

Curriculum vitae - Prof. Dr. Karl Schmid

Personal information: Born 27 March 1966 in Aindling (Bavaria) - German Nationality - Married, 4 children

Current position: Full Professor (W3)
Head of Research Group 'Crop Biodiversity and Breeding Informatics'
Institute address: Institute of Plant Breeding, Seed Science and Population Genetics
University of Hohenheim
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Education

1986 - 1992 Studies in Biology, University of Munich, Germany and Oxford University, UK
1993 - 1996 Research associate (PhD student), Institute of Zoology, University of Munich, Germany
1996 Dr. rer. nat. *magna cum laude*, University of Munich

Scientific career

1997 - 1999 Postdoc, Dept. of Molecular and Cell Biology, Cornell University, Ithaca NY, USA
2000 - 2006 Group Leader (Emmy-Noether Fellow), Department of Genetics and Evolution, Max-Planck Institute of Chemical Ecology, Jena, Germany
2006 - 2008 Group Leader (Evolutionary Genetics), Genebank Department, Leibniz Institute of Plant Genetics and Crop Research (IPK), Gatersleben, Germany
2008 Professor of Genetics, Swedish University of Agricultural Sciences, Uppsala,
2009 - 2014 Guest Professor, Swedish University of Agricultural Sciences, Uppsala, Sweden
since 2008 Full Professor (W3) of Crop Biodiversity and Breeding Informatics, University of Hohenheim, Germany

Research interests

Demography and local adaptation of wild and domesticated plants. Methods for utilization of plant genetic resources in plant breeding. Genetic mapping of domestication, adaptation and improvement genes in wild and domesticated plants.

Honors and special recognitions

2017 Award 'Freedom for Research' of the Gips-Schüle Foundation, Stuttgart
2000 - 2004 Emmy-Noether Fellowship of the DFG
1999 NATO Fellowship from the German Academic Exchange Service
1997 Short-Term Fellowship Boehringer Ingelheim Fonds
1990 - 1991 DAAD Fellowship
1989 - 1992 Fellowship of the German Fellowship Foundation (Studienstiftung des deutschen Volkes)

Other activities

Since 2018 Full Member of the Central Commission for Biological Safety (ZKBS) at the Federal Agency of Consumer Protection and Food Safety (BVEL)
2016 - 2018 Deputy Member of the Central Commission for Biological Safety (ZKBS) at the Federal Agency of Consumer Protection and Food Safety (BVEL)
Since 2016 Coordinator DFG Research Priority Programme SPP1819 "Rapid Evolutionary Adaptation - Potential and Constraints"
Since 2016 Member of Scientific Advisory Board, German Ministry of Science (BMBF) Program 'Plants for the future'
2014 - 2016 Member of Steering committee DFG Priority Program SPP1529 'Adaptomics'

- Since 2013 Member of Scientific advisory board of University Research Priority Program (URPP) 'Evolution in Action', University of Zurich
- 2007 - 2010 National coordinator and chair of work group 1, COST activity FA604 'Tritigen'
- 2001 - 2006 Member of Steering Committee of Jena Center for Bioinformatics (JCB)

Selected publications

1. Stetter M.G., Vidal-Villarejo M., **Schmid K. J.** (2020) Parallel seed color adaptation during multiple domestication attempts of an ancient New World grain. *Mol. Biol. Evol.* 37:1407–1419
2. Haupt, M., **Schmid, K.** (2020) Combining focused identification of germplasm and core collection strategies to identify genebank accessions for central European soybean breeding. *Plant Cell Environ.* 43: 1421– 1436.
3. Lampei C., Wunder J., Wilhalm T., **Schmid K.J.** (2019) Microclimate predicts frost hardness of alpine *Arabidopsis thaliana* populations better than elevation. *Ecology and Evolution* 9: 13017-13029.
4. Thorwarth P., Eltohamy Y., **Schmid K. J.** (2018) Genomic prediction and association mapping of curd-related traits in genebank accessions of cauliflower. *G3: Genes, Genomes, Genetics* 8:707-718.
5. Günther T., Lampei C., Barilar I. and **Schmid K. J.** (2016) Genomic and phenotypic differentiation of *Arabidopsis thaliana* along altitudinal gradients in the North Italian Alps. *Molecular Ecology*. *Mol. Ecol.* 25, 3574–3592
6. Gossmann T. I., Saleh D., Schmid M., Spence M. A., **Schmid K. J.** (2016) Transcriptomes of plant gametophytes have a higher proportion of rapidly evolving and young genes than sporophytes. *Mol. Biol. Evol.* 33:1669–1678
7. Russell, J., Mascher, M., Dawson, I.K., Kyriakidis, S., Calixto, C., Freund, F., Bayer, M., Milne, I., Marshall-Griffiths, T., Heinen, S., Hofstad, A., Sharma, R., Himmelbach, A., Knauff, M., van Zonneveld, M., Brown, J.W.S., **Schmid, K. J.**, Kilian, B., Muehlbauer, G.J., Stein, N. and Waugh, R. (2016) Exome sequencing of geographically diverse barley landraces and wild relatives gives insights into environmental adaptation. *Nature Genetics* 48,1024-1030
8. Gossmann T.I., Schmid M.W., Grossniklaus, U., and **Schmid, K.J.** (2014). Selection-driven evolution of sex-biased genes is consistent with sexual selection in *Arabidopsis thaliana*. *Mol. Biol. Evol.* 31:574-583
9. Günther T., Lampei C. and **Schmid K. J.** (2013) Mutational bias and gene conversion affect the intraspecific nitrogen stoichiometry of the *Arabidopsis thaliana* transcriptome. *Mol. Biol. Evol.* 30:561-8
10. Cao J., Schneeberger K., Ossowski S., Günther T., Bender S., Fitz J., Koenig D., Lanz C., Stegle O., Wang X., Ott F., Müller J., Alonso-Blanco C., Borgwardt K., **Schmid K.J.**, and Weigel D. (2011) Whole-genome sequencing of multiple *Arabidopsis thaliana* populations. *Nature Genetics* 43:956-963

Google Scholar page: <https://scholar.google.de/citations?user=TN3bbNwAAAAJ>