## Rodent-borne Ljungan virus in dispersing Norwegian lemmings Lemmus lemmus

Heidi Christine Hauffe<sup>1</sup>, Chiara Rossi<sup>1</sup>, Fausta Rosso<sup>1</sup>, Matteo Girardi<sup>1</sup>, Giorgio Recinella<sup>1</sup>, Liina Voutilainen<sup>2,3</sup>, Olli Vapalahti<sup>2</sup>, Annapaola Rizzoli<sup>1</sup>, Heikki Henttonen<sup>3</sup>

Dept of Biodiversity and Molecular Ecology, Fondazione E Mach, S Michele all'Adige (TN), Italy,

Department of Virology, Haartman Institute, University of Helsinki, Helsinki, Finland, Finnish Forest Research Institute (Metla), Vantaa Unit, Vantaa, Finland

The Ljungan (picorna) virus (LV) was first isolated in 1998 from Swedish bank voles, *Myodes glareolus*, and has subsequently been in laboratory mice and rats, as well as many wild small mammal species, including mice, voles and lemmings, in Sweden, Denmark, Germany, USA, and most recently, Italy. Although it was initially put forward as a zoonotic agent of several human (primarily gestational) diseases, LV causes symptoms in the rodents themselves; however, its effect on rodent ecology and population dynamics is unknown. Norwegian lemmings, *Lemmus lemmus*, have cyclic population dynamics and thus may be affected by LV. As a first attempt at addressing this question, we present some results of RT-PCR screening for its presence and prevalence in Norwegian lemmings from northern Finland, caught before, during and after a major dispersal event in spring 2011.