

Invited Speakers

Ali[®], Brand[®], Cremers[®], Dalkara[®], Dedek[®],
Dollfus[®], Fauser[®], Geleoc[®], Herrmann[®],
Hochmair[®], Housley[®], Klaver[®], Kollmeier[®],
Launer[®], Lenarz[®], Lentz[®], Leroy[®], Moser[®],
Nagel-Wolfrum[®], Petit[®], Picaud[®], Polley[®],
Roska[®], Sahel[®], Scholl[®], Senn[®], Shepherd[®],
Sieving[®], Smith[®], Strettoi[®], van Dijk[®],
Warren[®], ...

New_{in} Horizons

Vision and Hearing Research

March 5th – 7th, 2018

Elfriede-Aulhorn-Street 5-7, 72076 Tuebingen, Germany

New Horizons in Vision and Hearing Research 2018

The international symposium "New Horizons in Vision and Hearing Research" is intended to provide an intensive, interdisciplinary and internationally oriented scientific exchange on current developments in neurosensory research. The invited experts will present targeted therapeutic approaches and demonstrate their implementation on the way from bench to bedside.

In total 150 participants are planned to attend this interdisciplinary symposium. Approximately 30% of the internationally renowned external speakers come from outside Europe (USA, Australia and Canada), 50% from Europe (France, the United Kingdom, Switzerland, the Netherlands, Belgium) and 20% from Germany.

Special emphasis will be on the participation of doctoral students and postdoctoral staff from the Center for Neurosensory Systems and various Graduate Schools, many of which will contribute to the flashlight presentations and the evening poster session on March 5th, 2018. In the exchange with international leaders of the field, we hope for a rewarding scientific experience of our graduates, postdocs and young group leaders. In addition, we hope to make an important, scientifically high-ranking contribution for the interdisciplinary neurosensory research area, both nationally and internationally.

Prof. Dr. rer. nat. Peter Hegemann

Prof. Dr. rer. nat. Marlies Knipper

Prof. Dr. med. Dr. h.c. mult. Eberhart Zrenner



AGENDA

Version 33 - 2018-03-01

Monday March 5th, 2018

12:00-13:00	<i>Registration and Welcome Coffee</i>
13:00-13:15	Eberhart Zrenner & Marlies Knipper "Welcome and Introduction"
13:15-13:30	Hubert Loewenheim & Marius Ueffing "The Centre for Neurosensory Systems"

Session I - Therapy and Functional Restitution of the Ear

Chair: H. Löwenheim – Co-Chair: R. Shepherd

LECTURES: 20 minutes talk followed by 10 minutes of intensive discussion;

FLASHLIGHTS: 8 minutes talk and 2 minutes discussion – PLEASE RESPECT TIMELIMITS!

13:30-14:00	Christine Petit, FR "Bridging Auditory Deficits of Inherited Deafness and Therapeutic Approaches"
14:00-14:30	Gary Housley, AU "Neurotrophin gene electrotransfer enhances cochlear implant performance"
14:30-15:00	Pascal Senn, CH "Nanotechnologically modified cochlear implants with gapless interface to auditory neurons"
15:00-15:30	Richard Smith, USA "Understanding the Genetic Complexities of Hearing Loss as a Foundation for RNAi-Based Gene Therapy"
15:30-15:40	Flashlight: B. Vona: "Advances in hearing loss gene mutation detection: the gateway to therapeutic target development"
15:40-15:50	Flashlight: S. Schnichels: "DNA - more than just a code needing therapy"
15:50-16:20	<i>Coffee Break (in front of the lecture hall)</i>

Session II - Therapy and Functional Restitution of the Eye

Chair: E. Zrenner – Co-Chair: P. Sieving

LECTURES: 20 minutes talk followed by 10 minutes of intensive discussion;

FLASHLIGHTS: 8 minutes talk and 2 minutes discussion – PLEASE RESPECT TIMELIMITS!

16:20-16:50	Botond Roska, CH "Targeting retinal cell types for therapy"
16:50-17:20	Robin Ali, UK "Gene therapy for retinal dystrophies"
17:20-17:50	Deniz Dalkara, FR "Non-invasive gene delivery to foveal cones for gene therapy and vision restoration"
17:50-18:20	Kerstin Nagel-Wolfrum, DE "Ignore the nonsense: Translational read-through for the treatment of retinal ciliopathies"
18:20-18:30	Flashlight: D. Fischer: "Challenges in the translation of retinal gene therapy"
18:30-18:40	Flashlight: F. Paquet-Durand: "Training a new generation of scientists in translational medicine"

Evening Programme

19:00-19:20	Evening Lecture Hector Fellow Brigitte Röder, Hamburg, DE "Neural correlates of sensory restitution in humans"
From 19:30-	<i>Buffet-Dinner @ Kerstan Atrium</i>
From 20:00-	Poster Session with Swinging Music With the well-known pianist Edel Noel

Tuesday March 6th, 2018

Session III - Genetics of the Ear and Eye

Chair: B. Wissinger – Co-Chair: H. Dollfus

LECTURES: 20 minutes talk followed by 10 minutes of intensive discussion;

FLASHLIGHTS: 8 minutes talk and 2 minutes discussion – PLEASE RESPECT TIMELIMITS!

08:30-09:00	Gwenaelle Geleoc, USA "Gene Therapy for Usher Syndrome"
09:00-09:30	Bart Leroy, BE "The Fascinating World of Bestrophinopathies"
09:30-10:00	Jennifer Lentz, USA "Antisense Therapy Rescues Hearing and Vision in Usher syndrome"
10:00-10:30	<i>Coffee Break (in front of the lecture hall)</i>
10:30-11:00	Frans Cremers, NL "Revealing the 'dark matter' in ABCA4-associated Stargardt disease"
11:00-11:30	Helene Dollfus, FR "Lessons from ultra-rare syndromic retinopathies"
11:30-11:40	Flashlight: Susanne Kohl : "Identifying the genetic causes of Achromatopsia"
11:40-11:50	Flashlight: P. Berens : "Quantifying uncertainty in machine-learning based medical diagnostics"

Session IV - Technical Developments in the Eye and Ear

Chair: T. Gummer – Co-Chair: M. Seeliger

LECTURES: 20 minutes talk followed by 10 minutes of intensive discussion;

FLASHLIGHTS: 8 minutes talk and 2 minutes discussion – PLEASE RESPECT TIMELIMITS!

11:50-12:20	Thomas Lenarz, DE "Bionic Hearing: Restoration of hearing through technology towards neurobiology"
12:20-12:50	Serge Picaud, FR "Visual restoration by an infrared photovoltaic implant and by optogenetic therapy: validation in non-human primates"
12:50-13:00	<i>Group Photo (in front of the Institute)</i>
13:00-14:30	<i>Lunch Break (in front of the lecture hall) and short lab visits</i>
14:30-15:00	Birger Kollmeier, Oldenburg, DE "Precision audiology: Model-based auditory diagnostics and prediction of hearing aid benefit"
15:00-15:30	Stefan Launer, Sonova AG, CH "Hearing rehabilitation in the age of connectivity"
15:30-16:00	Robert Shepherd, AU "Taking bionic devices from an idea to the clinic"
16:00-16:10	Flashlight: Katarina Stingl : "Restoration of Vision with RETINA IMPLANT Alpha AMS"
16:10-16:20	Flashlight: Ernst Dalhoff : "Diagnosing the inner ear with pulsed DPOAE"
16:20-16:40	<i>Coffee Break (in front of the lecture hall)</i>

Session V - Circuits in Eye and Ear

Chair: T. Euler – Co-Chair: J. Sahel

LECTURES: 20 minutes talk followed by 10 minutes of intensive discussion;

FLASHLIGHTS: 8 minutes talk and 2 minutes discussion – PLEASE RESPECT TIMELIMITS!

16:40-17:10	Bjoern Herrmann, CA "Perceptual and Neural Organization of Sound Environments"
17:10-17:40	Enrica Strettoi, IT "Pharmacological tools to slow down photoreceptor degeneration"
17:40-18:10	Jason D. Warren, UK "Hearing and dementia: the auditory dynamics of disintegrating brain networks?"
18:10-18:40	Karin Dedek, DE "The functional role of horizontal cells in the mouse retina"
18:40-18:50	Flashlight: K. Franke: "Functional diversity in the mouse retina"
18:50-19:00	Flashlight: S. Wahl, ZEISS VISION LAB: "Novel technologies: Aids for the visually impaired?"

Evening Programme

19:45-20:15	Evening Lecture @ MUSEUM Steven Weinman, USA "Simultaneous detection and segmentation of cochlear and visual signals using deep neural networks"
From 20:15-	<i>Dinner @ MUSEUM</i> <i>Dress code: Business Casual</i>

Wednesday March 7th, 2018

Session VI Pathophysiology of Hearing and Seeing

Chair: M. Ueffing – Co-Chair: M. Knipper

LECTURES: 20 minutes talk followed by 10 minutes of intensive discussion;

FLASHLIGHTS: 8 minutes talk and 2 minutes discussion – PLEASE RESPECT TIMELIMITS!

08:30-09:00	Daniel Polley, USA "Restoring central auditory processing after hearing loss"
09:00-09:30	Michael Brand, DE "Regeneration of the adult zebrafish retina"
09:30-10:00	Paul Sieving, USA "Gene therapy for x-linked retinoschisis"
10:00-10:30	<i>Coffee Break (in front of the lecture hall)</i>
10:30-11:00	Pim van Dijk, NL "Brain networks and tinnitus: results from functional MRI"
11:00-11:30	Ellen Reisinger, DE "A viral gene replacement strategy to rescue hearing in inherited forms of deafness"
11:30-11:40	Flashlight: R. Muehlfriedel : "Pathophysiological aspects of retinal dystrophies"
11:40-11:50	Flashlight: K. Boldt : "Combining gene editing and protein complex analysis to dissect the function of ciliary proteins"
11:50-12:00	Flashlight: L. Rüttiger : "Gα-proteins: beyond roles for stereocilia"
12:00-13:00	<i>Lunch (in front of the lecture hall)</i>

Session VII - Bottlenecks of Research in AMD

Chair: K.U. Bartz-Schmidt – Co-Chair: R. Ali

LECTURES: 20 minutes talk followed by 10 minutes of intensive discussion;

FLASHLIGHTS: 8 minutes talk and 2 minutes discussion – PLEASE RESPECT TIMELIMITS!

13:00-13:30	José Sahel, FR/USA "Cone directed strategies in retinal degenerations"
13:30-14:00	Caroline Klaver, NL "Genetic epidemiology of AMD"
14:00-14:30	Hendrik Scholl, CH "Preparing for clinical trials to target <u>Progression</u> of <u>Stargardt</u> Macular Dystrophy: What have we learned from the ProgStar study?"
14:30-15:00	Sascha Fauser, CH „New treatments for age-related macular degeneration“
15:00-15:15	Final Remarks (Zrenner & Löwenheim)
15:15-15:30	Changeover ceremony of the leadership in the Centre for Neurosensory Systems From E. Zrenner and M. Knipper to H. Loewenheim and M. Ueffing effective 31 March 2018
15:30-16:15	<i>Optional Coffee Break & Bye-Bye</i>
from 16:15	Farewell
	Lab visits (optional)

Organisation

Prof. Dr. med. Dr. h.c. mult. Eberhart Zrenner

University of Tuebingen
Center for Neurosensory Systems
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72076 Tuebingen, Germany

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Prof. Dr. rer. nat. Marlies Knipper

University of Tuebingen
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Committees

International Programme-Committee

(in alphabetical order)

- Prof. Dr. Ingeborg Hochmair
- Prof. Dr. Jennifer Lentz
- Prof. Dr. José Sahel
- Prof. Dr. Hendrik Scholl (Chairman)
- Prof. Dr. Robert Shepherd (Deputy Chairman)

Local Programme-Committee

(in alphabetical order)

- Prof. Dr. Karl Ulrich Bartz-Schmidt,
Ärztlicher Direktor Augenklinik
- Prof. Dr. Dorothea Besch
- Prof. Dr. Thomas Euler

- Prof. Dr. Anthony Gummer
- Prof. Dr. Hubert Löwenheim,
Ärztlicher Direktor HNO-Klinik
- Prof. Dr. Mathias Seeliger
- PD Dr. Katarina Stingl
- Prof. Dr. Anke Tropitzsch
- Prof. Dr. Marius Ueffing,
Direktor Forschungsinstitut für Augenheilkunde
- Prof. Dr. Bernd Wissinger

Local Organisation-Committee

(in alphabetical order)

- Dr. Michaela Bitzer
- Dr. Ernst Dalhoff
- Dr. Sigrid Diether
- Benedikt Hofmeier
- Dr. Susanne Kohl
- Marie Manthey
- PD Dr. Marcus Mueller
- Prof. Dr. Francois Paquet-Durand
- Dr. Lukas Rüttiger
- Dr. Timm Schubert
- Dr. Thomas Wheeler-Schilling

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How to get there:

From Stuttgart Airport

Stuttgart Airport is situated approximately 35 kilometers from Tübingen. By car or taxi, Tübingen can be reached via an expressway in approximately 20 minutes. Please plan in a little more time if you will be making this journey during rush-hour periods. A bus service operating in both directions several times a day between the airport and Tübingen's main railway station is an additional option.

[Further information about the Airport](#)

Public transport services

- From the main railway station - directly opposite of which you will find the main bus station - you can reach all our Hospitals with the town buses ("Stadtbus").
- Please check whether your train or flight ticket is also valid for bus services.
- **"Berg" Hospitals:** With bus routes no. 5, 13, 17, 18, 19, X15 from main railway station and no. 14 from the west railway station ("Westbahnhof"). Night buses N93 and N94.
- Busstop: "Kliniken Berg"

From Frankfurt / Karlsruhe - From Munich

- Continue on the A8 motorway until you reach the exit 52 for Tübingen / Reutlingen
- Take the B27 and head south, direction Tübingen.
- Continue as in the paragraph "From Stuttgart airport".

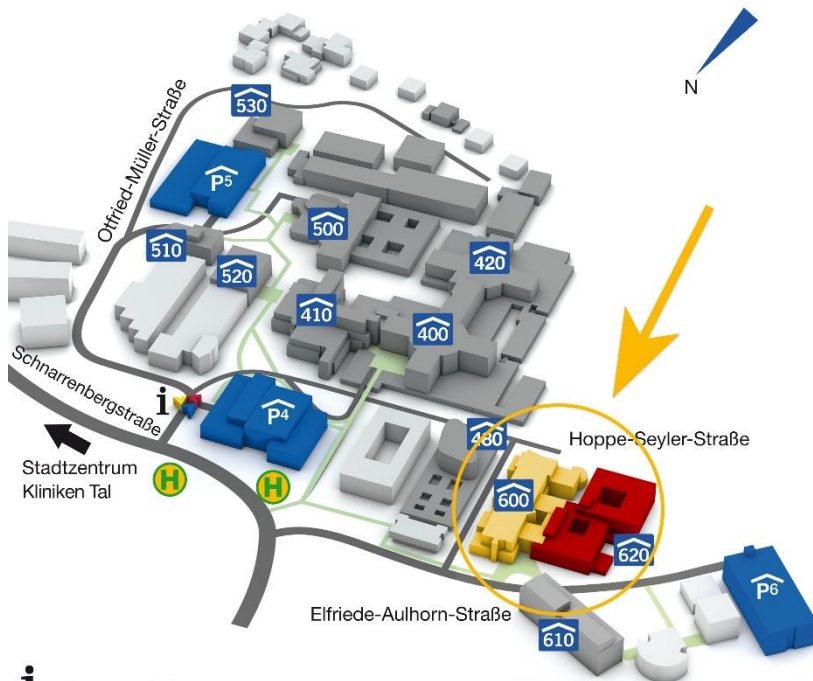
Parking

- Depending on which car park you choose ...
- turn right into the Elfriede-Aulhorn-Straße, to reach [P6 Oberer Schnarrenberg](#) - You will find the entrance to the car park at the end of the road. ...

- follow the Schnarrenbergstraße for aprox. 100 m further and turn right into the Otfried-Müller-Straße, to reach
- [P4 Crona Kliniken:](#)
The entrance to the multi-storey car park "P4 Crona Kliniken" is immediately on the right.
- [P5 Medizinische Klinik:](#)
The entrance to the multi-storey car park "P5 Medizinische Klinik" is 400 m further on the left.

Please park your vehicle in the multi-storey car parks located in the vicinity of the Clinics. Long-term parking places are not available on clinic premises.

If you have problems walking or you are confined to a wheelchair, it is possible for you to drive onto clinic premises in order to get out of your vehicle. Please ask for further information at the main entrance. Parking places for the disabled are also available at several locations on the Hospital Clinic premises.



i Einfahrt Klinikgelände

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Chirurgie
Neurochirurgie
Neurologie
Orthopädie
Radiologie
Radioonkologie
THG-Chirurgie
Urologie</p> <p>410 Kinderklinik</p> | <p>480 Gesundheitszentrum
Ambulante Rehabilitation, Physiotherapie,
Psychosomatische Tagesklinik, Sportmedizin,
ukfit, Gästehaus</p> <p>500 Medizinische Klinik</p> <p>510 Blutspendezentrale</p> <p>520 Konferenzzentrum
Casino, Cafeteria</p> <p>530 Nuklearmedizin</p> <p>600 Hals-Nasen-Ohrenklinik</p> <p>610 Medizinische Mikrobiologie, Medizinische Virologie</p> <p>620 Augenklinik und Institut für Augeneheilkunde</p> |
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