

Curriculum vitae of

Prof. Dr. rer. nat. Michael Bach



- 1950 Born in Berlin
- 1956 Moved to Dortmund, grammar school, Humboldt-Gymnasium (high school, college bound).
- 1970 Studied Physics at the "Ruhr-Universität Bochum".
- 1972 Vordiplom (Undergraduate Degree), transferred to the University of Freiburg.
- 1975 Married my beloved wife, Ulrike.
- 1975–78 Ran the Electronic Laboratory in the Dept. of Psychology (part-time affiliation).
- 1977 Diploma (Masters Degree) in Physics, thesis: "Measurement of differential scattering cross sections of ion-molecule-reactions at low energies".
- 1977 Birth of first child, Inga.
- 1978–81 Research assistant in the special research unit SFB 93 "Brain research and sensory physiology" at the Dept. of Neurology, Univ. of Freiburg.
- 1978–81 Dissertation, supervised by Prof Burkhardt Fischer und Prof Jürgen Krüger. Title of thesis: "Interaction between neurones in the visual cortex based on recordings with a multi-microelectrode".
- 1979 Participation in the course "Central Nervous System" (Cold Spring Harbor Laboratories, Long Island, USA) held by Carla Shatz and Michael Stryker.
- 1980 Birth of second child, Oliver.
- 1981 Doctorate in Physics (PhD);
Full time Research Assistant in the Department of Ophthalmology of the University of Freiburg.
- 1983 Appointed as Director of the Electrophysiological Laboratory in the Department of Ophthalmology, University of Freiburg (tenured position).
- 1984 Birth of third child, Maren.
- 1987 Project leader of "Modulation der musterevozierten Potentiale von Retina und Kortex" in the special research unit SFB 325 "Modulation und Lernen in Neuronensystemen" with PD Dr Jens Röver.
- 1989 Project leader of "Elektrophysiologie und Psychophysik der Sehbahn" in the special research unit SFB 325.
- 1991 Habilitation and venia legendi for 'Neurobiophysik'.
- 1992 Project leader of "Das magno- und parvozelluläre System in der Sehbahn des Menschen" in the special research unit SFB 325;
Appointed as 'Akademischer Oberrat'.
- 1994 Organised the International Neuroophthalmological Society meeting with Prof Guntram Kommerell.
- 1996 Elected as "Member at Large" by the International Society for Clinical Electrophysiology ([ISCEV](#));
Created the websites for the Ophthalmology Dept Freiburg and for ISCEV.
- 1997 Organised the 6th meeting of the "[Ophthalmic Optics](#)" group.
- 1998 Appointed as Professor (APL);
Co-organised the 7th meeting of the "[Ophthalmic Optics](#)" group.
- 1999 Professional appointment as "Akademischer Direktor";
Chaired the PERG Standardisation Committee of the International Society for Clinical Electrophysiology of Vision ([ISCEV](#));
Joined the Editorial Board of "[Documenta Ophthalmologica](#)".

- 2000 Appointed as “Director of International Communications” by the ISCEV board;
Re-elected as “Member at Large” by the [ISCEV](#) membership.
- 2001 Co-organised the Interdisciplinary College [IK2001](#).
- 2002 Appointed as Associate Editor for [Documenta Ophthalmologica](#);
Member of the International Editorial Advisory Board for [OPO](#).
- 2003 Co-organised the Interdisciplinary College [IK2003](#). Course “Visual Perception – Function and Malfunction” received the highest students’ score;
Co-organised the symposium “Adaptation: the psychophysicist’s microelectrode” with Nikolaus Troje at the [29th Göttingen Neurobiology Conference](#).
- 2004 Elected as ‘President’ by the [ISCEV](#) membership;
Joined the Editorial Board of “[Der Ophthalmologe](#)”;
“[Optical Illusions](#)”: highlighted in Science (2006) 206:383, received “Ten Cool Sites” award by the [Exploratorium](#) museum.
- 2006 Received the [Elfriede-Aulhorn award](#).
- 2007 Deputy Chair of [Kommission Qualitätssicherung bei sinnesphysiologischen Untersuchungen](#) of the DOG;
Re-elected as President of [ISCEV](#).

Publications

> 170 peer-reviewed papers, >400 first-authored oral presentations or posters, ~20 book chapters, website [visual phenomena](#).

Funding

19 DFG grants (each covering 2–3 yrs funding), Grimmke-Stiftung

Membership in professional organizations

- Deutsche Ophthalmologische Gesellschaft ([DOG](#))
- International Society for Clinical Electrophysiology ([ISCEV](#))
- Vision Sciences Society ([VSS](#))
- Association for Research in Vision and Ophthalmology ([ARVO](#))
- Kommission für Qualitätssicherung bei sinnesphysiologischen Untersuchungen und Geräten der [DOG](#)
- AK Klinische Fragen des wissenschaftlichen Beirats der [Pro-Retina e.V.](#)
- Editorial Board of [Documenta Ophthalmologica](#)
- [IOVS](#) guest editor
- International Editorial Advisory Board of [Ophthalmic and Physiological Optics](#) ([OPO](#))
- Editorial Board of [Der Ophthalmologe](#)
- Wissenschaftlicher Beirat von “[Lingelbachs Scheune – Optische Phänomene e.V.](#)”

Recognition and Awards

- 1998 Reisestipendium der [Deutschen Ophthalmologischen Gesellschaft](#)
- 2006 Elfriede-Aulhorn-Preis
- 2008 [Portrayed in ‘Die Zeit’](#)

Referee for

- 57 Journals: Acta Anatomica, Acta Ophthalmologica, Brain Research, Biol Cybernetics, Biol Psychiatry, Brit J Ophthalmol, Cerebral Cortex, Clinical Neurophysiology, Clinical Vision Sciences, Cognitive Brain Research, Computer Methods and Programs in Biomedicine, Computers in Biology & Medicine, Current Eye Research, Documenta Ophthalmologica, European J Neuroscience, Eye, Exp Brain Research, Exp Eye Research, Exp Psychology, German J Ophthalmology, Graefe's Archives, IEEE Trans Biomed Engng, Int Glaucoma Review, Int J Psychophysiology, IOVS, J Cataract Refract Surg, J Cognitive Neuroscience, J Neuroscience, J Neural Engineering, J Neural Transmission, J Neuro-Ophthalmology, J Physiology, J Psychophysiology, JOSA, Journal of Vision JOV, Klin Mbl Augenheilkunde, Med Biol Engng Comput, Mind & Matter, NeuroImage, Neuro-Ophthalmology, Neuropsychologia, Neuroscience, Neuroscience Letters, NeuroReport, Ophthalmic Research, Ophthalmic & Physiological Optics, Ophthalmologica, Perception, Optometry & Vision Science, Perception & Psychophysics, Physiological Measurement, Psychological Research, Psychophysiology, Spatial Vision, Visual Neuroscience, Vision Research, Z Medizinische Physik
- [DFG](#), BMBF, DLR, von Humboldt-Stiftung, Swiss Science Foundation, Wellcome Trust, Guide Dogs for the Blind Association
- The MIT Press; Wiley & Sons, Ltd.
- Medizinische Fakultäten Essen, Hamburg, Leipzig; *fortune*-Programm Tübingen