PhD Student Position in Virology – Institute of Virology and Immunology (IVI)  
Group PD Dr. Matthias Schweizer

**Host-cell interaction of a soluble pestiviral RNase**

Research field: Virology  
Supervisor: PD Dr. sc. nat. Matthias Schweizer  
Availability: This position is available immediately.  
Application deadline: Applications are accepted until October 22, 2017

**The project:** Interferon (IFN) represents the most important innate defense mechanism against virus infection. Within the family *Flaviviridae*, the pestiviruses, such as bovine viral diarrhea virus (BVDV) or classical swine fever viruses (CSFV), are the sole members that encode for two additional proteins that act as IFN antagonists, i.e., Npro and the viral RNase Erns (compare [http://www.ivi.unibe.ch/research/virology/group_schweizer/projects](http://www.ivi.unibe.ch/research/virology/group_schweizer/projects)). The aim of this study is to investigate in detail the mechanism of the pestiviral RNase to act as an important IFN antagonist and to identify its interaction partners in its natural host environment using state-of-the art methods in virology, molecular and cell biology, and biochemistry. This project might shed light on the more fundamental mechanisms of the host to avoid the body’s own immunostimulatory RNA to act as a danger-associated molecular pattern.

**The Institute:** The Institute of Virology and Immunology (IVI) is part of the Federal Food Safety and Veterinary Office (FSVO) and is embedded in the Department of Infectious Diseases and Pathobiology, Vetsuisse Faculty, University of Bern. The IVI is the Swiss reference laboratory for the diagnosis, surveillance and control of highly infectious animal diseases, and the Swiss reference center for rabies (Swiss Rabies Center), and it offers high quality research, teaching and services in virology and immunology in cooperation with the Vetsuisse Faculty Bern.

**We are looking for** highly motivated candidates with a strong interest in virus-host interactions. Solid experience in basic virology, biochemistry, cell biology and molecular biology and the ability to work independently and rigorously on a complex task will be of advantage. The possibility to present personally in the lab upon initial selection is highly appreciated. The position requires a master degree in the field of life sciences. The successful candidate will be enrolled in the PhD Program of the Graduate School for Cellular and Biomedical Sciences (GCB) at the University of Bern ([www.gcb.unibe.ch](http://www.gcb.unibe.ch)). The project is scheduled for 3 years and will be paid according the guidelines of the Swiss National Science Foundation.

Please send your application in one single file that should include a motivation letter, CV, copies of grade, diplomas, and references until **October 22**nd, 2017 to the secretariat: Barbara Gautschi, barbara.gautschi@vetsuisse.unibe.ch.