

## Alexander Borbély – Brief biography

Alexander Borbély is an emeritus Professor of Pharmacology at the Medical Faculty of the University of Zurich. He studied medicine in Geneva, Zurich, Vienna, Paris, Sheffield and Warsaw and graduated at the Medical Faculty of the University of Zurich in 1963. To pursue his interest in the application of signal analysis in biomedical research, he spent two years as a postdoctoral scientist at the Research Laboratory of Electronics, Massachusetts Institute of Technology in Cambridge, Mass. This is where he began research on sleep, an area that soon became the centre of his scientific activities. After returning to Zurich, he established a research group at the Institute of Pharmacology, University of Zurich and started his academic career as "Privatdozent" at the Medical Faculty (1971). Subsequently, he was appointed Associate Professor (1983) and later Full Professor (1992). He served as Dean of the Medical Faculty (1998-2000) and then as Vice-President of Research of the University of Zurich (2000-2006). After his retirement in 2006 he was president of the Steering Committee of the National Research Program "Non-Ionising Radiation – Health and Environment" (2006-2010). He was a delegate of the University in the project of the Government Council of the Canton of Zurich "Universitäre Medizin Zürich" (2012-2014).

Alexander Borbély's main area of research is sleep regulation. His approach was based on a combination of animal and human research using quantitative signal analysis and mathematical modelling. He is known for the [two-process model](#) of sleep regulation. The original paper of 1982 has been cited more than 5'000 times and the citation rate in 2022 was still above 300. Borbély published more than 170 peer-reviewed papers ([Google Scholar](#): citations 37,305; h-index 93; 385 papers) and three monographs. His book 'Secrets of Sleep' has been translated into 10 languages. In 2019 he published an [autobiography](#).

Many of his students have attained academic positions in sleep research. Borbély's scientific achievements have received international recognition. He is a recipient of the Anna-Monika Award for depression research (1985), the Pisa Sleep Award (1998), the Distinguished Scientist Award from both the World Federation of Sleep

Research Societies (1999) and the Sleep Research Society (USA) (2003), the Peter C. Farrell Prize for Sleep Medicine of the Harvard Medical School (2008), the Sleep Science Award of the European Sleep Research Society (2014) and the SCNi Academic Prize Medal of Oxford University (2022). He received Honorary Doctorates from the Albert Szent-Györgyi Medical University Szeged, Hungary (1998) and from the Warsaw Medical University, Poland (1999).