Institute of Molecular Biology

IMB TechTalk

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"A workflow for CRISPR-Cas9 high throughput arrayed screening with synthetic crRNA"

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Venue: IMB Seminar Room, 2nd Floor

Institute of Molecular Biology (IMB)

Johannes Gutenberg University Campus Mainz

All are welcome to attend.

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Abstract:

A workflow for CRISPR-Cas9 high throughput arrayed screening with synthetic crRNA

There is rapidly growing interest in using the CRISPR-Cas9 system for functional screening, both as a primary screening tool and as an orthogonal tool for RNAi hit validation. High throughput synthesis, combined with a proprietary algorithm that selects highly functional and specific guide RNAs, allows rapid generation of CRISPR RNA (crRNA) collections in arrayed formats. Arrayed crRNA screens offer the advantage of applying sophisticated assays, such as those requiring high-content microscopy, to investigate phenotypes that involve intracellular localization, morphological changes, or require time-lapse investigation.

This talk demonstrates the application of arrayed screening with synthetic crRNA libraries across multiple assay types, and presents considerations for experimental success.