

Workshop Application for ICAR 2017

Proposed Workshop Title:

The ADAPTOMICS workshop on emerging Brassicaceae model species (DFG SPP1529)

Workshop Date:

Thursday June 22 (because of restricted availability of Dr. Tsiantis)

Proposed Workshop Topic:

Arabidopsis thaliana is the most developed plant model, which continues to allow great scientific progress in the plant sciences. The very biology that facilitated the success of Arabidopsis as a model organism, however, implies that highly important research questions cannot be addressed in this species. The German DFG-funded Research Priority Programme 1529 ADAPTOMICS ("Evolutionary Solutions to Ecological Challenges: Molecular mechanisms underlying adaptive traits in the Brassicaceae s.l."; www.adaptomics-dfg.de) has been working to fill this gap over the past six years. The goal of this research programme is to employ the benefits afforded by genomics and high-throughput sequencing technologies in order to address traits and scientific questions that cannot be studied in Arabidopsis alone, while taking maximal advantage of knowledge, tools and resources available for this closely related species. This workshop will showcase the successful development of novel Brassicaceae model species and genome-enabled approaches towards understanding the molecular mechanistic basis, ecological roles and evolutionary history of important phenotypic traits that are not found in A. thaliana. There will be one established speaker from within the ADAPTOMICS consortium (I) and two selected speakers from outside the consortium who are young Pls (II, III).

Organizers:

Dr. Ute Krämer, Full Professor, Molecular Genetics and Physiology of Plants, Ruhr University Bochum, email: <u>Ute.Kraemer@ruhr-uni-bochum.de</u>

Dr. Miltos Tsiantis (se below)

<u>List of Potential Speakers and Prospective Talk Topics (speakers have accepted):</u>

- Prof. Dr. Miltos Tsiantis, Director, Max Planck Institute for Plant Breeding Research, Cologne, Germany; email: <u>tsiantis@mpipz.mpg.de</u>; "Exploiting Cardamine hirsuta to understand the genetic basis for evolution of plant form"
- **II) Dr. Maheshi Dassanayake**, Assistant Professor, Louisiana State University, Baton Rouge, LA; email: maheshid@lsu.edu; "The Genomic Basis of Extreme Edaphic Adaptations in *Schrenkiella parvula*"
- III) Dr. Levi Yant, Project Leader, John Innes Center, Norwich, UK; email: levi.yant@gmail.com; "Insights from Population Genomics in Natural Populations of Arabidopsis arenosa"