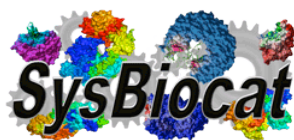




COST Action CM1303



Systems Biocatalysis

Training School 2014

Certosa di Pontignano, Italy

28.05. – 01.06.2014



Draft Program

Wed, May 28th 2014

17:00	Arrival and Registration	
18:00 – 18:30	Stefano Servi (<i>Chair</i>) Woody Fessner (<i>Dean</i>)	Welcome Introduction
18:30 – 19:30	Stefano Servi	Keynote lecture: Systems Biocatalysis
20:00	Dinner	

Thu, May 29th

9:00 – 9:45	Kurt Faber	Asymmetric Bioreduction of Alkenes
9:45 – 10:30	Kurt Faber	Regioselective Carboxylation of Aromatics and Asymmetric Hydration of Styrenes
10:30 – 11:00	Coffee break	
11:00 – 11:45	John Ward	Metagenomics and <i>in silico</i> vs <i>in vivo</i> libraries
11:45 – 12:30	John Ward	Synthetic biology and its application in novel pathway building and cascades
13:00	Lunch	
15:00 – 15:45	Loredano Pollegioni	D-Amino acid oxidase: protein engineering for novel applications
15.45 – 16:30	Loredano Pollegioni	L-Amino acid oxidase in biocatalysis: dream or reality?
16:30 – 17:00	Coffee break	
17:00 – 18:30	Poster Session	Speed Poster Presentations
20.00	Dinner	

Fri, May 30th

9:00 – 9:45	Per Berglund	Transaminases: Mechanisms, engineering and applications
9:45 – 10:30	Per Berglund	Transaminases in cascade reactions, and other promiscuous enzymes
10:30 – 11:00		Coffee break
11:00 – 11:45	Wolfgang Kroutil	Cascades involving alcohol dehydrogenases and transaminases
11:45 – 12:30	Wolfgang Kroutil	Deracemization of sec-alcohols and amines
13:00		Lunch
14:00 – 20:00		Free Afternoon Individual Field Excursions
20.00		Dinner

Sat, May 31st

9:00 – 9:45	Laszlo Poppe	Enzyme immobilization as a tool to improve biocatalysts
9:45 – 10:30	Laszlo Poppe	Stereoselective enzyme-catalyzed processes in continuous-flow mode
10:30 – 11:00		Coffee break
11:00 – 11:45	Maurice Franssen	Biosynthetic strategies: how Nature makes molecules
11:45 – 12:30	Maurice Franssen	Chemo-enzymatic routes for the conversion of biobased compounds to bulk chemicals
13:00		Lunch

15:00 – 15:45	Pere Clapes	Engineering of D-fructose-6-phosphate aldolase for exploitation in synthetic organic chemistry
15.45 – 16:30	Pere Clapes	Structure-guided modification of aldolases for synthetic applications
16:30 – 17:00		Coffee break
17:00 – 17:45	Woody Fessner	The dos and don'ts in synthetic glycobiology
17:45 – 18:30	Woody Fessner	Engineering promiscuous enzymes for sialoconjugation
20.00		Dinner

Sun, June 1st

9:00 – 9:45	Roland Wohlgemuth	Tools and ingredients for the biocatalytic synthesis of metabolites
9:45 – 10:30	Roland Wohlgemuth	Metabolic pathways, retrosynthetic analysis and metabolite space
10:30 – 11:00		Coffee break
11:00 – 12:00		Poster Recovery
12:30		Lunch

End of Training School

Teachers

- Prof. Dr. Per Berglund** KTH Royal Institute of Technology
School of Biotechnology, Division of Industrial Biotechnology
AlbaNova
10691 Stockholm, Sweden
- Prof. Dr. Pere Clapes** Biotransformation and Bioactive Molecules Group
Catalonia Institute for Advanced Chemistry-CSIC
Jordi Girona 18-26
08034 Barcelona, Spain
- Prof. Dr. Kurt Faber** University of Graz
Department of Chemistry
Organic and Bioorganic Chemistry
Heinrichstrasse 28
8010 Graz, Austria
- Prof. Dr. Wolf-Dieter Fessner** Institute for Organic Chemistry & Biochemistry
Technische Universität Darmstadt
Petersenstr. 22
64287 Darmstadt
Germany
- Prof. Dr. Maurice Franssen** Laboratory for Organic Chemistry,
Wageningen University and Research Centre
Wageningen, The Netherlands
- Prof. Dr. Wolfgang Kroutil** University of Graz
Department of Chemistry
Organic and Bioorganic Chemistry
Heinrichstrasse 28
8010 Graz, Austria
- Prof. Dr. Loredano Pollegioni** Centro di Ricerca "The Protein Factory"
DBSM - Dept. of Biotechnology and Molecular Sciences
Università degli Studi dell'Insubria
via J.H. Dunant 3
21100 Varese, Italy
- Prof. Dr. Laszlo Poppe** Department for Organic Chemistry and Technology
Budapest University of Technology and Economics
H-1111 Budapest, Gellert ter 4., Hungary
- Prof. Dr. Stefano Servi** Department CMIC Giulio Natta
Politecnico di Milano
Via Mancinelli 7
20131 Milano, Italy
- Prof. Dr. John Ward** University College London
Gower Street
London WC1E 6BT, UK
- Dr. Roland Wohlgemuth** Sigma-Aldrich
Industriestrasse 25
CH-9470 Buchs, Schweiz