

Laudatory speech for postdoctoral researchers

by Prof. Dr. Jörg Hacker

[Check against delivery.]

[Address]

As in previous years, the Robert Koch Foundation is again honouring outstanding scientists with three postdoctoral awards this year. Each year for nearly 15 years, the German Societies for Immunology, Virology and Microbiology have been asked to nominate postdoctoral award candidates in their fields. They are called on to suggest suitable outstanding young scientists to be considered for the awards. Based on the shortlists submitted by the societies, the Foundation's Scientific Advisory Council and Board of Directors choose the award winners. Accordingly, the recipients of the award count among the best young scientists currently working in their fields in Germany or abroad.

[Robert Koch Postdoctoral Award for Virology]

This year, the Postdoctoral Award for Virology goes to

Dr. Meike Dittmann from the Rockefeller University in New York City. Ms Dittmann has focussed on the question of the extent to which certain host factors can be used in order to prevent viral infections from spreading. Her work centred on the question of natural defence mechanisms. In particular, she studied interferon-stimulated genes, which are of importance in providing defence against viral infections. She focussed on both the influenza A virus as well as on other viruses such as hepatitis B and hepatitis C. For her work, she also used the new CRISPR/Cas-9 method. The aim of her work is to find new active substances which could be suitable for broad use in the treatment of infections caused by viruses. Ms Dittmann has also focussed on issues relating to diagnosis, in particular in the area of hepatitis virology.

Her work has been presented in 12 publications. Here, two papers from this year stand out in particular, in which she was the first author both of an article published in the "Molecular Cell" journal, as well as of a paper published in the journal "Cell".

Ms Dittmann first studied law in Tübingen before switching to biology from 2001 to 2006. From 2007 to 2010, she completed her dissertation at the laboratory of our colleague Mr Mertens in Ulm, which already focussed on natural forms of resistance, in this case against

cytomegaloviruses. At this time, Ms Dittmann was also a member of an international graduate school. She then worked at the Robert Koch Institute for a time, where she studied issues relating to viral diagnosis, and since 2011 she has been working as a postdoctoral researcher at the laboratory headed by Charles Rice at the Rockefeller University in New York.

Ms Dittmann has already won several awards and accolades. Of particular importance in this context is an NIH grant which will allow her early independence (“Pathway to Independence”). I congratulate Ms Dittmann on winning the Robert Koch Postdoctoral Award.

[Robert Koch Postdoctoral Award for Microbiology]

Dr. Nishith Gupta is this year’s recipient of the Postdoctoral Award for Microbiology. During his academic career, Mr Gupta has studied eukaryotes which are of importance to medicine, the *Toxoplasma gondii* and *Eimeria falciformis* parasites. He has focussed in particular on the metabolic activities and interaction of the parasites with the host cells. He succeeded in demonstrating that certain phospholipids play a role in the virulence of the pathogens. The aim of his work, among other things, is to trace new active substances in order to interfere with the metabolic pathways. For his work, Mr Gupta employed classic parasitological methods and molecular biology approaches, as well as new methods in optogenetics in order to characterise more precisely the metabolic functions of the pathogenic microorganisms.

Mr Gupta studied biology in India, with a focus on biotechnology. From 1999 to 2003, he completed his dissertation in Leipzig, before moving to Denver for three years in order to start his study of toxoplasma in the laboratory run by Dennis Voelker. In 2006, he then switched to the Humboldt University in Berlin, where he first worked as a postdoctoral researcher in the laboratory run by our colleague Mr Lucius. Since 2008, he has been working independently with his own small but highly efficient working group. Recently, he has been awarded grants for four projects alone from the German Research Foundation.

Mr Gupta has had 10 works published as first or last author, including papers in the “Proceedings” journal of the National Academy of Sciences, in the “Journal of Biological Chemistry” or in the FASEB journal.

I congratulate Mr Gupta on winning the 2015 Robert Koch Postdoctoral Award.

[Robert Koch Postdoctoral Award for Immunology]

The recipient of the Postdoctoral Award for Immunology is Dr. Christoph Klose from the University of Freiburg.

In recent years, so-called “innate lymphoid cells” (or ILCs) have become a popular subject of research in the field of immunology. It has been possible to detect the relevant immune cell populations and to shed light on the way in which they function. These include the ILC3 population, which produces a series of cytokines and transcription factors, and which as a result plays a central role in immune defence.

Mr Klose made a key contribution to the characterisation of this cell group. A large portion of his work was completed at the laboratory run by our colleague Mr Diefenbach in Freiburg, now located in Mainz. Mr Klose has an impressive list of publications under his belt, including recent papers published in “Nature” (2013), “Cell” (2014) and “Immunity” (2014), for which he was the first author. Mr Klose first studied molecular medicine at the University of Freiburg, before joining the laboratory under Andreas Diefenbach in 2006, where he also completed his doctoral thesis. In 2011, he was employed in the laboratory as a postdoctoral researcher. He continues to work there today.

My sincere congratulations also go to Mr Klose on winning the 2015 Robert Koch Postdoctoral Award.

Ladies and gentlemen, thank you for your attention.