## Curriculum vitae



Name: Britta Engelhardt

Date of Birth: December 28, 1962

Place of Birth: Stuttgart, Germany

University: 1982 – 1987

Human Biology, main subject Immunology, at the Philipps-University,

Marburg, Germany

Diploma Thesis: 1986 – 1987

"Immunotherapy of experimental autoimmune encephalomyelitis: monoclonal antibodies directed against the Interleukin-2 receptor and Cyclosporin A" at the Max-Planck-Institute, Clinical Research Group for Multiple Sclerosis, Würzburg, Germany in the laboratory of Professor Dr.

Hartmut Wekerle

Academic Degree: November 1987, graduation from the Philipps-University of Marburg:

"Diplom-Humanbiologe" = holder of a university diploma for Human

Biology, final grade: "excellent"

PhD Thesis: 1988 – 1990

"Immune-specific interaction of rat brain capillary endothelium with syngeneic antigen-specific T cells" at the Max-Planck-Institute, Clinical Research Group for Multiple Sclerosis, Würzburg, Germany and at the Max-Planck Institute for Psychiatry, Martinsried, Germany in the laboratory

of Professor Dr. H. Wekerle, final grade: "magna cum laude".

Academic Degree: January 1991 PhD in Human Biology (Dr.rer.physiol.)

Post-doctoral Fellow: 1991 – 1993

"Investigation of adhesion molecules involved in lymphocyte recruitment across the blood-brain barrier" at Stanford University, California, USA, Department of Pathology in the laboratory of Professor Dr. Eugene C.

Butcher

Research Group

Leader:

June 1993 - October 1993

Institute for Brain Research, Section Immunopathology of the Nervous System at the Eberhard-Karls-University in Tübingen, Germany with

Professor Dr. Dr. H. J. Schlüsener

November 1993 – June 1999

at the Max-Planck Institute for Physiological and Clinical Research, W.G. Kerckhoff-Institute, Department of Molecular Cell Biology, Bad Nauheim, Germany; Director: Professor Dr. Werner Risau (†December 13<sup>th</sup>, 1998).

July 1999 - July 2001

Max-Planck Institute for Physiological and Clinical Research, W.G. Kerckhoff-Institute, Department of Vascular Cell Biology, Bad Nauheim,

Germany, Director: Professor Dr. Dietmar Vestweber

August 2001 - October 2003

Max-Planck-Institute for Vascular Cell Biology, Münster, Germany,

Director: Professor Dr. Dietmar Vestweber

Director/Chair: since November 2003

University of Bern, Theodor-Kocher Institute, Switzerland

"Habilitation" (Postdoctoral lecture qualification): Venia Legendi for Immunology and Cell Biology on May 20, 1998, at the

Medical Faculty of the Philipps University Marburg, Germany

Appointments: November 1999

promoted to a C3-groupleader position at the Max-Planck Institute for Physiological and Clinical Research, W.G. Kerckhoff-Institute, Bad

Nauheim, Germany

November 2003

Appointment as "Full Professor (Ordinaria) for Immunobiology and Director

of the Theodor-Kocher Institute, University of Bern, Switzerland

Teaching: 1994 – 2003

Immunology (lectures, seminars, laboratory classes) and Cell Biology (laboratory classes) for students of Human Biology, Medicine and Biology at the Medical School of the Philipps-University, Marburg, Germany

since 2005

Graduate School for Cellular Biomedical Sciences; Immunology, Cell and Vascular Biology in the Life Science Bachelor and Master Programs at the

University of Bern, Switzerland

Research Focus: Leukocyte trafficking into the central nervous system; blood-brain barrier

research

Funding: 1994 – 2004 in Germany

Continuous funding via several individual research grants by the German Research Foundation "**Deutsche Forschungsgemeinschaft (DFG)**", Topic "Cell adhesion in experimental autoimmune encephalomyelitis (EAE)"; additionally by program project funds *Sonderforschungsbereich* 297 at the University of Marburg: "Mechanisms of Neuro-Immune-

Endocrine Interactions"; Sonderforschungsbereich 293 at the University of Munster: "Mechanisms of Inflammation"; Sonderforschungsbereich 629 at the University of Munster: "Molecular cell dynamics: intracellular and

cellular movements"

**BMBF** (Ministry for Education and Research, Germany) "Transmissible spongiform encephalopathies: Therapeutic intervention in animals and humans"

**HFSP**: Topic: "Expression and function of junctional adhesion molecule (JAM) at the blood-brain barrier"

Additional funding by AstraZeneca and GlaxoSmithKline

Since September 2004 - Switzerland

Continuous funding by the Swiss National Foundation (SNF) and the Swiss

Multiple Sclerosis Society

**2005-2009**: Research grant by National Multiple Sclerosis Society (USA): "Molecular mechanisms of leukocyte migration across the blood-brain barrier"

2005-2006: Research grant by Desirée and Niels Yde Foundation:

"Involvement of tight junctions in leukocyte migration across the blood-brain barrier"

**2008-2009**: Research Grant by the Kamillo Eisner Foundation. "Involvement of DARC in leukocyte recruitment across the BBB"

"Involvement of DARC in leukocyte recruitment across the BBB"

2008-2009: Research Grant by the Theodore Ott Foundation: The role of

agrin and aquaporin 4 in maintaining BBB integrity during EAE"

2008-2010: Research Grant by the Hertie-Foundation (co-application with

H. Wolburg): "The role of agrin in astrocyte polarization and BBB

maintenance".

**2008-2013**: Research Grant and Work package leader in the EU FP7 Large Integrating Project EUSTROKE of the European Stroke Network

2010: Novartis Foundation for Biomedical Research

2010-2014: Coordinator of the EU F7 Small Integrating Project JUSTRAIN

Memberships: Swiss Society for Allergology and Immunology

Swiss Society for Microcirculation

Swiss Laboratory Animal Science Association Biochemical Association Bern, Switzerland

German Society for Immunology

Working group of adhesion molecules of the German Society for

Immunology

International Society for Neuroimmunology

German Society for Cell Biology

Society for Microcirculation and Vascular Biology American Association for the Advancement of Science Founding Member of the International Brain Barriers Society

Awards and Honours: 1984 – 1987 Fellowship by the "Studienstiftung des Deutschen Volkes"

(German National Academic Foundation for gifted students)

1991 – 1993 Holder of a post-doctoral fellowship of the German Research

Foundation (DFG)

Hermann-Rein-Prize 2001 of the Society for Microcirculation and Vascular

Biology

Member of Scientific Advisory Boards:

Esplora GmbH, Darmstadt, Germany until 12/2003 AstraZeneca, R&D, Södertälje, Sweden until 12/2002

Swiss Multiple Sclerosis Society Micromet, Munich, Germany

Other professional Activities:

Member of the Editorial Board of the European Journal of Immunology, the Open Immunology Journal, the Journal of Cerebrospinal Fluid Research

Member of the Scientific Advisory Board of the Cluster of Excellence "Inflammation at Interfaces", Kiel, Germany

Member of the Scientific Advisory Board of the "Zentrum für molekulare Neurobiologie", Hamburg, Germany

Invited Guest Editor: Topic Issue on "The Choroid Plexus in Health and Disease"; Microscopy Research and Technique; Wiley Press, 2001

Board Member of the Society for Microcirculation and Vascular Biology

Member of the awards committee for the "Werner Risau Award for outstanding studies in endothelial cell biology"

Member of the awards committee for the "Werner Risau Award for outstanding studies in endothelial cell biology"

Co-founder of the European Vascular Biology Organization (EVBO) Mentoring in the "Schweizerische Studienstiftung"

Mentoring in the Swiss German Mentoring Program for Women

Member of the Board of Trustees of the Bernese Radium Foundation

Organization of Meetings:

February 18 - 19, 1997

Organization of the "5<sup>th</sup> Annual Meeting of the Study Group Adhesion Molecules of the German Society for Immunology", Bad Nauheim, Germany

September 7 – 11, 1997

Organization of the International Symposium "Molecular Mechanisms in Leukocyte Traffic", Ringberg Castle, Tegernsee, Germany

September 22 – 25, 2002

Together with Prof. D. Vestweber: Organization of the Third International Symposium "Molecular Mechanisms in Leukocyte Traffic", Ringberg Castle, Tegernsee, Germany

October 19 - 23, 2002

Together with Prof. P.-O. Couraud: Organization of the "INSERM LAUDAT Conference", Topic: "Brain Endothelium and Pathologies", Aix-les-Bains, France

June 26 - 29, 2005

Together with Prof. Hans-Joachim Galla: Organization of the 5<sup>th</sup> CVB (Cerebral Vascular Biology) Meeting in Munster, Germany

January 29 – 30, 2009

Member of the Organizing Committee of the USGEB 2009, Interlaken, Switzerland

October 8-10, 2009

Second Annual Meeting of the "Gesellschaft für Mikrozirkulation und vaskuläre Biologie" and the Swiss Society for Microcirculation, Bern, Switzerland

September 1-4, 2010

Co-organizer of the 13<sup>th</sup> International Symposium "Signalling at the Blood-Brain and Blood-Tumor Barriers", Zurich, Switzerland

Invited Meeting Speaker:

Regularly invited at international meetings since 1994

Selection of recent invitations in 2009 and 2010:

Keystone Symposium "Multiple Sclerosis", Santa Fee, New Mexico, USA, January 23, 2009

Workshop "CD8 T Cells in Central Nervous System inflammation", Neuroprotective Strategies for Multiple Sclerosis, Neuropromise, Rome, Italy, March 5-6, 2009

15<sup>th</sup> Annual Kentucky Spinal Cord and Head Injury Research Trust Symposium, June 11-12, 2009, Louisville, USA

8<sup>th</sup> Cerebrovascular Biology International Conference, Sendai, Japan, June 28-July2, 2009

2<sup>nd</sup> German-Japanese Neuroimmunology Symposium, July 9-12, 2009, Eibsee, Germany

7<sup>th</sup> International Symposium on the Biology of Endothelial Cells, September 2-5, 2009, Vienna, Austria

Graduate School of Immunology 4<sup>th</sup> Annual Meeting, November 4-6, 2009, Ystad, Sweden

COST-Exploratoy Workshop "Pharmacology and Toxicology of the Blood-Brain Barrier: State of the Art, Needs for Future Research and Expected Benefits for the EU, Febuary 11-12, 2010, Brussels, Belgium

4<sup>th</sup> European B4B Meeting, March 5-7,2010, Frankfurt, Germany

American Association of Immunologists, President's Symposium at the AAI Meeting Immunology, May 7-11, 2010, Baltimore, USA

20<sup>th</sup> Meeting of the European Neurological Society, June 19-23, 2010, Berlin, Germany

7<sup>th</sup> Forum of European Neuoscience (FENS), July 3-7, 2010, Amsterdam, The Netherlands

Neuroimmunology Kyoto Conference, August 18-21, 2010, Kyoto, Japan

Cell Symposia "Inflammation and Disease". September 26-28, 2010, Lisbon, Spain

Emerging Concepts in the Immunological and Degenerative Aspects of Multiple Sclerosis, September 29-30, 2010, Ann Arbor, MI, USA

10<sup>th</sup> International Congress of Neuroimmunology, October 26-30, 2010, Barcelona

SSIF Conference on "Multiple Sclerosis: Future Treatments and New Goals". November 12-13, 2010, Vienna

Cold Spring Harbor Conference "Blood –brain barrier", December 8-11, 2010, Cold Spring Harbor, NY, USA

Keystone Symposium on Genetics, Immunology and Repair in Multiple Sclerosis, February 15-20, 2011, Taos, NM, USA

## Reviewer Organizations

Association pour la recherche sur la sclerose en plaques (ARSEP; French Multiple Sclerosis Society), Associazione Italiana Sclerosi Multipla (Italian Multiple Sclerosis Society), BBSRC- Biotechnology and Biological Sciences Research Council , UK; Boehringer Ingelheim Fonds; Deutsche Forschungsgemeinschaft (German Research Foundation), Deutsche Krebshilfe; European Research Council; HERTIE Foundation; German-Israeli Foundation for Scientific Research & Development; Israel Science Foundation, Medical Research Council (UK), Minerva-Foundation of the Max-Planck-Society, Multiple Sclerosis Society Canada; Mulstiple Sclerosis Society Australia; Multiple Sclerosis Society UK; Neurological Foundation of New Zealand, Swiss National Foundation (SNF), The Leverhulme Trust (UK), The Wellcome Trust (UK); Inserm, French National Institute For Health and Medical Research

## Reviewer Journals:

Acta Neuropathologica; Annals of Anatomy, Annals of Neurology; Arteriosclerosis, Thrombosis and Vascular Biology; Biochemical Pharmacology; Blood; Brain; Brain Research; Cancer Research; Cell and Tissue Research; Cerebrospinal Fluid Research; Circulation Research; EMBO Reports; Endothelium, European Journal of Cell Biology, European Journal of Immunology, Experimental Cell Research; Glia; Histochemistry

and Cell Biology, Immunology, International Immunology; Journal of Cerebral Blood Flow and Metabolism; Journal of Cancer, Journal of Cell Biology, Journal of Cellular Physiology, Journal of Drug Targeting, Journal of Experimental Medicine; Journal of Immunology, Journal of Leukocyte Biology; Journal of Neurochemistry, Journal of Neuroimmunology; Journal of Pathology, Journal of Thrombosis and Haemostasis; Laboratory Investigation; Nature Immunology; Nature Reviews Immunology; Neuropathology & Applied Neurobiology, PLoS\_One; PNAS; Toxicology, The Open Immunology Journal, Trends in Immunology

Most relevant current scientific collaborations:

Dr. Ralf Adams, Cancer Research UK, London, UK

Dr. Ingolf Blasig, Leibnitz-Institute for Molecular Pharmacology, Berlin, Germany

Prof. Roméo Cecchelli, University of Lens, France

Dr. Pierre-Olivier Couraud; INSERM, Institut Cochin, Paris, France

Prof. Elisabetta Dejana, Institute of Molecular Oncology, Milan, Italy

Prof. Dr. Beat Imhof, Centre Médicale Universitaire, Geneva, Switzerland

Dr. Stefan Liebner; Johann-Wolfgang Goethe-University, Edinger Institute,

Frankfurt, Germany

Prof. Dr. Heinrich Mattle, Neurology, Inselspital Bern, Switzerland

Dr. Eric Meyer, University of Zurich, Switzerland

Prof. Dr. Antal Rot, Birmingham, UK

Prof. Dr. Hans-Joachim Schnitter, University of Münster, Germany

Prof. Dietmar Vestweber, Max-Planck Institute, Münster, Germany

Prof. Dr. Hartwig Wolburg, University of Tubingen, Germany