

Fulbright Seminar 2011

The 2010-11 U.S. Grantees to Norway Present Their Projects

Thursday, February 17, 2011

The Royal Norwegian Ministry of Foreign Affairs

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FULBRIGHT

U.S.-Norway Fulbright Foundation

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| 8:00-8:15 | Gather. Light Refreshments. |
| 8:15-8:30 | Welcome Remarks |
| 8:30-9:20 | Mapping Environmental Change (Hermanson, Jahren, Perlinger, Tessin) |
| 9:20-10:00 | Norwegian Environmental Policy in the Arctic (Bobbe, Lovecraft, Seligman) |
| 10:00-10:15 | Break |
| 10:15-10:45 | Optical Measuring and Motion Capturing Technologies (Carlson, Kozak) |
| 10:45-11:35 | Ecology (Anderson, Bass, King, Marine) |
| 11:35-12:25 | Lunch |
| 12:25-13:05 | Human Relationships with Nature (Dern, Severson, Stevens) |
| 13:05-13:35 | Environmental Building Design (Ericson, Jacobson) |
| 13:35-14:15 | Research to Performance: Engaging Norwegian Students in American Culture (Irvine, Patterson, Sanderson) |
| 14:15-14:30 | Break |
| 14:30-15:10 | Micro and Macro Perspectives on State Actions (Condee-Padunov, Jenkins, McKowen) |
| 15:10-15:50 | Perspectives on Education in Norway (Scheurman, Virtue, White) |
| 15:50-16:00 | Evaluations and Closing |

Alphabetical list of Presenters beginning on next page



Alyssa Anderson: Alyssa Anderson is studying molecular and morphological taxonomy of the aquatic fly genus, *Micropsectra* (Diptera: Chironomidae), which can be quite useful in biological monitoring studies but only when examined at the species level. Species within this genus are found in a variety of freshwater habitats and have a wide distribution throughout the Nearctic and Palearctic regions; however, comparatively few systematic and taxonomic studies have focused on the differentiation and description of Nearctic species. Thus, the intent of Alyssa's research is to use molecular-based tools to help resolve these taxonomic problems and provide the framework for better elucidation of North American *Micropsectra* species.



Arthur Bass: Art is studying the ecology of an inland fish, European grayling, in a Norwegian lake called Lesjaskogsvatnet. Acoustic transmitters implanted in the fish allow tracking of movement and behavior. This data provides a novel description of grayling behavior in a lake and complements previous studies of the differences between subpopulations utilizing the lake.



Sarah Bobbe: Sarah Bobbe conducts research at the Institute of Marine Research and is obtaining a master's degree in Marine Aquatic Ecology at the University of Bergen. Her research focuses on the evaluation of the Norwegian model of marine spatial management with focus on the designation of vulnerable areas in the Barents Sea ecosystem.



Andrew Carlson: For use in offshore oil drilling where the integrity of pipe joints are crucial, the optical measuring system being developed in Andrew's project is a method for determining the quality of the weld that is fast, non-invasive, and inexpensive to implement. Using a standard camera, three dimensional models can be created of pipes to ensure the welding process was performed correctly.



Nikolai Condee-Padunov: Over the past few centuries, experts worldwide have expressed fear that the growth of the world's population was becoming unsustainable, with the potential outcome of famines and other such calamities in the future. Condee-Padunov's research project examines historical and modern approaches to population control and family planning in both global and domestic settings, with a particular focus on programs managed by Norway and Sweden -- two leaders in global family planning efforts. Other areas of research include the use of sterilization in Nordic states, intrauterine device usage in India, the effects of Malthusian "positive checks" on reproduction in British colonies, and an assessment of the challenges facing future efforts to improve access to family planning services worldwide.



Courtney Dern: Courtney Dern is one of this year's English Teaching Assistants. In addition to her roles at the University of Oslo and a lower secondary school in Ås, she also works for an upper secondary program called Language For Leaders and at an environmentally focused preschool. Here she will share her insights into how Norwegian school children relate to nature.



Kristine Ericson: Kristine is researching the theory and history of Norwegian urban and landscape design. These theoretical studies have a number of practical applications for ongoing urban development projects in Trondheim. A former power plant in the city's Ilsvika district and the Gløshaugen campus of the Norwegian University of Science and Technology could become important cultural nodes for the city and strengthen the existing identities of their sites.



Mark Hermanson: Mark Hermanson was a Fulbright Chair in Chemistry at the University Center on Svalbard (UNIS), researching sources and fates of organic contaminants found in ice cores collected on Svalbard. These contaminants are delivered to Svalbard through the atmosphere and are thought to originate in Eurasia. His activities during this period included preparing manuscripts for publication, making presentations to groups in Norway and elsewhere, and arranging for new research on an ice core drilled in 2009. In addition, Hermanson has been working with UNIS to develop new courses to attract more students to the environmental program.



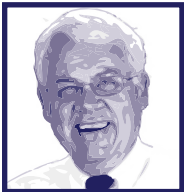
Colin Irvine: One of two "Rovers" for the Upper Secondary Level, Colin Irvine visits both traditional and vocational videregående schools throughout Norway giving presentations on American Studies topics to students while also offering workshops on pedagogical topics for teachers. With a focus on teaching in vocational schools and classes, his paper will address the challenges and rewards associated with teaching those students preparing for such professions as engineering, electrical work, beauty and health care, sales and marketing, and food service.



Rolf Jacobson: Rolf Jacobson is investigating the performance of highly insulating residential building envelopes (exterior walls, roof, and floor) for use in cold climates. While necessary to meet new national and international energy efficiency and carbon reduction targets, these building envelopes also pose special problems such as an increased potential for moisture accumulation, greater embodied energy, and higher cost. Identifying envelope options that address these issues while saving substantial amounts of energy is the challenge.



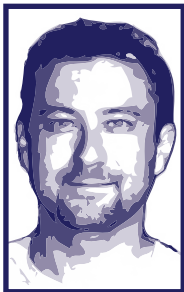
Anne Hope Jahren: Anne Hope Jahren is studying methods of embryo propagation which remove genetic variation from experiments, thus allowing for the production of entire forests composed of a single individual tree. By exposing these trees to different conditions during embryogenesis, but the same conditions during adulthood, she is testing how performance during climate change can be related to early growth experiences. In simple terms, she has found that trees experiencing warm childhoods can better perform under warming conditions as adults, suggesting that trees remember childhood experiences and can use them to choose the most appropriate behavior for unstable environments.



Craig Jenkins: Civil conflicts create challenges for international peace. Drawing on computer coding of civil conflicts in countries throughout the world reported by Reuters newswire, Craig Jenkins is evaluating the reliability of these data and using them to assess conflict dynamics that lead to civil war and peace processes.



Tyler King: Through directed research at NTNU, Tyler has been contributing to a national project at the Center for Environmental Design of Renewable Energy (CEDREN) where he focuses on the environmental impacts of an integrated renewable energy system. His research provides crucial data for integrating fluctuating forms of renewable energy by modelling the impacts of short term reservoir releases.



Mariusz Kozak: In this project, Mariusz Kozak is using motion capture technology to examine how listeners perceive musical sounds, especially how certain basic elements of sound engender specific movements in participants. This is in keeping with the general premise of embodied cognition, which asserts that our cognitive abilities are predicated on our bodily existence in our environment. Experiments have been conducted to test specific claims of this approach, namely that the kinematic and dynamic features of movement are in direct response to, and guide our perception of, the temporal distribution of energy contained in the sound itself.



Amy Lovecraft: Dr. Lovecraft is researching Norway's policy responses to climate change, in particular in relation to the Arctic. One case study she explores in her research is the potential for the formation of a cross-scalar adaptive sea ice system of refugia. She is affiliated with the Center for International Climate and Environmental Research (CICERO) in Oslo.



Caitlin Marine: Caitlin Marine assisted with a population study and conducted GIS analysis using three different base maps to determine habitat preferences of capercaillie and black grouse in the early autumn. Additionally, Caitlin is taking classes in Nature Management and is an active member/volunteer with the local ski club.



Kelly McKowen: Welfare state research, characterized largely by theory and typologies of the various existent 'regimes,' has revealed relatively little about how concepts such as decommodification, social citizenship, and universalism manifest themselves in everyday life. Utilizing anthropological methodology, Kelly McKowen aims to contribute to the filling of that void by describing the Norwegian welfare system in terms distilled from the perceptions, experiences, and insights of some those who come into contact with it on a regular basis.



Martha Patterson: During the first half of the Fulbright grant period, Patterson is exploring how George Schuyler, a prominent African American satirist known as the black H.L. Mencken, responded to the rise of European fascism in the 1930s. Her project is part of a larger book project entitled *The Harlem Renaissance Weekly*, which examines the newspaper contributions of some of the most important African American writers during the Renaissance.



Judith Perlinger: Dr. Perlinger's collaborative project involves measurement and modeling of transport of organic toxicants in the environment. Specifically, the rate at which organic toxicants are vertically exchanged between the lower atmosphere and Earth surfaces (e.g., canopies, oceans, glaciers) is being measured and modeled using micrometeorological approaches.



Christopher Carter Sanderson: Christopher Carter Sanderson is working with the student actors and musicians of Ensemble Free Theater Norway on a new musical that he has written and composed. Having learned both practical techniques and cultural background of this originally American art form in rehearsal, the student artists will then perform in both Norway and the US.



Geoff Scheurman: It's impossible to talk about education independent of the larger culture, and it's impossible to isolate culture independent of our projections and perceptions on it. Scheurman will share a few evolving observations in the form of paradoxes from the perspective of a "lifer" in American schools now visiting schools in Norway. These apparent tensions combine to form a sort of "egalitarian dilemma" which appears in varied forms, ranging from social and ethical to ideological and psychological.



Ira Seligman: Ira Seligman's project is a comparative study of Norwegian and American sustainable fishing policies. In particular, he has examined the role of ecosystem-based management in both nations' fisheries governance. His goal is identify techniques in the Norwegian regulatory regime that could be successfully applied to the U.S. system.



Rachel Severson: The natural world experienced in childhood forms the baseline of what is normal. As the environment and/or the quality of experiences declines the degraded condition is taken as the normal state unaware that the baseline has shifted downward. Severson is investigating the possibility of a shifting baseline across generations in Norwegians' experiences, conceptions, and values for nature.



Christopher Stevens: The movements for environmental preservation and for environmental human rights (EHRs) have a less satisfactory relationship than one would hope. Because EHRs are typically conceived of in terms of basic human needs, and because environmentally-related basic human needs can be had from an environment in decline, EHRs generate weak reasons for preservation. But the language of rights is more politically effective than the language of preservation. To deal with these difficulties, Christopher Stevens develops a new theory of environmental human rights.



Allyson Tessin: The Southern Ocean has been one of the most rapidly warming regions of the world but sources of these trends and the relative roles of anthropogenic and natural influences, as well as their potential impacts on global ocean circulation remain debated. Allyson will present a record characterizing long-term natural climate variability from Southern Ocean sediment cores. Such records are necessary to contextualize recent trends and to understand their potential impacts on the Southern Ocean and its circulation.



David Virtue: David is serving as the roving scholar for the lower secondary schools, providing lectures and workshops for students and teachers related to the theme: *E Pluribus Unum: Dimensions of Diversity and Unity in the United States*. He has visited more than 25 schools throughout the country and has given presentations on topics including life in U.S. schools, physical and cultural regions of the U.S., American history, and curriculum integration.



Taylor White: Since arriving in Norway in August, Taylor has taught and assisted instructors at the middle, high school, and university level in both formal and informal settings. To further her study of Norwegian education, Taylor also took Models in Nordic Education, a course at UiO, and has begun making plans to "follow" Norwegian students for full school days to better understand the system from students' perspectives. Outside of schools, Taylor has also helped establish Norway's first ever women's lacrosse team in Oslo, a team which she now coaches and co-manages.

