

Symposium

Basics and Methods for Microvascular Diagnosis of the Retina (SympMDR)

September 10 – 11, 2007
Technical University Ilmenau

Humboldt-Bau, Room 211/212

The symposium is embedded in the International Research Colloquium (IWK).

Organisers:

Institute of Biomedical Engineering and Informatics, Technical University of Ilmenau
Prof. Jens Haueisen, Dr. Uwe Graichen

In Cooperation with Imedos GmbH
Dr. Walthard Vilser, Dipl.-Ing. Axel Fink

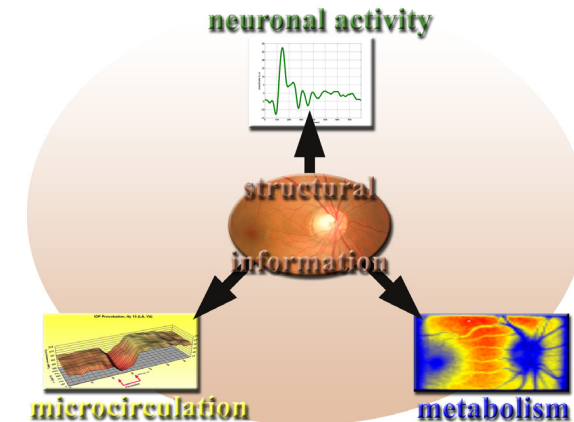
Support:

Bundesministerium für Bildung und Forschung, FKZ 03IP605
Imedos GmbH

What is MIntEye?

“Multimodal integration of ophthalmological diagnostic technologies” (MIntEye) is a research project at the Institute of Biomedical Engineering and Informatics which started in January 2007. It is scheduled for 5 years and granted by the German Ministry for Research and Education (BMBF).

The objective of “MIntEye” is to link and integrate the so far independently applied diagnostic technologies in ophthalmology including microcirculation diagnostics, electro physiology diagnostics, and metabolic diagnostics. Milestones on the way to this main objective are the creation of a generic technology basis for the integration of the single technologies, a standardization of the single technologies as well as the demonstration of integration possibilities in specific application examples. A unification of these technologies into a multidagnostic tool for the ophthalmologic research will yield integrative knowledge not existing so far, reaching from the emergence and the early progress of eye diseases to their particular characteristics.



Contact

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Detailed Program

Humboldt-Bau, Room 211/212

Monday, September 10th 2007

09:00 – 09:05	Welcome speech	Jens Haueisen
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Diagnostic Methods for the Investigation of the Retinal Microcirculation – Part I

Chairman: Leopold Schmetterer (Clinical Pharmacology, University of Vienna)
 Speakers: Martin Hammer (Experimental Ophthalmology, FSU Jena)
 Rainer. A. Leitgeb (Ecole Polytechnique Federale Lausanne)
 Bernd-Ulrich Seifert (Imedos GmbH Jena)

09:05 – 09:55	<i>Key Note Lecture:</i> Methods for Micro Vascular Diagnosis of the Retina	Leopold Schmetterer
09:55 – 10:20	Reproducibility of Optical Oximetry in Retinal Vessels	Martin Hammer
10:20 – 10:40	<i>Coffee break</i>	
10:40 – 11:05	Quantitative Assessment of Retinal Blood Flow in 3D and Retinal Vasomotion in Response to Light Flicker	Rainer A. Leitgeb
11:05 – 11:30	Static Vessel Analysis and Reproducibility	Bernd-Ulrich Seifert
11:30 – 13:00	<i>Lunch break</i>	

Diagnostic Methods for the Investigation of the Retinal Microcirculation – Part II

Chairman: Charles E. Riva (Università di Bologna)
 Speakers: Walthard Vilser (Imedos GmbH Jena)
 Dietmar Link (TU Ilmenau)

13:00 – 13:50	<i>Key note lecture:</i> Physiology and Modelling of Flicker-Induced Hemodynamical Response of the Retinal Microcirculation	Charles E. Riva
13:50 – 14:15	Dynamic Vessel Analysis with the DVA	Walthard Vilser
14:15 – 14:30	Universal Retina Camera for Investigations of the Microcirculation	Dietmar Link
14:30 – 14:50	<i>Coffee break</i>	

Clinical Results of Retinal Vessel Analysis – Part I

Chairman: M. Kamran Ikram (Erasmus MC, Rotterdam)
 Speakers: Edgar Nagel (Ophthalmologist, Rudolstadt)
 Jens Dawczynski (Clinical Centre, FSU Jena)

14:50 – 15:40	<i>Key note lecture:</i> Associations between Retinal Vessel Diameters and Systemic Disorders	M. Kamran Ikram
15:40 – 16:05	Variance of Flicker-Induced Retinal Vessel Dilatation and Discussion of Possible Trouble Sources	Edgar Nagel
16:05 – 16:30	Flicker-induced Retinal Vessel Reactions in Diabetic Patients	Jens Dawczynski
16:30 – 19:00	<i>Reception Ceremony with Dixiland Music and Thuringian Sausage</i>	
From 19:30	<i>Dinner in restaurant of hotel "Lindenhof" for all referents</i>	

Tuesday, September 11th 2007

Clinical Results of Retinal Vessel Analysis – Part II

Chairman: Ines Lanzl (Eye Klinik, TU München)
 Speakers: Axel Preßler (Sports Medicine, TU München)
 Konstantin Kotliar (Eye Klinik, TU München)
 Helen Hanso (Neurological University Clinic, TU Dresden)
 Christoph Wirtz (Eye Klinik, TU München)

09:00 – 09:50	<i>Key note lecture:</i> Age Dependence of Retinal Vessel Vasomotions	Ines Lanzl
09:50 – 10:15	Dynamic Retinal Vessel Analysis in Patients with Obesity	Axel Preßler
10:15 – 10:40	<i>Coffee break</i>	
10:40 – 11:05	Microstructural Changes of Longitudinal Retinal Arterial Profiles in Systemic Hypertension	Konstantin Kotliar
11:05 – 11:30	Retinal Microcirculation in the Context of Systemic Cardiovascular Regulation	Helen Hanso
11:30 – 11:55	Which Retinal Vessels are Best Suitable for Dynamic Vessel Analysis?	Christoph Wirtz
11:30 – 13:00	<i>Lunch break</i>	
13:00 – 15:00	Guided tour through the Institute of Biomedical Engineering including the Ophthalmology Laboratory	