

Curriculum vitae – Dr. Matthias Hess, Ph.D.

ACADEMIC DEGREES

Doctor of Philosophy	2007
Specialization in microbiology and biotechnology <i>Hamburg University of Technology, Hamburg, Germany</i>	
Diplom in Biology (German equivalent to Master of Science in Biology)	2004
Emphasis on microbiology, microbial ecology, genetics and limnology <i>University of Konstanz, Konstanz, Germany</i>	

SPECIALITIES

Metagenome and metatranscriptome analysis, genetic engineering, microbial genetics, microbiology, biotechnology, biocatalysis, molecular biology, microbial physiology, protein engineering and microbial ecology

SKILLS

Conducting goal oriented and interdisciplinary research, mining microbial genomes for genes of industrial interest and evaluating the industrial potential of novel biocatalysts and biological systems

FIELDS OF ADVANCED KNOWLEDGE

Bioremediation, geomicrobiology, limnology, molecular toxicology, immunology, geology, ecology and evolution

RESEARCH EXPERIENCE

Assistant Professor	Since 2011
<i>Washington State University, Richland, WA, USA</i>	
<ul style="list-style-type: none">• “Bioprospecting by ultra-deep sequencing”• “Metagenomics and Metatranscriptomics of microbial environments”• “New Technologies for improved production of biofuels and other bioproducts”	
Computational analyst, postdoctoral fellow	2007-2010
<i>DOE Joint Genome Institute, Walnut Creek, CA, USA</i>	
<i>Lawrence Berkeley National Laboratory, Genomics Division, Berkeley, CA, USA</i>	
Supervisor: Dr. Edward M. Rubin, Joint Genome Institute Director	
<ul style="list-style-type: none">• “Bioprospecting by ultra-deep sequencing”• “Metagenomics and Metatranscriptomics of the rumen microbiome”	
Research assistant	2004-2006
<i>Hamburg University of Technology, Hamburg, Germany</i>	
Supervisor: Prof. Dr. Dr. h.c. Garabed Antranikian, Chair in Biotechnology	
<ul style="list-style-type: none">• “Enzymes from extremophiles for industrial applications”	
Research assistant	2002-2003
<i>Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA</i>	
Supervisor: Prof. Dr. Michael J. Daly	
<ul style="list-style-type: none">• “Genome analysis of the extremely radiation resistant bacterium <i>Deinococcus radiodurans</i>”	
Student research assistant	2002
<i>University of Konstanz, Konstanz, Germany</i>	
Supervisor: Prof. Dr. Winfried Boos, Chair in Microbiology	
<ul style="list-style-type: none">• “The sugar transport system of <i>Escherichia coli</i>”	
Student research assistant	2002
<i>University of Konstanz, Konstanz, Germany</i>	
Supervisor: Prof. Dr. Axel Meyer	
<ul style="list-style-type: none">• “Genomics of East African Cichlids”	
Student research assistant	2001
<i>Northern Arizona University, Flagstaff, Arizona, USA</i>	
Supervisor: Prof. Dr. Bruce A. Hungate	
<ul style="list-style-type: none">• “Studying plant-microbe interactions using stable isotopes”	

Curriculum vitae – Dr. Matthias Hess, Ph.D.

RESEARCH EXPERIENCE (continued)	
Student research assistant <i>Northern Arizona University, Flagstaff, Arizona, USA</i> Supervisor: Prof. Dr. Jane Marks • “The endemic ecosystem of Cuatro Cienegas and its food web“	2001
ADDITIONAL WORK EXPERIENCE	
Nurse <i>Center of Psychiatry Weissenau, Ravensburg, Germany</i>	1995-1997
Paramedic <i>German Red Cross, Ravensburg, Germany</i>	1994-1995
EDUCATION	
Ph.D., Microbiology & Biotechnology <i>Hamburg University of Technology, Hamburg, Germany</i>	2005-2007
Diplomarbeit (Masters Thesis), Microbiology <i>Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA</i>	2003
Graduate school, Microbiology, Microbial Ecology & Limnology <i>University of Konstanz, Konstanz, Germany</i>	1999-2003
Graduate school, Microbiology, Microbial Ecology & Limnoecology <i>Northern Arizona University, Flagstaff, Arizona, USA</i>	2000-2001
Undergraduate program, Microbiology, Biochemistry & Botany <i>University of Konstanz, Konstanz, Germany</i>	1997-1999
Paramedic II <i>German Red Cross, Pfalzgrafenweiler, Germany</i>	1994-1995
Paramedic I <i>German Red Cross, Mannheim, Germany</i>	1994
Abitur (High School Diploma) <i>Albert Einstein Gymnasium, Ravensburg, Germany</i>	1994
PEER REVIEW SERVICE	
Biotechnology and Bioengineering	since 2011
Foundation of Science and Technology, Portugal	since 2010
Environmental Technology, Microbial Cell Factories	since 2009
SCHOLARSHIPS	
Travel and congress scholarship <i>German Science Foundation, Germany</i>	2004
Research scholarship <i>Henry M. Jackson Foundation for the Advancement of Military Medicine, MD, USA</i>	2002-2003
Student scholarship <i>German Federal Ministry of Education and Research, Germany</i>	1997-2003