

Germany

<http://www.arabidopsis.org/portals/masc/countries/Germany.jsp>
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AFGN (Arabidopsis Functional Genomics Network; DFG funded)

Aim and activities of AFGN

AFGN was founded by a bottom-up approach of the German Arabidopsis research community in 2001 as a basic research program. AFGN currently funds 25 projects in Germany and has, almost from the start, been organized in close coordination with the 2010 Project of the United States National Science Foundation (NSF). Together with many other research programs throughout the world, these programs aim to elucidate the function of all Arabidopsis genes by the year 2010. The AFGN program was renewed in 2007 (3rd funding period). In addition, the AFGN and the 2010 Project implemented the collaborative AFGN-2010 Young Researcher Exchange Program (AFGN-2010-YREP). The program provides funding for 1 to 3 month research visits of young scientists to the US and vice versa. Since the program's inception, seven German scientists have been supported by YREP funds to visit the U.S. There were three scientists supported in the past year, which concludes the program funding period: (1) Christiane Katja Kleindt, PhD student at the University of Bielefeld advised by Bernd Weisshaar, visited Mary Wildermuth of the University of California at Berkeley to work on ATH1 GeneChip-based analysis of powdery mildew infection stages in Arabidopsis. (2) Nora Peine, PhD student at the University of Bonn, advised by Dorothea Bartels, visited Andrew Wood of Southern Illinois University to work on bioinformatics and biochemical analysis of group 3 ALDHs from Arabidopsis. (3) Christos Noutsos, PhD student at the University of Munich, advised by Dario Leister, visited Georgiana May of the University of Minnesota, St. Paul to work on bioinformatics analyses of the chloroplast proteome and its phosphorylation.

The AFGN program will continue to support basic functional genomics research in Arabidopsis, thereby contributing to the accelerated acquisition and utilization of new knowledge and innovative approaches to elucidate fundamental biological processes in higher plants. Current support concentrates on two areas of research:

- Functional Genomics of Biological Processes

Research in the AFGN has shown that different members of a given Arabidopsis multiprotein family may be multifunctional and, thus, may play a role in different biological processes and pathways. As a consequence, the focus of AFGN will move from a sole multiprotein family-based genomic approach towards the genomic analysis of multigene networks whose members functionally interact with each other in accomplishing a given biological process.

- Tools and Resources for Plant Functional Genomic Research
There is still demand for the development of novel and genome-wide tools and technologies and additional resources in plant functional genomics to address unmet needs. It is expected that these methods and tools will complement the already existing tools and research resources, will provide quantitative readouts, will be cost effective and comprehensive, and, thus, will be readily adopted by the scientific community.

Tri-National Arabidopsis Meeting

Together with colleagues from Austria and Switzerland the AFGN organizes a yearly, rotating, international conference on Arabidopsis functional genomics. Funding comes primarily from DFG which allows young scientists including PhD students and postdocs to attend.

- The 5th Tri-National Arabidopsis Meeting, attended by around 200 participants, was held in Zuerich, Switzerland; September 10-13, 2008, and was organized by the ETH Zuerich.
- The 6th Tri-National Arabidopsis Meeting will be held in Cologne, Germany from September 16-19, 2009. Around 200 participants are expected and the meeting will be organized by the MPI for Plant Breeding Research, Cologne (<http://www.tnam.org>).

AFGN-related Arabidopsis tools and resources:

- AFGN:
<http://www.uni-tuebingen.de/plantphys/AFGN/>
- AFGN-2010-YREP:
<http://www.uni-tuebingen.de/plantphys/AFGN/yrep.htm>