

***Prof. Dr. rer. nat. Frank Schaeffel***

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Date of birth: November 8, 1953



**Academic Education**

Year	Degree	College or University	Field of Study
1974-1980	Staatsexamen	University of Freiburg	Biology, Physics
1981-1985	Ph.D.	University of Freiburg	Visual signals in the courtship behaviour of <i>Drosophila melanogaster</i>
1993	Habilitation	University of Tübingen	Animal physiology, myopia research

**Professional Experience**

Year(s)	Position
1985-1988	Post-doc with Prof. HC Howland, Cornell University, USA
1988-1989	Research Associate in the MPI for physiological and clinical Research, Munich
1989-1993	Leader of a research group "Neurobiology of the visual regulation of eye growth"
1994-2000	Assistant Professor at the Department of Experimental Ophthalmology, Tübingen
since 2000	Regular Professor (C3), Leader of the Section of Neurobiology of the Eye, University Eye Hospital Tübingen

**Honors and Awards**

1991	"Attempto Preis", Tübingen (5.000,- DM)
1992	German optical society travel grant (10.000,- DM)
1996	Max-Planck Award for international collaboration (250.000 DM)
1994-1999	Professorship of the Schilling-Foundation (C3)
1995	Offer of a Professorship at the New England College of Optometry Boston, USA
1999	Offer of a Professorship at the FH Aalen, Germany
2001	Offer of a Professorship at the University Eye Hospital of Würzburg, Germany (C3)

**Other Scientific Functions**

1997-2003	Scientific secretary of the Sonderforschungsbereich 430 (German Research)
since 1986	Member of the Association for Research in Vision and Ophthalmology, German Neuroscience Society, German Zoological Society, Optical Society of America
	Reviewer for numerous scientific journals: Journal of Comparative Physiology, Nature Medicine, Science, Journal of Physiology, Vision Research, European Journal of Neuroscience, Journal of Neuroscience, Journal of the Optical Society of America, Visual Neuroscience, Experimental Eye Research, Ophthalmological and Physiological Optics, Graefe's Archive for Clinical and Experimental Ophthalmology, Clinical Vision Science, Canadian Journal of Zoology, Investigative Ophthalmology and Visual Science, Ophthalmic Research, Optometry and Visual Science, Neurochemistry International, Strabismus, Science

### **Editorial work**

since 1998 Editorial Board of Vision Research, since 2006 also Editor at Ophthalmic & Visual Optics

### **Supervision of PhD Students**

From 1994 until now, **14 PhD students** (biology: Marieluise Bartmann, Hartmut Schwahn, Sigrid Diether, Sibylle Ohngemach, Matthias Ott, Anne Seidemann, Michaela Bitzer, Daniel Hartmann, Perikles Simon, Christine Brand, Beatrix Kovacs, Ruth Schippert, Erich Diedrich. medicine: Florian Gekeler, Hakan Kaymak, Silke Thomas) were supervised and **3** are currently supervised.

### **Publications, patents and grants**

More than 100 original research articles were published from 1985 until now (mostly on myopia), in addition one patent on photorefractive surgery, and more 4 Million Euros of extramural grants were attracted (most recently, a Research Training Network (RTN) on Myopia, funded by the European Community, together with 6 European partners; <http://www.my-europia.net/>).

### **Some recent publications**

Bertrand E, Fritsch C, Diether S, Lambrou G, Mueller D, Schaeffel F, Schindler P, Schmid KL, van Oostrum J, Voshol H. Identification of Apolipoprotein A1 as a "STOP" signal for myopia. Mol Cell Proteomics. 2006 Nov;5(11):2158-66.

Schippert R, Schaeffel F. Peripheral defocus does not necessarily affect central refractive development. Vision Res. 2006 Oct;46(22):3935-40.

Schaeffel F. Myopia: the importance of seeing fine detail. Curr Biol. 2006 Apr 4;16(7):R257-9.

Bitzer M, Schaeffel F. ZENK expression of retinal glucagon amacrine cells in chicks: the effect of defocus presented in vivo, in vitro and under anesthesia. Vision Res. 2006 Mar;46(6-7):848-59.

Schippert R, Brand C, Schaeffel F, Feldkaemper MP. Changes in scleral MMP-2, TIMP-2 and TGFbeta-2 mRNA expression after imposed myopic and hyperopic defocus in chickens. Exp Eye Res. 2006 Apr;82(4):710-9.

Bitzer M, Kovacs B, Feldkaemper M, Schaeffel F. Effects of muscarinic antagonists on ZENK expression in the chicken retina. Exp Eye Res. 2006 Mar;82(3):379-88.

Schmucker C, Schaeffel F. Contrast sensitivity of wildtype mice wearing diffusers or spectacle lenses, and the effect of atropine. Vision Res. 2006 Mar;46(5):678-87.

Schaeffel F, Burkhardt E. Pupillographic evaluation of the time course of atropine effects in the mouse eye. *Optom Vis Sci*. 2005 Mar;82(3):215-20.

Schmucker C, Seeliger M, Humphries P, Biel M, Schaeffel F. Grating acuity at different luminances in wild-type mice and in mice lacking rod or cone function. *Invest Ophthalmol Vis Sci*. 2005 Jan;46(1):398-407.

Simon P, Schott K, Williams RW, Schaeffel F. Posttranscriptional regulation of the immediate-early gene EGR1 by light in the mouse retina. *Eur J Neurosci*. 2004 Dec;20(12):3371-7.

Schmucker C, Schaeffel F. In vivo biometry in the mouse eye with low coherence interferometry. *Vision Res*. 2004;44(21):2445-56.

Simon P, Feldkaemper M, Bitzer M, Ohngemach S, Schaeffel F. Early transcriptional changes of retinal and choroidal TGFbeta-2, RALDH-2, and ZENK following imposed positive and negative defocus in chickens. *Mol Vis*. 2004 Aug 24;10:588-97.