

## Regular Wednesday IMG seminar



**Björn Schuster, Dr. rer. nat.**

**Laboratory of Cell Differentiation**

**“Switcher ON!”**

**CRISPR-inducible Cre regulating CRISPR activity”**

In this seminar we present a novel genetic switch we term Switcher based on a floxed wild-type Cre-construct representing a CRISPR-inducible and self-limiting kill switch. By leveraging CRISPR/Cas12a-mediated crRNA-array maturation, we showcase Switcher's dual role – not just as a recombinase but as a CRISPR-switch, orchestrating intricate CRISPR applications with precise spatial and temporal control. Consequently, this versatile system holds the potential to streamline complex, multi-layered orthogonal CRISPR applications, both *in vitro* and *in vivo*.

**The seminar will be held**

**on Wednesday 11<sup>th</sup> October 2023 at 15:00**

**in the Milan Hašek Auditorium at IMG**

(Institute of Molecular Genetics of the Czech Academy of Sciences, Vídeňská 1083, Prague 4)

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