PREFACE

Although specific antibodies to West Nile virus (WNV) in human beings, horses and European brown bears had been previously detected, the first laboratory-confirmed human cases of the West Nile virus neuroinvasive infection in Croatia were diagnosed in September 2012 in three eastern Croatian counties. That outbreak of the WNV infection prompted us to organize the symposium under the title “Epidemiological and Clinical Aspects of the West Nile Virus Infection in Croatia and the Neighbouring Countries”. The Symposium was organized by the Department of Medical Sciences of the Croatian Academy of Sciences and Arts and held on 25 October 2012 at the Academy Palace. It was dedicated to the review of the recent progress in research on the virology, epidemiological, ecological and clinical manifestations of WNV infection, involving mosquitoes, birds, humans and horses. Distinguished researchers from Austria, Croatia, Hungary, Italy, Serbia and Slovenia gave presentations and stimulated the discussion about selected topics. Regretfully, not all papers of all presentations are included in this issue.

Until 2012, WNV infections in Croatia have never been associated with clinical symptoms. The clinical manifestations of WNV infection in humans from the wetlands of northeastern Croatia, foraging and nesting habitats for many wild birds species and mosquitoes, are described in the presented articles. In addition, IgM seropositive horses indicate the active focuses of WNV in Croatia, and might suggest a possible role of these animals as sentinels for human risk due to WNV. Although the vast majority of WNV infections are acquired from the bite of infected mosquitoes, it is necessary to emphasize that WNV can be transmitted through blood transfusion, organ transplantation, transplacentally, and probably through breast milk.

All these aspects were elucidated at the Symposium. It may be concluded that the expanded knowledge about WNV illness in humans seeks a new platform for a future implementation of diagnostic test and therapy of the disease in Croatia.

The organizers of the Symposium wish to express their gratitude to the Editor-in-Chief of the journal Rad, Marko Pećina, Fellow of the Croatian Academy of Sciences and Arts, for granting them the opportunity to publish the papers in this issue.

On behalf of the Organizing Committee,

Josip Madić