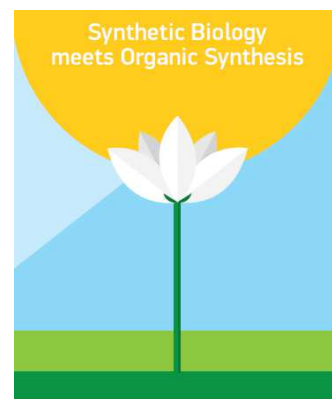


Synbio Conference, Berkeley

10-12 Nov 2014



Cross-disciplinary conference

Berkeley, 10-12 Nov. 2014

Day 1: 10-Nov 2014

Time	Session 1: Synthetic Biology & Organic Synthesis – common challenge, competition or collaboration?
8:15-9:00	Continental Breakfast and Registration
9:00-9:10	Welcome by Prof. Poul Erik Jensen , U. Copenhagen
9:10-9:40	Intro: Objectives and focus of the session by Dr. Thomas Högberg , LEO-Pharma (chair) <i>"Effective access to more complex drug molecules – a medicinal chemistry perspective exemplified with ingenol esters"</i>
9:40-10:15	Prof. Jay Keasling , U.C. Berkeley <i>"Engineering Microbes for Chemicals and Fuels"</i>
10:15-10:50	Prof. Phil Baran , Scripps Research Institute <i>"Studies in Natural Product Synthesis"</i>
10:50-11:05	Break
11:05-11:40	Prof. Jutta Heim , Aravis <i>"A Yeast Synthetic Biology Platform Generates Novel Pharmacological Scaffolds for Drug Discovery"</i>
11:40-12:00	Selected speaker from abstracts: Postdoc Johan Andersen-Ranberg , U. Copenhagen <i>"Exploiting the diterpenoid toolbox for the biosynthesis of high value compounds"</i>
12-13	Lunch
Session 2: Grand Opportunities - Bridging science, industry and investors	
13:00-13:10	Introduction to afternoon session by Ask Agger (chair), Change Management Leader and CEO at Workz
13:10-13:45	Dr. Lynn Rotschild , NASA's Ames Research Center <i>"Reaching for the stars: The role of synthetic biology in NASA's missions"</i>
13:45-14:20	Prof. Stephen Mayfield , U.C. San Diego <i>"Photosynthetic Bio-manufacturing in green algae"</i>
14:20-14:40	Introducing; <i>"On the Edge of a new Paradigm"</i> trailer and introduction by philosopher and film director Allan Alfred Birkegaard Hansted & documentarist Katja Gry Birkegaard Carlsen , WeCollaborate.org
14:40-15:00	Break
15:00-16:30	Grand Opportunities; Identifying unseen opportunities and potential collaborations focusing on 9 Great Opportunities Facilitated dialogue and matchmaking between synbio, organic chemistry, industry, investors and other stakeholders <ul style="list-style-type: none">• Reflections and introduction• Structured matchmaking and dialogue
	Short walk to the Bancroft Hotel
17:00-?	Reception + Dinner at Bancroft Hotel

Day 2: 11-Nov 2014

Time	Session 3: Production hosts and bilateral knowledge exchange
8:30-9:00	Continental Breakfast and Registration
9:00-9.30	Intro: Objectives and focus of the session by Prof. Birger Lindberg Møller , U. Copenhagen (chair) <i>"Synthetic biology in collaboration with nature"</i>
9.30-10:05	Prof. Kris Niyogi , U.C Berkeley <i>"Tools and hosts for making valuable molecules in eukaryotic algae"</i>
10:05-10:40	Prof. Wim Vermaas , Arizona State Uni <i>"Cyanobacteria as a solar-fueled chassis to make a wide variety of compounds"</i>
10:40-10:50	Short Break
10:50-11:25	Assist. Prof. Packo Lamers , Wageningen UR <i>"Microalgal lipids: bridging the yield gap"</i>
11:25-12:00	Chief Scientific Officer, Dr. Jørgen Hansen , Evolva <i>"Bio-production of small molecules in yeast"</i>
12-13	Lunch and POSTER SESSION
	Session 4: Compartments & Localization - Enzymes and Products
13:00-13:15	Intro: Objectives and focus of the session by Prof. Poul Erik Jensen , U. Copenhagen (chair)
13.15-13.50	Prof. Christoph Benning , Michigan State Univ. <i>"Synthetic enzyme assemblies at the surface of lipid droplets"</i>
13:50-14:10	Selected speaker from abstracts: Postdoc Agnieszka Zygadlo Nielsen , U. Copenhagen <i>"Improving the efficiency of electron transfer for light-driven cytochrome P450 reactions"</i>
14:10-14:45	Assist. Prof. Ming Hammond , U.C. Berkeley <i>"RNA-based sensors for assaying in vivo enzyme activity"</i>
14:45-15:05	Selected speaker from abstracts: PhD Student Tristan de Rond , UC Berkeley <i>"High-throughput mass-spectrometric enzyme activity determination with PECAN"</i>
15:05-15:25	Break
15:25-16:00	Assist. Prof. John Dueber , U.C. Berkeley <i>"Repurposing the peroxisome in Sacchromyces cerevisiae for Compartmentalizing Multi-Enzyme Metabolic Pathways"</i>
16:00-16:20	Selected speaker from abstracts: Assistant Prof. Bushra Kiani , International Islamic University, Pakistan. <i>"Artemisinin production in Artemisia annua and Artemisia dubia following transformation with the rol ABC genes and elucidation of the sites of its synthesis"</i>
16:20-16:40	Selected speaker from abstracts: Associate Prof. Yumiko Sakuragi , U. Copenhagen <i>"Bifunctional Sedoheptulose/Fructose Bisphosphatase activity acts as a metabolic switch enhancing the Calvin cycle and photosynthesis in cyanobacteria. Can this be a new target for increasing endproduct yields in synthetic photobiology?"</i>
16:40-17:00	Selected speaker from abstracts: Prof. Toshiya Muranaka , Osaka University, Japan <i>"Terpenoid biosynthesis: diversity and their application to metabolic engineering"</i>
17:00-17:45	Poster session and reception.
17:45-18:45	Possibility to see the full version of <i>"On the Edge of a new Paradigm"</i> , by philosopher and film director Allan Alfred Birkegaard Hansted & documentarist Katja Gry Birkegaard Carlsen , WeCollaborate.org
18:45-19:00	Panel debate of the movie <i>"On the Edge of a new Paradigm"</i>
19:00 - ?	Free time: Here is nothing arranged so people are free to go and explore San Francisco for example

Day 3: 12-Nov 2014

Time	Session 5: Unifying cloning principle and synthetic biology workflow to facilitate generation of 100s of permutations
8:30-9:00	Continental Breakfast and Registration
9:00-9:30	Intro: Objectives and focus of the session by Prof. Richard Kitney , Imperial College London (chair) <i>"Systematic Design in Synthetic Biology"</i>
9:30-10:05	Prof. Steve Oliver , Cambridge <i>"Robot Scientists and model-driven strain design"</i>
10:05-10:25	Selected speaker from abstracts: Dr. Michael Fero , TeselaGen Biotechnology <i>"Combinatorial DNA Library Design"</i>
10:25-10:35	Short break
10:35-11:10	Dr. Dominique Loqué , Lawrence Berk. Nat. Lab/JBEI <i>"Gene stacking approaches to build and control metabolic pathways in plants"</i>
11:10-11:30	Selected speaker from abstracts: Co-founder Reshma Shetty , Ginkgo Bioworks, Inc. <i>"The emerging organism engineering industry"</i>
11:30-11:50	Selected speaker from abstracts: Senior Scientist Morten Nørholm , Technical University of Denmark, Novo Nordisk Foundation Center for Biosustainability <i>"Versatile and automatable DNA editing standards for synthetic biology"</i>
11:50-12:25	Dr. Sunil Chandran , Amyris <i>"Development of pipelines for high-throughput rational strain construction and testing: The industrialization of synthetic biology"</i>
12:25-13:00	Goodbye Lunch



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