

IMB TechTalk

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"RNAi screening and the development of novel tools for the high-content analysis of the cell"

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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:

RNAi screening and the development of novel tools for the high-content analysis of the cell

RNA interference (RNAi) is a powerful genetic tool to determine gene function in living cells. In the RNAi Screening Facility, located in the BioQuant Centre of Heidelberg University we co-develop with our customers assays for high-throughput RNAi screening and provide a fully automated fluorescence microscopy-based screening platform.

The main focus of the group "High content analysis of the cell (HiCell)" is the design, development and application of novel technologies for high-content screening and analysis. Once developed, tested and standardized, the approaches are incorporated in the portfolio of RNAi Screening Facility and made opened for the users. In the HiCell group, we address the following directions successfully:

- 1. Development of methodologies to interfere with cell function on genome, transcript and protein levels.
- 2. Miniaturization of cellular analysis, e.g. cell arrays.
- 3. Development of correlative light microscopy combining high-speed and super-resolution microscopy