## ARTHUR KONNERTH



German Brain-Prize laureate neuroscientist

Arthur Konnerth German neuroscientist won the Brain-Prize in 2015 alongside with Winfried Denk, Karel Svoboda and David W. Tank for developing two-photon microscopy for visualising brain tissue and neurons.

## CAREER

Arthur Konnerth was born in 1953. He obtained his degree in medicine from Ludwig Maximilian University of Munich (LMU) and a PhD from the Max Planck Institute of Psychiatry. He completed his habilitation at Technische Universität München (TUM) in 1987.

Among many other prestigious honors, in 2015 he was awarded the Brain Prize, together with Winfried Denk, Karel Svoboda and David W. Tank, for their research on two-photon microscopy for visualizing brain tissue and neurons. Arthur Konnerth's research continues to focus on development of imaging technology, as well as understanding behavior-related synaptic signaling. Their current research is focused on the development and application of methods that allow a quantitative understanding of function and dysfunction of neurons and circuits in the intact brain.

Their team pioneered in developing the LOTOS (low power temporal oversampling) method. Their major goal is a better understanding of the cellular and circuit mechanisms of learning and memory in the healthy brain, especially in the developing and the mature cerebellum. In the diseased brain, they explore the pathophysiology underlying the impairment of cognition and memory in Alzheimer's disease.

## **PROFESSIONAL ACHIEVEMENTS**

- · 2002 member of German Academy of Sciences Leopoldina
- 2001 Gottfried Wilhelm Leibniz Prize
- 2004 member of Academia Europaea
- professor of TUM (Technische Universität München) and the director of its Institute of Neuroscience since 2005
- 2011 member of the Bavarian Academy of Sciences
- 2015 The Brain Prize
- Hertie professorship since 2017