



Yeast Synthetic Biology Workshop

Saturday, October 16, 2010

Genentech Hall, UCSF



<u>Time</u>	<u>Topic</u>	<u>Speaker</u>	<u>Title</u>
8:30-9:00	Registration, Breakfast		
9:00-9:15	Welcome & Overview	Todd Peterson, Life Technologies	
9:15-10:15	Keynote Address	Geoff Duyk, TPG Ventures	Lost in Translation: The Myth of Technological Determinism
10:15-10:30	Break		
Session 1: Genome Engineering, Approaches and Tools. Jef Boeke, Session Leader			
10:30-11:00		Dan Gibson, JCVI	Assembling and Engineering Bacterial Genomes in Yeast
11:00-11:30		Zach Serber, Amyris	The Industrialization of Synthetic Biology: Rapid Yeast Strain Engineering
11:30-12:00		Jef Boeke, Johns Hopkins	Building <i>Saccharomyces cerevisiae</i> 2.0: Probing genome plasticity
12:00-12:10		Aindrila Mukhopadhyay, JBEI	Study of Yeast Transcription Factors as a Strategy to Discover New Parts for Cellular and Metabolic Engineering
12:10-12:20		Jingjing Sun, MIT	Artificial Cell-to-Cell Communication and Population Control in Yeast
12:20-1:30	Lunch		
Session 2: Engineering Metabolic and Regulatory Pathways. Chris Paddon, Session Leader			
1:30-2:00		Chris Paddon, Amyris	Microbially-Derived Artemisinin: Engineering Yeast Using Synthetic Biology to Stabilize the Supply of an Important Anti-malarial Drug for the Developing World
2:00-2:30		Sergio Peisajovich, UCSF	Signaling Network Engineering by Combinatorial Recombination
2:30-3:00		Quinn Zhu, DuPont	Systemic Engineering of <i>Yarrowia lipolytica</i> for Production of Commercial Products
3:00-3:10		Pamela Peralta-Yahya, JBEI	A Heritable Recombination System for Synthetic Evolution in Yeast
3:10-3:20		Josh Michener, Stanford	Riboswitch-Guided Enzyme Engineering in <i>Saccharomyces cerevisiae</i>
3:20-3:30		Kim Tipton, UC Berkeley	Engineering Specific Degradation Circuits in yeast
3:30-3:45	Break		
Session 3: Fermentation, Process Development and Production. Ton van Maris, Session Leader			
3:45-4:15		Danie La Grange, University of Stellenbosch	Engineering <i>Saccharomyces cerevisiae</i> for Consolidated Bioprocessing
4:15-4:45		Ton van Maris, Technical University of Delft	Engineering of <i>Saccharomyces cerevisiae</i> for Efficient Alcoholic Fermentation of Plant Biomass hydrolysates
4:45-5:15		Mickel Jansen, DSM	Yeast as an Industrial Platform for Fermentation Processes: Succinic Acid - A Case Study
5:15-5:45		Maitreya Dunham, University of Washington	Use of Fermentors for Strain Selection
5:45-6:30	Mixer		
6:30-8:00	Topical Dinners	Each table will focus on one the day's three sessions. Discussions to center on what is still needed in each of the areas.	
8:10-8:30	Group Summaries	Leader of each group will present a list of what still needs to be achieved	