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Eidgenössisches Departement für
Wirtschaft, Bildung und Forschung WBF
Agroscope



PhD position

in honey bee population genetics,

**Swiss Bee Research Centre of Agroscope federal research station for food and agriculture and
University of Bern, Bern Switzerland**

Application deadline: 31.01.2014

A PhD position in honey bee, *Apis mellifera*, population genetics is available at the Swiss Research Center (<http://www.agroscope.admin.ch/imkereji>). The group has a strong experience in honey bee pathology and molecular genetics. The thesis will be conducted in the Graduate School for Cellular and Biomedical Sciences at the University of Bern under joint supervision with the Institute of Bee Health (<http://www.bees.unibe.ch>) and the Institute of Genetics (<http://www.genetics.unibe.ch>).

European honey bees have recently suffered from severe colony losses, mainly driven by the ectoparasitic mite *Varroa destructor* and native subspecies are often endangered. The project will therefore take advantage of the honey bee genome to address the timely topics of bee conservation and host-parasite interactions. It will be focused on a bee population study in Switzerland, with the ultimate aim to provide tools for decision making to preserve honey bee diversity. A particular emphasis will be given on genome-wide association studies (GWAS) and marker-assisted selection (MAS) for *Varroa destructor* resistance.

Applicants must hold a university Master's degree in Animal Breeding and Genetics, Biology, Biometrics, or Computer Science. Required qualifications include the experience in management, processing and analysis of large datasets in animal breeding, knowledge of mixed model methodology, population diversity analysis tools, and strong interest in biology and population genetics. The applicant will mainly work with large-scale datasets including next generation sequencing data, genome-wide association or admixture mapping studies using SNP arrays.

The position is fixed term for three years and will be available from January 2014. Bern is a delightful, historic city situated in the heart of Switzerland. The working language of the group is English, though knowledge of basic French or German, or willingness to learn within three years, would be an advantage. The Agroscope Research Station is an equal opportunity employer. You will be a member of a supportive and dynamic group that interacts closely within and outside the Agroscope Research Institute. Review of applicants will begin on January 31, 2014, and will continue until a suitable candidate is identified. The attractive PhD salary will be according to the standards of the Swiss National Science Foundation (SNF).

For further details please contact:

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Applications should be sent together with a full CV and names of two professional referees as a single pdf file to the contact e-mail until 31.01.2014.