PD DR. MED. BARBARA WILHELM



MEDICAL STUDIES

1973 - 1979	Medical School of the Albert-Ludwig-Universität Freiburg, Germany
1979 - 1980	Guest student at the Ademiska Sjukhuset Uppsala, Sweden
1980 - 1981	University of Mainz, practical year, Krankenhaus der Barmherzigen Brüder in Trier, Specialty Neurology.
1980 - 1981	License to practise medicine

1982 Medical Thesis at the Med. Fakultät Freiburg "Tumoren des Zentralnervensystems – retrospektive Studie aus strahlentherapeutischer Sicht".

SCIENTIFIC CURRICULUM VITAE

1981 – 1982 Resident at the Medical Department (Internal Medicine) Klinik Kues, Bernkastel-Kues, Germany 1983 family break

Since 1986,

ⁿ Translation of "Clinical Decisions in Neuro-ophthalmology" Burde, Savino, Trobe. Kohlhammer-Verlag, Stuttgart, Germany, 1989.

Since 1991 Dep. Pathophysiology of Vision and Neuroophthalmology, University Eye Hospital Tübingen Research Associate

- Contract to perform a scientific study on "Pupillenstörungen bei retrogenikulären Läsionen" for the woman's representative of the University Tübingen
- n Establishing and developing a pupil research group at the Dep. Pathophysiology of Vision and Neuro-ophthalmology, University Eye Hospital Tübingen
- n Establishing a pupillography laboratory: Infrared video pupillography,





pupil campimetry and simultaneous assessment of accommodation. Development, introduction und application of these methods in normals and patients

Since 1994 Head of the pupillography laboratory of the University Eye Hospital Tübingen

- Head of research projects, inventions and construction of measuring devices, Supervising medical students in their thesis about pupil research, clinics
- Invention and development of the Pupillographic Sleepiness Test (PST)
- n Technical solutions of long-time recording of pupil size
- n Development of an algorithm for the determination of pupil diameter under special conditions
- German patent for the special algorithm described above together with Helmut Wilhelm, MD und Dipl.-Phys. Holger Lüdtke (Bundespatentamt 19649542.3-35 Vigilanzprüfung mit Pupillographie).
- n Since 1995 Introduction of the Pupillographic Sleepiness Test into German Sleep Medicine and Sleep Research
- ⁿ Since 1997 Production and sales of the PST-device licensed by AMTech, Weinheim.
- 1997-2000 Main activities in research projects DFG WI 1066/3-1, WI 1066/3-2
- n 2000–2003: Head of research projects DFG 1928 1928/1-3 "Spontanverhalten der Pupille im Dunkeln als Maß für das Vigilanzniveau"
- Research studies with the PST according to GCP (continuously since 1995)
- Development of an objective visual field test by Pupil Campimetry (grant by fortune 531)
- n Anthocyan-Study "Efficacy of a bilberry extract standardised to a content of 25% anthocyanidines in improving the night vision of healthy volunteers: a double-blind, randomised, placebo controlled, cross-over trial over 2 x 28 days", sponsored by Pharmaton SA (1999-2000)

Since 1998: Steinbeis Transfer-Centre Biomedical Optics and Function Testing Tübingen

Head of projects

- n FuE-research and development projects with industrial companies
- Development of Prototypes: SWIFT (Automated Swinging Flashlight Test)
- n Advisory tasks
- Principal investigator of the European BRAION multicentre study, "Efficacy, tolerability and safety of 0.2% Brimonidine-Tartrate for the treatment of acute non-arteritic anterior ischemic optic neuropathy (NAION): a three-month, double-blind, randomised, placebo-controlled trial". Investigator-driven study, partially sponsored by Allergan.



Since 2002 Head of the Sphere of Competence II Autonomous Nervous System and Safety Studies at the Steinbeis Transfer-Centre for Biomedical Optics and Function Testing Tübingen

- § Principal Investigator of the Songha Night Clinical Trial, "A randomised, double-blind, double-dummy placebo-controlled crossover trial to evaluate the presence of a hang-over effect in healthy adults after administration of Songha® Night tablets (120 mg Valerian / 80 mg Lemon balm)". Phase I Study. BI Trial 582.2 (2003)
- § Main Investigator "Objective Assessment of daytime sleepiness under spezial shift conditions in public health services and construction sites" sponsored by Bavarian Ministry of Health (Bayerisches Staatsministerium für Gesundheit, Umwelt und Verbraucherschutz" (2003)
- § Principal Investigator of "Double-blind, placebo-controlled randomized trial to investigate hang-over effects of 10 mg und 30 mg Oxazepam in healthy normals, assessed by the Pupillographic Sleepiness Test" sponsored by Pharmaton SA, Lugano (2003)
- § Main Investigator of the Study, Analysis of Driver Sleeepiness at German Roadhouses" sponsored by Bavarian Ministry of Health (Bayerisches Staatsministerium für Gesundheit, Umwelt und Verbraucherschutz) (2004)
- § Main Investigator of the Study "Light dimensions Investigation of different illumination levels on visual function, alertness and wellbeing in the work place" sponsored by DaimlerChrysler AG, PVT/PBT Sindelfingen (2004)
- § Main Investigator of the Study "Sleep-wake behaviour and daytime alertness in men and women over the age of 50 years" sponsored by Bavarian Ministry of Health (Bayerisches Staatsministerium für Gesundheit, Umwelt und Verbraucherschutz" (2005)
- § Principal Investigator of pilot study "Investigation of human retinal function in a model of modified oxygen supply" sponsored by Pharmaton, SA, Lugano (2005)
- § Principal investigator of "Sensitivity of test paradigms for assessing anticholinergic effects on pupillary light reflex and glare – a randomized double-blind double-dummy placebo controlled cross over pilot methodology trial with tolterodine and oxybutynin in healthy volunteers" sponsored by Pfizer (A6121145) (2006)
- § Coordination of the trial at the eye hospital (Prof. Bartz-Schmidt): "A Phase 2/3 Randomized, Controlled, Double-Masked, Multi-Center, Comparative Trial, in Parallel Groups, to Compare the Safety and Efficacy of Intravitreous Injections of 0.3 mg Pegaptanib Sodium (Macugen®), Given as Often as Every 6 Weeks for 2 years, to Sham Injections, in Subjects with Diabetic Macular Edema (DME) Involving the Center of the Macula" (since 2007)
- § Preparation and coordination at the centre for ophthalmology: "A Multicenter, Patient-masked, Dose-escalation, Paired-eye Comparison, Sham-controlled, 6-Month (Plus 6-Month Extension) Study to



Evaluate the Safety, Tolerability, and Effects on Visual Function of 100 µg, 200 µg, and 400 µg Brimonidine Tartrate Posterior Segment Drug Delivery System (Brimonidine Tartrate PS DDS) Applicator System in Patients with Retinitis Pigmentosa" (since 2007)

- § Preparation and coordination at the centre for ophthalmology: "A twoarm, randomised, double-blind, placebo-controlled, multicenter phase II study to evaluate safety and tolerability and to explore the neuroprotective effect of atacicept as assessed by Optical Coherence Tomography (OCT) in subjects with Optic Neuritis (ON) as Clinically Isolated Syndrome (CIS) over a 36 week treatment course." (since 2007)
- § Principal Investigator at the Centre for ophthalmology and Coordinating Investigator: "Case-crossover study of PDE5 inhibitor exposure as a potential trigger factor for acute NAION" (since 2008)

Since 2004 Head of Steinbeis Transfer Centre Autonomous Nervous System and Safety Studies, Ofterdingen.

- § Coordination of the first human trial with a subretinal implant "A prospective open pilot study with functional placebo-control to evaluate the efficacy and tolerability of a Subretinal Implant in blind patients". BMBF-Project 01 KP 0401 (since 2004)
- § Coordination and monitoring of the trial: "Transcorneale Elektrostimulation zur Therapie retinaler Erkrankungen – eine randomisierte, einfach verblindete Pilotstudie" (since 2007)



MEMBERSHIPS IN SCIENTIFIC SOCIETIES

- German Ophthalmological Society Gesellschaft (DOG)
- German Society for Sleep Research and Sleep Medicine (DGSM) - Active member of the Vigilance Team, DGSM
- European Sleep Research Society (ESRS)
- European Aviation Group for Occupational Safety and Health (EAGOSH)
- German Society of Occupational and Environmental Medicine (DGAUM)
- Member of the women's representative group of the medical faculty, university Tübingen. Replacement person of the women's representative in appointment procedures of professorships at the medical faculty Tübingen.

AWARDS

• Elfriede Aulhorn Award of the German Ophthalmological Society 2004

HABILITATION MEDICAL SCHOOL AT THE UNIVERSITY OF TÜBINGEN

- Field of Teaching: Experimental Ophthalmology since May 2006
- Inaugural Lecture: 3rd november 2006

Steinbeis Transfer Centre Biomedical Optics and Function Testing Sphere of Competence II Autonomous Nervous System and Safety Studies Head: PD Dr. med. Barbara Wilhelm Schleichstr. 12 - 16 D-72076 Tübingen Tel: (0 70 71) 298 4898 Fax: (0 70 71) 29 50 21 e-mail: barbara.wilhelm@stz-biomed.de http://www.stz-biomed.de

R. Wille

Tübingen, 2008-09-22