



On the occasion of election of Stipan Jonjić as a member of Leopoldina, the German National Academy of Sciences

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Stipan Jonjić and his group have been investigating the immune control of cytomegalovirus (CMV) infection for over 25 years. The major scientific achievement of his group is the characterization of several mechanisms involved in immunosurveillance of acute and latent murine CMV (MCMV) infection. Working in close collaboration with Professor Ulrich Koszinowski (Germany) his group was the first to show that CD4 T cells are

essential for control of horizontal virus spread and can compensate the function of CD8 T cells when these cells are depleted. His group provided the first evidence that immunosurveillance of latent CMV infection is organized in a hierarchical and redundant fashion, with not only CD8 T cells but also CD4 T cells and NK cells playing an important role. The group pioneered the work on MCMV evasion of NK cells and characterized several viral proteins involved in down-modulation of NKG2D ligands. More recently, they established the MCMV model of congenital CMV infection of CNS and demonstrated impaired development of cerebellum of infected animals coupled with inflammatory lesions. They have also made a significant contribution to elucidating the recognition of MCMV infected cells by Ly49 NK cell receptors and molecular mechanism involved in specific recognition of infected cells by several activating Ly49 receptors. The group has been the first to show that 'missing-self' dependent NK cell activation plays a role in virus control and characterized viral immunoevasion of this effector mechanism.

Stipan Jonjić has published over 100 papers, mostly in the field of virology and immunology and has been invited lecturer to prestigious international conferences and universities. He has worked as a principal investigator on several national and international scientific projects, including those funded by the European Commission and US National Institutes of Health. His scientific work has been characterized by a long and intense international cooperation. For his scientific achievements he was awarded several national and international prizes. He has been principal advisor to 15 PhD students. Two of his PhD students were awarded the Humboldt fellowship, two of them received the

EMBO fellowship, one was awarded HHMI fellowship and one was awarded the ERC Starting Grant.

The appointment of Stipan Jonjić as a member of Leopoldina is a remarkable recognition to his scientific achievements in the field of viral immunology. Founded almost 350 years ago, Leopoldina is the oldest academy for medicine and natural sciences in the world. It was appointed the German National Academy of Sciences in

2008. It acts as an independent adviser of public institutions and bodies on scientific issues and encourages the exchange of ideas with foreign researchers and organisations. Approximately three quarters of its members are from German-speaking countries and one quarter from 30 other nations.