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**UNIVERSITÄT  
BERN**

Faculty of Science  
Institute of Plant Sciences

## Postdoctoral and PhD-student Positions Genomic Analysis of Adaptations to Pollinators in *Petunia*

The Institute of Plant Sciences at the University of Bern in Switzerland is seeking highly motivated Postdoctoral and PhD candidates with a strong interest in applying genetic and genomic approaches to questions of ecology and evolution. Our Institute offers a creative and stimulating international scientific environment and high end facilities. You will join a small and active research group where individually and collaboratively generated research questions will be developed and addressed. The lab language is English. The city of Bern is located at the foothills of the Alps, and is known for its attractive recreational and cultural opportunities.

The Swiss NSF-supported project aims to understand the genetic and genomic basis of floral adaptations to different pollinators in *Petunia*. The genus *Petunia* comprises closely related species adapted to different pollinators: bees, hawkmoths and hummingbirds. Among the floral characters that are important for differential pollinator preference are petal color and scent emission as well as the morphology of the petals and reproductive organs. You will undertake the molecular identification and characterization of the major genetic mutations that caused the shifts between pollination syndromes. Importantly, we recently found that several of the relevant floral traits are tightly genetically linked. Elucidation of the molecular structure of this “genomic island” will give a mechanistic insight into the evolution of pollination syndromes. Techniques will include classical and molecular genetics, genome wide association studies (GWAS), high-throughput transcriptomics and bioinformatics. In addition, there is the opportunity to perform pollinator choice assays and population genetic studies. See: *Plant Cell* 19,779 (2007); *Curr. Biol.* 21 730 (2011); *Curr. Biol.* 23: 873 (2013); *Evolution* 67: 3023 (2013).



Requirements are a degree (MSc for students, PhD for postdocs) in molecular genetics, population genetics or bioinformatics. A strong interest in bioinformatics is an advantage.

The positions are available immediately and applications will be continuously evaluated until the deadline of May 31, 2015. Your application should be a single pdf file with curriculum vitae, copies of diplomas and transcripts, motivation letter and contact details of three references.

Address for application and further information:

Prof. Cris Kuhlemeier

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<http://www.botany.unibe.ch/deve/research/projects/pollinator.php>

[http://www.youtube.com/watch?feature=player\\_embedded&v=o1BcisZPBgg](http://www.youtube.com/watch?feature=player_embedded&v=o1BcisZPBgg)