

Contact: Diana Gonzalez

**FACULTY PRESENTATION AT THE UNIVERSITY OF NORTHERN IOWA:
“FRONTIERS OF SUSTAINABILITY – UNDERSTAND AND FOSTERING SUSTAINABLE
DEVELOPMENT IN THE ARCTIC AND OTHER REMOTE AND RURAL COMMUNITIES”**

Action Requested: Receive the presentation.

Executive Summary: This presentation will report on the work by UNI faculty, staff and students on projects dealing with issues of sustainability and sustainable development in remote regions, most particularly in Arctic communities. UNI recently became a management and research center for a number of NSF research coordination networks and other NSF grants devoted to advancing sustainability science research in the Arctic for the next decade. These networks and projects build international interdisciplinary collaborative teams of environmental and social scientists, educators and community members from all circumpolar countries to enable and mobilize research on sustainable development, specifically aimed at improving health, human development and well-being of remote and rural communities in the Arctic while conserving ecosystem structures, functions and resources under changing climate conditions. The purpose of the projects is to contribute to conceptual, applied and educational aspects of sustainability science about the Arctic and beyond. Some of the findings are relevant to Iowa, most particularly with respect to sustainable development in small rural communities.

UNI has a history of Arctic research securing National Science Foundation, NASA and other funds to study Arctic, remote and rural regions. Dr. Petrov and other UNI researchers and students have been involved in key circumpolar initiatives, such as the International Polar Year, Arctic-FROST, Arctic Human Development Report, International Caribou Research Network, Arctic Social Indicators, Resources and Sustainable Development in the Arctic, Creative Arctic and others. New funding will expand the opportunities for UNI faculty and students to interact and engage in research with the community of Arctic scholars, and will raise the profile of UNI as a center of Arctic sustainability science in the United States. The new programming will also establish the IArctic (Iowa Arctic) initiative with the aim to develop K-12 curriculum and to improve the awareness of Iowa's public about the Arctic and its changing environment and societies.

Dr. Andrey N. Petrov is an Associate Professor of Geography at the University of Northern Iowa. He earned a Ph.D. from Herzen University in Russia in 2006 and a Ph.D. from the University of Toronto in 2008. Dr. Petrov is the Director of the Arctic Social and Environmental Systems (ARCSES) Research Lab and Academic Director of the Geoinformatics Training, Research, Education and Extension (GeoTREE) Center at UNI. Currently, he is serving as a Councilor of the International Arctic Social Science Association, a U.S. representative on the International Arctic Science Committee, and a Vice-Chair of the Polar Geography Specialty Group of the Association of American Geographers. Dr. Petrov is also an Associate Editor of Polar Geography (Taylor & Francis) and Director of the NSF Arctic-FROST research coordination network in Arctic sustainability.

Dr. Petrov's research interests include sustainable development, regional policies, economic diversification, knowledge-based and resource economies in remote and rural regions, indigenous demographics and labor migration in the Arctic, and geospatial techniques in regional analysis. His work is primarily based in northern Canada and Russia, but also includes Alaska, Greenland and rural areas of Iowa and North Dakota. Dr. Petrov has published more than 30 peer reviewed articles and book chapters. He is also a co-editor of a recent Arctic Social Indicators volume (2014). Dr. Petrov is a recipient of the Starkey-Robinson Award from the Canadian Association of Geographers and a number of institutional awards.