

IMB TechTalk

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"Multipurpose DARPin Binders for Innovative Applications - How to Identify Affinity Reagents for Challenging Tasks"

29 November 2016, 11:00 (s.t.)

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:

Multipurpose DARPin Binders for Innovative Applications - How to Identify Affinity Reagents for Challenging Tasks

Obtaining high-quality and reliable affinity reagents remains a major challenge for many scientific projects. Frequently, commercial antibodies fail to behave as advertised or only work for a subset of samples. Therefore, we established a High-Throughput Binder Selection Facility, generating hundreds of high-end binders (so called DARPins) that specifically recognize different, non-overlapping epitopes at their targets with high affinities. Those binders have already been used in a variety of applications both in-house and by numerous international collaboration partners, improving existing and enabling novel, so far unfeasible applications.

Within my presentation, I will give insights into our streamlined and robust binder generation pipeline and show examples of DARPin applications (amongst others, DARPins have been successfully employed in advanced microscopy, pull-downs, immunohistochemistry, for co-crystallization, as intracellular biosensors, and even have been therapeutically validated).