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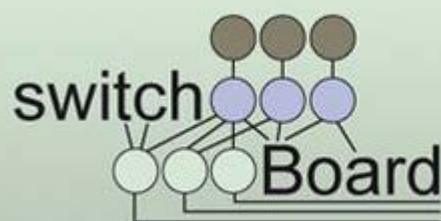

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New H2020 Research Network for Doctoral Students



IN THE EYE OF THE OBSERVER:
VISUAL PROCESSING
AT THE HEART OF THE RETINA

A Switchboard in the Eye of the Beholder

The European Union has greenlit an international neuroscientific research network to better understand visual information processing in the eye and to promote training of young investigators. The network includes 15 institutions of both the public and private sector in 9 countries (Austria, Belgium, Germany, Israel, Italy, Netherlands, Norway, Switzerland, UK) and is coordinated from Tübingen. Titled 'switchBoard - In the Eye of the Observer: Visual Processing at the Heart of the Retina', the project will be funded with 3.8 million EUR over the course of four years. The network has celebrated its official inception with an inaugural workshop on November 2nd, 2015.

Beauty is not the only thing that lies in the eye of the beholder - everything that we see is first analysed in the eye itself. Before the retina relays visual information to the brain, more than 80 types of neurons compute image properties such as contrast, brightness, and colour. More complex aspects such as edges and movements are likewise first detected in the eye. Much like a biological switchboard, retinal neurons form diverse circuits in multiple layers, giving the newly established project its name. The research network aims at understanding structure and functional organisation of these neuronal circuits in the retina. To do so, it will offer fifteen 3-year PhD student positions, financed with the funds provided by the EU.

'switchBoard' prevailed in a highly competitive field to reach this point - in 2015, only 106 of more than 1,300 applicant projects in the framework of the Marie Skłodowska-Curie Actions (MSCA) programme were successful in obtaining funding from the European Commission. The MSCA programme is part of the EU's Horizon 2020 Research and Innovation Framework

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Programme. It was established to generate a larger pool of researchers in Europe and thus strengthen its scientific standing world-wide. Among other projects, the programme funds networks specialising in the structured training of junior researchers, in this case a so-called 'Innovative Training Network' (ITN). Besides individual scientific training, ITNs include a number of overarching measures such as summer schools, scientific training seminars, soft skill courses and workshops, which are mandatory for all 15 'switchBoard' PhD students. Furthermore, ITNs promote mobility within the EU: to receive training, all junior researchers must relocate to a country different from the one where they received undergraduate training and/or worked in the past 3 years.



Kick-off Meeting of the H2020 project switchBoard in Tübingen, Germany

The project will be coordinated by Prof. Dr. Thomas Euler of the Werner Reichardt Centre for Integrative Neuroscience (CIN) at Tübingen University and the Institute for Ophthalmic Research. Prof. Euler is very pleased with how the project commenced, commenting: 'This kind of international and interdisciplinary research network is a great opportunity for young researchers to get to know a range of possibilities in neuroscience. It enables them to make important career decisions. Also, a network such as 'switchBoard' allows us to tackle more complex questions, for instance: how does the retina deal with this incredible stream of data flooding into the eye such that important information is filtered out and encoded for the brain.'

Find more information at: www.etn-switchBoard.eu

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Kick off in Tübingen: „switchBoard - In the Eye of the Observer: Visual Processing at the Heart of the Retina“ | Photo: Thomas Euler