

Organisers:



Centro de Investigaciones
Biológicas - Consejo Superior de
Investigaciones Científicas



Universidad
Internacional
Menéndez Pelayo



Master in Molecular
and Cellular Integrative
Biology (at CIB-CSIC)

presents

Systems and Synthetic Biology Workshop

Centro de Investigaciones Biológicas
(CIB-CSIC), Madrid, Spain

15 December 2017

Workshop Objectives

Recent advances in DNA synthesis have opened up many new options for modifying or creating novel biological systems through the application of a variety of tools and expertise derived from the physical sciences, engineering, biology, computer science and mathematics. **Synthetic Biology** aims at streamlining the design and synthesis of robust and predictable biological systems using engineering design principles. Designing biological systems requires a deep understanding of how genes and proteins are interacting in living cells.

Systems Biology aims at elucidating the cellular organization at gene, protein and network level using computational and biochemical methods in a holistic context that takes into account the layered levels of complexity, and there is both synergy and complementarity between these two hybrid disciplines. The intention of this workshop is to consider Systems Biology and Synthetic Biology as **complementary fields** of research, bringing together researchers with diverse views, strategies and approaches relevant to the understanding and engineering of biological systems.

Invited Speakers

Luis Serrano (Centre for Genomic Regulation, Barcelona)

Luis Ángel Fernández (CNB, Madrid)

Alfonso Rodríguez-Patón (LIA-UPM, Madrid)

Esteban Martínez (CNB, Madrid)

Juan Nogales (CNB, Madrid)

..... and more to be announced!