




Press Release, September 04, 2019

dr. christiane menzfeld

phone: +49 89 8578-2824

pr@biochem.mpg.de

www.biochem.mpg.de/news

 @MPI_Biochem

Two Leopoldina Honors for MPIB Scientists

The oldest continuously existing learned society in the world honors Walter Neupert posthumously with the Cothenius Medal and Elena Conti with the Schleiden Medal.

The German National Academy of Sciences Leopoldina has been honoring scientific achievements since 1652 and elects outstanding scientists as its members. The Academy now honors two of its members and researchers at the Max Planck Institute of Biochemistry (MPIB). Max Planck Fellow Walter Neupert receives the Cothenius Medal posthumously for his scientific life's work and Elena Conti, Director at the MPIB, the Schleiden Medal for outstanding scientific work in the field of cell research. The award ceremony will take place at the festive opening of the Annual Meeting of the Leopoldina on September 20, 2019 in Halle (Saale), Germany.

Walter Neupert examined the power plants of the cells

The biochemist and cell biologist Prof. Dr. Walter Neupert (1939-2019) investigated the structure and biogenesis of mitochondria. Mitochondria are cell organelles, responsible for energy conversion and often described as power plants of cells. Neupert's research focused on the question of protein transport in mitochondria, a process he investigated as one of the first scientists. One of Neupert's particular achievements was to open up biochemistry - initially a discipline characterised by basic research - to medicine. For example, mitochondrial disorders play an important role in heart diseases, metabolic diseases and cancer. Neupert and his research group provided fundamental insights into protein import, protein folding and the structure of mitochondria. In his research, Neupert deciphered mechanisms with fundamental cell biological significance extends far beyond the field of mitochondrial research and which have been incorporated into textbooks. As a teacher and mentor, he has trained and promoted numerous outstanding scientists.

Walter Neupert studied chemistry and medicine at the Ludwig Maximilian University (LMU) in Munich, where he received his PhD in 1968 on the biogenesis of mitochondria. This subject also accompanied him as professor at the Georg-August-Universität Göttingen (1977-1983) and LMU





Munich (1983-2010). From 2008 to 2017, he continued his research as a Max Planck Fellow at the MPIB in Martinsried. His numerous awards and honors include the Bavarian Maximilian Medal for Science and Art awarded in 2008 and the Ernst-Jung Medal for Medicine in Gold presented to him in 2015. Neupert became a member of the Leopoldina in 1993 and received the Schleiden Medal from the Academy in 1999.

Elena Conti analyzes the mediator of the genetic code

Elena Conti, head of the Department of “Cellular Structural Biology”, has gained fundamental new insights into RNA transport within the cell and RNA metabolism. Among other things, the RNA, the so-called ribonucleic acid, ensures that the DNA's genetic information is translated into proteins. Conti and her department are particularly investigating the degradation of RNA by protein structures, which takes place in the cell when RNA molecules are no longer required or are defective. Conti has succeeded in deciphering the atomic structure of one of the largest RNA degradation machines, the RNA exosome. The scientist is also interested how the exchange of information in this area works within the cell. For example, she has analyzed the function of the relevant protein complex (exon-junction complex) in the detection and degradation of defective messenger RNA. In addition, Conti and her team succeeded in deciphering the ski complex, which supplies the RNA degradation complex (exosome) with RNA molecules and thus activates it.

Elena Conti studied chemistry at the University of Padua and biochemistry at Imperial College in London, where she received her PhD in 1996 with a thesis on protein crystallography. She then went to Rockefeller University New York, USA, as a postdoctoral fellow. In 1999, she became head of a research group at the European Molecular Biology Laboratory (EMBL) in Heidelberg. In 2006, she became Director of the Research Department “Structural Cell Biology” at the MPIB in Martinsried. In 2007, she was appointed Honorary Professor at the LMU Munich. In 2008, Conti and Elisa Izaurralde received the Gottfried Wilhelm Leibniz Prize for their scientific achievements. In 2014 she was awarded the Louis Jeantet Prize. She has been a member of the Leopoldina since 2009. In 2014 she was also elected into the Academia Europaea.





About the Leopoldina

The Leopoldina originated in 1652 as a classical scholarly society and now has 1,600 members from almost all branches of science. In 2008, the Leopoldina was appointed as German National Academy of Sciences and, in this capacity, was invested with two major objectives: representing the German scientific community internationally, and providing policymakers and the public with science-based advice. It promotes a scientifically enlightened society and the responsible application of scientific insight and is an advocate of human rights. The Leopoldina presents its policy recommendations in a scientifically qualified, independent, transparent and prospective manner, ever mindful of the standards and consequences of science. <http://www.leopoldina.org>

About the Max Planck Institute of Biochemistry

The Max Planck Institute of Biochemistry (MPIB) belongs to the Max Planck Society, an independent, non-profit research organization dedicated to top level basic research. As one of the largest Institutes of the Max Planck Society, around 800 employees from 45 nations work here in the field of life sciences. In currently eight departments and about 25 research groups, the scientists contribute to the newest findings in the areas of biochemistry, cell biology, structural biology, biophysics and molecular science. The MPIB in Munich-Martinsried is part of the local life-science-campus where two Max Planck Institutes, a Helmholtz Center, the Gene-Center, several bio-medical faculties of two Munich universities and several biotech-companies are located in close proximity. <http://biochem.mpg.de>





Pictures (from left to right):
Markus Scholz/Leopoldina; Axel Griesch, Walter Neupert, Jung-Stiftung
für Wissenschaft und Forschung; Markus Scholz/Leopoldina;
© Max Planck Institute of Biochemistry, 2019

Caption: Elena Conti and Walter Neupert

Photo: Susanne Vondenbusch © MPI of Biochemistry

Contact:

Prof. Dr. Elena Conti
Department of Structural Cell Biology
Max Planck Institute of Biochemistry
Am Klopferspitz 18
82152 Martinsried
Germany

E-Mail: conti@biochem.mpg.de

<https://www.biochem.mpg.de/en/rd/conti>

Dr. Christiane Menzfeld
Public Relations
Max Planck Institute of Biochemistry
Am Klopferspitz 18
82152 Martinsried
Germany

Phone: +49 89 8578-2824

E-Mail: pr@biochem.mpg.de

www.biochem.mpg.de

