

Leibniz-Kolleg for Young Researchers Chances and Challenges of Interdisciplinary Research



Date: 9 -11 November 2016

Venue: House of the Leibniz-Association, Chausseestr 111, 10115 Berlin

Interdisciplinarity facilitates to address research topics in a comprehensive way and from diverse angles. Be it climate change, smart industries, effects of globalization or the understanding of historical discourses and narratives – the different angles interdisciplinarity allows for are crucial to pervade, understand and complex challenges of our time. At the same time, interdisciplinarity is a challenge in the everyday of researchers: How can I best organise an interdisciplinary project? How does it affect career options? What are the best ways to publish research results? And which funding bodies support which kind of projects? The Leibniz-Kolleg for Young Researchers is addressed to PhD students in their final year and postdoctoral researchers and offers a forum to discuss these issues with experts in- and outside academia, experienced researchers and peers.

Programme

1. Day Interdisciplinary research projects

From 12:30 Arrival, Registration, Lunch

13:15 **Welcome and introduction to the Leibniz Association**

Dr Ricarda Opitz, Deputy General Secretary Leibniz Association

14:00 **Parallel thematic workshops: How to build and organise interdisciplinary research**

- Models and Modeling

Dr. Ana Teresa Monteiro Tomás, Leibniz- Network Modelling and Simulation and Weierstrass Institute for Applied Analysis and Stochastics

- From source to exhibition: How objects in spaces encourage interdisciplinary thinking

Prof. Ruth Schilling, German Maritime Museum - Leibniz Institute for German Maritime History

- Infections as challenge of the 21st century

Prof. Ulrich Schaible, Leibniz Research Alliance Infection 21 and Research Centre Borstel - Leibniz Centre for Medicine and Bioscience

- Globalisation and its effects: Interdisciplinarity from a social/political Perspective

PD Jonas Wolff, Peace Research Institute Frankfurt

16:00 Coffee/Tea (*flexible*)

16:30 **Continuation of the workshops**

18:00 **End of Workshops**

Followed by Keynote and Evening Reception

- 18:30 **Welcome**
Matthias Kleiner (President of the Leibniz Association)
- 18:45 **Keynote**
Publishing interdisciplinary research in the Nature journals and what happens afterwards
Sir Philip Campbell (Chief Editor of "Nature", London)
- 19:45 **Drinks Reception and Buffet**
-

2. Day Let's Talk about Career Options

- 9:30 Career Paths
- From PhD/Postdoc to Professorship
Prof. Sonja Utz, Leibniz Institut für Wissensmedien, Tübingen
 - From PhD to your own enterprise
Dr. Christian Bogatu, KIWI
- 10:30 **World Café: Choosing a career path**
Opportunity to talk to Researchers and Alumni of the Leibniz Association from Academia, Economy, Politics
- *Dr. Christian Bogatu, KIWI*
 - *Dr. Nils Saniter, Bundesministerium für Wirtschaft und Energie, Berlin*
 - *Dr. Jan Ludwig, Bundesarchiv, Koblenz*
 - *Dr. Angelika Sturm, TopIQ, Nijmegen*
 - *Prof. Sonja Utz, IWM, Tübingen*
- 12:30 Lunch
- 13:30 **Orientation in the funding system: Who funds what?**
Representative from funding bodies introduce their organization/programmes in short
- 14:15 **World café: Funding system**
- EU – Programmes (Horizon, ERC)
Claudia Labisch, Leibniz EU Team
 - DFG (German Research Foundation)
Ilka Paulus, Research manager Chemistry and Engineering
 - German Academic Exchange Service (DAAD)
Holger Finken, Head of Research Fellowship Programmes and Oliver Reinken Research Fellowship Programmes
 - Humboldt Foundation (AvH)
Katja Hartmann, Head of the AvH-Office Berlin
 - Exist – Start-Up Funding (*in German*)
Angelika Daniels, Head of the Leibniz Knowledge and Technology Transfer

15:30-16:00	Coffee/Tea (<i>flexible</i>)
16:00	Continuation of world café
17:30	Wrap Up
18:00	Dinner
19:00	Social Evening/Science Slamming

3. Day Developing personal career strategies

9:00 **Welcome and short introduction to workshop options**

9:15 **Seminars**

- Shaping your future: career planning
Neela Enke
- Career building – with goals and networks
Julia Lehnhof
- Presentation Techniques
Sebastian Kleint
- Team Building
Zoi Kathrin Güssow

12:30 **Resumé and farewell**

- **Models and Modeling**

Dr. Thorsten Koehler, Leibniz- Network Modelling and Simulation and Weierstrass Institute for Applied Analysis and Stochastics

Modern methods of modeling and simulation are crucial resources for the scientific and technological progress. Therefore, mathematical modeling and simulation is an important methodological field which is significant for the natural sciences and engineering as well as for the economic, social, life and environmental sciences. Methods from various areas of mathematic are applied (e.g. statistics, mathematical finance, optimization/operations research, numeric, mathematical imaging etc.) and problems on all imaginable space and time scales are worked on (from nanoparticles to huge cosmic structures, from femto seconds to the age of the universe). All these methods however are based on mathematical principles. As such, they can be adapted and adopted to many other scientific fields enable the design of cross-disciplinary models. In this workshop, those methods and their applicability will be further explored and discussed. In this workshop, those methods, their applicability and the role of interdisciplinarity in the scientific career will be further explored and discussed.

- **From source to exhibition: How objects in spaces encourage interdisciplinary thinking**

Prof. Ruth Schilling, German Maritime Museum - Leibniz Institute for German Maritime History

The workshop aims at looking the methodological potential of analyzing the material character of things and asking if and how the focus on objects might encourage inter- and transdisciplinary discourses or even methods. In analyzing this potential it will focus on the interaction between objects and space as part of an object based narrative as seen in museums and exhibition displays. The workshop is structured in three parts:

- A) Object and Method: All participants are kindly requested to present an object (either real or virtual), which is both relevant for their own research and at the same time possesses the potential for different methodological approaches.
- B) Object in Space: We will analyze different models of object-space relations from contemporary exhibitions.
- C) Object, Method and Space: Interdisciplinary teams work together on an exhibition idea and present that at the end to the audience.

Bibliography: Boivin, Nicole, *Material Cultures, Material Minds: The Impact of Things on Human Thought, Society and Evolution*, New York, second edition 2010; Thatcher Ulrich, Laurel/ Gaskell, Ivan, *Tangible Things: Making History through Objects*, New York 2015; Woodward, Ivan, *Understanding Material Culture*, Sage 2007.

- **Infections as challenge of the 21st century**

Prof. Ulrich Schaible, Leibniz Research Alliance Infection 21 and Research Centre Borstel - Leibniz Centre for Medicine and Bioscience

Infectious diseases can be spread and transmitted to humans in various ways. A holistic approach across disciplines is required to better understand transmission dynamics and to achieve optimal infection control strategies. Biomedical, ecological, socio-economic and political aspects all need to be considered. An interdisciplinary research agenda as represented by the LRA *Infections'21* opens up new avenues of communication between distinct scientific disciplines and enables new strategies and methods to develop early warning and outbreak management systems. In this workshop, you will be introduced to the Leibniz Research Alliance *Infections 21* and its evaluation criteria for successful interdisciplinary research as employed by the LRA's external monitoring team. In small groups, you will further explore these criteria by developing projects across your disciplines in order to design a concept for events addressing political stakeholders and/or the general public.

- **Interdisciplinarity from a Social/Political Perspective**

PD Jonas Wolff, Peace Research Institute Frankfurt



The workshop will address the specific advantages and challenges, opportunities and constraints that social and, specifically, political scientists face when participating in interdisciplinary research. Why should we, at all, engage in something that is obviously quite complicated? Under what conditions is interdisciplinary research promising? What is important to consider when planning, organizing, implementing and publishing interdisciplinary research? Participants are expected to bring in real, or spontaneously invent virtual, research projects so that we can discuss these abstract issues using concrete examples.

Shaping your future: career planning

Coach: Nina Enke

What to do once I have my doctor's degree? There are many different options for scientists within but also outside of academia. This workshop facilitates your personal decision by bringing together an individual qualification profile with your personal motivators and skills. Based on these you will build a catalogue of criteria that will give you orientation when choosing your next career step.

Career building - with goals and networks

Coach: Julia Lehnhof

Most of today's researchers face fields of work that include various career options. In order to deal with these options as well as with own aspirations, deliberate decision-taking is required. But how to deal with the "jungle" of objectives and how to actually formulate self-selected goals? The short format will give impulses for answering these questions. In a structured sequence of reflection and impulse inputs the participants will explore their current set of career goals, get to know an exemplary formula for successful shape of goals and discover the importance of networks to support your career choices.

Introduction to presentation techniques

Coach: Sebastian Kleint

Speaking publicly about one's own scientific projects, no matter if during a weekly lab meeting or while giving a talk at a conference, represents a challenge to many scholars: How to enthuse the audience about the research you have been working on? How to keep focus and prioritize given the time restriction for your presentation? How to start a talk so that colleagues or potential promoters will be interested in further discussing your project or even collaborate?

In this hands-on presentation skills training, you will be familiarized with effective strategies for successful oral presentations within academic settings. You will particularly learn about creating a catchy introduction that will help you capture your audience's attention. You will also be encouraged to further develop your individual presentation style. For this purpose, we will hone your presentation skills during a presentation exercise with focus on a successful introduction, which is video-recorded and then feedbacked by your peers and the trainer.

Teambuilding in interdisziplinären Teams (passive knowledge of German required)

Coach: Zoi Kathrin Güssow

Interdisziplinäre Teams können - wenn sie gut kooperieren - eine Quelle gegenseitiger Inspiration sein, in der auf schnellem Weg innovative Lösungen für komplexe Probleme gefunden werden. Postdoktorandinnen Postdoktoranden befinden sich nach der Promotion immer wieder in der Situation ein Team anzuleiten, in dem Wissenschaftlerinnen und Wissenschaftler aus diversen Fachrichtungen zusammenarbeiten. Neben der fachlichen Kompetenz ist die kommunikative Kompetenz der Wissenschaftlerinnen und Wissenschaftler wichtig, um die eigene Position im Team zu vertreten und begreifbar zu machen und um Reibungsverluste durch Konflikte zu minimieren. Deshalb ist es zu Beginn der Zusammenarbeit eines interdisziplinären Teams besonders wichtig eine gemeinsame Verständigungsbasis zu etablieren, in der sich alle Beteiligten wiederfinden.