



Curriculum Vitae Professor Dr Uta Paszkowski

Name: Uta Paszkowski

Research Priorities: Molecular genetics of plants, arbuscular mycorrhiza symbiosis, host-microbe interaction, symbiotic signal transmission

Uta Paszkowski is a German molecular scientist. Her research focuses on elucidating the molecular mechanisms that underly arbuscular mycorrhiza symbiosis (AM) and its use for the phosphate supply of crops. She established rice and maize as monocotyledonous models for the study of the molecular genetics of AM-symbiosis and contributed significantly to this area.

Academic and Professional Career

- since 2019 Professor, Department of Plant Sciences, University of Cambridge, Cambridge, UK
- 2017 - 2019 Reader, Department of Plant Sciences, University of Cambridge, Cambridge UK
- 2012 - 2017 Lecturer, Department of Plant Sciences, University of Cambridge, Cambridge UK
- 2006 - 2012 Assistant Professor, Department of Plant Molecular Biology, University of Lausanne, Lausanne, Switzerland
- 2003 - 2006 Junior Group Leader, Department of Plant Biology, University of Geneva, Geneva, Switzerland
- 2000 - 2003 Scientist, Torrey Mesa Research Institute, Syngenta, San Diego, USA
- 1996 - 2000 Postdoctoral Fellow, University of Basel, Basel, Switzerland
- 1993 PhD, Eidgenössische Technische Hochschule (ETH) Zurich, Zurich, Switzerland
- 1989 Diploma, University of Cologne, Cologne, Germany

Functions in Scientific Societies and Committees

- since 2020 Member, European Molecular Biological Organization (EMBO)
- Member, European Plant Science Organization (EPSO)
- Member, American Society of Plant Biology (ASPB)
- Member, American Society of Phytopathology (ASP)

Project Coordination, Membership in Collaborative Research Projects

- 2010 - 2012 Applicant, “Plant factors essential for the AM symbiosis in rice and maize”, SNF-Professorships, Swiss National Science Foundation (SNF), Switzerland
- 2006 - 2010 Applicant, “Using genetics and genomics to identify plant factors essential to the AM symbiosis in maize and rice”, SNF-Professorships, SNF, Switzerland
- 2004 - 2007 Applicant, Project “Identification and characterization of factors involved in the arbuscular mycorrhizal symbiosis in maize and rice”, SNF, Switzerland
- 1996 - 1999 Applicant, “Identification of Symbiosis-Specific Genes in Plants”, Marie Heim-Voegtlin Grants, SNF, Switzerland

Honors and Awarded Memberships

- since 2023 Member, German National Academy of Sciences, Germany

Research Priorities

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In her research Uta Paszkowski focuses on AM – the most common connection between terrestrial plant roots and the glomeromycotan of fungi. Her team studies the molecular mechanisms that are the basis for the bonding and functioning of AM-symbioses in rice and maize. With the help of molecular genetics and imaging techniques she elucidated the molecular mechanisms on which this seemingly harmonious connection is based. She wants to find out how the two organisms, each feeding and recognising the other, communicate to establish this physical relationship. From this Uta Paszkowski deduced mechanisms of communication that enable this widespread and close partnership between cereal crops and fungi.

Arbuscular mycorrhiza receives increased scientific attention due to its nutritional benefits it gives to plants, its common occurrence in present-day plant species, and as a result of its evolutionary

age as well as its relationship to other plant interactions. The aim of Uta Paszkowski's research is to optimize the adaptation of AM-symbiosis into modern sustainable agricultural practices.