Two Postdoctoral Fellowship Opportunities, Alaska Climate Science Center

(1) Climate Data Downscaling
(1) Arctic Hydrology

The Alaska Climate Science Center (ACSC) is the first of eight regional climate science centers to be established in the United States. It was created in 2010 by the US Department of the Interior to address climate change and variability in Alaska and the surrounding region. Hosted by the University of Alaska Fairbanks, this research collaboration brings together federal and university scientists to address the priority needs of land and resource managers throughout the state in response to a rapidly changing climate.

Climate change is already recognized as altering temperature and precipitation regimes across Alaska. Some impacts already occurring include changes in sea ice extent and thickness, decreases in permafrost, altered hydrologic regimes, snowpack, streamflows, and sea levels, accelerated coastal erosion, wildfire, invasive species, and extreme weather events, impacts on subsistence species and human communities, and impacts to human health. Understanding future responses in Alaska in response to continued and accelerated climate change will depend on progressive, reliable, and readily available information about climate change effects.

The ACSC’s mission is to assist managers in anticipating, monitoring, and adapting to a changing climate utilizing leading edge research, tools, and data analysis techniques. The Alaska Climate Science Center provides science support to the state of Alaska and the surrounding region including adjacent marine ecosystems. This region contains a vast diversity of ecosystems including marine and fresh water habitats, temperate rainforests, boreal forests underlain by discontinuous permafrost, sub and high arctic regions with deep continuous permafrost, as well as numerous mountain ranges with the highest elevations in North America.

Climate Data Downscaling
Postdoctoral Fellowship Opportunity

Alaska Climate Science Center and
Scenarios Network for Alaska & Arctic Planning
University of Alaska, Fairbanks

The Alaska Climate Science Center (ACSC) and the Scenarios Network for Alaska & Arctic Planning (SNAP) are seeking a skilled researcher in advancing the science and knowledge of climate data downscaling. This researcher will compare various downscaling techniques and their application to specific research questions as well as develop new statistical downscaling techniques in order to transform model outputs and integrate them into ecosystem models of fire, vegetation, soil carbon, and permafrost dynamics.

This position will work closely with the ACSC, Dr. John Walsh, Chief Scientist at the International Arctic Research Center, and a second ACSC postdoctoral fellow concentrating on arctic hydrology. In addition, this position will collaborate with various scientists at SNAP as well as stakeholders from local, state, and federal agencies, industry, and non-profit organizations.

Ideal candidates will have:
- a doctorate in a scientific field related to climate science and demonstrated exceptional capabilities in research.
- expertise in working with and analyzing global climate model outputs.
- a strong understanding and desire to further the science of statistical climate data downscaling techniques.
- a strong background in climate and ecosystem modeling and quantification of uncertainty.
- the ability to take the lead on research projects while working with highly diverse individuals.
- excellent verbal and written communication skills.

Hydrological Analysis and Modeling Postdoctoral Fellowship Opportunity

Alaska Climate Science Center and
International Arctic Research Center
University of Alaska, Fairbanks

The Alaska Climate Science Center (ACSC) and the International Arctic Research Center (IARC) are seeking a skilled researcher in advancing the science and knowledge of hydrology and climate science. The researcher will work on characterizing and quantifying the present surface hydrologic conditions of Alaska and developing realistic projections of future trends in hydrologic variables and consequent impacts to habitat and water resources. This would entail characterizing the present water balance (rain, snow, stream and river runoff, soil moisture and lake storage) and developing defensible projections on how these variables will change in the next century.

This position will work closely with the ACSC, IARC scientists, and a second ACSC postdoctoral fellow concentrating on climate data downscaling. In addition, this position will collaborate with various scientists in the Scenarios Network for Alaska & Arctic Planning (SNAP) at the University of Alaska Fairbanks, as well as stakeholders from local, state, and federal agencies, industry, and non-profit organizations.

Ideal candidates will have:
- a doctorate in a scientific field related to hydrology and/or climate science and demonstrated exceptional capabilities in research.
- expertise in working with and analyzing hydrological and meteorological data sets.
- a strong understanding and desire to further the science of hydrological analyses and modeling.
- a strong background in hydrology, climate and ecosystem modeling.
- the ability to take the lead on research projects
For questions about the position, please contact Scott Rupp at tsrupp@alaska.edu

Application review date set for 9/30/2011

Please refer to job posting number 0062613 at https://www.uakjobs.com for application procedures, or use this quick link, www.uakjobs.com/applicants/Central?quickFind=74945

while working with highly diverse individuals.

● excellent verbal and written communication skills.

For questions about the position, please contact Larry Hinzman at lhinzman@iarc.uaf.edu

Application review date set for 9/30/2011

Please refer to job posting number 0062131 at https://www.uakjobs.com for application procedures, or use this quick link, www.uakjobs.com/applicants/Central?quickFind=74211