### **EPFL Bioengineering Day 2017**

## - (ETH) Basel meets (EPF) Lausanne -

SwissTech Convention Center, EPFL, Friday, November 24, 2017, 10h-19h

10:00	Bruno Correia (EPFL) and Sai Reddy (E	TH) Welcome, Opening Words
10:05	Michael Nash (ETH)	Genetically Programmed Auto-Encapsulation of Single Cells in Synthetic Hydrogel-Shells for Directed Evolution of Biocatalysts
10:25	Patrick Barth (EPFL)	Protein Design for Cell Engineering
10:45	Ulrike Menzel (ETH)	Understanding Principles of Antibody Repertoire Structure for Immune Prediction and Engineering
11:00	Petra C. Schwalie (EPFL)	A Stromal Cell Population that Inhibits Adipogenesis in Mammalian Fat Depots
11:15	coffee break	
11:45	Kyle M. Douglass (EPFL)	Democratizing the Super-Resolution Microscope
12:05	Periklis Pantazis (ETH)	Primed Conversion: the New Kid on the Block for Photoconversion
12:25	Selman Sakar (EPFL)	Body Plan and Locomotor Biomechanics at Small Scale
12:40	David Martinez-Martin (ETH)	Tracking a Cell's Mass in Real Time
13:00	Lunch Buffet - Poster Session - mini-talks (10') by ETH and EPFL Master students	
14:30	Petra Dittrich (ETH)	Microfluidic Devices for High-Throughput Cell Analysis
14:50	Alex Persat (EPFL)	Bacteria with a Sense of Touch
15:10	Dordaneh Etezadi (EPFL)	Nanoplasmonic Mid-Infrared Biosensor for Ultrasensitive Protein Secondary Structure
		Detection
15:25	Adrian Nievergelt (EPFL)	A Gentle High-Speed Atomic Force Microscope for Real-Time Visualization of Weak Protein Interactions
15:40	coffee break	
16:10	Randall Platt (ETH)	In vivo Genome Editing with CRISPR-Cas Systems
16:30	Diego Ghezzi (EPFL)	Organic Neuroprosthetics for Vision Restoration
16:50	Armin Baumschlager (ETH)	Dynamic Light-Inducible T7 RNA Polymerases (Opto-T7RNAPs) for Spatiotemporal Gene
		Expression Control in Cybergenetics
17:05	Ferdinand Sedlmayer (ETH)	Engineering of Programmable Anti-Infective Gene Circuits for Cell-Based Pathogen Attenuation
17:20	Jeffrey Hubbell and Melody Swartz Young Bioengineer Award ceremony	
17:30	Networking, beer & wine, food, music	
19:00	Chartered bus transport to Basel for po	articipants from ETH v3.4

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#### mini-talks by ETH and EPFL undergrads in SwissTech's main hall

13:00 Moritz Durtschi (EPFL) Using DNA Nanotechnology as a Molecular Ruler to Calibrate High-Speed Atomic Force Microscopes

13:15 Freyr Sverrisson (EPFL) *Teaching Old Folds New Tricks - Computational Design to Repurpose Protein Function* 

13:30 Simon Meng (ETH) Directed Evolution and Protein Engineering in Mammalian Cells

13:45 Samer Bekhazi (EPFL) Development of Automated Trajectory Mapping
Approaches for Single Cell Analysis

14:00 Lisa Dratva, Lena Bruhin and Malek Kabani (EPFL 2017 iGEM team)

Aptasense: a Cell-Free Biosensor