HEINRICH WIELAND PRIZE

PRESS RELEASE: 22 August 2024

Benjamin F. Cravatt developed a new method to identify disease-causing proteins and drugs targeting those proteins. For this, he is awarded the 2024 Heinrich Wieland Prize worth 250,000 euros.

Proteins are the building blocks of life. They enable and regulate the chemical reactions within the body. Understanding their interplay is the goal of American researcher Benjamin F. Cravatt, who works in the field of Chemical Biology.

His research at Scripps Research in La Jolla, USA, aims to understand the role of proteins in the development of diseases to find new therapeutic approaches for their treatment. For this purpose, he invented a technology that allows measurement of the chemical activity of individual proteins in the complex mixture of a cell or even an entire organism. This technology is called Activity-based Protein Profiling, or ABPP for short.

The cornerstones of ABPP are small molecules (probes) that selectively match the sites of proteins that are chemically active and irreversibly attach to them. The probes must be tailored to the active site of an individual type of protein such that they recognize these proteins during their course of action only. Such marked proteins can now be distinguished from their inactive copies and all other proteins in a cell and examined. Pathological proteins can also be detected in this way. ABPP is now used worldwide, both in basic research and in drug development, for which this technology has opened up exciting new possibilities.

From the Jury's Statement: "Benjamin Cravatt's groundbreaking technologies have enabled the uncovering of fundamental mechanisms of human physiology and have revolutionised the way new drugs are discovered and researched. His research has laid the foundation for several new drugs currently being tested in clinical trials for the treatment of cancer and neurological diseases." (Professor Franz-Ulrich Hartl, Chairman of the Selection Committee for the Heinrich Wieland Prize).

Christoph Boehringer, Chairman of the Board of the Boehringer Ingelheim Foundation, adds: "Benjamin Cravatt's work demonstrates what can be achieved when one successfully builds bridges between disciplines and in this way spans the arc from basic research to clinical application."

Boehringer Ingelheim Stiftung

The Heinrich Wieland Prize
The Heinrich Wieland Prize is one of the most prestigious awards in the life sciences conferred by a German foundation. Since 1964, it has annually honoured outstanding scientists worldwide for their groundbreaking research in chemistry, biochemistry, biology, and physiology. On the occasion of its 60th anniversary in 2024, the Boehringer Ingelheim Foundation has increased the prize money from 100,000 to 250,000 euros. This makes the Heinrich Wieland Prize one of the most highly endowed awards for fundamental research in the life sciences in Europe.

The Award Ceremony
On 24 October, the Heinrich Wieland Prize 2024 will be awarded. The festive ceremony at Nymphenburg Palace in Munich will be framed by a scientific symposium. The professional exchange between scientists in chemical biology, biochemistry, biology, and medicine is open to the public. In addition to the laureate, internationally renowned guest speakers are invited, including Nobel Laureate James E. Rothman from Yale University in the USA. Interested parties are cordially invited to attend the award ceremony and the symposium.

Boehringer Ingelheim Foundation
The Boehringer Ingelheim Foundation is an independent, non-profit organization committed to the promotion of the medical, biological, chemical, and pharmaceutical sciences. It was established in 1977 by Hubertus Liebrecht (1931–1991), a member of the shareholder family of the Boehringer Ingelheim company. Through its funding programmes Plus 3, Exploration Grants, and Rise up!, the Foundation supports excellent scientists during critical stages of their careers. It also endows awards for junior scientists in Germany. In addition, the Foundation funds institutional projects in Germany, such as the Institute of Molecular Biology (IMB), and the European Molecular Biology Laboratory (EMBL) in Heidelberg.

Full press kit incl. topic and background information on Benjamin Cravatt, speaker profiles and registrations link for the symposium at:
heinrich-wieland-prize.de/award-symposium/id-2024.html

For interviews and/or high-resolution images, please contact:

Boehringer Ingelheim Foundation:
Kirsten Achenbach | Senior Officer Communications
tel. +49 (0) 6131 27508-16 | kirsten.achenbach@bifonds.de
www.boehringer-ingelheim-stiftung.de | hwp@bistiftung.de

Boehringer Ingelheim Stiftung