



Press Release, December 13, 2018

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Max Planck Director awarded the Bavarian Maximilian Order

Petra Schwille, Director at the Max Planck Institute of Biochemistry in Martinsried, has been awarded the Bavarian Maximilian Order for Science and Art. She received the highest accolade of the Free State of Bavaria for her outstanding scientific achievements. After her groundbreaking work on the biophysics of single molecules, Petra Schwille has for several years been exploring the origin of life. With her research group she wants to construct a biological system from individual building blocks that is able to divide itself -- an important step towards the primordial cell. Schwille said: "The award of the Maximilian Order is a particular honor for me, because I feel very much connected to the great scientific location of Munich and the Free State of Bavaria." The Maximilian Order will be awarded on December 17 at the Munich Residence.

The many technical developments in the field of biophysics now make it possible to track cellular processes down to the level of individual molecules with the utmost accuracy. Because biological cells are very complex, it is difficult to define the processes that are essential to life. Petra Schwille has dedicated herself to this exact question: what minimal equipment does a cell need to live? To discover and understand the fundamental properties of cells as minimal units of life, Petra Schwille replicates cellular processes in a dramatically simplified cell-free environment and subjects them to precise biophysical measurements that are not usually possible inside cells themselves. In her team, researchers use the so-called "bottom-up" approach of synthetic biology. "We hope that with this approach we will be able to decipher and reconstruct the minimal requirements for cellular life — with the aim of building a so-called artificial 'protocell', the original form of a cell," said Schwille.

About Petra Schwille

Petra Schwille studied physics and philosophy at the Universities of Stuttgart and Göttingen. She received her doctorate in the laboratory of the Nobel laureate Manfred Eigen at the Max Planck Institute (MPI) for Biophysical Chemistry. After a postdoctoral stay at Cornell University, Ithaca, New York, USA, she returned to Germany in 1999 to the MPI for Biophysical Chemistry, where she led her own junior research group. In 2002, she was appointed as the the Chair of Biophysics to the Biotechnology Center of the TU Dresden (BIOTEC), which she held until April 2012. Since 2011 she is director at the MPI of Biochemistry and heads the department "Cellular and Molecular Biophysics". Since 2012 she has been honorary professor at the Faculty of Physics of the LMU. Petra





Schwille has been awarded several prizes, including the Philip Morris Research Award 2004 and the Gottfried Wilhelm Leibniz Prize 2010. In addition to her scientific work, Petra Schwille is regularly invited to cultural events as an expert on scientific, philosophical and social topics. As a mother of three children, she is actively involved in mentoring young scientists and is often requested for comment on futuristic issues in the media.

About the Maximilian Order

The Maximilian Order is the highest award of the Free State of Bavaria and is awarded every two years. It was founded in 1853 by King Maximilian II of Bavaria. The number of living recipients may not exceed 100 awardees. After this year's ceremony, there will be 85 awardees. Since 1853, the Order has been awarded to 573 people. The award is also understood as admission to the congregation of the Order. All members of the Order are invited by the Prime Minister of Bavaria to a special assembly in order to facilitate and promote the scientific and artistic exchange of ideas.

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, 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.





Caption:

Petra Schille

Picture: Monika Krause © MPI of Biochemistry

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