Bergen Summer
Research School

› Food as a Global Development Challenge

2013

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The Bergen Summer Research School is a joint venture under the leadership of the University of Bergen with the Norwegian School of Economics and Business Administration, Bergen University College, Chr. Michelsen Institute and UniResearch.
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WELCOME TO BERGEN SUMMER RESEARCH SCHOOL - BSRS 2013

Food as a Global Development Challenge

A basic need, a pleasure, a cultural and religious marker, an ethical, environmental and a health challenge, an economic resource, a manifestation of power, a political battle ground - food shapes all aspects of our lives. Some of us have too little, others too much, and we deal with and distribute the global food resource in ways that may not be ethically, environmentally, or economically sustainable.

Technological development opens new opportunities for food production, but also redefines what we think of as healthy, edible, good and right. But technology cannot decouple food and nature - all of us, urban or rural, rich or poor, depend on the goods and services that ecosystems provide for our livelihoods. Hence, ecosystem degradation is a global concern, but the technological and economic ability to adapt is not equally distributed.

Food can be a source of conflict, around tables as well as among nations. Globalization processes have consequences for how we solve these various challenges related to food production, distribution, and consumption at all scales and levels. Food is a cross-disciplinary research challenge. From nutrition and medicine to law, from aquaculture to cultural studies, from psychology to comparative politics, research can identify problems, suggest solutions, and create opportunities.

In BSRS 2013, the Bergen Research Milieu aims to stimulate participating students, course lecturers and international keynotes to come together to take a broader view on food as a development challenge. This will be achieved through a series of keynote lectures and seminars given by internationally leading experts, in-depth tutoring and discussions for the students attending each of the four parallel courses, group discussions within and across courses, and practical training in a broad range of research skills including scientific writing and communication, conceptual and numerical models, various research tools, and statistical analyses.

Welcome to Bergen Summer Research School 2013!

THE HISTORY OF BSRS

Research education for global development challenges

Academic institutions are the backbones of society, providing knowledge and educating young people. Global development challenges affect us all, rich as well as poorer countries. As inequalities continue to grow, it is a responsibility for advanced economies and their academic institutions to invest in research that addresses global challenges, to share their resources, and to provide opportunities for exchange of ideas. The Bergen academic milieu is committed to rethink the implications of Norway's position in the world today, emphasizing topics of relevance to our research strengths and strategic priorities. The Bergen Summer Research School is a joint venture under the leadership of the University of Bergen (UiB) with the Norwegian School of Economics (NHH), Bergen University College, Chr. Michelsen Institute and UniResearch.

Over the years, the Bergen Summer Research School has focused on the following overarching themes:

- 2008: Global Poverty
- 2009: Climate, Environment and Energy
- 2010: Global Health
- 2011: Norms, Values, Language and Culture
- 2012: Transnational Migration and Global Development

Bergen Summer Research School is a priority in the University of Bergen Strategic Plan for 2011-2015, which prioritizes high-quality research education with emphasis on developing and strengthening thematic areas, across disciplines, to meet global challenges.

SCIENTIFIC COMMITTEE – BSRS 2013

- Professor Vigdis Vandvik, *Department of Biology, Faculty of Mathematics and Natural Sciences, UiB* (Chair)
- Professor Kjersti Fløttum, *Department of Foreign Languages, Faculty of Humanities, UiB*
- Professor Tore Furevik, *Geophysical Institute, Faculty of Mathematics and Natural Sciences, UiB, and the Bjerknes Centre for Climate Research*
- Professor Siri Gloppen, *Department of Comparative politics, Faculty of Social Sciences, UiB, and Christian Michelsen Institute*
- Professor Matthias Kaiser, *Centre for the studies of the Sciences and the Humanities, UiB*
- Professor Gro Lie, *Department of Health Promotion and Development, Faculty of Psychology, UiB*
- Professor Ernst Nordtveit, *Faculty of Law, UiB*
- Professor Karin Pittman, *Department of Biology, Faculty of Mathematics and Natural Sciences, UiB*
- Professor Lise Rakner, *Department of Comparative politics, Faculty of Social Sciences, UiB, and Christian Michelsen Institute*
- Professor Berit Rokne, *Deputy Rector, Head of the Central research Committee, UiB*
- Professor Grethe Tell, *Department of Global Public Health and Primary Care, Faculty of Medicine and Dentistry, UiB*
- Professor Thorkild Tylleskär, *Centre for International Health, Faculty of Medicine and Dentistry, UiB*

ORGANIZING COMMITTEE – BSRS 2013

Scientific leader
Professor Vigdis Vandvik
Department of Biology
Faculty of Mathematics and Natural Sciences
UiB

Communication advisor
Øyvind Gjerstad
UiB Global
Division of Research Management
UiB

Scientific coordinator
Postdoc Inger Elisabeth Måren
Department of Geography
Faculty of Social Sciences
UiB

Administrative coordinator
Howaida Faisal Abdelrahman
UiB Global
Division of Research Management
UiB

Academic head of UiB Global
Professor Gro Lie
UiB Global and *Department of Health Promotion and Development*
Faculty of Psychology
UiB

KEYNOTE SPEAKER

TUESDAY 18.06. - 10:00 – 12:00 - LAW FACULTY – DRAGEFJELLET – AUDITORIUM 2

THOMAS WINFRIED MENKO POGGE

Dr. Thomas Pogge is Director of the Global Justice Program and Leitner Professor of Philosophy and International Affairs, Yale University, USA. Having received his PhD in philosophy from Harvard, Pogge has published widely on Kant and in moral and political philosophy. He is Research Director at the Oslo University Centre for the Study of Mind in Nature (CSMN) and a member of the Norwegian Academy of Science. Pogge is President of Academics Stand Against Poverty (ASAP), an international network aiming to enhance the impact of scholars, teachers and students on global poverty. He is also involved in a team effort toward developing a complement to the pharmaceutical patent regime that would improve access to advanced medicines for the poor worldwide (www.healthimpactfund.org). His recent publications (see pantheon.yale.edu/~tp4) include *Politics as Usual*, Polity 2010; *World Poverty and Human Rights*, 2nd edn, Polity 2008; *John Rawls: His Life and Theory of Justice*, Oxford 2007; and *Freedom from Poverty as a Human Right*, edited, Oxford & UNESCO 2007.

Keynote lecture

The Hunger Games

Since the 1996 World Food Summit, the world has been committed to halving world hunger by 2015. But the specification of this promise has changed from the Summit version to the Millennium Declaration to the Millennium Development Goals (MDGs). These revisions have dramatically diluted the promise, raising the number of hungry people deemed acceptable in 2015 by 55 percent. In a final push, in 2012 (year 22 of the 25-year MDG exercise) the FAO revised its methodology for counting the hungry with the effect of raising the 1990 number of hungry people by 157 million and lowering the 2010 number by 57 million. This switch harmonized the hunger numbers with the World Bank's rosy poverty trend line and enabled the FAO to proclaim: "The Millennium Development Goal 1 hunger target, halving the proportion of hungry people in developing countries by 2015, is still within reach." As new development goals are about to be formulated, we must urgently learn the lessons from the expiring ones which have brought mainly cosmetic efforts and cosmetic progress. The hungry of the world are not able to contest the official portrayals of their problem.

KEYNOTE SPEAKER

TUESDAY 18.06. - 18:00 – 19:00 - LAW FACULTY – DRAGEFJELLET – AUDITORIUM 2

SHENGGEN FAN

Dr. Shenggen Fan is the Director General of the International Food Policy Research Institute (IFPRI) in Washington DC. Fan joined IFPRI in 1995 as a research fellow, conducting extensive research on pro-poor development strategies in Africa, Asia, and the Middle East. He led IFPRI's program on public investment before becoming the director of the Institute's Development Strategy and Governance Division in 2005. He is the Chairman of the World Economic Forum's Global Agenda Council on Food Security. Dr. Fan received a PhD in applied economics from the University of Minnesota and bachelor's and master's degrees from Nanjing Agricultural University in China.

Keynote lecture

Leveraging Agriculture and Food for Nutrition and Health Outcomes

Today, the world food system remains vulnerable. Global hunger and malnutrition persist at unacceptably high levels, as nearly 870 million individuals remain undernourished and more than 2 billion suffer from micronutrient deficiencies, according to figures from the United Nations. Obesity now increasingly coexists alongside hunger and malnutrition as well, as globally more than 1 billion individuals are overweight and 300 million are obese. Agriculture- related health risks, such as avian influenza, are also a growing concern, accounting for adverse health effects in billions of people each year. Hunger, malnutrition, and agriculture-related health risks threaten the ability of many developing countries to improve nutrition and health outcomes. As a supplier of food and essential nutrients, a source of income and employment, and an engine for growth, the global agricultural and food system must be leveraged for better nutrition and health. A nexus approach must be pursued to do this.

This presentation will give an overview of global food insecurity, malnutrition, and agriculture-related health risks. Key linkages between agriculture, nutrition, and health will be presented. Actions needed to leverage agriculture for nutrition and health outcomes through a nexus approach will be discussed, including: promoting nutrition-sensitive value chains, such as through biofortification and crop diversification to enhance dietary quality; reducing health risks along the entire value chain through public information campaigns on agriculture-related disease transmission; and developing strong regulatory and monitoring frameworks for food safety.

KEYNOTE SPEAKER

WEDNESDAY 19.06. - 08:30 – 10:00 - LAW FACULTY – DRAGEFJELLET – AUDITORIUM 2

KJERSTI FLØTTUM

Dr. Kjersti Fløttum is Professor of French linguistics at the Department of Foreign Languages, University of Bergen, where she teaches text theory and discourse analysis. She headed the Bergen Summer Research School (BSRS) 2008-2011. Her general research fields are related to text and genre theory with a special focus on linguistic polyphony (multivoicedness) and dialogism in scientific, political and climate change discourse. She is head of the multidisciplinary project LINGCLIM: *Linguistic representations of climate change discourse and their individual and collective interpretations.* Fløttum is co-author of the book *Academic Voices* (2006) and has published extensively in international journals including *Journal of Pragmatics, Journal of Language and Politics, Language & Communication, Climatic Change.*

Keynote lecture

Communicating 'Wicked Problems' at the Interface between Science and Politics: the example of Climate Change

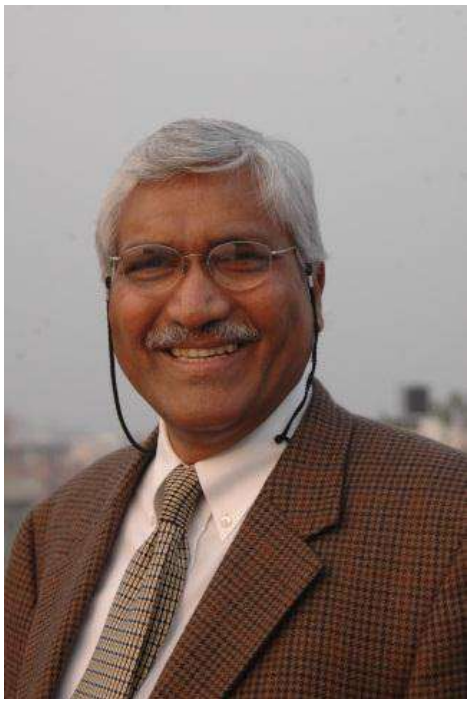
For several decades, the natural sciences have documented causes and effects of climate change, with all its complexity and inherent uncertainty. This global challenge is one of the most pressing issues facing humanity today. However, the current global debate reveals some discrepancies between the claims and evidence presented by climate sciences and the 'stories' circulating in the media, among politicians and ordinary citizens. While the majority now firmly believes that climate change to a large extent is anthropogenic and that it is our moral obligation to current and future generations to do something about it, some are still dismissive of the issue and equally firm in their belief that any change has natural causes and that nothing can or ought to be done. Why are there so many different opinions about and attitudes towards climate change? Climate change seems to have moved from being predominantly a physical phenomenon to being simultaneously social, political, ethical and cultural. Human values and belief systems have a clear influence on human responses and lead to different attitudes and preferences for courses of action or inaction. Research has shown that the meaning that people ascribe to climate change is closely related to how climate change is portrayed in the communication. In this, language plays a crucial role.

With this as a backdrop, I will present and discuss different linguistic and discursive features frequently used in text and talk about climate change. The aim of such analyses is to contribute to a fuller understanding of the multifaceted climate change debate, where multiple actors and voices are constructing a variety of agendas, according to different backgrounds, world views, interests and values. Examples will be taken from scientific, political and media discourse.

KEYNOTE SPEAKER

WEDNESDAY 19.06. – 10:00 – 12:00 - LAW FACULTY – DRAGEFJELLET – AUDITORIUM 2

ATIQ RAHMAN



Dr. Atiq Rahman, Executive Director of Bangladesh Centre for Advanced Studies (BCAS), is a leading climate scientist and visionary thinker on sustainable development from South Asia. He is widely known for his research and publications on climate justice, food security and human security. He got the highest UN award on Environment "The Champion of the Earth 2008" from the UNEP for the Asia Pacific Region. He also received the highest Environment Award of the Government of Bangladesh called - 'Paribesh Padak 2008'. He was a lead author of the IPCC Fourth Assessment Report, which received the Nobel Peace Prize in 2007.

Keynote lecture

Interlinkages Between Food Security, Climate Change and Sustainable Development

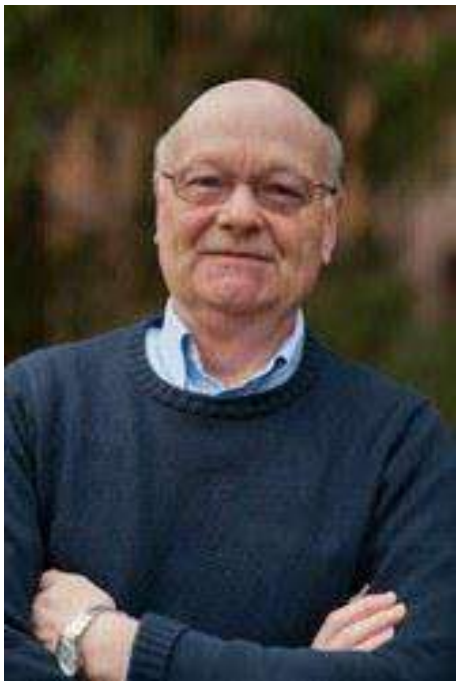
The advent of twenty first century was preceded by the emergence of the concept of sustainable development. The impacts of climate change are being evident in different parts of the world and in different ecosystems where the need for consideration of sustainable development concepts has become an imperative. The poor of the world will be paying the heaviest price through the experience of extreme events induced by climate change.

Food Security will be one of the sectors that will face particular stress. The presentation will discuss food production, food availability, food access, food security and also nutritional security. In the context of intensifying climate impacts and in the sustainable development framework, significant amount of work has been done on Bangladesh. Bangladesh will be treated as a case study to demonstrate the interlinkages of the three connected issues of food security, climate change and sustainable development.

KEYNOTE SPEAKER

THURSDAY 20.06. - 10:00 – 12:00 - LAW FACULTY – DRAGEFJELLET – AUDITORIUM 2

DAVID BLANDFORD



Dr. David Blandford is a professor of agricultural and environmental economics at the Pennsylvania State University. He was formerly a division director at the Organization for Economic Cooperation and Development and a professor at Cornell University. He was president of the Agricultural Economics Society (U.K.) in 2010/11. He teaches courses in agribusiness at Penn State and conducts research into food and agricultural policies, including their environmental, trade, and rural development aspects. Blandford has served as a consultant for a range of international organizations including the Food and Agriculture Organization, the International Food Policy Research Institute, the OECD, and the World Bank.

Keynote lecture

Challenges and Policy Options for Balancing Competing Demands on Agriculture

World agriculture faces major challenges. The prospect of continued growth in the demand for food will exert major pressure on the agricultural sector. Agriculture is a major user of natural resources, particularly land, water and energy. The need to expand production to meet the growing demand for food will generate increased pressure on these resources. Climate change will also have major implications for agriculture, both because its activities are so dependent on climate, but also because the sector is a major source of greenhouse gas emissions. Adaptation to climate change may pose a major challenge. In many developing countries the sector is a major source of employment, but the trend is towards a declining economic role for agriculture as people migrate from rural areas to the cities to work in other sectors. It will be difficult to sustain viable local economies in many rural areas. Finding a balance between the need to increase productivity in agriculture, enhance its contribution to environmental quality, and strengthen its contribution to rural economies will be extremely challenging.

In this lecture I shall outline key issues that we face in trying to balance competing objectives for agriculture and their implications for agricultural policies. The aim is identify the menu of possible policy choices and the extent to which these are mutually supportive or conflicting in terms of the economic, social and environmental roles that we expect agriculture to perform in the future.

KEYNOTE SPEAKER

FRIDAY 21.06. - 11:00 – 13:00 – BERGEN CHAMBER OF COMMERCE AND INDUSTRY

EMMA MARRIS

Author of "Rambunctious Garden"

Emma Marris is an environmental writer and reporter. Her book, *Rambunctious Garden: Saving Nature in a Post-Wild World,* highlights alternative conservation strategies that do not focus on holding or returning land to a historical baseline. From managed relocation of species threatened by climate change to the embrace of so-called novel ecosystems, she champions a blurring of the lines between nature and people, and a conscious and responsible management of our humanized planet. She grew up in Seattle, Washington, and now lives with her husband and two children in Columbia, Missouri.

Sponsored by Bergen Chamber of Commerce and Industry (Bergen Næringsråd)

11.00 Lunch
11.30 Welcome to Bergen Chamber of Commerce and Industry
11.35 Keynote speaker Emma Marris
12.20 Industry perspective - Brand and Marketing Director, Pål Erik Michelsen, Hallvard Lerøy AS
12.40 Discussion and questions from the audience – moderated by Vigdis Vandvik

Keynote lecture

Rambunctious Garden Earth

The more we learn about the extent to which even seemingly 'pristine' ecosystems have been influenced by humans and the more we understand the transformative nature of contemporary change, from climate change to global agriculture and aquaculture, the clearer it is that environmentalism cannot be premised on putting things back the way they used to be. Environmentalism must break free of culturally determined baselines and orient itself around goals like diversity, services and beauty. This talk will sketch out how this might be done, including accepting and becoming conscious about our influence over Earth ecosystems, as well as letting some areas go wild to form 'novel ecosystems'--the wildernesses of the future.

KEYNOTE SPEAKER

FRIDAY 21.06. - 16:00 – 18:00 - LAW FACULTY – DRAGEFJELLET – AUDITORIUM 2

AMBEKAR EKNATH

Dr. Ambekar Eknath is the Director General (2011 - present) of the Network of Aquaculture Centers in Asia-Pacific (NACA), based in Bangkok, Thailand. He has over 30 years' experience in managing international development projects in challenging multi – institution and multi – cultural settings in Asia and Africa. He worked at ICLARM / WorldFish Center from 1987-1997 where he was responsible for the Program on Fish Germplasm Enhancement and Breeding; from 1998 – 2006 he worked in GenoMar – Norway as one of the founding scientists responsible for establishing GenoMar as a pioneering life sciences company in the University of Oslo research Park, Norway. Prior to joining NACA as its Director General from September 2011, he was the Director of CIFA, a premier national institute responsible for research and development of freshwater aquaculture in India from 2008 - 2011.

Keynote lecture

Challenges and Opportunities to Sustain Aquaculture Production in the Asia – Pacific Region

My presentation will begin with an overview of aquaculture production – Global and in the Asia – Pacific region – with emphasis on the unique characteristics of the Asian aquaculture system: diversity of species, diversity of farming systems, the present trends and most importantly the people and the small scale entrepreneurs who are responsible for the region's impressive contribution to the food security, nutrition and livelihoods.

The focus of discussions will be on the track record of aquaculture in Asia in terms of its responsiveness to a number of issues related to the "image" and sustainability of aquaculture including, productivity, environment, biodiversity, use of resources, food safety, balancing of socio-economic benefits, small-scale vis-à-vis large scale industrial aquaculture; and adoption of animal welfare measures. It will also focus on how the sector as a whole is expected to sustain in the next few decades against the backdrop of stagnating food fish production from capture fisheries, population growth and the targets established under the auspices of the Millennium Development Goals.

KEYNOTE SPEAKER

MONDAY 24.06. - 10:00 – 12:00 - LAW FACULTY – DRAGEFJELLET – AUDITORIUM 2

JULIE GUTHMAN

Dr. Julie Guthman is a geographer and professor of social sciences at the University of California at Santa Cruz where she teaches courses primarily in global political economy and the politics of food and agriculture. She has published extensively on contemporary efforts to transform the way food is produced, distributed, and consumed, with a particular focus on voluntary food labels, community food security, farm-to-school programs, and the race and class politics of "alternative food". Her publications include two multi-award winning books: *Agrarian Dreams: the Paradox of Organic Farming in California (2004)* and *Weighing In: Obesity, Food Justice, and the Limits of Capitalism (2011)*.

Keynote lecture

Re-thinking Environmental Causes of Obesity

The thesis that rising obesity owes to a built environment where cheap, fast, nutritionally inferior food is ubiquitous and physical activity opportunities are sparse has become quite prominent, especially in the United States among public health advocates, planners, geographers, and food activists. However, studies to test the thesis have generated inconclusive or marginal results, and the more robust findings may be based on spurious correlations. Part of the problem is methodological: researchers embed many assumptions in their models and derive causality from unexamined correlation. As such, they neglect the possibility that features of the built environment may be as much an effect of socio-spatial patterning as a cause. In addition, in embedding taken-for-granted assumptions about the causes of obesity, namely the energy balance model, these studies foreclose alternative explanations. In this talk, Guthman will explore some of the conceptual and empirical limitations of the obesogenic environment thesis. She will also report on emerging evidence that environmental toxins and certain food additives play a significant role in contemporary obesity, irrespective of caloric intake. She will conclude the talk by discussing some of the implications of these findings for food governance.

KEYNOTE SPEAKER

TUESDAY 25.06. - 10:00 – 12:00 - LAW FACULTY – DRAGEFJELLET – AUDITORIUM 2

LIVAR FRØYLAND

© Helge Skodvin

Dr. Livar Frøyland is Director of Research at the Norwegian National Institute of Nutrition and Seafood Research (NIFES). He has his research background within biology, physiology, clinical biochemistry and nutrition. In 1997 Frøyland was employed at NIFES, formerly Institute of Nutrition at the Directorate of Fisheries. He is also professor in Medicine (nutritional physiology) at Department of Biomedicine, UiB, where he lectures in nutrition. Frøyland has been a member of the Panel on Nutrition, the Norwegian Scientific Committee for Food Safety (VKM), since it was established in its new model in 2004. He was a co-author of the Norwegian risk benefit report on seafood in 2006 and led the work on a risk-benefit report on omega-3 fatty acids 2011.

Keynote lecture

Seafood and health – current status

A varied diet provides good nutritional status and forms the basis for good health. The authorities advise people to eat more seafood since this is a significant part of a varied diet, much like for example fruit and wholegrain products. Seafood contains unique combinations of nutrients, proteins, vitamins, minerals and omega-3 fatty acids, which are all important components of a healthy and proper diet. However, seafood also contains unwanted substances such as methyl mercury, dioxins, PCBs and other potentially harmful compounds. Some principles regarding risk-benefit evaluations on seafood as well some thoughts on future research on seafood consumption will be presented.

KEYNOTE SPEAKER

WEDNESDAY 26.06. 10:00 – 12:00 - LAW FACULTY – DRAGEFJELLET – AUDITORIUM 2

PETER KAREIVA

Dr. Peter Kareiva is the chief scientist and Vice President of The Nature Conservancy, where he is responsible for developing and helping to implement science-based conservation. Peter joined The Nature Conservancy in 2002 after more than 20 years in academics and work at the National Oceanic and Atmospheric Administration, where he directed the Northwest Fisheries Science Center Conservation Biology Division. In addition to his duties as the Conservancy's chief scientist, his current projects emphasize the interplay of human land-use and biodiversity, resilience in the face of global change, and marine conservation. In addition to conducting research, Peter believes that general communications and writing are essential in science, and has written (with Dr. Michelle Marvier) the conservation textbook *Conservation Science: Balancing the Needs of People and Nature* (Roberts & Company 2010). In May 2011, Peter Kareiva was named a member of the National Academy of Sciences for his excellence in original scientific research. Peter received his Ph.D. in ecology and evolutionary biology from Cornell University.

Keynote lecture

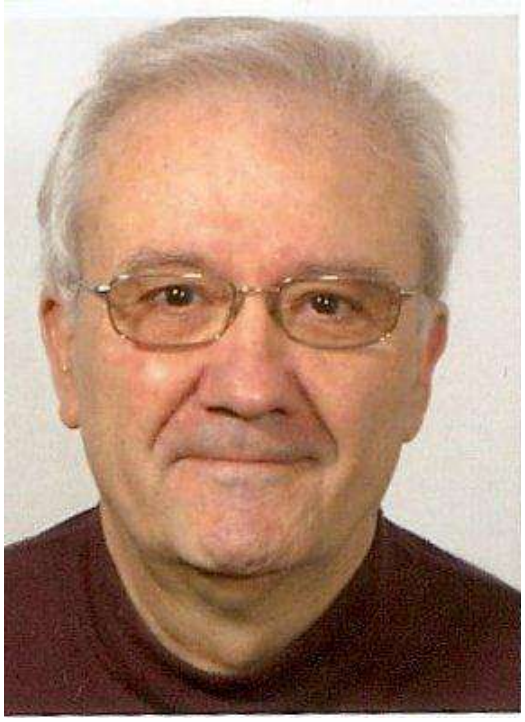
The Importance of Ecosystem Services in Long-term Food Security and the Need for Outcome Based Measure of Sustainable Agriculture

Very little is more important to people than food. Not only do we need food to live, but food is also an important part of our culture. Labels such as "all natural", "organic", "no GMO's", and "grown locally" are widely used to announce something about how our food is grown. But missing are credible on-the ground outcome-based field measurements that can point us towards a truly sustainable food production system. I will outline some contentious issues surrounding the definition of sustainable agriculture, and use an ecosystem services framework to suggest a pragmatic solution. Only if we have good measures of sustainability can we use science to improve agriculture in a way that both deliver food security and a healthy planet.

KEYNOTE SPEAKER

THURSDAY 27.06. 10:00 – 12:00 - LAW FACULTY – DRAGEFJELLET – AUDITORIUM 2

SERGE GARCIA



Dr. Serge Michel Garcia has been the Director (now retired), FAO Fisheries Management Division, Belgium. Serge earned his Doctorate in Sciences from the University of Marseille, France, 1976. He is a former Research Director of the French Institute of Research for Development (IRD) and former Director of the FAO Fisheries and Aquaculture Management Division. Retired since March 2007, he chairs the Fisheries Expert Group of the IUCN Commission on Ecosystem Management (IUCN-CEM-FEG) and is member of the Scientific Committee of the French Institute for Research and Exploitation of the Sea (IFREMER) and of the Board of the European Bureau for Conservation and Development (EBCD). He has served as consultant in a range of international organization including FAO, UNEP and the World Bank.

Keynote lecture

The Role of Fisheries in Food Security

Fisheries contribute both qualitatively and quantitatively to global and local food security. Paradoxically, fisherfolk communities are both important contributors to food security and vulnerable to food insecurity. Overfishing threatens food security but there are also trade-offs between stocks rebuilding (putting food resources aside) and food security (using food sources). Modern proposals for fisheries reform and environmental rebuilding present a tensed trade-off between conservation and food security, in the short term and perhaps also in the longer term. The so called "win-win" solutions are rare and usually miss (or hide) one important dimension of the problem. Hard-nosed decisions are therefore needed. Without more integrated governance, it is likely that both goals, food security and conservation will be missed.

BSRS 2013 PROGRAM

FOOD AS A GLOBAL DEVELOPMENT CHALLENGE

MONDAY 17 JUNE

TIME	EVENT	VENUE
	ARRIVAL DAY	
16:00-20:00	**REGISTRATION** and informal get-together with light dinner	Law Faculty, Dragefjellet

TUESDAY 18 JUNE

TIME	EVENT	VENUE
08:00	Guided travel for students from Fantoft to the BSRS venue	
08:30-10:00	**OFFICIAL OPENING** – Music by Henry Reitan, Morten Andre Larsen, Knut Martin Rasmussen and Øystein Magnus Gjerde, the Grieg Academy, UiB – Welcome by Professor Gro Lie, head of UiB Global – "Welcome to Bergen" by Ragnhild Stolt-Nielsen, the city council of Bergen – Six years with BSRS by Professor Kjersti Fløttum, scientific leader of BSRS 2008-2011 – Official opening by Rector Sigmund Grønmo, UiB – Introduction to the academic content of BSRS 2013, by Professor Vigdis Vandvik, scientific leader of BSRS 2013	Law Faculty, Dragefjellet Auditorium 2
10:00-12:00	**PLENARY KEYNOTE LECTURE** **The Hunger Games** (see p. 3) **Thomas Winfried Menko Pogge**, Director, Global Justice Program and Leitner Professor of Philosophy and International Affairs, Yale University, USA Chair: Gro Lie, UiB Global and Department of Health Promotion and Development, UiB	Law Faculty, Dragefjellet Auditorium 2
12:00-13:00	*Lunch*	
13:00-15:30	**PHD COURSE ACTIVITIES**	Law Faculty Seminar rooms
15:30-16:00	*Coffee / tea*	
16:00-17:00	**PLENARY ROUNDTABLE DISCUSSION** **Global change, food security and ethical challenges** (see p. 27) Moderated by Tore Furevik, Geophysical Institute, UiB, and the Bjerknes Centre for Climate Research	Law Faculty, Dragefjellet Auditorium 2

17:00-18:00	**PHD COURSE INDEPENDENT WORK**	Law Faculty Seminar rooms
18:00-19:00	**PLENARY KEYNOTE LECTURE** **Leveraging Agriculture and Food for Nutrition and Health Outcomes** (see p. 4) **Shenggen Fan**, Director General of the International Food Policy Research Institute (IFPRI) in Washington DC, USA Chair: Jutta Dierkes, Department of Clinical Medicine, UiB	Law Faculty, Dragefjellet Auditorium 2
19:00-21:00	**DINNER PROJECT** for the BSRS students	Bergen city

WEDNESDAY 19 JUNE

TIME	EVENT	VENUE
08:30-10:00	**PLENARY KEYNOTE LECTURE** **Communicating 'Wicked Problems' at the Interface between Science and Politics: the example of Climate Change** (see p. 5) **Kjersti Fløttum**, Professor at Department of Foreign Languages, UiB Chair: Øyvind Gjerstad, Division of Research Management, UiB	Law Faculty, Dragefjellet Auditorium 2
10:00-12:00	**PLENARY KEYNOTE LECTURE** **Interlinkages Between Food Security, Climate Change and Sustainable Development** (see p. 6) **Atiq Rahman**, Executive Director of Bangladesh Centre for Advanced Studies, Dhaka, Bangladesh Chair: Tore Furevik, Geophysical Institute, UiB, and the Bjerknes Centre for Climate Research	Law Faculty, Dragefjellet Auditorium 2 Law Faculty Seminar rooms
12:00-13:00	*Lunch*	
13:00-15:30	**PHD COURSE ACTIVITIES**	Law Faculty Seminar rooms
15:30-16:00	*Coffee / tea*	
16:00-18:00	**PHD COURSE ACTIVITIES / INDEPENDENT WORK**	Law Faculty Seminar rooms

THURSDAY 20 JUNE

TIME	EVENT	VENUE
08:30-10:00	**PHD COURSE ACTIVITIES**	Law Faculty Seminar rooms
10:00-12:00	**PLENARY KEYNOTE LECTURE** **Challenges and Policy Options for Balancing Competing Demands on Agriculture** (see p. 7) **David Blandford**, Professor of agricultural and environmental economics at the Pennsylvania State University, USA Chair: Erling Vårdal, Department of Economics, UiB	Law Faculty, Dragefjellet Auditorium 2
12:00-13:00	*Lunch*	

13:00-15:30	**PHD COURSE ACTIVITIES**	Law Faculty Seminar Rooms
15:30-16:00	*Coffee / tea*	
16:00-18:00	**LIBRARY COURSE** **Resources, citations and how to navigate** Student assistants will escort students to the libraries	Various locations
19:00-19:30	*Walk to Håkonshallen guided by student assistants*	
19:30-20:30	**RECEPTION BY THE CITY OF BERGEN** in Håkonshallen, with light meal	Håkonshallen

FRIDAY 21 JUNE

TIME	EVENT	VENUE
08:30-10:00	**MORNING SEMINAR 1:** **Ethical challenges related to publication** (see p. 1) Moderated by Øyvind Gjerstad, Division of Research Management, UiB	Bergen Resource Centre For International Development, Jekteviksbakken 31
10:30-11:00	*Walk to the City Centre guided by student assistants*	
11:00-13:00	**HOSTED PLENARY KEYNOTE LECTURE** **Rambunctious Garden Earth** (see p. 8) **Emma Marris**, author and science writer, Columbia, Missouri, USA 11.00 Lunch 11.30 Welcome to Bergen Chamber of Commerce and Industry 11.35 Keynote lecture 12.20 Industry perspective - **Pål Erik Michelsen**, Brand and Marketing Director, Hallvard Lerøy AS 12.40 Discussion and questions from the audience – moderated by Vigdis Vandvik, Department of Biology, UiB	Hosted by the Bergen Chamber of Commerce and Industry Grand selskapslokaler, Ole Bull Plass 1
13:00-15:30	**PHD COURSE ACTIVITIES**	Law Faculty Seminar Rooms
15:30-16:00	*Coffee / tea*	
16:00-18:00	**PLENARY KEYNOTE LECTURE** **Challenges and Opportunities to Sustain Aquaculture Production in the Asia – Pacific Region** (see p. 9) **Ambekar Eknath**, Director General of the Network of Aquaculture Centers in Asia-Pacific (NACA), Bangkok, Thailand Chair: Karin Pittman, Department of Biology, UiB	Law Faculty, Dragefjellet Auditorium 2
18:00-22:00	**BSRS DINNER AND PUB** at "Kvarteret" Student assistants will escort us to the venue	Kvarteret, Olav Kyrresgate 49

SUNDAY 23 JUNE

TIME	EVENT	VENUE
09:00-16:00	**EXCURSION 1:** **The Aquaculture/Fisheries Industry Up Close** (see p. 32) Hosted by Lerøy Seafood Group	Osterfjorden
15:00-20:00	**EXCURSION 2:** **Seafood from the Shore – at the Shore** (see p. 33) Organized by Arne Duinker, The National Institute of Nutrition and Seafood Research (NIFES)	Askøy

MONDAY 24 JUNE

TIME	EVENT	VENUE
08:30-10:00	**MORNING SEMINAR 2: Can research be independent when funding is not?** (see p. 25) Moderated by Øyvind Gjerstad, Division of Research Management, UiB	Bergen Resource Centre For International Development, Jekteviksbakken 31
10:00-12:00	**PLENARY KEYNOTE LECTURE** **Re-thinking Environmental Causes of Obesity** (see p. 10) **Julie Guthman**, Geographer and professor of social sciences at the University of California at Santa Cruz, USA Chair: Peter Andersen, Department of Geography, UiB	Law Faculty, Dragefjellet Auditorium 2
12:00-13:00	*Lunch*	
13:00-15:30	**PHD COURSE ACTIVITIES**	Law Faculty Seminar Rooms
15:30-16:00	*Coffee / tea*	
16:00-18:00	**PHD COURSE ACTIVITIES**	Law Faculty Seminar Rooms
18:00-19:00	*Dinner*	Dragefjellet
19:00-20:00	**POPULAR LECTURE** **The Slow Food Movement** (see p. 30) **Thor Øyvind Jensen**, Department of Administration and Organization, UiB	Law Faculty, Dragefjellet Auditorium 2

TUESDAY 25 JUNE

TIME	EVENT	VENUE

08:30-10:00	**PHD COURSE ACTIVITIES**	Law Faculty Seminar Rooms
10:00-12:00	**PLENARY KEYNOTE LECTURE** **Seafood and health – current status** (see p. 11) **Livar Frøysand,** Director of Research at the National Institute of Nutrition and Seafood Research (NIFES), Bergen, Norway Chair: Karin Pittman, Department of Biology, UiB	Law Faculty, Dragefjellet Auditorium 2
12:00-13:00	*Lunch*	
13:00-15:30	**PHD COURSE ACTIVITIES**	Law Faculty Seminar Rooms
15:30-16:00	*Coffee / tea*	
16:00-17:00	**ROUNDTABLE DISCUSSION 2:** **Is seafood good for you?** (see p. 28) Moderated by Jutta Dierkes, Department of Clinical Medicine, UiB	Law Faculty, Dragefjellet Auditorium 2
17:00-18:00	**INDEPENDENT WORK**	Law Faculty Seminar Rooms

WEDNESDAY 26 JUNE

TIME	EVENT	VENUE
08:30-10:00	**MORNING SEMINAR 3:** **Science communication outside Academia** (see p. 26) Moderated by Øyvind Gjerstad, Division of Research Management, UiB	Bergen Resource Centre For International Development, Jekteviksbakken 31
10:00-12:00	**PLENARY KEYNOTE LECTURE** **The Importance of Ecosystem Services in Long-term Food Security and the Need for Outcome Based Measure of Sustainable Agriculture** (see p. 12) **Peter Kareiva,** Chief scientist and Vice President of The Nature Conservancy, Seattle, USA Chair: Inger Elisabeth Måren, Department of Geography, UiB	Law Faculty, Dragefjellet Auditorium 2
12:00-13:00	*Lunch*	
13:00-15:30	**PHD COURSE ACTIVITIES**	Law Faculty Seminar rooms
15:30-16:00	*Coffee / tea*	
16:00-18:00	**PHD COURSE ACTIVITIES**	Law Faculty Seminar Rooms

THURSDAY 27 JUNE

TIME	EVENT	VENUE
08:30-10:00	**PHD COURSE ACTIVITIES**	Law Faculty Seminar Rooms
10:00-12:00	**PLENARY KEYNOTE LECTURE** **The Role of Fisheries in Food Security** (see p. 13) **Serge Garcia**, Director (retired), FAO Fisheries Management Division, Brussels, Belgium Chair: Richard Nash, Institute of Marine Research (IMR)	Law Faculty, Dragefjellet Auditorium 2
12:00-13:00	*Lunch*	
13:00-15:30	**PHD COURSE ACTIVITIES**	Law Faculty Seminar Rooms
15:30-16:00	*Coffee/tea*	
16:00-17:00	**ROUNDTABLE DISCUSSION 3:** **Food or biodiversity vs Food and biodiversity: Whither conservation?** (see p. 29) Moderated by Lawrence Kirkendall, Department of Biology, UiB	Law Faculty, Dragefjellet Auditorium 2
17:00-18:00	**INDEPENDENT WORK**	Law Faculty Seminar Rooms

FRIDAY 28 JUNE

TIME	EVENT	VENUE
08:30-12:00	**PHD COURSE ACTIVITIES** **Summary & Evaluation: What have we learned?**	Law Faculty Seminar Rooms
12:00-13:00	*Lunch*	
13:00-15:30	**PLENARY SESSION** BSRS 2013 Evaluation & Closure Food for thought from the four courses Chair: Vigdis Vandvik, Scientific leader of BSRS 2013	Law Faculty, Dragefjellet Auditorium 2
17:00-20:00	**FAREWELL DINNER** for BSRS 2013	Insitutt for Samfunnsmedi-sin, Kalfarveien

SATURDAY 29 JUNE & SUNDAY 30 JUNE

Departure days

DOCTORAL COURSE 1

VENUE: LAW FACULTY, SEMINAR ROOM 1 (404)

The Economics and Politics of Global Agriculture and Trade

Organized by the Norwegian School of Economics (NHH) and Department of Economics, University of Bergen

Course theme
In this course we use international trade theory to discuss some of the main issues found in the overarching theme of BSRS 2013. In particular we deal with the issue of distributing food in environmentally and economically sustainable ways. Food can be a source of conflict, around tables as well as among nations. Globalization processes have consequences for how we solve these various challenges related to food production, and consumption at all scales and levels. This course requires knowledge which is contained in a bachelor degree in economics.

Course leaders
Rolf Brunstad, Professor, Department of Economics, Norwegian School of Economics (NHH)
Erling Vårdal, Professor, Department of Economics, University of Bergen
Area of Expertise: Agricultural Economics, Trade theory

Invited keynote speakers
David Blandford, Pennsylvania State University, USA
Area of Expertise: Agricultural Economics, Trade theory

Course description and objectives
Agriculture has for decades been a bone of contention in international trade and has been one of the main focal points in the last and the ongoing rounds of negotiations in the WTO. On one side we have industrialized nations eager to protect and support their own agriculture; on the other side we have nations with comparative advantage in agriculture, including many developing nations, who want freer markets for their products. While the present problems of hunger and malnutrition in the world are more questions of income distribution than of shortage, the sharp rise in food prices since 2005 may also hint to a future with more scarcity.

Students
Aga N. Doba
Israel K. Ekanade
Ranveig Falch
Ruslan Imanov
Ewelina C. Janowska-Miasik
Sara Khan
Miraji M. Kitigwa
Kristjana A. Loptson
Gezahegn A. Mamo
Ngonwei A. Mbah
Santiago M.Blanco
Justine Nasejje
Innocent Nkwasiibwe
Yow P. Raiphea
Sisay N. Hailemariam
Jorge W. De Queiroz
Milton R. Basbishisha
Amar Eisa

DOCTORAL COURSE 2

VENUE: LAW FACULTY, SEMINAR ROOM 3 (412)

Surf & Turf: Ecological Perspectives on Food Production from Marine and Terrestrial Systems

Organized by the Department of Biology, University of Bergen

Course theme
Food production has a profound impact on terrestrial and marine ecosystems, and it is a major challenge to manage systems for both biodiversity and productivity. Rapid technological developments, consumer pressures, and issues of biological sustainability are important aspects of the business of producing food – and this leads to increasing demands for scientific expertise and advice for decision-makers. Important issues apply to both terrestrial and aquatic systems: What is sustainability? What is the goal of management? Should we prioritize intensive, efficient production or extensive, low-input production?

Course leaders
Karin Pittman, Department of Biology, UiB
Richard Telford, Department of Biology, UiB
Invited lecturers
Dr. Peter Kareiva - The Nature Conservancy, Seattle, USA
Emma Marris - Columbia, Missouri, USA
Professor Serge Garcia - former Director of FAO Fisheries Management Division
Dr. Ambekar E. Eknath - Director General of NACA and Central Institute for freshwater Aquaculture, India
Professor Patrick Sorgeloos - Artemia Reference Centre, Ghent University, Belgium
Lecturers
Professor Dag Aksnes - Department of Biology
Professor Audrey Geffen - Department of Biology
Professor Lawrence Kirkendall - Department of Biology
Dr. Richard Nash - Institute of Marine Research
Postdoc Sandra Nogue-Bosch - Department of Biology and the Biodiversity Institute of Oxford
Professor Vigdis Vandvik - Department of Biology
Professor Kathy Willis -Department of Biology and the Biodiversity Institute of Oxford

Course description and objectives
"Surf & Turf" takes a broad perspective in analyzing how food reaches our dinner plates. The chains of production, forms of management, food sources and nutritional value, long-term effects of early interventions, the use and proof of concept of intervention strategies like marine protected areas, and the links with consumers are all crucial component of the food systems, and will be explored through the course activities. A central theme is understanding how biodiversity supports food production through ecosystem services. Conversely, food production may have negative effects on biodiversity, both directly and through off-site pollution. Despite common challenges and strategies there are few opportunities for terrestrial and aquatic ecologists, and aquaculture and fisheries scientists to meet and discuss linkages. This course will create a meeting point for early-career scientists to learn from each other and to understand how food production systems affect natural populations and ecosystems: to share perspectives, solutions and methods used in different ecosystems, and to find common ground and general approaches to protect biodiversity in all systems. This course combines debates and discussions with international experts, with group activities and individual writing projects.

Students
Aurora C. Fernandez
Bridget Bwalya
Callixte Gatali
Christine Pötsch
Eleonora Bruno
Julio E. Morales Can
Keno P. Ferter
Lila N. Sharma
Lina E. R. Ljungfeldt
Malin E. Jonell
Mari Jokerud
Mukendi K. Al Aime
Mulako Kabisa
Nadia Fouzai
Olanrewaju O. Olujimi
Onai R. S. Mtengwa
Stine Dalmann Ross
Vivian Valencia

DOCTORAL COURSE 3

VENUE: LAW FACULTY, SEMINAR ROOM 4 (413)

The Global Food System

Organized by Department of Geography & University Museum of Bergen, University of Bergen

Course theme
The course is aimed at providing an interdisciplinary approach to understanding the causes and consequences of the changing global food system, and to analyse and evaluate proposed policy interventions.

Course leaders
Associate Professor Peter Andersen, Department of Geography, UiB
Postdoc Inger Elisabeth Måren, Department of Geography, UiB

Invited lecturer
Professor Julie Guthman - Division of Social Sciences, University of California, Santa Cruz

Lecturers
Associate Professor Peter Andersen - Department of Geography, UiB
Professor Arnt Fløysand - Department of Geography, UiB
Researcher Birgit Kopainsky - Department of Geography, UiB
Postdoc Inger Elisabeth Måren - Department of Geography, UiB
Associate Professor Ragnhild Overå - Department of Geography, UiB
Postdoc Keshav P. Paudel - Department of Geography, UiB
Professor Ole Reidar Vetaas - Department of Geography, UiB
Associate Professor Kari Loe Hjelle - University Museum of Bergen, UiB
Associate Professor Anne Karin Hufthammer - University Museum of Bergen, UiB

Course description and objectives
Viewing food in a global system perspective offers possibilities to analyze developments and linkages across spatial and temporal scales. It includes chains of production and consumption from soil, plant and livestock, water and fish, via transport, processing, marketing, purchase, food culture and to nutritional outcomes of food consumption. Changes within the system are linked to global environmental change, food policies, technology, expansion of corporate capital and neo-colonialism, farmers' decision making, intellectual property rights, agro-biodiversity, cultural landscapes, demographic changes and changing metabolic rates, changing food skills, preferences and dietary patterns, creating concurrent situations of food insecurity and under-nutrition, and eating disorders, over-nutrition and obesity epidemics, in the global South as well as the global North. Food cultures, preferences and avoidances relate to economy, class, ethnicity, socialization and ethics, and are constantly challenged by trends and countertrends in global and local markets. This course seeks participants who are interested in setting their research case studies in a system perspective, being local or global.

Students
Yograj Gautam
Festus Boamah
Charles Dube
Cheryl A. Sjostrom
Rabi N. Behera
Valerie J. Stull
Eirik M. Degerud
Molly MacGregor
Nurul Aini
Helene Nilsen
Janice Johnson
Hiba A. M. Ahmed
Vivian L. Veum
Man B. Khattri
Mukendi K.a Al Aime
Sumaira Saleem

DOCTORAL COURSE 4

VENUE: LAW FACULTY SEMINAR ROOM 5 (414)

Micronutrient Research for Global Health

Organized by Department of Clinical Medicine, Lifestyle Epidemiology Group & Centre for International Health (CIH), University of Bergen

Course theme
The course deals with the long-term consequences of micronutrient deficiency on the health and the development of the individual and of society. Micronutrient deficiency may occur independently of any energy deficit and may therefore be 'hidden', and even be associated with overweight and obesity. Assessment issues of micronutrient research will also be part of the course.

Course leaders
Jutta Dierkes, Department of Clinical Medicine, Section Clinical Nutrition, UiB
Grace Egeland, Lifestyle Epidemiology Group, UiB

Invited lecturer
Shenggen Fan, Director General, International Food Policy Research Institute (IFPRI), Washington DC, USA

Lecturers
Jutta Dierkes, Department of Clinical Medicine, UiB
Grace Egeland, Department of Global Public Health and Primary Care, UiB
Karen Marie Moland, Centre for International Health (CIH), UiB
Thorkild Tylleskär, Centre for International Health (CIH), UiB
Tor Strand, Centre for International Health (CIH), UiB
Catherine Kaulfuss, Centre for International Health (CIH), UiB

Course description and objectives
Malnutrition was for many years only perceived as energy or protein deficit in the diet. During the last 20 years, a shift was noticed from overt malnutrition to 'hidden hunger' - the unrecognized deficiency of micronutrients despite sufficient amounts of energy and macronutrients in the diet. Micronutrient deficiency, however, may have severe consequences for long term health, especially in the so called critical 1,000-day window from conception until 2 years of age, but also during adolescence and adulthood. The course will deal with all aspects of micronutrient deficiency - epidemiology, assessment and diagnosis, treatment options and long term health outcomes.

At the end of the course, the participants will have a profound knowledge of prevalence, assessment and treatment of micronutrient deficiency and hidden hunger, they will be familiar with research designs used in nutritional assessment and treatment, and will know about public health strategies to cope with this health challenge in different economical settings.

Students
Akampurira Andrew
Ulrike L. Aune
Annette Bernhard
Satish K. Dixit
Małgorzata Fejfer
Reyna G. Rivera
Idolo Ifie
Julie Sletten
Ngoako S. Mabapa
Zebasil T. Mengesha
Widad G. H. Rahma
Aditi Roy
Alexander Rønnevik
Asahngwa C. Tanywe
Helga B. Urke
Eli Skeie
Nathalie G. Puaschitz

MORNING SEMINAR 1

FRIDAY 21 JUNE, 08:30 – 10:00 – BERGEN RESOURCE CENTRE FOR INTERNATIONAL DEVELOPMENT, JEKTEVIKSBAKKEN 31

Ethical Challenges Related to Publication

Discussion leader: Øyvind Gjerstad - Communication advisor, UiB Global, Division of Research Management

Participants:

- Howard Browman, Principal Research Scientist, Institute of Marine Research, Bergen
- Ingrid Cutler, Adviser for Scientific Publishing Resources, University of Bergen Library
- Matthias Kaiser, Head of Department, Centre for the Study of the Sciences and the Humanities, UiB
- Susanne Mikki, Senior Academic Librarian, University of Bergen Library

Theme:
The first of three morning seminars at BSRS 2013 takes on the issue of ethics in relation to open access, citation impact, and other aspects of research publication. What is citation impact and why is it so important for researchers? Does it reflect the scientific merits of a given paper?

What exactly is open access, and what is the significance of this movement for the future of scientific research? As journal subscription fees have risen sharply, many university libraries and researchers find themselves cut off from essential scientific literature. This has led to calls for the removal of price barriers, as the advancement of science depends on the diffusion of knowledge. Governments have also mandated that published research be open access, based on the point of view that publicly financed research should be available to the public. In light of this is it justifiable to keep existing profit structures in place? On the other hand, who will cover the costs? Could open access compromise quality assurance, as the peer-review process can be both costly and time consuming? Could we see an increasing number of fake academic journals? What influence does open access have on citation impact?

Quality assurance is also relevant for the issue of scientific misconduct, including fabrication, falsification, plagiarism and misrepresentations of authorship. What mechanisms are in place to prevent and uncover such practices? Are national and international standards for independent investigations the answer? Should we focus on courses in research ethics as part of doctoral programmes? Are we dependent on whistle blowers, i.e. those who see and report cases of misconduct? What could be done to protect their reputations and careers?

All of these questions will be explored in introductory presentations and a subsequent panel discussion with the four participants.

As representatives of the University of Bergen Library, **Ingrid Cutler** and **Susanne Mikki** will share their extensive knowledge of matters such as open access and bibliometrics, which are of crucial importance for researchers who wish to disseminate their work.

Howard Browman is a biological oceanographer, limnologist, and sensory ecologist. In addition to his research activities he is respectively editor-in-chief and section editor of two scientific journals. He is also a member of the Committee on Publication Ethics.

Matthias Kaiser is an expert on the philosophy of science, ethics of science and technology assessment. He is currently a member of the editorial boards for four peer reviewed journals, and has served on a number of national and international research ethics committees.

MORNING SEMINAR 2

MONDAY 24 JUNE, 08:30 – 10:00 – BERGEN RESOURCE CENTRE FOR INTERNATIONAL DEVELOPMENT, JEKTEVIKSBAKKEN 31

Can Research be Independent When Funding is Not?

Discussion leader: Øyvind Gjerstad - Communication advisor, UiB Global, Division of Research Management

Participants:

- Benedicte Carlsen, Uni Rokkan Centre, Bergen
- Jutta Dierkes, Department of Clinical Medicine, UiB
- Ottar Nygård, Department of Clinical Science, UiB

Theme:
During the second morning seminar of BSRS 2013 we will discuss the conditions for independent research within different models of financing. What role do private actors play in the research they finance? What is the importance of political priorities for researchers who apply for funding from public institutions? A central point for discussion will be the potential conflicts of interest arising when corporations or agencies have an interest in obtaining certain scientific results. However this is not a problem which is limited to privately funded research. In a 2005 study published in *Nature*, 15.5 per cent of 3,247 US-based and publicly funded scientists admitted to having "[changed] the design, methodology or results of a study in response to pressure from a funding source".

In addition to the risk of conflicts of interest, a central point for discussion will be the future of scientific diversity and basic research in a time where science is expected to yield financial and societal gains. Is there a place – and appropriate funding – for the social sciences and the humanities, which increase our understanding of society and the human condition, often with no apparent potential for economic or technological applications? Is there a place for research motivated by curiosity? This is not only a question of principle, as basic research has in fact provided technological gains in the long term. As an example, over a hundred years ago mathematicians conducted research which had no application at the time, but which allowed for the development of computers several decades later. In light of the history of science, could a focus on immediate rewards be self-defeating?

Benedicte Carlsen has a background in social anthropology and a PhD in medicine from the University of Bergen. Her research focuses on regulatory health care frameworks, clinical practice and doctor-patient relations. Carlsen currently heads three research projects, two of which are financed by the Research Council of Norway.

Jutta Dierkes is Professor of clinical nutrition at UiB. Her research interests include randomized controlled trials with micronutrients, dietary intervention studies (dyslipidemia, vitamin deficiencies, end-stage renal disease, obesity) and observational cohort studies. Dierkes is one of the course leaders for 'Micronutrient Research for Global Health' at this year's Bergen Summer Research School.

Ottar Nygård is a cardiologist and nutritional expert. He has been principal investigator of numerous clinical studies at the Haukeland University Hospital. Many of his studies have been published in high ranking medical journals, including the New England Journal of Medicine.

MORNING SEMINAR 3

WEDNESDAY 26 JUNE, 08:30 – 10:00 – BERGEN RESOURCE CENTRE FOR INTERNATIONAL DEVELOPMENT, JEKTEVIKSBAKKEN 31

Science Communication Outside Academia

Discussion leader: Øyvind Gjerstad - Communication advisor, UiB Global, Division of Research Management

Participants:

- Trine Dahl, Norwegian School of Economics (NHH)
- Helge Drange, Geophysical Institute, UiB / Bjerknes Centre for Climate Research, Bergen
- Peter Kareiva, the Nature Conservancy, Seattle, USA

Theme:
Science has long enjoyed an unrivalled status as a producer of knowledge, but popularised accounts of scientific findings tend to simplify the complexities of the issues and leave out the uncertainties involved. The fear of oversimplification can often create tensions between researchers and journalists who report on their work, and may deter researchers from engaging in science communication themselves. What is it about scientific discourse that makes it difficult for even scientists to communicate the results of their work to the public?

Furthermore, during the last few years science has seen its credibility challenged. Despite an overwhelming scientific consensus on man-made climate change, there is little political mobilisation on the issue, and a significant minority of the public in the Global North remain sceptical. Some even actively work to undermine the veracity of climate science. Why do climate researchers have difficulties getting through to politicians and the public? Is it a psychological issue, where crisis scenarios are rejected because people are less receptive to negative messages? Is it because climate change is still largely foreign to the daily experiences of people in the Global North? Is it related to the growth of internet blogs and social media, through which oversimplified and misconstrued narratives of complex issues can gain traction? Is it fundamentally about the difficulties with the scientific concept of uncertainty, which has been exploited by climate change sceptics and deniers?

Trine Dahl is professor of English linguistics. During the last twelve years she has studied the linguistic and discursive properties of scientific papers in the fields of medicine, economics and linguistics. Among the phenomena she has investigated are authors' interactions with readers and their presentations of knowledge claims. More recently she has investigated the rhetorical properties of policy texts pertaining to climate change.

Helge Drange is a climate scientist. His research is primarily focused on Earth System Modelling, development of ocean general circulation models, analysis of inter-annual to decadal variability in the Atlantic-Arctic sector, and sea level variability and change. He also gives climate presentations for the general public, industry and governmental agencies on a regular basis, and spends some time on the public global warming debate.

Dahl and Drange are part of the research project *Linguistic representations of climate change discourse and their individual and collective interpretations* (LINGCLIM), funded by the Research Council of Norway. The aim of the project is to find the connection between language use about climate and the individual and collective interpretations of these accounts. In order to do this LINGCLIM are developing an interdisciplinary methodology, involving researchers from linguistics, political science, psychology and the natural sciences.

Peter Kareiva is the chief scientist for The Nature Conservancy. His current projects emphasize the interplay of human land-use and biodiversity, resilience in the face of global change, and marine conservation. He believes that general communications and writing are essential in science, and has written (with Dr. Michelle Marvier of Santa Clara University) the conservation textbook *Conservation Science: Balancing the Needs of People and Nature* (Roberts & Company 2010). Peter Kareiva is one of this year's BSRS keynote speakers. For more information see p. 12.

ROUNDTABLE DISCUSSION 1

TUESDAY 18 JUNE, 16:00 – 17:00 - LAW FACULTY, AUDITORIUM 2

Global Change, Food Security and Ethical Challenges

Discussion leader

Professor Tore Furevik, Geophysics, Climate Dynamics, Faculty of Mathematics and Natural Sciences, UiB

Participants

- Dr Ambekar E. Eknath, Director General of Network of Aquaculture Centres, Bangkok, Thailand
- Dr Shenggen Fan, Director General of the International Food Policy Research Institute (IFPRI), Washington DC
- Dr Thomas Winfried Menko Pogge, Director of the Global Justice Program, Yale, USA
- Dr A. Atiq Rahman, director of the Bangladesh Centre for Advanced Studies, Dhaka, India

DISCUSSION THEME

On this day 80 million barrels of oil will be pumped out of the ground. The ground water will decrease with half a billion cubic meters. There will be 140 square kilometres of forest lost. 330 square kilometres will turn into deserts. 200 000 more people will need food, safe drinking water, energy to cook. One hundred million tons of CO_2 will be released into the atmosphere. Ocean and land temperatures will continue to rise, ice sheets melt, sea level rise, precipitation patterns change, extreme summer temperatures become more frequent, and droughts and crop failure will increasingly jeopardize the welfare of human beings.

Today one billion people are malnourished. At the same time 1.5 billion people eat too much. Persistent poverty, environmental degradation and poor governance are widespread but avoidable. What should be the responsibility of the powerful states, the intergovernmental organizations, the international corporations, the individual citizens, in achieving a more sustainable, equitable and harmonious world where basic needs are met for all human beings?

ROUNDTABLE DISCUSSION 2

TUESDAY 25 JUNE, 16:00 – 17:00 - LAW FACULTY, AUDITORIUM 2

Is Seafood Good for You?

Discussion leader

Professor Jutta Dierkes, Department of Clinical Medicine, Section Clinical Nutrition, UiB

Participants

- Amund Måge, National Institute of Nutrition and Seafood Research
- Anders Goksøyr, Department of Biology, UiB
- To be announced, Department of Clinical Medicine, UiB

DISCUSSION THEME

Dietary guidelines all over the world recommend consuming at least 2 portions of fish per week. Many species of fish are an excellent source of polyunsaturated fatty acids and vitamin D, among other nutrients. However, as with many dietary guidelines, a critical evaluation of this reveals that the scientific evidence underlying this recommendation can be disputed. Epidemiologists and toxicologists are able to discover fish consumers due to their higher levels of mercury and other persistent pollutants in their blood, which may limit any positive health effect of fish consumption. Therefore, we will discuss the positive and negative health effects of fish consumption in this roundtable discussion.

ROUNDTABLE DISCUSSION 3

THURSDAY 27 JUNE, 16:00 – 17:00 - LAW FACULTY, AUDITORIUM 2

Food or Biodiversity vs Food and Biodiversity: Whither Conservation?

Discussion leader

Professor Lawrence Kirkendall, Department of Biology, UiB

Participants

- Dr. Peter Kareiva, Chief Scientist, The Nature Conservancy, Seattle, USA
- Representatives of student groups

DISCUSSION THEME

Human populations continue to increase; almost all positive population growth is in the tropics and subtropics, where the bulk of the world's biodiversity resides. Both human population densities and population growth rates in biodiversity hotspots exceed world averages; about 1/5 of the world's population lives within hotspots of endemism. More mouths to feed and increasing standards of living lead to inexorable growth in food consumption; where will this food come from, and by what means of production or harvesting? Given the impact of humans on nature everywhere, conflict between basic human needs and the needs of other species is inevitable, and this conflict is increasing in severity. In the face of growing demand for both farmed and wild foods, which conservation strategies could best reduce the on-going degradation of wildlands and loss of biodiversity? Must we, at least in some cases, pit biodiversity preservation against food production: is increased food production incompatible with biodiversity and conservation, or can conservationists and food providers develop sustainable methods favourable to both? Will price tags save ecosystems? (Must we sacrifice ecosystems which cannot provide valuable services?) What biodiversity values should conservationists emphasize, in their defence of nature?

Here, at this final plenary meeting, we will draw upon the lessons of the previous two weeks to zero in on concrete suggestions for reducing biodiversity loss while increasing food availability.

POPULAR LECTURE

MONDAY 24 JUNE, 19:00 – 20:00 - LAW FACULTY, AUDITORIUM 2

The Slow Food Movement

Lecturer
Associate Professor Thor Øyvind Jensen - Department of Administration and Organization Theory, UiB

BACKDROP

The Slow Food movement crosses several dividing lines within and between politics, culture, development and food marketing. It emphasizes pleasure, sensuality and quality in food, but links this with a classical struggle against industrialization and commodification of food. It is the organizer of one of the biggest food fairs with several hundred thousand visitors (Salon de Gusto) and absolutely a member based political movement (80 000 members in 120 countries). It joins forces with the struggle of indigenous people and small scale producers all over the world, links with Fair Trade and UN organizations and is running development projects.

The Slow Food movement has classification and quality assurance programs for wine, seeds, meals, food raw materials and classical recipes and are importing and selling foods. They are influential in EU food regulation and organize campaigns against Monsanto, Land Grabbing and large scale trawlers.

The questions on the basis of this strange mix are several:

• Is food emerging as a new important political platform?

• Is Slow Food indicating new alliances between consumers and producers, between local and global, between South and North and between pleasure and politics?

• Is this movement indicating a general opposition against and fear of industrialism and alienation?

• When and how will this movement run into problems and what is the long term development?

• And finally; Can we eat our way to a better world?

LIBRARY COURSE

THURDAY 20 JUNE, 16:00-18:00 - VARIOUS LIBRARY LOCATIONS

Resources, Citations and How to Navigate

Organised by the University Library of Bergen

The library session aims to allow participants to take full advantage of our library resources. Resources and searching-techniques will be thought so that the participants can learn to effectively get an overview of literature and other resources in the field. This process will enable the candidate to keep an active dialogue with relevant literature through the research process.

Key words:
• Access to material – on/off campus
• Useful databases and resources
• PhD on track

The course will be held in four different branches of the library, all located at the campus area. The student assistants will take the groups to the right location.

Homepage of the library: https://www.uib.no/ub/en

Contact persons:
Hege Folkestad - Hege.Folkestad@ub.uib.no
Tone Hellesund – Tone.Hellesund@ub.uib.no
Inga Lena Grønlund - Inga.Gronlund@ub.uib.no
Svenn Sivertssen - Svenn.Sivertssen@ub.uib.no

AQUACULTURE EXCURSION 1

SUNDAY 23 JUNE, 9:00-16:00 – /BUSBOAT TRIP

The Aquaculture/Fisheries Industry Up Close

Backdrop

The aquaculture/fisheries industry is second only to oil in generating income for Norway and is an important part of the national economy. It is by no means an artisanal industry even though it is spread along the coastline in rural areas and is less than forty years old. We are fortunate enough to have a local company, Lerøy Seafood Group, an important player in both sectors with a socially conscientious profile. They will take us on a tour of their hatchery and a growout farm for salmon and possibly on a special wellboat for transport of these fish. For those who have heard of the impact of fish farming but wonder what it is really like, now is the chance to see it in practice.

Schedule

09.00 Departure by bus from Bergen city
10.00 Visiting one of our smolt plants
11.30 Lunch at Bjørkheim
We would like you to taste our own Fjord trout
13.30 Visiting one of our local sea sites for production of Fjord trout at Osterøy
15.30 Return to Bergen

Note that the times are just estimates

Lerøy Seafood Group

Lerøy Seafood Group is the leading exporter of seafood from Norway and the world's second largest producer of Atlantic Salmon. The Group's core activities are distribution, sale and marketing of seafood, processing of seafood, production of salmon, fjordtrout and other species, as well as product development. They supply a total range of seafood products from Norway including salmon, fjord trout, cod, saithe, mackerel, herring, shellfish and others. In 2011 Lerøy Seafood Group exported more than 200 000 tonnes of seafood.

SEA SHORE EXCURSION 2

SUNDAY 23 JUNE, 15:00 – 20:00 – BUS

Seafood From the Shore – At the Shore

The trip

We will travel to a beautiful bay located at Marikoven, on the west coast of Askøy (the Island just north of Bergen center), that opens to the west and (hopefully) the afternoon sun and is sheltered from the wind from most directions. There will be a 15 minutes' walk from where the bus stops, and please consider good footwear and warm clothes as the path will be partly soft and the evening might get chilly.

We will collect and prepare sea snails (preiwinkles) and seaweed (kelp) together with fish (brought with us) for the ultimate experience of clean tastes of short-travelled food from the sea.

Schedule

15.00 Departure by bus from Bergen city
16.00 Arrival at Askøy
17.30 Low tide – we collect marine plants and animals for our meal!
18.30 Cooking at the seashore – combining what we have found ourselves with first-class local produce and drinks brought with us from Bergen. The meal will provide opportunities for both new and more traditional and familiar culinary experiences!
20.00Return to Bergen

Note that the times are just estimates.

Arne Duinker - NIFES

Arne Duinker is a seafood researcher at the National Institute of Nutrition and Seafood Research (NIFES). He has been co-authoring a book about seafood from the shore, and the last year he has at several occasions taken groups of curious people to the shore to show them what they can find there and prepare directly.

Book on the theme: *Sjømat fra fjæra*

Seaweed, eel, periwinkle and bivalves are known as delicacies in several countries, but are a rare commodity in Norwegian cuisine despite their abundance along the Norwegian coastline. A new book released this week "Seafood from the shore" intend to draw consumers' attention to this rarely used food resource and outline where to collect and how to prepare such seafood in addition to provide information on nutrients unique to seafood. This book is the result of a collaboration between the scientists Stein Mortensen (Institute of Marine Research) and Arne Duinker (NIFES), and the chef Fredrik Hald (Neptun Restauranter).

RECEPTION BY THE CITY OF BERGEN

THURSDAY 20 JUNE, 19:30 – 20:30 HÅKONSHALLEN

The Håkon's Hall

© Ove G. Kalgraff

The King's banqueting hall

The Håkon's Hall is 750 years old, and was built by King Håkon Håkonsson as a royal residence and banqueting hall. When his son Magnus Håkonsson Lagabøte married the Danish princess Ingeborg in 1261, 2000 guests were invited. "The King held court in the stone hall" say the sagas. At that time Bergen was Norway's largest and most important town, and Håkon's Hall was the site of major national events, such as the drawing up of Norway's first complete set of laws. Inside the thick stone walls there are still echoes of the medieval court's solemn ceremonies and riotous feasts. As a national cultural monument, Håkon's Hall is still used both for royal dinners and other official occasions. It is easy to see where His Majesty the King usually sits.

The county of Bergen will serve us finger food and wine/water. Student assistants will accompany you over to Håkonshallen.

BERGEN KOMMUNE

STUDENT DINNER PROJECT

TUESDAY 28 JUNE, 19:00 – 21:00 DOWNTOWN BERGEN

What's in the food stores in Norway? What does it cost, and can a group of people get a decent meal for a reasonable 'student price'?

For dinner on the first day, the four courses are given NOK 50 per person, and their task is to go to a grocery store, buy food for their course for the allotted amount, which will constitute dinner for the course members this day. This gives you a good opportunity to get to know the other course members.

The task will be combined with a 'traceability exercise' in collaboration with the Surf and Turf course.

Venue: Depending on the weather and your creativity, this meal can be prepared outside in a park, inside at the BSRS venue Dragefjellet, in the cantina, or back at the student accommodation at Fantoft. NB! There are no cooking facilities, just a microwave at the cantina at Dragefjellet, so food that does not need a lot of prepping is thus advisable if you plan to eat there.

The groups will be assisted by their course assistants and on every course there are students living in Norway which make good shopping consultants.

What you choose to eat and where you choose to eat it is entirely up to your group – be creative!

Please document the process and be prepared to report back during the plenary on the last day!

1: The Economics and Politics of Global Agriculture and Trade

Students

Milton Rugaaza Basbishisha, University of Bergen, Norway

Aga Neme Doba, Haramaya University, Ethiopia

Amar Eisa, Embassy of Republic of Sudan, Norway

Israel Kehinde Ekanade, University of Venda, South Africa

Ranveig Falch, Norwegian School of Economics, Norway

Sisay Nune Hailemariam, Norwegian Embassy, Ethiopia

Ruslan Imanov, Azerbaijan University of Languages, Azerbaijan

Ewelina Cecylia Janowska-Miasik, University of Rzeszow, Poland

Sara Khan, Minhaj University, Pakistan

Miraji Masudi Kitigwa, the Open University of Tanzania, Tanzania

Kristjana Alice Loptson, University of Alberta, Canada

Gezahegn Abebe Mamo, Addis Ababa University, Ethiopia

Ngonwei Achi Mbah, University of Buea, South-west province, Cameroon

Santiago Movilla Blanco, University of Bergen, Norway

Justine Nasejje, University of Kwazulu-Natal, South Africa

Innocent Nkwasiibwe, National Council for Higher Education, Uganda

Yow Peter Raiphea, North Eastern Hill University, India

Jorge Washington De Queiroz, IBGT, USA, Norway

2: Surf & Turf: Ecological Perspectives on Food Production from Marine and Terrestrial Systems

Students

Mukendi Katamba Al Aime, University of Kinshasa, the Dem. Rep. of Congo

Eleonora Bruno, Danish Technical University, Denmark

Bridget Bwalya, University of Zambia, Zambia

Aurora Campo Fernandez, University of Bergen, Norway

Keno Peter Ferter, University of Bergen, Norway

Nadia Fouzai, University of Bergen, Norway

Callixte Gatali, National University of Rwanda (NUR), Rwanda

Mari Jokerud, University of Bergen, Norway

Malin Elisabet Jonell, Environment and Plant Sciences (Faculty of Science), Sweden

Mulako Kabisa, University of Zambia, Zambia

Lina Eva Robin Ljungfeldt, Institute of Marine Research, University of Bergen, Norway

Julio Enrique Morales Can, NINA, Norway

Onai Ruvimbo Sibongile Mtengwa, University of Venda, South Africa

Olanrewaju Olusoji Olujimi, Federal University of Agriculture, Abeokuta, Nigeria

Christine Pötsch, University of Bergen, Norway

Stine Dalmann Ross, Technical University of Denmark, Denmark

Lila Nath Sharma, University of Bergen, Norway

Vivian Valencia, Columbia University in the City of New York, USA

3: The Global Food System

Students

Hiba Abdelrahman Mohmed Ahmed, University of Bahri (University of Juba before), Sudan

Nurul Aini, Murdoch University, Western Australia, Indonesia

Rabi Narayan Behera, North-eastern Hill University, India

Festus Boamah, University of Bergen, Norway

Eirik Magnus Degerud, University of Bergen, Norway

Charles Dube, Great Zimbabwe University, Zimbabwe

Yograj Gautam, University of Bergen, Norway

Janice Johnson, University of Geneva, Geneva, Switzerland, France

Man Bahadur Khattri, Tribhuvan University, Nepal

Molly Macgregor, Lund University, Sweden

Helene Nilsen, University of Bergen, Norway

Sumaira Saleem, University i Bergen, Norway

Cheryl Ann Sjostrom, Lund University, Sweden

Valerie Jo Stull, University of Wisconsin - Madison, USA

Vivian Lohmann Veum, University of Bergen, Norway

4: Micronutrient Research for Global Health

Students

Akampurira Andrew, Makerere University, Uganda

Ulrike Liisberg Aune, University of Bergen, Norway

Annette Bernhard, University of Bergen, Norway

Satish Kumar Dixit, ICFAI University Raipur India, India

Małgorzata Fejfer, Poznan University of Life Sciences, Poland

Reyna Gutierrez Rivera, University of Leeds, United Kingdom

Idolo Ifie, University of Leeds, United Kingdom

Ngoako Solomon Mabapa, University of Cape Town, South Africa

Zebasil Tassew Mengesha, Erasmus Mundus Programme, Norway

Nathalie Genevieve Puaschitz, University of Bergen, Norway

Widad Gamar Hussien Rahma, Ahfad University for Women, Sudan

Aditi Roy, the Pennsylvania State University, USA

Alexander Rønnevik, Copenhagen University, Denmark

Eli Skeie, University of Bergen, Norway

Julie Sletten, University of Bergen, Norway

Asahngwa Constantine Tanywe, University of Yaounde 1, Cameroon

Helga Bjørnøy Urke, University of Bergen, Norway

STUDENT ASSISTANTS – BSRS 2013

Leader
Sylvia Duerr
Department of Administration and Organization Theory and UiB Global

Fereshteh Kakisahneh
Department of Administration and Organization Theory
Course 1

Rachael Morgan
Department of Biology
Course 2

Yngve Bråten
Department of Geography
Course 3

Sally El Tayeb
Department of Global Public Health and Primary Care
Course 4

	Monday 17.06.2013	Tuesday 18.06.2013	Wednesday 19.06.2013	Thursday 20.06.2013	Friday 21.06.2013	Saturday 22.06.2013	Sunday 23.06.2013	Monday 24.06.2013	Tuesday 25.06.2013	Wednesday 26.06.2013	Thursday 27.06.2013	Friday 28.06.2013
08:30												
09:00		BSRS opening	Keynote lecture: **Kjersti Fløttum**	PhD course activities	Morning seminar 1: **Ethical challenges related to publication**			Morning seminar 2: **Can research be independent when funding is not?**	PhD course activities	Morning seminar 3: **Science communication outside academia**	PhD course activities	
10:00		Keynote lecture: **Thomas Pogge**	Keynote lecture: **Atiq Rahman**	Keynote lecture: **David Blandford**	Walk to city center			Keynote lecture: **Julie Guthman**	Keynote lecture: **Livar Frøyland**	Keynote lecture: **Peter Kareiva**	Keynote lecture: **Serge Garcia**	PhD course summary and evaluation
11:00					Bergen Chamber of Commerce and Industry Keynote lecture: **Emma Marris**							
12:00		LUNCH	LUNCH	LUNCH				LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
13:00		PhD course activities					**Excursion 1:** Aquaculture Excursion by Lerøy Seafood Group (09:00-16:00) *or* **Excursion 2:** Seafood from the shore - at the shore (15:00 - 20:00)	PhD course activities				BSRS summary - **Food for thought**
14:00												
15:00						Free time						
15:30		COFFEE/SNACK	COFFEE/SNACK	COFFEE/SNACK	COFFEE/SNACK			COFFEE/SNACK	COFFEE/SNACK	COFFEE/SNACK	COFFEE/SNACK	
16:00	Registration, meet & greet Dragefjellet	Roundtable 1: **Global change, food security and ethical challenges**	PhD course activities / independent work	Library course: **Resources, citations and how to navigate**	Keynote lecture: **Ambekar Eknath**			PhD course activities / independent work	Roundtable 2: **Is seafood good for you?**	PhD course activities / independent work	Roundtable 3: **Food production vs. conservation**	
17:00		Independent work							Independent work		Independent work	BSRS Farewell dinner
18:00		Keynote lecture: **Shenggen Fan**		19:00 - 19:30 Walk to Håkonshallen	BSRS dinner and pub at "Kvarteret"			Dinner				
19:00		BSRS Dinner project		19:30 - 20:30 Reception by the City of Bergen: Håkonshallen				Popular lecture: **Thor Øivind Jensen**				
20:00												
21:00												
22:00												

Common BSRS 2013 activities
Common mandatory BSRS 2013 scientific activities
Course specific mandatory BSRS 2013 activities
Optional social activity