

National Jewish Health Immunologists Win Wolf Prize for Research

Prestigious award recognizes Philippa Marrack and John Kappler for research on T cells

JANUARY 30, 2015

DENVER, CO — National Jewish Health immunologists [Philippa Marrack](#), PhD, and [John Kappler](#), PhD, have been awarded the Wolf Prize in Medicine, an international honor that recognizes researchers at the top of their field. Drs. Marrack and Kappler, share the 2015 medicine prize with Jeffrey Ravetch, MD, PhD, at the Rockefeller University, and will split the \$100,000 award with him.

The three researchers received this year's prize for their contribution "to the understanding of the molecular basis of the immune response in health and disease," according to the Wolf Foundation website. "Working together, Drs. Kappler and Marrack ...succeeded in identifying the previously elusive T-cell receptor by an ingenious use of monoclonal T cells and monoclonal antibodies."



The T cell is a crucial part of the immune system. T cell receptors recognize specific pathogens and drive the immune response that generates antibodies and other responses to pathogens.

Working as a team, Drs. Kappler and Marrack have made numerous important scientific discoveries that have impacted the health of millions of people throughout the world. Their research has helped unravel the functioning of our immune system.

In addition to their identification of the T-cell receptor in the early 1980s, they discovered how T cells are allowed to mature, but potentially autoimmune T cells are destroyed. In 1990, they discovered superantigens, extremely virulent toxins that cause an overwhelming and disastrous immune response, such as occurs in toxic shock syndrome. These and other discoveries made them two of the most influential immunologists in the world.

Drs. Kappler and Marrack have had research laboratories at National Jewish Health for 35 years. They are both members of the U.S. National Academy of Sciences and the U.S. Institute of Medicine, and are investigators with the prestigious Howard Hughes Medical Institute.

Together, they have won the British Royal Society's Wellcome Foundation Prize and The Paul Ehrlich and Ludwig Darmstadter Prize from the Paul Ehrlich Foundation in Germany. Drs. Kappler and Marrack also have received the prestigious Louisa Gross Horwitz Prize from Columbia University, often considered a predictor of the Nobel Prize since about half its recipients have subsequently won the prize.

In addition to their scientific accomplishments, throughout their careers, they have contributed to the education of new generations of research scientists and physicians through fellowships in their laboratories and teaching immunology courses to graduate and medical students.

National Jewish Health is the leading respiratory hospital in the nation. Founded 120 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit the [media resources page](#).

Media Contacts

Our team is available to arrange interviews, discuss events and story ideas.

William Allstetter

303.398.1002

allstetterw@njhealth.org

Adam Dormuth

303.398.1082

dormutha@njhealth.org