



**Lunch Seminar: Thursday, 30 August 2018**

# **CRISPR editing using chemically-modified crRNA:tracrRNA complexes**

<b>Venue</b>	Department for Infectious Diseases and Pathobiology (DIP) Vetsuisse Faculty, University of Berne, Hörsaal Paraklinik (303), 3rd Floor, Länggassstrasse 122, 3012 Bern
<b>Speaker</b>	Dr. Mirko Vanetti, European Application Manager - Functional Genomics (IDT)
<b>Host</b>	Dr. Philipp Olias, Institute of Animal Pathology, Vetsuisse Faculty
<b>Agenda</b>	11:45 – 12:30 Seminar 12:30 – 13:00 Sandwich lunch and discussion

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CRISPR/Cas is a simple and efficient method of gene editing that utilizes the Cas9 protein and RNA molecules as guides to either disrupt host genes or insert sequences of interest. The prospect of efficiently creating tailored changes to a gene of interest is revolutionizing biomedical research.

The speaker will introduce the basics of CRISPR genome editing. Then, he will discuss the development of the ALT-R CRISPR/Cas system. This system combines recombinant Cas9 protein with length-optimized and chemically modified guide RNAs to form ribonucleoprotein complexes (RNPs). You will hear about using RNPs to perform CRISPR genome editing and tools to optimized reagent delivery and screening. Finally, the presentation will conclude with an overview of novel Cas9 variants with enhanced target specificity and reduced off-target effects.

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## **Registration**

Following the seminar, a sandwich lunch will be provided. We therefore kindly ask you to register at

[https://crispr\\_lunchseminar\\_berne2018.eventbrite.de](https://crispr_lunchseminar_berne2018.eventbrite.de)