



**“Genetics of neurological diseases:  
From mutations to personalized medicine ”**

**Programme**

**Sunday, July 14**

|                                  |  |  |   |
|----------------------------------|--|--|---|
| <b>Welcome Reception</b>         | <b>10:00</b>   |  |   |
| <b>Session 1</b><br>Chair:<br>NN | 10:30  | <b>Hilmar Bading</b><br>Managing Director IZN<br>Heidelberg                              | Welcome address   |
|                                  | 10:45  | <b>Christian Schaaf</b><br>Heidelberg University Hospital<br>Institute of Human Genetics | “Disease gene discovery using exome sequencing – how to find patient no. 1”                                   |
|                                  | 11:30  | <b>David Jones</b><br>German Cancer Research<br>Center, Heidelberg                       | “Personalized medicine approaches for pediatric brain tumors”   |
| <b>Lunch</b>                     | <b>12:15</b>   |  |   |
|                                  | <b>Free time: Canoeing (meet at 13.15), walk’n’talk or guided tour through the monastery (meet at 14.00)</b> |  |   |
| <b>Dinner</b>                    | <b>18:00</b>   |  |   |
| <b>Session 2</b><br>Chair:<br>NN | 19:30  | <b>Lars Steinmetz</b><br>Stanford University, USA and<br>EMBL, Heidelberg                | “Developing technology for the future of precision health: meeting the needs of a changing medical landscape” |
|                                  | <b>20:30</b>   | <b>Posters and Drinks, Rooms 203 + 204 and hallway</b>                                   |   |

**Monday, July 15**

|                                  |              |   |  |
|----------------------------------|--------------|---|--|
| <b>Breakfast</b>                 | <b>8.00</b>  |   |  |
| <b>Session 3</b><br>Chair:<br>NN | 9:00         | <b>New Members of the IZN – who is who?</b><br><br><b>Alexander Groh</b><br>Institute of Physiology and Pathophysiology, Heidelberg | “Synaptic interactions in the thalamocortical system during sensory processing and behavior”   |
|                                  | 9:30         | <b>Moritz Mall</b><br>Hector Institute for Translational Brain Research<br>German Cancer Research Center, Heidelberg                | “Cell fate engineering to model neuronal development and disease”  |
|                                  | 10:00        | <b>Lucas Schirmer</b><br>Department of Neurology<br>Medical Faculty Mannheim  | “Neuron subtype vulnerability and glial reactivity in multiple sclerosis”  |
| <b>Coffee</b>                    | <b>10:30</b> |   |  |
| <b>Session 4</b><br>Chair:<br>NN | 10:50        | <b>Gudrun Rappold</b><br>Institute of Human Genetics, University of Heidelberg  | “From genes to neurodevelopmental disease”   |
|                                  | 11:35        | <b>Amit Zeisel</b><br>Technion – Israel Institute of Technology, Haifa, Israel  | “Molecular architecture of the mouse nervous system”   |
|                                  | 12:20        | <b>IZN Pre-/Postdoc Meeting</b><br><b>IZN Investigator Meeting</b>  | Festsaal<br>Room 219   |
| <b>Lunch</b>                     | <b>13:00</b> |   |  |
| <b>Session 5</b><br>Chair:<br>NN | 14:30        | <b>Paul M. Matthews</b><br>Imperial College London, UK  | “Integrating ‘omics of single cells to define causal mechanisms in neurological disease”   |
| <b>Session 6</b><br>Chair: NN    | 15:15        | <b>3 Selected Presentations of IZN PhD students</b>   |  |
|                                  |              | <b>Bahar Aksan</b>  | “The balance between structural maintenance and plasticity in neurons”   |
|                                  |              | <b>Shehabeldin Elzoheiry</b>  | “Mild metabolic stress disturbs formation of neuronal ensembles during gamma oscillations”   |
|                                  |              | <b>Marco Siekmann</b>   | “Organoid-assemblies of different brain identities to model cortical development and neuropsychiatric diseases”  |
| <b>Coffee</b>                    | <b>16:00</b> |   |  |
| <b>Session 7</b>                 | 16:30        | <b>Award Ceremony</b>   | - PhD-Poster Prize<br>Foundation BrainAid<br>- IZN Master’s Award 2019<br>- IZN / Chica and Heinz Schaller<br>Young Investigator<br>Neuroscience Award |
|                                  | <b>17:00</b> | <b>End of the Retreat</b>   |  |