

Laudatory speeches for Maximilian Münchhoff, Christian Mayer, Christian Schwartz and Lisa Beate Maier

[Check against delivery.]

Young scientists make a major contribution to the expansion of our scientific and communal knowledge. With their knowledge, commitment and creativity in finding new ideas and solutions, they make an important contribution to major scientific achievements and are essential for satisfying the workforce needs of the modern scientific community.

The promotion and support of young scientists is one of the central goals of the Robert Koch Foundation. To this end, the Robert Koch Foundation, together with the German Societies for Hygiene and Microbiology, Immunology and Virology, annually presents three awards to outstanding young scientists. Each year, these societies - DGHM, DGfI and GfV - are asked to nominate suitable award winners. From the shortlists provided by the societies, the Scientific Advisory Council and the Board of Directors of the Robert Koch Foundation choose the respective award winners.

Ladies and Gentlemen,

This year's Postdoctoral Award for Virology goes to Doctor Maximilian Münchhoff from the Max von Pettenkofer Institute at the Ludwig Maximilian University in Munich.

Doctor Münchhoff investigated the molecular causes of the immune reaction triggered by the HIV virus. One of his main projects was the characterisation of children infected with HIV who remain healthy without antiretroviral therapy. He successfully published the results of this study in the Science Translational Medicine journal in 2016. Doctor Münchhoff is also investigating the evolution of HIV at a population level, the pathogenesis of malnutrition in the context of a HIV infection and the effects of retroviral therapy on the immune system.

Doctor Münchhoff has already successfully published his research results, with first authorships in the journals Science Translational Medicine, PNAS and The Journal of Infectious Diseases.

Doctor Münchhoff initially studied Biophysics and then Human Medicine in Munich, and also completed a semester at the Universidad Miguel Hernandez in Alicante. He received his doctorate in Munich. He then completed a practical year in the School of Internal Medicine at the University of Sydney in Australia and the University of Otago in New Zealand, and also a practical year in Paediatrics at the University of Capetown in South Africa. Doctor Münchhoff was then an Intern in the Department of Infectious Diseases at the Medical Clinic and Polyclinic of the University of Munich. As a guest scientist at the Ragon Institute of MGH, MIT

and Harvard he then went to Cambridge and was a Postdoctoral Fellow at the University of Oxford with several research periods in South Africa. He has been a science and medical colleague at the Max von Pettenkofer Institute in the National Reference Centre for Retroviruses since 2016.

He has already been honoured with the HIV/AIDS Research Prize of the German Society of Infectious Diseases for his scientific achievements.

Dear Doctor Münchhoff, please accept my sincere congratulations on winning the Robert Koch Postdoctoral Award.

Ladies and Gentlemen,

This year's post-doctoral award for Immunology goes to Doctor Christian Mayer from the Rockefeller University New York and Doctor Christian Schwartz from Trinity College Dublin.

Doctor Mayer has made significant contributions to the field of adaptive immunity. During his doctoral studies he investigated regulatory T lymphocytes and dendritic cells and their role in autoimmune reactions and tumour defence. In his current position he is continuing his research into adaptive immunity by investigating B cell selection in the germinal centres. His work on the question of the microanatomy of germinal centre development and apoptosis of B cells, published this year in the journal *Science*, is of special importance for our understanding of B cell selection and thus also for the development of antibody-based vaccines.

Doctor Mayer has an impressive publication list with 28 articles and many first authorships in highly regarded journals such as *Science*, *Blood* and *Cancer Research*.

Doctor Mayer studied Biochemistry at the TU Munich and completed a research residency at the University of Pennsylvania during this period. He received his doctorate at TWINCORE at Hannover Medical School and has been an EMBO Fellow and Postdoctoral Fellow at the Rockefeller University in New York since 2014.

He has received several awards, among which are the Fritz and Ursula Melchers Prize from the German Association for Immunology and the Young Investigator Award from the Cripps Center for HIV/AIDS Vaccine Immunology & Immunogen Discovery.

Dear Doctor Mayer, I am very pleased to congratulate you on your Robert Koch Postdoctoral Award.

And now to Doctor Schwartz:

Doctor Schwartz' research focuses on the induction and regulation of the immune response to helminths. He made fundamental and highly regarded discoveries on the role of Basophiles, Eosinophiles and type 2 innate lymphoid cells in the resistance to

Heligmosomoides polygyrus and *Nippostrongylus brasiliensis* – Nematodes that are both present in rodents.

Doctor Schwartz has an impressive publication history of 21 published articles, with many first authorships in highly regarded journals such as *Immunity*, *The Journal of Allergy and Clinical Immunology*, *Experimental Medicine*, *PNAS* and *Blood*.

Doctor Schwartz studied Biology at the Eberhard Karls University in Tübingen and also completed an overseas semester at the University of Connecticut during this time. He received his doctorate from the Friedrich Alexander University in Erlangen-Nuremberg and has been occupied at Trinity College in Dublin since 2016.

Doctor Schwartz has received several Fellowships and travel scholarships, including those from the National Institute of Allergy and Infectious Diseases in the USA and the European Molecular Biology Organization (EMBO).

I would also like to congratulate Doctor Schwartz sincerely on winning the Robert Koch Postdoctoral Award.

Ladies and Gentlemen,

This year's Robert Koch Postdoctoral Award for Microbiology goes to Doctor Lisa Maier from the European Molecular Biology Laboratory in Heidelberg.

Doctor Maier has especially studied the importance of the microbiological flora during bacterial intestinal infections, particularly *Salmonella*, and the influence of non-antibacterial and antibacterial medication on the intestinal microbiome. In a study published in the journal *Nature* in 2017, she was able to show that a quarter of the medications attacking human target structures also inhibit the growth of at least one bacterial strain. In addition to changing the intestinal flora, the unwanted antibacterial effects can also promote antibiotic resistance.

Doctor Maier has an outstanding record of publications, with numerous first authorships in the journals *Nature*, *PLOS Pathogens*, and *Cell Host & Microbe*.

Doctor Maier studied biochemistry at the Eberhard Karls University in Tübingen and was awarded her Doctorate at the ETH Zurich for her work on the role of microbiological flora during *Salmonella Typhimurium* induced Colitis. She was then a Postdoctoral Fellow at the ETH Zurich with a research position at Stanford University and has been a Postdoctoral Fellow at EMBL in Heidelberg since 2015.

Among other awards, she has been honoured with the ETH medal for her outstanding performance.

Today you are receiving another award – the Robert Koch Postdoctoral Award – for which I would like to congratulate you sincerely.

Ladies and Gentlemen,

I would like to ask the four Robert Koch Postdoctoral Award winners to join me on stage to accept their certificates.