





IDP BRIDGESNews

IDP BRIDGES - Bridging Plant Sciences and Policy

No 2, 2015

Upcoming training

Responsible Conduct in Research

5 Mar - 8 May 2015

ETH Zentrum, LFO G 25

Women in Science

15 & 16 Apr 2015

University of Zurich

PSC Policy Workshop:

Communicating Science

4 May - 18 May 2015

University of Zurich

Introduction to Political Sciences

12 & 13 May 2015

ETH Zurich

IDP BRIDGES Summer School:

Tackling wicked problems

21 - 25 Sep 2015

Einsiedeln

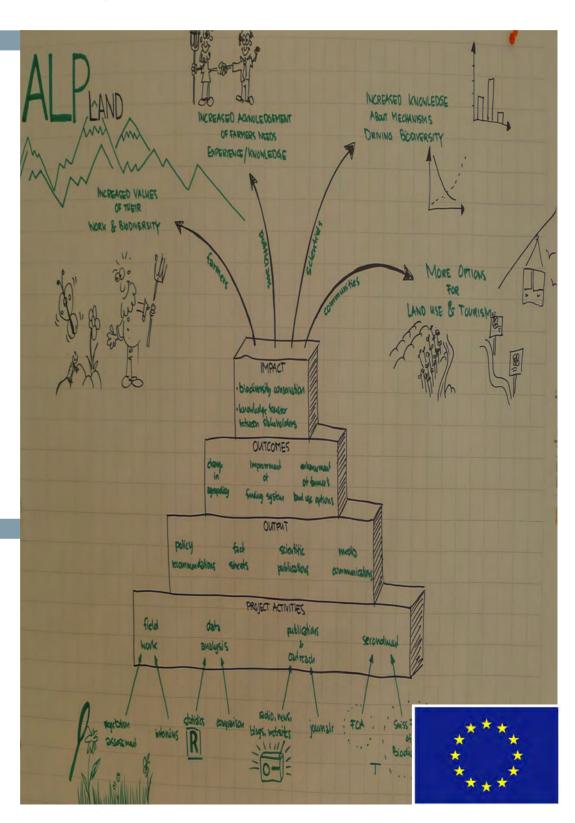
2nd Annual Meeting

26 - 28 Oct 2015 - Männedorf

Midterm review

Fellows presentations

Green business workshop



CAREER NETWORK SKILLS "The problems that exist in the world today cannot be solved by the level of thinking that created them." Albert Einstein

Pictures taken during the DP BRIDGES Annual Meeting

Editorial



Te are producing more information than ever before in the history of humankind and, thanks to the internet, this information can be accessed almost instantaneously as soon as it is published. However, are we as a society really using these resources? Is this information being considered when it comes to policy making?

Scientists are fundamental in the process of policy making by providing evidence, which later can be used by policy actors to make decisions that will end up affecting the public. This sounds quite straightforward: however, do we actually provide the information policy makers and the public need? And what may be even more relevant: do we provide this information in a way that can actually be accessed and understood by them? Studies show that the challenge lies then not only in overcoming the limitations of the formats we use to transmit our ideas and discoveries, but also in acknowledging the simple fact that scientists, policy makers and the public «speak» different languages.

THE CHALLENGE OF COMMUNICATION

In the last decades, generations of hard-working scientists have made incredible advancements in every field of knowledge, however, we have to recognize that we've fallen short when it comes to communicating this to the society and policy makers. Current discrepancies on how to approach important issues such as GMOs and climate change are clear examples of the consequences of miscommunication, which have sadly led to the general state of confusion and distrust by the public that we see everyday in the media.

This is one of the reasons why initiatives such as the IDP BRIDGES program are so important. By preparing a new generation of scientists, better equipped to understand, integrate and communicate the needs of policy makers and stakeholders in their research, we are hopefully contributing to the foundation of an improved approach on how to undertake science.

However, I would also like to think that we do not have to wait for new generations of scientists to start improving our contribution to policy making. The invitation is to go beyond the lab bench, our comfort zone of scientific journals and meetings and embrace the challenge of communication now, before it's too late. Let's not forget, that when policy decisions are made using all the information currently available, we are not only making sure that we are doing our part as scientists, but also we are giving policy makers the tools to make better choices that will end up affecting us all.



IDP BRIDGES News No 2, 2015 Fellows IDP BRIDGES News No 2, 2015



Modelling alternative agroforestry scenarios to improve sustainable land use

CHARLOTTE PAVAGEAU

Complex agro-ecological landscapes provide a range of ecosystem goods and services. For instance, low-intensity agricultural lands can benefit biodiversity conservation and maintain the pollination service of plants and crops. The region of Kodagu in South India offers a typical example of these relationships, where small forest patches are dispersed within paddy rice and coffee plantations grown under shade. However these landscapes are currently undergoing changes from relatively diverse smallscale production systems to more simplified but intensive systems. Many uncertainties remain on the consequences of those transformations at a larger scale. The main objective of my project is to assess the impact of landscape transition on the provision of a biodiversity-based

ecosystem service – pollination - and the subsequent provision of agricultural production service at different scales. In the study area, landscape transitions are defined by the conversion from forest to agroforest, and the opening and simplification of canopy structure in coffee plantations. We intend to model how different land use scenarios and management practices modify the role of forest fragments, coffee agroforests and landscape structure on pollination in the region of Kodagu in South India.

From this, we will draw guidelines for management of ecosystems and land use planning with some implications for conservation, agricultural sector and development. Charlotte Pavageau ETH Zurich, Institute of Terrestrial Ecosystems Supervisor: Prof. Jaboury Ghazoul

Secondment

Charlotte will spend three months at the University of Agricultural Sciences and ATREE in Bangalore in India. She will estimate foraging distances of pollinators using a molecular approach. Thus, she will use genetic markers to reconstruct bee movements in fragmented landscapes. Charlotte will have the opportunity to work with experts on conservation and population genetics at the University of Agricultural Sciences and at ATREE in Bangalore and access their facilities.

About the organizations

ATREE is a non-profit organization working to conserve India's biodiversity. It's mission is to promote socially-just environmental conservation and sustainable development by generating rigorous interdisciplinary knowledge that engages actively with academia, policy makers, practitioners, activists, students and wider public audiences.

The University of Agricultural Sciences Bangalore is a premier institution of agricultural education and research in India. The institution has developed into a major national centre for research in the field of conservation and interface with agriculture, including excellent laboratories and facilities in molecular biology.

www.treesforthefuture.org www.uasbangalore.edu.in

Associate partner

Prof. R. Uma Shaanker, Department of Crop Physiology and the School of Ecology and Conservation, University of Agricultural Sciences, Bangalore, India

siRomics for diagnostics of plant viral disease and virus diversity studies

This project will provide insights into to the mechanisms of RNA silencing-based antiviral defense. The aim is to develop novel strategies of virus control such as siRNA-based vaccination.

SILVIA TURCO

The main plant antiviral defense system is based on RNA silencing and generates 21-24 nucleotide short interfering RNAs (siRNAs). In plants infected with DNA and RNA viruses, Dicer enzymes generate viral siRNAs that restrict virus replication and systemic spread. Growing evidence indicates that viral siRNAs are derived from the entire genome sequence of RNA and DNA viruses and accumulate at high levels. Since existing methods

of viral diagnostics using antibodies and PCR often fail to identify a pathogen, I will use a siRNA omics (siRomics) method based on deep sequencing and de novo assembly of short interfering RNAs (siRNAs) to identify and reconstruct the genomes of known and unknown RNA and DNA viruses that infect field crops, grapevines, vegetables, fruits and ornamentals in Switzerland.

Secondment

Silvia will spend three months at the Research Institute of Organic Agriculture (FiBL). She will establish direct contacts with farmers and producers to better understand which kinds of crops are infected in Switzerland, and how her work could contribute to find solutions.

About the organization

FiBL is an independent, non-profit, research institute with the aim of advancing cutting-edge science in the field of organic agriculture. FiBL's research team works together with farmers to develop innovative and cost-effective solutions to boost agricultural productivity while never losing sight of environmental, health and socio-economic impacts. Alongside practical research, FiBL gives high priority to transferring knowledge into agricultural practice through advisory work, training and conferences. FiBL has offices in Switzerland, Germany and Austria and numerous projects and initiatives in Europe, Asia, Latin America and Africa.

www.fibl.org

Associate partners

Dr. Lucius Tamm, Head of Plant Protection and Biodiviersity Division, FiBL Dr. Paul Mäder, Head of Soil Sciences Division, FiBL, Switzerland



Silvia Turco University of Basel, Institute of Botany Molecular Plant Virology Supervisor: Dr. Mikhail Pooggin

IDP BRIDGES News No 2, 2015 Fellows IDP BRIDGES News No 2, 2015



Sensible consumerism for environmental sustainability

This project will explore trends in the food system and how these will affect the environment, particularly changes in diets and changes in agricultural production.

LISA KING

The global population is expected to grow from 7 billion to 9 billion people by 2050, with studies predicting that food production may need to double to keep up. Modern agriculture, however, is often linked with high water and energy use, pollution, soil degradation, climate change, deforestation and the disruption and loss of biodiversity. This combination of challenges raises the question as to how we will feed the world in 2050 with less environmental damage.

I will be modeling different scenarios of these trends to explore their social and

environmental implications, including the resulting impacts on regional food security and the international exchange of environmental impacts from exports and imports. These results will provide the basis for discussions with policy makers around the future of farming and how to manage land use changes.

Lisa King ETH Zurich, Institute of Terrestrial Ecosystems Supervisor: Prof. Jaboury Ghazoul

Secondment

Lisa will spend four months at **Princeton University** in USA. She will be taking courses on globalization and development and policy making in diverse societies. Being part of the research group will allow her to gain additional perspectives on research and how to disseminate it. She will have the opportunity to work with and learn from other group members with extensive experience working at the science and policy interface.

About the organization

Princeton University's Program in Science, Technology and Environmental Policy (STEP) is based in the Woodrow Wilson School of Public and International Affairs with strong ties to the Princeton Environmental Institute. In addition to providing a systematic introduction to the field of policy analysis, the goal of the STEP program is to develop a deeper understanding of current scientific, technological, and environmental issues and potential local, national and international policy responses. The program provides inter-disciplinary training that facilitates communication between technical experts and policy makers.

www.princeton.edu/step/

Associate partner

Prof. David Wilcove, Ecology and Evolutionary Biology and Public Affairs, Princeton University, USA

Diversity and primary productivity in subtropical forests—fixing carbon to mitigate climate change

This project will explore whether more diverse forests can take up more carbon dioxide from the atmosphere and thus reduce global warming.

YUANYUAN HUANG

Developing better forest biodiversity management strategies helps to optimize ecosystem services provided by forests, in particular carbon storage and erosion control.

I measure tree growth as a function of different aspects of tree diversity a) in comparative study plots varying in successional stage and tree species richness and b) in experimental plots varying in tree species richness and composition. More than 500 plots have already been set up in south-east China. My main

task will be synthesizing my own and other data from these plots to predict ecosystem services provided by forests of different tree diversity and scaling up from plot to local and regional level. Based on the field measurements, structured interviews, discussions with forest companies, local authorities and forest visitors, I will develop forest biodiversity management strategies and supply scenarios and guidelines for forest plantation in subtropical areas in China and elsewhere.



Secondment

Yuanyuan will spend three months at the Institute of Botany of the Chinese Academy of Sciences (IBCAS). She has conducted field measurements of tree growth in south-east China in collaboration with the local forest company and farmers. She also has been disseminating and discussing her work with forest managers and government officials. She will soon organize guided tours and interviews with forest visitors with explanatory plates and leaflets.

In the end, she will develop management scenarios with researchers involved in carbon mapping and climate mitigation for China.

About the organization

The Institute of Botany of the Chinese Academy of Sciences (IBCAS) is one of the oldest comprehensive research institutions in China, which has led the development of plant science in China since its establishment in 1928. The institute has received three first-level National Natural Science Awards, as well as more than 160 awards at the national and provincial level. With a focus on integrative plant biology, IBCAS conducts innovative research at the molecular, cellular, physiological, ecological and landscape levels, and develops applications to benefit agriculture and the environment. http://english.ib.cas.cn/

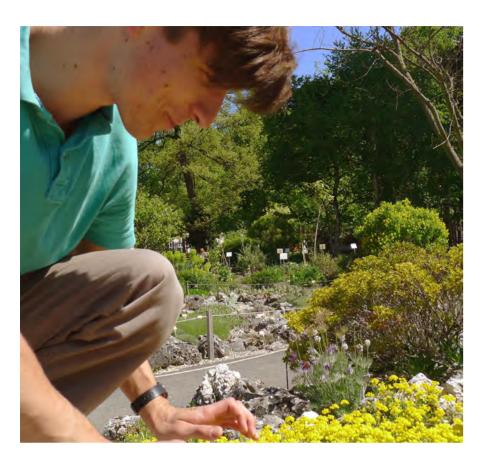
Associate partner

Prof. Keping Ma, IBCAS, China

Yuanyuan Huang
University of Zurich, Institute of Evolutionary
Biology and Environmental Studies
Supervisor: Prof. Bernhard Schmid

 $\mathbf{6}$

IDP BRIDGES News No 2, 2015 Fellows IDP BRIDGES News No 2, 2015



Recent biodiversity changes in managed grasslands in the Swiss mountains

CONSTANTIN PÖLL

Agriculturally used grasslands in mountain areas are among the most species rich habitats in Europe. In addition to natural gradients, i.e. spatial and temporal variation, different types of land use have shaped the landscape and thereby the biodiversity of grasslands. Mowing or grazing, the intensity of land uses, the amount of fertilizers and the accessibility of parcels are important determinants of grassland biodiversity. Socio-economic and associated land use changes are a major threat for this diversity. Great efforts are necessary to protect the existing biodiversity because of its importance for the stability of ecosystems and the many directly and indirectly associated ecosystem services. As the basis for my studies I am using biodiversity data

from grassland parcels of the Swiss Alps and the Swiss Jura recorded 10 to 15 years ago. In the same geographical positions with the same methods, I record plant diversity again. Biodiversity changes will be evaluated by comparing new and old plant diversity data, i.e. species number and composition. By interviewing farmers, for each parcel I re-examine the socio-economic drivers and recent changes in land use. This approach allows evaluating effects of land use and socio-economic factors on plant diversity. Land users are part of the project from the start and will, together with local and federal authorities be involved in the formulation of recommendations for measures and improvements of incentives to maintain biodiversity.

Constantin Pöll University of Basel Department of Environmental Sciences Supervisor: Prof. Jürg Stöcklin

Secondments

Constantin will spend three months at the Federal Office for Agriculture (FOAG). He will become acquainted with the Swiss agricultural policy and the possibilities of the government for improving biodiversity. This will help him to formulate recommendations for the next revision of the agricultural policy and its local implementation within a realistic and yet discerning frame.

Constantin will spent another two months at the **Swiss Biodiversity Forum** where he will benefit from the long experience of translating scientific findings for the general public as well as custom-tailored communication to specific audiences. The outcome will be fact sheets providing essential information about our findings to different stakeholder groups.

About the organizations

The FOAG, in conjunction with the cantonal authorities and farmers' associations, implements decisions taken by the electorate, the Swiss parliament and the government, and plays an active role in formulating agricultural policy.

The Swiss Biodiversity Forum is the competence centre for biodiversity research in Switzerland and contact point for all stakeholders.

www.blw.admin.ch www.biodiversity.ch

Associate partners

Dr. Samuel Vogel, Department of Agricultural Environmental Systems and Nutrients, FOAG Prof. Markus Fischer, president and Daniela Pauli, chief science officer of Swiss Biodiversity Forum

Molecular breeding strategies to control pollination for improved forage and turf grass breeding

TIMOTHY SYKES

This project will identify the gene(s) or genomic region(s) responsible for fertility restoration of cytoplasmic male sterility (CMS) in perennial ryegrass (*Lolium perenne L.*). This research is important as CMS is a key breeding tool that gives breeders an effective pollination control mechanism allowing the production of hybrid seed. With their increased yield potential, new hybrid varieties could help to solve many problems facing the global food system such as; the need for increased production, climate change mitigation and poor soil conditions.

The first approach to identifying the gene(s) responsible for fertility restoration will be an in silico study aimed at identifying the members of the pentatricopeptide repeat (PPR) gene family in ryegrass. It is likely that the gene(s) responsible for fertility restoration in perennial ryegrass belong to the PPR family of proteins as all but one of the studied CMS systems in grasses are restored through the action of one or more PPR genes. This research is being conducted in collaboration with Aarhus University in Denmark. The identified PPRs will then be screened to identify candidate restorer of fertility like PPR genes (RFLs). A second approach will involve identification of candidate RFLs through RNA sequencing, targeting candidates generated from the in silico research. This will allow the identification of RFLs with transcription patterns complementary to the restored pheno-

Timothy Sykes ETH Zurich, Institute of Agricultural Sciences Research Group of Forage Crop Genetics Supervisor: Prof. Bruno Studer type. The third approach to restorer gene identification will be a mapping approach utilising a population of plants segregating for fertility restoration. DNA from individuals within this population will be extracted and used to genotype these individuals using genotyping by sequencing. By combining the phenotype data with this genotype data a quantative trait loci analysis will be performed to identify the genomic regions responsible for fertility restoration. In combining the results from these two approaches the set of candidate genes, developed through the in silico study, should be able to be narrowed and individual genes identified.



Secondments

Timothy has spent three months at the Department of Molecular Biology and Genetics at Aarhus University in Denmark. He is also collaborating with the plant breeding company Norddeutsche Pflanzenzucht Hans-Georg Lembke AG providing the plant material needed for his research. As a result of these collaborations a greater understanding of the genetics underpinning restoration of fertility of CMS in ryegrass will be garnered taking us closer to this molecular tool being available to plant breeders.

About the organizations

The Department of Molecular Biology and Genetics at Aarhus University provides research-based teaching at the undergraduate, graduate and doctoral level.

The Norddeutsche Pflanzenzucht Hans-Georg Lembke AG is a medium-sized, privately-owned, plant breeding company located in Hohenlieth (Schleswig-Holstein) and Malchow-Poel (Mecklenburg-Vorpommern) in Germany.

www.creas.cl/en/nosotros/creas/

Associate partners

Dr. Torben Asp, Department of Molecular Biology and Genetics at Aarhus University, Denmark

Norddeutsche Pflanzenzucht Hans-Georg Lembke AG, Germany

IDP BRIDGES News No 2, 2015 Fellows IDP BRIDGES News No 2, 2015 Fellows

The use of PGPRs and mycorrhizae as biofertilizers on marginal land in India

This project studies early indicators of changes in soil organic matter. An important outcome will be a toolbox of molecular markers to trace biofertilizer strains.

LUKAS SCHÜTZ

This project studies benefits of the introduction of biofertilizers to plant growth, nutrient use efficiency and other soil properties. An important outcome will be a toolbox of molecular markers to trace biofertilizer strains after their application.

Mycorrhiza – fungi that live in symbiosis with plant roots – have been known since the end of the 19th century and their role in phosphorus nutrition to plants was known by the end of the 1960s. However, only now with increasing energy costs and decreasing phosphorus deposits, the potential of mycorrhizal fungi for agriculture is being discussed. I will study the use of arbuscular mycorrhizal fungi — a subgroup of mycorrhizal fungi mostly found on herbaceous species — as well as the use of plant growth promoting bacteria

(PGPR) on heavily weathered soils in southern India.

The properties of such soils make it difficult to apply fertilizers and thus my research could be all the more rewarding. Indigenous microorganisms will be used to inoculate pigeon pea (Cajanus Cajan) and finger millet (Eleusine coracana), which will be planted in rows as an intercropping scheme. This traditional system is already used by the farmers and therefore has good prospects for implementation. Furthermore, by selecting these crops an improvement of nutrition security is targeted.

Secondment

Lukas will spend six months at the Research Institute of Organic Agriculture (FiBL) in Switzerland. He will conduct two literature surveys; one on soil carbon and carbon allocation in soil as influenced by biofertilizers, the other one on fertilizer use efficiency as affected by farming systems and biofertilizers. He will also conduct pot and field experiments with biofertilizers.

About the organization

FiBL is an independent, non-profit, research institute in the field of organic agriculture. FiBL's research team works together with farmers to develop innovative and cost-effective solutions to boost agricultural productivity. FiBL gives high priority to transferring knowledge into agricultural practice through advisory work, training and conferences. www.fibl.org

Associate partner

Dr. Paul Mäder, Head of Soil Sciences Division, FiBL, Switzerland



Lukas Schütz University of Basel Department of Environmental Sciences Supervisor: Prof. Thomas Boller Margarida Sofia Nobre University of Zurich, Institute of Plant Biology Supervisor: Prof. Ueli Grossniklaus

Secondment

Margarida will spend six months at CAMBIA in Australia. In collaboration with legal experts, she will investigate the details of intellectual property and patent laws that are in practice in the life sciences. She will look for ways in which agreements can be made so that biotechnology can benefit subsistence farmers who cannot usually afford the high costs of biotech innovation.

About the organization

CAMBIA is an independent non-profit institute. Its mission is to democratize innovation by creating a more equitable and inclusive capability to solve problems using science and technology. The institutional ethos is built around an awareness of the need and opportunity for local commitment to achieving lasting solutions to food security, agricultural, public health and environmental problems. The broadest community of problem solvers are empowered with new technologies to become innovators in developing their own solutions to the challenges they face - solutions for which they feel ownership.

www.cambia.org

Associate partner

Dr. Richard Jefferson, CEO of CAMBIA, Australia



Evaluating the potential of apomixis for sustainable agriculture and food security

MARGARIDA SOFIA NOBRE

In agriculture, the way to produce a crop that is better fitted to a specific environment is by crossing varieties with the desired traits and then select the offspring that show these combined characteristics. But these hybrids cannot be further propagated by seed, because to reproduce them means introducing new genetic variation, and those desirable traits are again separated or lost in the new generation. To obtain the desired hybrids season after season, farmers often depend on breeding programs of seed companies. This not only costs time and effort, but also money to the farmers. The alternative could be to reproduce these hybrids via apomixis, which is the asexual reproduction through the production of clonal seeds; that is, creating

a seed genetically identical to the mother plant. Although occurring in nature, very few species reproduce by this mechanism, and none of them are major crops. I will investigate the underlying molecular mechanisms that regulate asexual reproduction in apomictic plants, and the possibility of manipulating and applying it to economically relevant crops. Such a technological advancement, however, can only be useful to farmers if they can use it freely, which is why the scope of my PhD project also includes research into intellectual property and patent laws and common practices, and devising a general legal framework in which this and other technologies could be used for the benefit of many, instead of for the profit of a few.

Organisation & Partners Upcoming IDP BRIDGESNews No 2, 2015 IDP BRIDGES News No 2, 2015

Introduction to Political Sciences

12-13 May 2015, ETH Zurich

This introductory lecture explains the influence of political actors on decision-making processes, political negotiations and public opinion. Students will discuss theoretical approaches to the study of politics and policies across a range of states, international organizations and issue areas. Topics include: leading ideologies in political sciences, democracies, actors in politics, public opinion, decision making, negotiations and eval-

This lecture is tailor-made for Science & Policy students giving an elaborate overview of political processes and political sciences.

Trainer: Dr. Sarah Bütikofer, Department of Political Science, University of Zurich

PSC Policy Workshop: Communicating Science

4 May - 18 May 2015

Academic researchers can play an essential role in allowing policy-makers to develop and properly assess policy options by e.g. communicating with the media and contributing to the improvement of public's critical thinking. In this course, students will learn basics on how to communicate science in an effective way to the media, policy-makers and a wider public. They will be introduced to different communication tools and best-practice examples.

On the second course day, there will be a public panel discussion. Details tba

Trainer: Jacopo Pasotti, science communicator and freelance journalist

IDP BRIDGES Summer School: Tackling wicked problems

21 - 25 Sep 2015, Einsiedeln, Switzerland

Using various real-world examples, students will learn to identify inherent properties of complex interconnected social and environmental problems and will learn skills and tools of systems thinking, problem framing and creative thinking for approaching them. This summer school invites all IDP BRIDGES fellows to explore transdisciplinary approaches for solving wicked problems. We expect that you will leave with a deeper understanding of how we can live smarter in an increasingly unpredictable world. The summer school is also open to students from other disciplines of Life Sciences.

Organisers: Dr. Melanie Paschke and Dr. Andrea Pfisterer, PSC

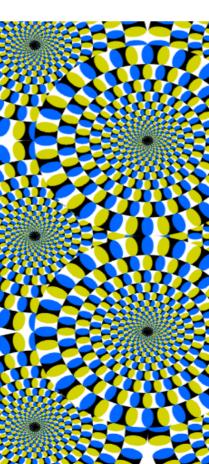
In collaboration with Robin de Carteret, Systems Games; Dr. Christian Pohl, TdLab of the Department of Environmental Systems Science ETHZ; Prof. Gerd Folkers, Director of the Collegium Helveticum.

Program and registration: www.registration.ethz.ch/spsw

Women in Science

15-16 April 2015, ETH Zurich

Trainers: Dr. Hilde Janssens; Dr. Gerlind Wallon,



Financial Administration: Romy Kohlmann, Zurich-Basel Plant Science Center

Why are there so few women in the upper ranks of academia? Lack of self-confidence and the fear of not being able to combine an academic career with family life are among the main reasons for women to leave science. The aim of this workshop is to raise awareness of potential problems, and to provide tools to deal with issues such as self-confidence, guilt feelings, differences between personality types, or stereotyping and bias. We will also point out the immense power and value of local personal influence and peer

EMBO Young Investigator Program

Work Package MANAGEMENT

Lead: Dr. Melanie Paschke

Work Package RESEARCH

Lead: Prof. Samuel C. Zeeman

Work Package TRAINING

Lead: Dr. Melanie Paschke

Work Package EXPLOITATION

Lead: Dr. Manuela Dahinden

Work Package OUTREACH

Lead: Dr. Manuela Dahinden

Associated Partners

King, Charlotte Pavageau

Dr. María Elvira Zúñiga - Centro Regional de Estudios en Alimentos Saludables, CREAS, Chile

Prof. Maria Emma Christine Rey - University of Witwatersrand, South Africa

Consortium: ETH Zurich, University of Zurich, University of Basel

Project Management: Dr. Melanie Paschke, Zurich-Basel Plant Science Center

ETH Zurich: Dr. Eduardo Perez, PD Dr. Hervé Vanderschuren, Prof. Achim Walter, Prof.

University of Basel: Dr. Etienne Bucher, PD Dr. Mikhail Pooggin, Prof. Thomas Boller,

Samuel Zeeman, Prof. Bruno Studer, Prof. Lian Pin Koh, Prof. Jaboury Ghazoul

University of Zurich: PD Dr. Diana Santelia, Prof. Bernhard Schmid, Prof. Pascal

ETH Zurich: Guillaume Lacavé, Devang Mehta, Wuyan Wang, Timothy Sykes, Lisa

University of Basel: Silvia Turco, Claudia Hahn, Michael Thieme, Constantin Pöll,

University of Zurich: Arianna Nigro, Yuanyuan Huang, Margarida Sofia Nobre

Project Officer: Dr. Andrea Pfisterer, Zurich-Basel Plant Science Center

Coordinator: Prof. Samuel C. Zeeman. ETH Zurich

Prof. Ansgar Kahmen, Prof. Jürg Stöcklin

Niklaus, Prof. Ueli Grossniklaus

Fellows

Principal Investigators

Dr. Monika Messmer, Dr. Lucius Tamm and Dr. Paul Mäder - Research Institute of Organic Agriculture, FiBL, Switzerland

Dr. Willy Kessler and Dr. Andreas Lüscher - Agroscope Reckenholz, Switzerland

Dr. Klara Simkova - PSI, Czech Republic

Dr. Kebebew Assefa - Ethiopian Inst of Agricultural Research, Ethiopia

Dr. Zerihun Tadele - University of Bern, Switzerland

Dr. Torben Asp - Arhus University, Denmark

Prof. David S. Wilcove - Princeton University, USA

Dr. Uma Shaanker - ATREE, India

Prof. Ma Keping - Chinese Academy of Sciences, China

Dr. Daniela Pauli and Prof. Markus Fischer - Swiss Biodiversity Forum, Switzerland

Dr. Samuel Vogel - Federal Office for Agriculture, Switzerland

Dr. Richard Jefferson - CAMBIA, Australia

Mentors

Dr. Gerlind Wallon - EMBO Deputy Director, Manager for Women in Science

Activities, EMBO Young Investigator Program

Dr. Michele Garfinkel - EMBO Science Policy Program

Regina Ammann - Head of Public Policy, Syngenta International AG

Dr. Gunter Festel - FESTEL CAPITAL

Dr. Eva Spehn - Swiss Biodiversity Forum SCNAT, Global Mountain Biodiversity Assessment of DIVERSITAS, University of Basel

IDP BRIDGES is an Innovative Doctoral Program supporting 14 PhD students work in the most challenging areas of the plant sciences and policy. This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no PITN-GA-2013-608422 – IDP BRIDGES. It is coordinated by the Zurich-Basel Plant Science Center as a competence center linking and serving the plant science research community of the University of Zurich, ETH Zurich and University of Basel.

Our twice-yearly newsletter is distributed to all IDP BRIDGES participants and other interested people in our network. It will provide information about scheduled training and outreach events as well as highlights of significant research results and policy outcomes.

Contributions are always welcome! If you are interested in contributing to the next issue, please contact andreapf@ethz.ch

© Plant Science Center (PSC) IDP BRIDGES Newsletter No. 2, 2015

Publisher

Zurich-Basel Plant Science Center Coordination Office Universitätstrasse 2, ETH Zurich, LFW 8092 Zurich, Switzerland Phone +41 44 632 02 71

www.plantsciences.ch

Editors

Andrea Pfisterer, Manuela Dahinden Zurich-Basel Plant Science Center

Layout

Manuela Dahinden, Zurich-Basel Plant Science Center

English language consultant

Juanita Schläpfer

Pictures

PSC team, except:

Page 3: The timber trade, illustration by WWf, ZSL, Global Footprint Network Page 10: Optical Illusion by Akiyoshi Kitaoka

