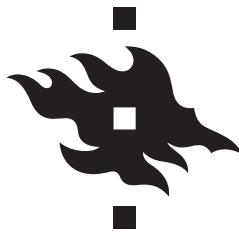




**Karolinska
Institutet**



UNIVERSITY OF HELSINKI

Factors in the environment, viruses and host responses affecting the epidemiology of tick-borne encephalitis virus in Northern Europe

AKADEMISK AVHANDLING

som för avläggande av filosofi doktorsexamen vid Karolinska Institutet och Helsingfors universitet (LERU program) offentligen försvaras i auditorium XII at the University of Helsinki Main Building (Unioninkatu 34), Helsinki, Finland

Fredagen den 19. September, 2014, kl.12.00 (local time)

Elina Tonteri, M.Sc.

Huvudhandledare:

Professor Olli Vapalahti
Department of Virology, Haartman Institute, University of Helsinki
Department of Veterinary Biosciences, University of Helsinki
Department of Virology and Immunology, Hospital District of Helsinki and Uusimaa Helsinki, Finland

Bihandledare:

Professor Åke Lundkvist
Department of Microbiology, Tumor and Cell Biology, Karolinska Institutet
The Public Health Agency of Sweden
Solna, Sweden
Department of Medical Biochemistry and Microbiology, Uppsala University, Uppsala, Sweden

Fakultetsopponent:

DVM, PhD Annapaola Rizzoli
Department of Biodiversity and Molecular Ecology,
Edmund Mach Foundation, Research and Innovation Centre, S. Michele all'Adige Trento, Italy

Betygsnämnd:

Professor Jorma Hinkula
Department of Clinical and Experimental Medicine Virology, Linköping University Linköping, Sweden

Professor Dag Nyman
Åland University of Applied Sciences
Mariehamn, Åland, Finland

Professor Dennis Bamford
The Programme on Molecular Virology:
Department of Biosciences and Institute of Biotechnology, University of Helsinki Helsinki, Finland

Stockholm 2014