

## UniSysCat researcher Peter Hegemann receives the Shaw Prize 2020

Start Time: Friday, May 29, 2020

End Time:



**Peter Hegemann, Gero Miesenböck and Georg Nagel receive the 2020 Prize in Life Science & Medicine!**

The Shaw Prize in Life Science and Medicine 2020 is awarded in equal shares to **Gero Miesenböck**, Waynflete Professor of Physiology and Director of the Centre for Neural Circuits and Behaviour, University of Oxford, UK, [Peter Hegemann](#), Hertie Professor for Neuroscience and Head of the Department of Biophysics, Humboldt University of Berlin, Germany and **Georg Nagel**, Professor for Molecular Plant-Physiology, Department for Molecular Plant-Physiology and Biophysics–Botany I, University of Würzburg, Germany for their contributions to the development of optogenetics, a key technology revolutionising neuroscience.

This technique helps to understand some of the brain's more confounding mysteries, including decision-making and behavior, as well as the elucidation and manipulation of circuits that underlie serious neurologic and neuropsychiatric disorders. Further it can be used for testing and monitoring the response to treatments. Selective targeting of neurons in the brain allows for the study how the activity of these cells contributes to simple and complex behaviors. It will allow to trace and regulate neural networks in experimental animals have emerged in recent years and thanks to the discoveries of the Shaw Life Science Awardees for 2020: **Gero Miesenböck** of Oxford University, **Peter Hegemann** of Humboldt University, Berlin, and **Georg**

Nagel of the University of Würzburg.

For further information see the press release of the [Life Science and Medicine Selection Committee of the Shaw Prize](#).

Peter Hegemann is a biophysicist with a work focus on algae research, analysing sensory photoreceptors from microalgae and is one of the discoverers of channel rhodopsins. These light-sensitive proteins are the basis for optogenetics research, co-founded by Peter Hegemann, facilitating new approaches to study neuronal networks.

More information about the [Shaw Prize](#).

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