime Arctic Safety and Security Symposium, St. Johns, Newfoundland, Canada, ADAC PI, Dr. Causey attending

#### December 2018
- December 5-6: ADAC’s Annual meeting, U.S. Coast Guard Headquarters, Washington, D.C.

### Arctic Summer Internship Program

Students take part in an opportunity to study the changing Arctic environment

By: Richard McElmurry

This summer saw the successful completion of ADAC’s inaugural Arctic Summer Internship Program (ASIP). Students from across the country came together to study the rapidly changing Arctic environment. They got the opportunity to spend two weeks in Utqiagvik, Alaska (formerly Barrow) where they gained valuable hands-on experience, and a better perspective on the challenges facing those who live, work, and operate in the Arctic. ADAC staff supported the ASIP experience in Anchorage and Utqiagvik, while expert instruction in Utqiagvik was provided by Dr. Craig Tweedie, from the University of Texas El Paso, and Dr. Andrew Mahoney, from the University of Alaska Fairbanks. Over the course of the ten-week internship, participants received instruction on current Arctic issues, met with Arctic operators and communities, and collaborated on projects to demonstrate their understanding of how all these elements come together.

Six students were selected to take part in this unique opportunity and used it to improve their understanding of the Arctic, gain experience, and narrow their academic focus as they look forward to the next step in their careers. At the beginning of the summer, students from universities in Alaska, Texas, Ohio, and the Naval Academy in Annapolis, Maryland gathered at the ADAC office in Anchorage, Alaska to begin their journey. While in Anchorage, the students spent the first week of the program learning about the ADAC mission, getting to know each other, and preparing for their trip to Utqiagvik. During this time, they heard presentations and met with representatives from the U.S. Coast Guard and partner organizations, such as NOAA and the Alaska Department of Environmental Conservation. Students participated in discussions and completed an Arctic Futures mini-workshop focused on current and future Arctic issues. They also visited the Alaska Native Heritage Center to gain insight into the culture and history of Alaska’s indigenous communities. The last two days in Anchorage were spent going over the schedule and logistics for the trip to Utqiagvik.

Upon arrival on the North Slope of Alaska, students were met with the unfamiliar sight of snow and ice in the middle of June. They had arrived just in time to witness the summer thaw, a perfect opportunity to observe this seasonal transition. Utqiagvik hosts a robust Arctic research community, and the students were able to meet and interact with researchers from around the world who were there to take advantage of the short summer season. The days were spent on the sea ice and tundra as well as interacting with the local community and visiting various research sites.
Student Spotlight: Abdel-Fattah

Arctic Domain Awareness Center Workforce Development Fellow
Dina Abdel-Fattah has been a Workforce Development Fellow with ADAC since fall 2017. She is a Natural Resources and Sustainability Ph.D. candidate at the University of Alaska Fairbanks (UAF) and is advised by Dr. Sarah Trainor. Her background is in the social sciences and information technology and she has largely focused her work and research on the human-technology interface. She received her B.A. in international Relations from the College of William and Mary, Williamsburg VA, and her M.Sc. in International Development Studies from the University of Amsterdam, Netherlands. Before starting her Ph.D. studies at UAF, Dina worked as an IT project manager for over a decade for firms in Germany and the U.S. and has implemented projects in over 25 countries across the Middle East and North Africa, Eastern Europe, Asia, the Pacific basin, Sub-Saharan Africa, and the Caribbean.

Her doctoral research focuses on decision-making under uncertainty, specifically regarding crypticash hazards. As part of her ADAC fellowship, she supports Dr. Nathan Ketty’s Arctic Sea Ice and Weather Forecasting Project titled “Developing sea ice and weather forecasting tools to improve situational awareness and risk response in the Arctic.” Her work on this project focuses on understanding how sea ice modeling outputs can support early warning notifications for sea ice hazards in Utqiagvik (formerly known as Barrow), Alaska.

Over the course of the 2017-2018 academic year, she worked on a project that investigated the various modeling outputs used in a Search and Rescue (SAR) incident for a missing small vessel off the shores of Point Barrow, Alaska. She presented her findings at the Department of Homeland Security’s Centers of Excellence Summit in Arlington, VA in May 2018.

Apart from the ADAC-funded research Dina conducts, she supports the Center at its different workshops and events. Earlier this year she helped facilitate and contributed to the final report for the “Arctic in the distant future - Gaining Alaskan Native Insights to Challenges anticipated across Maritime and Coastal Regions” workshop in Nome, Alaska in March 2018. If all falls in place, Dina will also help facilitate the “North American Arctic Maritime & Environmental Security Workshop” in Anchorage, Alaska in September 2018.

Dina was also one of the participants for the inaugural ADAC Summer Intern Program (ASIP) in Anchorage and Utqiagvik, Alaska. The ASIP offered undergraduate and graduate students an opportunity to gain on-the-ground experience conducting field research in the Arctic and prove to be an informative and useful opportunity for the students who participated. After the Point Barrow portion of ASIP, Dina continued her summer internship work in Juneau, Alaska. She worked with the National Weather Service, the United States Geological Survey, and the University of Alaska Southeast on understanding the decision and information needs of various stakeholders in Juneau regarding global outburst flooding from Suicide Basin. She also worked with the U.S. Coast Guard (USCG) during her stay in Juneau on cataloguing and digitizing USCG SAR case files from 1976 to 2001. She will continue working on both projects upon her return to Fairbanks later in August.

She is very grateful for the opportunities and work she has been able to conduct this past year thanks to ADAC’s support and looks forward to continuing her collaboration with ADAC and its broader network in the years to come.

ADAC to Cohost MaLTE Workshop

U.S. and Canadian Arctic Experts to Gather at UAA in September

By: Mafie Kukkonen

On September 18-20, ADAC will co-host a workshop titled “North American Maritime and Environmental Security: Assessing Concern, Advancing Collaboration” at the University of Alaska Anchorage. The workshop is a partnered effort initiated by Trent University from Peterborough Ontario, Canada as a follow-on to their previous northern security-focused Canadian Arctic workshop hosted in Whitehorse, Yukon, Canada in the summer of 2017. Other partners of the workshop include several entities from the United States Coast Guard, the Alaskan Command, Center for Resilient Communities from the University of Idaho, University of Waterloo, Ontario, Canada, and The Polar Institute. For ADAC, the event will also be part of the Center’s medium to long-term (MaLTE) workshop series that focus on addressing key concerns for Arctic operations in the near and long-term.

The workshop will bring together Arctic-minded experts from government, Arctic operators, academics and industry principals from Canada and the U.S. to collaboratively assess and provide solutions to addressing security in the North and the Arctic maritime region, including aspects of environmental and human security. Registration for the workshop is open online (visit ADAC’s website for details) and the organizers anticipate the number of workshop participants to be between 50–70 people. Members of the Alaska Native communities and Canadian First Nations are among the stakeholders to take part in the workshop proceedings.

The two-day workshop program includes themed plenary panels on the first full day of the workshop followed by strategic analysis and group work sessions on the final day. As in previous years, ADAC student fellows will work alongside ADAC staff to ensure the success of the workshop. Following the conclusion of the event, the organizing team will provide a report that will assist in the creation of new synergies between the community of Arctic operators, academic researchers, and North American Arctic residents to respond to the emerging Arctic security challenges from both a physical environment and human perspective.