



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.

Online participation

Free of charge

Registration

- Follow this link for registration:
<https://horizons2022.de/register>
- 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.medizin.uni-tuebingen.de/de/kontakt/datenschutz).

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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

Preliminary Program

MONDAY JUNE 27th, 2022

- 10:00 Welcome by the organisers | Marius Ueffing and Ulrich Bartz-Schmidt
10:10 Inspiration – Motivation – ‘Supervision’
The role of patient organizations in terms of science in retinal research | Franz Badura

Diagnostics and Therapy of Ocular Tumors

CHAIRS: Michael Förster & Ulrich Bartz-Schmidt

- 10:20 Reduction of mortality in uveal melanoma. Dream or reality? | Nikolaos E. Bechrakis
10:40 Why is the treatment method not decisive for the metastasis of the malignant choroidal melanoma? | Heinrich Heimann
11:00 Uveal melanoma metastasis - still a secret?
Flashlight: Daniela Süsskind
11:15 **COFFEE BREAK**
11:45 Clinical challenges in vitreo-retinal lymphoma | Vinodh Kakkassery
12:15 Molecular genetics of vitreo-retinal lymphoma | Falko Fend
12:40 Advances in systemic treatment of vitreo-retinal lymphoma | Christian Junghans
13:00 **LUNCH BREAK**

Diagnostics and Therapy of Retinal Disease

CHAIRS: Sabine Aisenbrey & Ulrich Bartz-Schmidt

- 14:15 Routine practice patterns / Benefit-risk analysis | Focke Ziemssen
14:35 Managing active macular disorders | Andreas Stahl
14:55 The German National Cohort (NAKO) - importance for ophthalmology | Flashlight: Alexandra Schweig
15:10 Retinal functional diagnostics: how to measure therapy success? | Flashlight: Katarina Stingl
15:25 **COFFEE BREAK**
15:55 CRAO - clinical management | Martin Spitzer
16:15 Limitations, bottlenecks, and new horizons in retina implant research | Peter Walter
16:30 Sorapazan: an EU clinical study on Stargardt's disease | Flashlight: Tobias Peters

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 Diagnostic considerations for gene therapy
A critical discourse | Flashlight: Susanne Kohl
14:15 Gene-therapy, the next steps ahead? | Dominik Fischer
14:35 Non-viral transposon-based gene therapy – the efficient alternative approach escaping the immune system | Gabrielle Thumann
14:55 Precision Genome Surgery for Imprecision Medicine | Steven Tsang
15:20 **COFFEE BREAK**

Molecular Therapy Development I

CHAIRS: Hendrik Scholl & François Paquet-Durand

- 16:00 KEYNOTE LECTURE: A critical view on gene therapy development | 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 pharmacological therapy | Flashlight: Blanca Arango-Gonzalez
17:20 Retinitis pigmentosa: using PKG inhibitors to prevent photoreceptor 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: NN & 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

Closing Lecture

CHAIRS: Nicole Eter & Marius Ueffing

- 12:20 AI for the Eye | Philipp Berens
12:50 SUMMARY & FAREWELL | Ulrich Bartz-Schmidt & Marius Ueffing
13:15 **LIGHT LUNCH @ Kerstan Atrium**