



NEW HORIZONS IN OPHTHALMOLOGY

Ophthalmic Research and Vision Science are continuously advancing. We approach a new era, where we are able to analyze, diagnose, treat and eventually prevent eye diseases in a precise and individualized way. This is especially true for retinal diseases, where molecular therapy is now moving into clinical routine. In tune with the focus of activities in Tübingen, the 2nd New Horizons Meeting will concentrate on progress in understanding, diagnosing and treating diseases affecting the retina. The meeting will provide an interphase and discussion between internationally leading experts, basic and clinical scientists from our center, patient group representatives as well as colleagues inside and outside of Germany.

In 2022, we celebrate 12 years of joint activities in ophthalmic research and a continuous growth of the Center for Ophthalmology in Tübingen during these years.

We are delighted to invite and welcome you to the 2nd New Horizons in Ophthalmology Meeting in Tübingen.

Prof. Bartz-Schmidt for
the team of the eye hospital

Prof. Ueffing for the team of
the research institute

CME points from the LÄK BW

Participation for physicians in Germany:
12 CME points will be applied for at the LÄK BW.

Registration for the online event

- Due to current Corona regulations, the meeting will be held as a hybrid meeting. Speakers, chairs and a limited number of guests will be on site. Additionally, all presentations will be streamed via Zoom.
- Online participation is free of charge after registration at www.horizons2022.de. Unfortunately, on-site participation of additional guests is not possible.
- When registering, please provide your full name, your e-mail address and, as physician in Germany, also your EFN. This is required for the correct reporting of participants to the LÄK BW and to the DFG.
- After registration you will receive a confirmation e-mail with the access data and further information about the participation in the webinar.

Data Protection

As audio, video and image recordings are personal data according to the State Data Protection Act of Baden-Württemberg, the corresponding legal regulations and requirements apply.

For further information on data protection, please refer to the UKT data protection declaration (www.medicin.uni-tuebingen.de/de/kontakt/datenschutz).

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Verantwortlich für den Inhalt
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Department für Augenheilkunde



NEW HORIZONS IN OPHTHALMOLOGY

From Molecular Mechanisms to Therapy

June 27th-29th, 2022

University of Tübingen, ETN-Grand Lecture Hall
Elfriede-Aulhorn-Street 5-7 | DE-72076 Tübingen



Universitätsklinikum
Tübingen

Program

MONDAY JUNE 27th, 2022

10:00 Welcome by the organisers |
Marius Ueffing and Ulrich Bartz-Schmidt

Diagnostics and Therapy of Ocular Tumors

CHAIRS: Michael Foerster & Ulrich Bartz-Schmidt

- 10:10 Reduction of mortality in uveal melanoma. Dream or reality? |
Nikolaos E. Bechrakis
- 10:30 Why is the treatment method not decisive for the metastasis
of the malignant choroidal melanoma? | Heinrich Heimann
- 10:50 Uveal melanoma metastasis - still a secret?
Flashlight: Daniela Süsskind
- 11:05 **COFFEE BREAK**
- 11:35 Clinical challenges in vitreo-retinal lymphoma |
Vinodh Kakkassery
- 12:05 Molecular genetics of vitreo-retinal lymphoma | Falko Fend
- 12:30 Advances in systemic treatment of vitreo-retinal lymphoma |
Christian Junghans
- 12:50 **LUNCH BREAK**

Diagnostics and Therapy of Retinal Disease

CHAIRS: Sabine Aisenbrey & Ulrich Bartz-Schmidt

- 14:05 Routine practice patterns / Benefit-risk analysis |
Focke Ziemssen
- 14:25 Managing active macular disorders | Andreas Stahl
- 14:45 The German National Cohort (NAKO) - importance for
ophthalmology | Flashlight: Alexandra Schweig
- 15:00 Retinal functional diagnostics: how to measure therapy
success? | Flashlight: Katarina Stingl
- 15:15 **COFFEE BREAK**
- 15:45 CRAO - clinical management | Martin Spitzer
- 16:05 Limitations, bottlenecks, and new horizons in retina implant
research | Peter Walter
- 16:20 Sorapazan: an EU clinical study on Stargardt's disease |
Flashlight: Tobias Peters

AI Lecture

CHAIRS: Nicole Eter & Marius Ueffing

16:35 AI for the Eye | Philipp Berens

17:05 CLOSING TALK: Inspiration – Motivation – ‚Supervision‘
The role of patient organizations in terms of science in retinal
research | Franz Badura

from 18:00 **RECEPTION @ Kerstan Atrium**

TUESDAY JUNE 28th, 2022

Molecular Mechanisms & Therapy Development of AMD

CHAIRS: Frank Holz & Daniel Pauleikhoff

- 09:00 KEYNOTE LECTURE: Age-related macular degeneration
genetics meets genome architecture: a merger in the retina |
Anand Swaroop
- 09:30 Nature & nurture in AMD: where is the potential for the
patient? | Caroline Klaver
- 09:50 Targeting AMD pathomechanisms for therapy development |
Sascha Fauser
- 10:10 Classifying AMD | Monika Fleckenstein
- 10:30 Imaging endpoints in clinical trials in AMD |
Steffen Schmitz-Valckenberg
- 10:50 **COFFEE BREAK**

Retinal Disease and Inflammation

CHAIRS: Marius Ueffing & Simon Clark

- 11:20 Intracellular signaling in response to complement stimulation |
Olaf Strauss
- 11:40 Mineralocorticoid pathways in the retina |
Francine Behar-Cohen
- 12:00 Retinal inflammation and AMD | Florian Sennlaub
- 12:20 The non-canonical function of CFH in RPE cells and AMD |
Flashlight: Angela Armento
- 12:30 Removal of RPE lipofuscin as a possible therapy option for
Stargardt's disease and AMD? |
Flashlight: Sylvie Julien-Schraermeyer
- 12:40 Immunomodulatory targets for AMD | Flashlight: Anne Wolf
- 12:50 Molecular mechanisms of uveitis | Cornelia Deeg
- 13:10 **LUNCH @ Kerstan Atrium**

Molecular Diagnostics & Therapy Development

CHAIRS: Irene Maumenee & Bernd Wissinger

- 14:00 Selecting the right patient for gene therapy: reflecting genetic
results - a critical discourse and special cases |
Flashlight: Susanne Kohl
- 14:15 Gene-therapy, the next steps ahead? | Dominik Fischer
- 14:35 Non-viral transposon-based gene therapy – the efficient alter-
native approach escaping the immune system |
Gabriele Thumann
- 14:55 Precision genome surgery for imprecision medicine |
Stephen Tsang

15:20 **COFFEE BREAK**

Molecular Therapy Development I

CHAIRS: Hendrik Scholl & François Paquet-Durand

- 16:00 KEYNOTE LECTURE: Expediting AAV gene therapy |
Alberto Auricchio
- 16:30 Restoring vision with gene and cell therapy | Deniz Dalkara
- 16:50 Gene therapy for hearing loss | Ellen Reisinger
- 17:10 Targeting proteostasis as mutation independent pharmaco-
logical therapy | Flashlight: Blanca Arango-Gonzalez
- 17:20 Retinitis pigmentosa: using PKG inhibitors to prevent pho-
toreceptor cell death | Flashlight: François Paquet-Durand

Molecular Therapy Development II

CHAIRS: Eberhart Zrenner & Mathias Seeliger

- 17:30 Visual restoration | Serge Picaud
- 17:50 **BREAK**
- 18:00 EVENING LECTURE: Optogenetics | Botond Roska
- 19:00 **SPEAKERS DINNER @ KELTER**

WEDNESDAY JUNE 29th, 2022

Organoids and Cell-based Therapy Development

CHAIRS: Thomas Euler & Frank Schaeffel

- 09:00 Regenerating human photoreceptors | Volker Busskamp
- 09:20 A glance at the eye in the dish | Stefan Liebau
- 09:40 Combining genome editing and retinal organoids for IRDs |
Vasiliki Kalatzis
- 10:00 Towards modelling and rescue of inherited retinal
dystrophies using prime editing and patient-derived iPSCs |
Peter Quinn
- 10:20 Functional analysis of the retina | Flashlight: Wadood Haq
- 10:35 Advancing adaptive optics | Flashlight: Christina Schwarz
- 10:50 **COFFEE BREAK**

Pathomechanisms of Retinal Disease

CHAIRS: Knut Stieger & Sven Schnichels

- 11:20 Oxidative stress in AMD pathogenesis | Kai Kaarniranta
- 11:40 Proteostasis in the neuroretina | Mike Cheetham
- 12:00 A systems view on ciliopathies | Ronald Roepman
- 12:20 A mouse model of INPP5E-Leber Congenital Amaurosis |
Wolfgang Baehr

SUMMARY & FAREWELL |

Ulrich Bartz-Schmidt & Marius Ueffing

13:00 **LIGHT LUNCH @ Kerstan Atrium**