

Nicole Knabe

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Business:

Friedrich-Schiller Universität

Mikrobielle Phytopathologie

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Objective

To obtain a Postdoc position in the field of fungal molecular biology

Education

Ph.D. at Friedrich Schiller University of Jena, Germany (05/2002 - 06/2008)

- Topic of Ph.D. work: “Untersuchung von Signalkomponenten der sexuellen Entwicklung bei dem Basidiomyceten *Schizophyllum commune*” (Investigation of components of the signal transduction pathway in the sexual development of the basidiomycete *Schizophyllum commune*)
- Graduated with “cum laude (1,5)”
- Granted a 3 year scholarship (GRK 768 “Biomolecular Switches”)

Diploma thesis at Friedrich Schiller University of Jena, Germany (10/1995 – 11/2001)

- Focus: Microbiology
- Focus of Diploma thesis: Investigation of the gene *ste20* of the MAP kinase pathway in the fungus *S. commune*

Practical Experience

Postdoc position (01/2009 – 05/2009)

Friedrich Schiller University of Jena, Germany in cooperation with the chemical company BASF in Ludwigshafen, Germany

- Investigation of the glucan synthase in *S. commune* in cooperation with BASF
- Participation in the annotation of the *S. commune* genome

Postdoc position (7/2008 – 12/2008)

Friedrich Schiller University of Jena, Germany

- Established 2D-gel electrophoresis for *S. commune*

Doctoral Research (05/2002 - 06/2008)

Friedrich Schiller University of Jena, Germany; Department of Microbial Phytopathology
(research advisor: Prof. Dr. Erika Kothe)

- Characterization of two genes (*ras1* and *pkac1*) of the pheromone induced signal transduction pathway in the basidiomycete *Schizophyllum commune*
 - Experience with protein and nucleic acid isolation
 - Performed transformation of *S. commune*
 - Created mutant strains and screened the transformants
 - Experience with Southern blot analysis, PCR and real-time PCR
 - Analysed the cytoskeleton (tubulin, dynein) of *S. commune* with immunofluorescence
 - Investigated microtome sections of fruit bodies
 - Experience with sequence data analysis and use of BLAST algorithms to search public databases
 - Analysed intracellular cAMP amounts and protein kinase A activity

Publications

Knabe, N., Hennicke, F., Jung, E.-M. and Kothe, E. (2009). Effect of Ras signalling on the sexual development of the homobasidiomycete *Schizophyllum commune*. (in preparation)

Schubert, D., Raudaskoski, M., **Knabe, N.** und Kothe, E. (2006). Ras GTPase-activating protein Gap1 of the homobasidiomycete *Schizophyllum commune* regulates hyphal growth orientation and sexual development. Eukaryot. Cell 5, 683-695.

Teaching Experience

Instructor (2002 – present)

- Organized and accomplished practical courses and seminars of fungal genetics / molecular biology for undergraduate students
- Supervision of students in intensive practical courses / lab courses

Supervision of Diploma-, Master-, Magister- and PhD students at the Institut for Microbiology / Department of Microbial Phytopathology (2002 – present)

Conference Proceedings

- 03/2009 „Fungal Genetics” in Asilomar (USA), poster
- 09/2007 VAAM symposium „Molecular Biology of Fungi“ in Hamburg (GER)
Talk: „Effect of Ras signaling on fruit body formation in the fungus *Schizophyllum commune*“
- 03/2007 „Fungal Genetics” in Asilomar (USA), poster
- 10/2006 „Biology of Yeast and Filamentous Fungi“ in Frankfurt (GER), poster
- 03/2006 VAAM annual conference in Jena (GER), poster
- 09/2005 VAAM symposium „Molecular Biology of Fungi“ in Bochum (GER), poster
- 03/2005 „Fungal Genetics“ in Asilomar (USA), poster
- 09/2003 „Signaling Complexes“ in Jena (GER), poster

09/2003 VAAM symposium „Molecular Biology of Fungi“ in Göttingen (GER), poster

Professional Affiliations

Member of the “Verein für Allgemeine und Angewandte Mikrobiologie“ (VAAM) /
Association for General and Applied Microbiology, 2007 - present

Special Skills/Interests/Activities

Computer Skills	WinXP, Microsoft Office, Photoshop, DNASTar
Languages	German (native speaker), English (good)
Hobbies	photography

References

Available upon request