Austria

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In Austria, Arabidopsis projects are undertaken at four institutions (BOKU-University of Natural Resources & Applied Life Science Vienna, GMI-Gregor Mendel Institute of Molecular Plant Biology, MFPL-Max F. Perutz Laboratories, University of Salzburg) on:

Population genetics:

Magnus Nordborg (www.gmi.oeaw.ac.at/en/research/magnus-nordborg/) has been appointed as director of the GMI

Systems biology:

Wolfram Weckwerth has been newly appointed as Head of the Molecular Systems Biology at the University of Vienna

Chromosome biology:

Karel Riha (www.gmi.oeaw.ac.at/rkriha.htm): telomeres and genome stability

Peter Schlögelhofer (www.mfpl.ac.at/index.php?cid=54): meiotic recombination

Dieter Schweizer (www.gmi.oeaw.ac.at/dschweizer.htm): SMC proteins

Development, hormones and stress responses:

Andreas Bachmair: (www.mfpl.ac.at/index.php?cid=702): ubiquitination and sumoylation

Thomas Greb (www.gmi.oeaw.ac.at/tgreb.htm): vascular tissue development

Marie-Theres Hauser (www.dagz.boku.ac.at/11135. html?&L=1): development, stress

Claudia Jonak (www.gmi.oeaw.ac.at/cjonak.htm): stress signalling and adaptation

Fritz Kragler (www.mfpl.ac.at/index.php?cid=52) proteins/ RNA cell to cell transport

Christian Luschnig (www.dagz.boku.ac.at/7968.html?&L=1): auxin, chromatin

Irute Meskiene (www.mfpl.ac.at/index.php?cid=53): AP2C1/2 in stress adaptation

Brigitte Poppenberger: brassinosteroid biosynthesis

Tobias Sieberer (www.chemie.boku.ac.at/4191.html): development of the shoot apical meristem

Markus Teige (www.mfpl.ac.at/ index.php?cid=55): Targets of calcium-dependent protein kinases

Epigenetics:

Werner Aufsatz (www.gmi.oeaw.ac.at/waufsatz.htm): RNA mediated silencing, stress adaptation

Antonius and Marjori Matzke (www.gmi.oeaw.ac.at/amatzke. htm): RdDM, nuclear architecture

Ortrun Mittelsten Scheid (www.gmi.oeaw.ac.at/oms.htm): epigenetic changes in polyploids

Hisashi Tamaru (www.gmi.oeaw.ac.at/htamaru.htm): chromatin during pollen development

Glycobiology:

Georg Seifert (www.dapp.boku.ac.at/ips.html?&L=1): arabinogalactan proteins and PCD

Herta Steinkellner (www.dagz.boku.ac.at/11132.html?&L=1): "customised" N-glycosylation

Richard Strasser (www.dagz.boku.ac.at/12349.html?&L=1): N-glycosylation

Raimund Tenhaken (www.uni-salzburg.at/zbio/tenhaken): biosynthesis of nucleotide sugars for cell wall polymers, PCD

Plant pathogen interactions:

Gerhard Adam (www.dagz.boku.ac.at/11137.html?&L=1): role of mycotoxins in plant-pathogen interactions

Holger Bohlmann (www.dapp.boku.ac.at/2238.html): MIOX gene in nematode induced syncytia

Florian Grundler (www.dapp.boku.ac.at/2238.html): plant nematode interaction

RNA metabolism:

Andrea Barta (www.mfpl.ac.at/index.php?cid=68): RNP complexes, spliceosome

Current Research Consortia

- "Lasting effects of abiotic stress in plant genomes and their potential for breeding strategies" is funded through the Austrian Genome Research Program GEN-AU of the Austrian Federal Ministry of Science and Research and coordinated by Christian Luschnig (www.gen-au.at/ projekt.jsp?projektId=65&lang=en)
- "Chromosome dynamics unravelling the functions of chromosomal domains" is a multiorganismal project (Arabidopsis represented by Peter Schlögelhofer) with the focus on the interaction of kinetochore –microtubules, biochemistry of sister-chromatid cohesion, chromosome pairing and recombination. (www.mfpl.ac.at/index. php?cid=647)
- "From regulatory complexity to biological function: Metabolic adjustment of plant development by regulatory

bZIP factor networks" (www.zmbp.uni-tuebingen.de/PlantPhysiology/bzip/) a cooperative International Project funded by the German DFG, the Austrian FWF, the Dutch NWO, and the Spanish MEC.

- "Chloroplast Signals, COSI" (www.univie.ac.at/cosi) EC-funded Marie-Curie Initial Training Network (ITN) coordinated by the University of Vienna and investigating chloroplast signals and metabolic regulation in a network of 10 European Institutions including BayerBioScience as industrial partner.
- "Signaling to plant immunity responses" (PathoNet) is an ERANet PG project coordinated by Irute Meskiene with members from Austria, Germany and United Kingdom (www.erapg.org/everyone/16790/18613/19533/19539)
- "Calcium Regulation of Plant Productivity" (CROPP) is an ERANet PG project with members from Austria, Germany, Israel and United Kingdom (www.erapg.org/ everyone/16790/18613/19533/19537)
- "Alternative Splicing and Abiotic Stress" (PASAS) is an ERANet PG project with members from Austria, Israel and United Kingdom(www.erapg.org/everyone/16790/18613/19533/19538)
- "Fusarium Metabolites and Detoxification Reactions" SFB-Project coordinated by Gerhard Adam from the BOKU-University of Natural Resources & Applied Life Sciences, Vienna

Conferences

- 'Plant abiotic stress tolerance' February 8-11 2009 (www. univie.ac.at/stressplants/Home.html
- 'Adaptation potential in plants' March 19-21 2009 (www. gmi.oeaw.ac.at/en/other-sites/febs/home/)
- 7th ISRR Symposium 'Root Research and Applications' (RootRAP) September 2-4, 2009 (rootrap.boku.ac.at/)

Public Relations- Education

- GEN-AU Summer School: an educational program for high school students (www.gen-au.at/artikel.jsp?id=761& base=vermitteln&lang=en)
- "Dialog Gentechnik": an independent non-profit society dedicated to provide scientific information on molecular biology and different aspects of biotechnological applications is organizing the Vienna Open Lab where hands on courses are offered to school classes and the general public. (www.viennaopenlab.at/index.php?lang=en) (www.dialog-gentechnik.at/index.php?id=104908&txgroup=104908)
- "Lange Nacht der Forschung" (Long Night of Research), a common activity of scientific and technical institutions all over Austria to present their work to the general public. (www.langenachtderforschung.at/lnf2/?cat=7)

Vienna Biocenter International PhD Programmes

These international competitive programmes offer up to 4 years working on Arabidopsis research projects. For detailed information consult the website www.univie.ac.at/vbc/PhD/

Funding Sources

- Basic and translational research: FWF (www.fwf.ac.at)
- Vienna region: WWTF (www.wwtf.at)
- Specific programs (GEN-AU) (www.gen-au.at/index. jsp?lang=en)
- Austrian Research Promotion Agency (FFG) (www.fff. co.at)

Awards

Karel Riha received one of eight START prizes of the FWF for studies on telomere components in Arabidopsis, a €1.2 million award for research over the next 6 years. (http://www.gmi.oeaw. ac.at/en/news/)