

Applications are invited for 24 month post doc (with a possibility of up to 2 year continuation) in the research group of Marjo Saastamoinen as part of the ERC funded META-STRESS project (Starting Grant scheme). The successful applicant will join the Centre of Excellence in Metapopulation Research at the University of Helsinki. The project aims to understand the mechanisms that allow organisms in the wild to cope with environmental stress. The large metapopulation of the Glanville fritillary butterfly gives a unique opportunity to study processes operating from genes within individuals all the way to metapopulation-level dynamics (> 20 years of data). In this project ecological studies will be integrated with molecular approaches to unravel the significance of different mechanisms - candidate genes, epigenetic inheritance and intestinal microbial communities - potentially influencing individual responses to environmental challenges. Molecular and genomic tools (including the genome; Ahola et al. 2014, Nat Comm) are available for this species to apply to ecologically relevant traits. Recent relevant publications include: Saastamoinen M, Norio H & Van Nouhuys S (2013) Direct and trans-generational responses to food deprivation during development in the Glanville fritillary butterfly. *Oecologia* 171: 93-104. Saastamoinen M, Ikonen S, Wong SW, Lehtonen R & Hanski I (2013) Plastic larval development in a butterfly has complex environmental and genetic causes and consequences for population dynamics. *Journal of Animal Ecology* 82: 529-539. Kvist J., Wheat C. W., Kallioniemi E., Saastamoinen M., Hanski I. & Frilander M. (2013). Temperature treatments during larval development reveal extensive heritable and plastic variation in gene expression and life history traits. *Molecular Ecology* 22: 602-619. The successful candidate should have PhD / post doctoral experience in evolutionary genetics, bioinformatics, microbiology, evolutionary biology or similar, and a strong interest in working with natural populations. Excellent written and verbal communication skills, and the ability to think independently and creatively are required. You must demonstrate the ability to work as part of a team, and participate in supervision of more junior group members. More information:

<http://www.mv.helsinki.fi/h>

[ome/msaastam](http://www.mv.helsinki.fi/home/msaastam)

; www.h

[elsinki.fi/science/metapop](http://www.helsinki.fi/science/metapop)

Starting date: April 2015

Application deadline: 13 February 2015

Mail your application with title post-doc META-STRESS (CV with publications included, contact details of two references, and a letter (MAX 1 page) with a description of your research interests and why you would be a suitable candidate for the project) as a single pdf file to biotiede-mrg@helsinki.fi

Informal inquiries to

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