

CONFIRMED SPEAKERS

Giovanni Bertoni, UML - Università degli Studi di Milano

Víctor de la Torre, CNIO - Fundación Centro Nacional de Investigaciones Oncológicas

T. Feher, Biological Research Center of the Hungarian Academy of Sciences

GENEART company

M.ª José Gosálbez, CSISP - Centro Superior de Investigación en Salud Pública

Raik Gruenberg, Center for Genomic Regulation, Barcelona (Spain)

Alfonso Jaramillo, CNRS - Centre National de la Recherche Scientifique

Ismail Mahmotglu, BU - Bauer Umwelt GmbH

Esteban Martínez, CSIC - Centro Nacional de Biotecnología

Arnau Montagud, Universidad Politécnica de Valencia

Emilio Navarro, Universidad de Málaga

Andrés Moya, Institut Cavanilles de Biodiversitat i Biologia Evolutiva, Universitat de València

Vicente Pérez, CSISP - Centro Superior de Investigación en Salud Pública

Manuel Porcar, Institut Cavanilles de Biodiversitat i Biologia Evolutiva, Universitat de València

Markus Schmidt, IDC - International Dialogue and Conflict Management

Javier Urchueguía, Universidad Politécnica de Valencia

Alfonso Valencia, CNIO - Fundación Centro Nacional de Investigaciones Oncológicas

NOTES

The laboratory practice of SB - "wetlab" - are aimed at researchers from technological branches who have no expertise, with the working principles of a molecular biology laboratory.

Practices of "drylab" are aimed at students from Life Sciences, with the intent to convey the basics of computer design in SB.

VENUE

Universidad Politécnica de Valencia · Centro Superior de Investigación en Salud Pública

PRICES

150 € course // 350 € course and accommodation (5 nights)

MORE INFORMATION AND REGISTER ON LINE

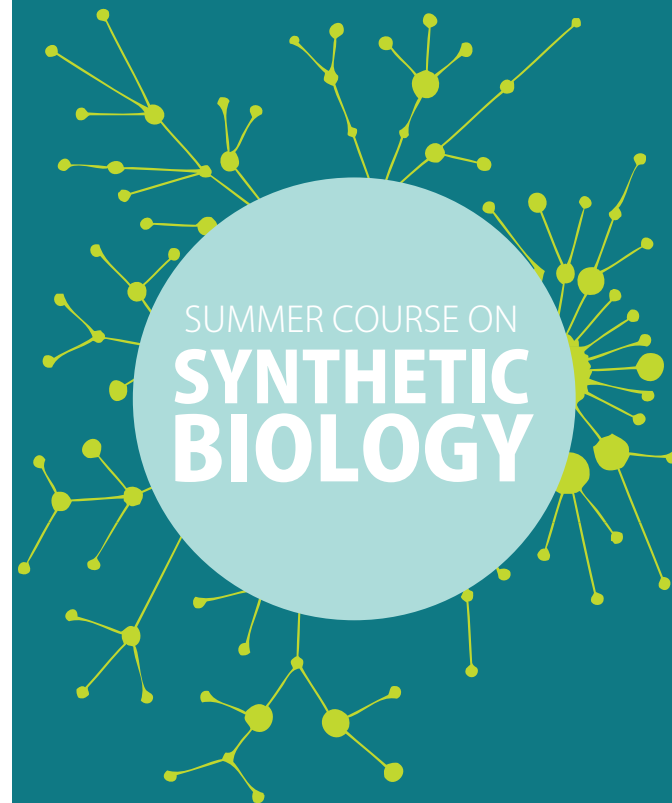
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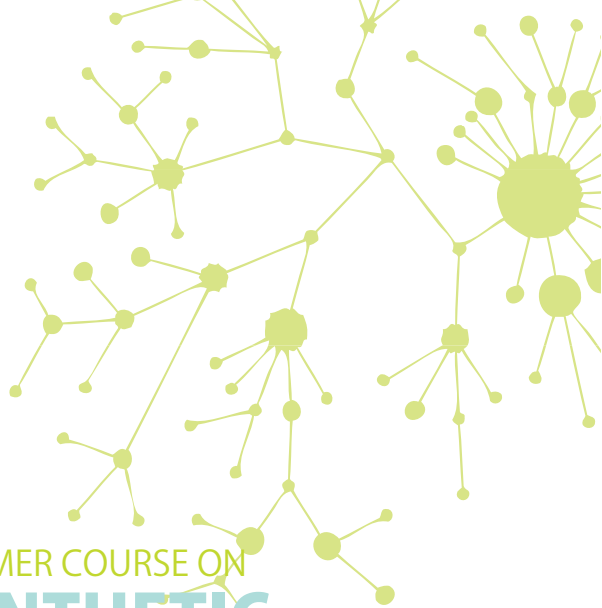


Ciudad Politécnica de la Innovación



TARPOL PROJECT

Valencia, 19-23 April 2010



SUMMER COURSE ON SYNTHETIC BIOLOGY

Thinking of Synthetic Biology (SB) as a new field of technology in the intersection of biology and engineering, the importance of attracting and training new researchers in this discipline becomes evident. With this objective, Institute Cavanilles (University of Valencia) and Intertech Group of the Universidad Politécnica de Valencia have organized **Summer Course on Synthetic Biology**, within the framework of TARPOL (KBBE-212894).

This activity will be developed from two sides: training and motivational. For this reason, the program will combine the expertise of the organizers to train scientists from an interdisciplinary perspective, in order to offer a range of activities for young researchers from a wide range of fields. Summer Course on Synthetic Biology conference also includes lectures by the leading scientists of this new discipline on the constitutive principles underlying SB, which will allow attendees to see and understand the great possibilities of this new scientific area.

PROGRAM MONDAY, APRIL 19

09:00 Welcome
09:15 From genetic engineering to Systems Biology
10:15 Introduction to Synthetic Biology
11:30 Coffee break
12:00 Protein Synthetic Biology
13:15 Lunch
15:30 Track 1 (Advanced course drylab)
17:00 MATLAB Basic course and other codes often used in modeling

15:00 Track 2 (Laboratory techniques in SB)
16:30 Practical Session 1

TUESDAY, APRIL 20

09:00 Basic molecular biology: the transmission of information in biology
10:45 Coffee Break
11:15 Defining Synthetic Biology standards
13:00 Lunch
15:30 Track 1 (Advanced course drylab)
17:00 Basic genetic circuits and its modeling

15:00 Track 2 (Laboratory techniques in SB)
16:30 Practical session 2

WEDNESDAY, APRIL 21

09:00 Boolean logic in the genetic control of regulatory circuits
10:45 Coffee Break
11:15 Basic regulatory circuits
13:00 Lunch
15:30 Track 1 (Advanced course drylab)

15:00 Track 2 (Laboratory techniques in SB)
16:30 Practical session 3

THURSDAY, APRIL 22

09:00 Control theory applied to biology
10:45 Coffee Break
11:15 Application of bioinformatics to Synthetic Biology
13:00 Lunch

15:30 Track 1 (Advanced course drylab)

15:00 Track 2 (Laboratory techniques in SB)
16:30 Practical session 4

FRIDAY, APRIL 23

09:00 Applications of Synthetic Biology in biomedicine
10:15 Development of Synthetic Biology tools for environmental applications
11:30 Coffee break
12:00 iGEM, an educational experience for the dissemination of SB among young scientists
13:00 Lunch
15:00 SB and new businesses, towards the economy of the future
15:30 Ethical and philosophical debate about the SB
16:00 Minimum Genomes and the development of new concepts SB chassis
17:00 Epilogue and summary of the course

Track 1 Track 2

Track 1 teachers:

Emilio Navarro, Universidad de Málaga
Arnau Montagud, Universidad Politécnica de Valencia

Track 2 teachers:

María José Gosálbez, Centro Superior de Investigación en Salud Pública
Vicente Pérez, Centro Superior de Investigación en Salud Pública