

4th International Synthetic & Systems Biology Summer School – SSBSS 2017
Robinson College, University of Cambridge, UK
17–21 July 2017

www.taosciences.it/ssbss/

ssbss.school@gmail.com

Ver. January 14, 2017

	Mon, 17 July	Tue, 18 July	Wed, 19 July	Thu, 20 July	Fri, 21 July
08:00 – 09:00	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
09:00 – 09:50	Lecture	Lecture	Lecture	Lecture	Lecture
09:50 – 10:40	Lecture	Lecture	Lecture	Lecture	Lecture
10:40 – 11:10	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
11:10 – 12:00	Lecture	Lecture	Lecture	Lecture	Lecture
12:00 – 12:50	Lecture	Lecture	Lecture	Lecture	Lecture
12:50 – 14:30	Lunch	Lunch	Lunch	Lunch	Lunch
14:30 – 15:20	Lecture	Lecture	Lecture	Free	Lecture
15:20 – 16:10	Lecture	Lecture	Lecture		Lecture
16:10 – 16:40	Coffee break	Coffee break	Coffee break		Coffee break
16:40 – 17:30	Lecture	Lecture	Lecture		Lecture
17:30 – 18:20	Poster Session I	Oral Talks I	Poster Session II		Oral Talks III
18:20 – 19:10		Oral Talks II			Oral Talks IV
19:30 – 21:00	Group Photo & Welcome Cocktail	Dinner	Social Dinner		Dinner

Arrival: July 16, 2017

Departure: July 22, 2017

REGISTRATION — Registration Desk

The registration desk will be located close to the Main Conference Room and will be open during the following hours:

Sunday, July 16, 12:30 – 19:00

Monday, July 17, 08:30 - 17:30

Tuesday, July 18, 08:30 - 17:30

Wednesday, July 19, 08:30 - 17:30

Thursday, July 20, 08:30 - 17:30

Friday, July 21, 08:30 - 17:30

Upon registration at the desk, you will receive your badge, vouchers, and conference materials. To facilitate the process please bring with you your registration confirmation. You are kindly requested to wear your name badge during all events of the conference.

Summer School Venue:

Robinson College, University of Cambridge, UK

SSBSS 2017 is a full-immersion course on cutting-edge advances in systems and synthetic biology. The school provides a stimulating environment for doctoral students, early career researchers and industry leaders. The school will be lectured by world-renowned experts of synthetic and systems biology including:

SPEAKERS:

- **Antonino Cattaneo**, *Scuola Normale Superiore Pisa, Italy*
- **Jasmin Fisher**, *Microsoft Research & Cambridge Systems Biology Centre, UK*
- **Carole Goble**, *University of Manchester, UK*
- **Jim Haseloff**, *University of Cambridge, UK*
- **Jay Keasling**, *University of California, Berkeley, USA*
- **Edda Klipp**, *Humboldt University, Germany*
- **Natalio Krasnogor**, *Centre for Synthetic Biology and Bioexploitation, Newcastle University, UK*
- **Markus Ralser**, *University of Cambridge, UK & The Francis Crick Institute London, UK*
- **Uwe Sauer**, *Institute of Molecular Systems Biology, ETH Zurich, Switzerland*
- **Eriko Takano**, *Manchester Synthetic Biology Research Centre, University of Manchester, UK*
- **Sarah Teichmann**, *Wellcome Trust Sanger Institute & EMBL, European Bioinformatics Institute, UK*

SCHOOL DIRECTORS:

- **Massimo Gulisano**, *University of Catania, Italy*
- **Giuseppe Nicosia**, *University of Catania, Italy*
- **Steve G. Oliver**, *University of Cambridge, UK*

SSBSS 2017 CALL FOR PARTICIPATION

The synthetic and systems biology summer school provides graduate students and industry professionals with an intense learning experience on the theory and applications of modern synthetic & systems biology. Over the course of one week, a panel of internationally renowned experts of the field will offer lectures and tutorials covering basic as well as advanced topics.

Application process

Applications are invited from graduate students, postdoctoral researchers and industry professionals looking to use, or already using synthetic biology and/or systems biology methods in their work. Prior experience is not strictly required.

Applicants will be asked to submit a CV. We are also seeking to give participants a chance to discuss their own work with their peers and the speakers. As option, it is possible for each applicant to provide the abstract of a poster they would like to present at the school.

The application system is now open.

For more information visit

<http://www.taosciences.it/ssbss/#application-form>

Important Dates:

- **March 31, 2017 DEADLINE FOR APPLICATIONS**
- April 10, 2017 Notification Acceptance
- The school will take place from July 17 to July 21, 2017

SSBSS 2017 Call for Abstracts

4th INTERNATIONAL SYNTHETIC and SYSTEMS BIOLOGY SUMMER SCHOOL & WORKSHOP

University of Cambridge, UK

July 17 to 21, 2017

<http://www.taosciences.it/ssbss/>
ssbss.school@gmail.com

Call for Abstracts Deadline: March 31, 2017

Submission instructions here: <http://www.taosciences.it/ssbss/#application-form>

Submit an abstract today for the Synthetic and Systems Biology Summer School & Workshop (SSBSS 2017):

<https://easychair.org/conferences/?conf=ssbss2017>

The Synthetic and Systems Biology Summer School is the leading Summer School for sharing the state-of-the-art developments and achievements made in the fields of synthetic and systems biology.

The School and Workshop will take place July 17-21 at the Robinson College, University of Cambridge, England, UK. The School and the Workshop is chaired by Massimo Gulisano and Giuseppe Nicosia, University of Catania - Italy, and Steve Oliver, University of Cambridge, England, UK. Submissions not accepted for talks will also be considered in the poster sessions.

SSBSS 2017 will focus on advances in the science and technology emerging from the fields of synthetic biology, systems biology, genome synthesis and genetic engineering. The School and the Workshop will highlight new tool development, as well as the application of these tools to diverse problems in biotechnology, computational medicine, molecular biology including therapeutics, industrial chemicals and biofuels, natural products, and agriculture.

If you are engaged in above cited topics that you believe can impact the state of the science and technology you must consider submitting.

GOAL

Given the rapidity with which this field moves, it is challenging for both newcomers and experts alike to stay updated with all of the latest advances. The goal of this summer school and workshop is to bring together scientists from academia and industry with diverse but relevant expertise in a setting conducive to discussion of new results and potential collaborative efforts. Invited talks will cover a wide range of topics ranging from fundamental basic science through to applications. Attendees of this workshop will have the opportunity to hear about the latest findings in this fast-paced field and to establish collaborations with scientists who have complementary expertise.

TOPICS

Sessions integrate the recent achievements made in the fields of synthetic biology, systems biology, biochemical engineering, synthetic enzyme, evolutionary engineering, integrated omics, tools and methods, and emerging techniques, healthcare, biofuels, chemicals and materials, biologics, microbial and mammalian systems, and other disciplines and applications.

Submissions should be related to the following areas of synthetic biology, systems biology, genome and genetic engineering:

Applications of Synthetic & Systems Biology
Biological Design Automation
Computational/Mathematical Modeling and Design
Computer Aided Design
Directed Evolution
Designing and Writing Genomes
DNA Synthesis, Assembly, and Sequencing
High Throughput Design Space Exploration
Industrial Applications of Synthetic & Systems Biology
Mammalian Synthetic Biology
Metabolic Engineering
Microbial Synthetic Biology / Microbiome Engineering
Molecular Programming
Omics Science and Synthetic & Systems Biology

Pedagogical/Educational Tools
Plant Synthetic Biology
Protein Engineering
Synthetic & Systems Biology for Cell Culture and Medical Applications
Synthetic & Systems Biology of Industrial Microorganisms

COMMITTEE

Richard Allmendinger, *The University of Manchester, UK*
Yaakov (Kobi) Benenson, *ETH Zurich, Basel, Switzerland*
Leonidas Bleris, *The University of Texas at Dallas, USA*
Paola Branduardi, *University of Milano Bicocca, Italy*
Michele Ceccarelli, *University of Sannio, Italy*
Domitilla Del Vecchio, *MIT, USA*
Diego Di Bernardo, *Telethon Institute & University of Napoli "Federico II", Italy*
Barbara Di Camillo, *University of Padova, Italy*
Barbara Di Ventura, *BioQuant/DKFZ, Heidelberg, Germany*
Simone Furini, *University of Siena, Italy*
Emanuele Domenico Giordano, *University of Bologna, Italy*
J. Gootenberg, *Harvard Medical School, Harvard University, USA*
Markus Herrgard, *Technical University of Denmark, Denmark*
Paolo Magni, *University of Pavia, Italy*
Vincenzo Manca, *University of Verona, Italy*
Giancarlo Mauri, *University of Milano Bicocca and SYSBIO - Center of Systems Biology, Italy*
Giuseppe Narzisi, *New York Genome Center, USA*
Danilo Porro, *University of Milano Bicocca, Italy*
Francesco Ricci, *University of Rome "Tor Vergata", Italy*
Gianna Maria Toffolo, *University of Padova, Italy*
Renato Umeton, *Dana-Farber Cancer Institute, USA*
Luca Zammataro, *Yale University, USA*

SSBSS 2017 solicits talks, posters and tool presentations on synthetic biology, systems biology, metabolic engineering, computational biology and genome engineering. The event brings together biologists, physicians, computer scientists, mathematicians, engineers, and physicists interested in a synthetic and/or system-level understanding of biological processes.

Contributions should be submitted to one of the following categories:

- I) Talks,
- II) Posters,
- III) Tool presentations.