



Synthetic Biology Workshop 14th–16th September 2009 St Anne's College University of Oxford

RoSBNet is a Network in Synthetic Biology bringing together researchers working in Synthetic and Systems Biology as well as systems/control engineers, electrical, chemical, computer engineers, physicists and mathematicians to address the theoretical and practical challenges of designing new robust biological networks or modifying already existing ones, which have to function inside uncertain biological environments, all the way from parts to whole systems. The Network also focuses on the Ethical, Legal and Societal Issues that are raised by advances in Synthetic Biology, aiming to create a fruitful discussion on how such concerns can be balanced by the potential usefulness of the many applications, such as environmental cleanup, fuel generation and healthcare. The objective is to transfer knowledge and develop a fruitful discussion and cross-fertilization of ideas on modelling, analysis, design and construction of synthetic biological networks.

Topics:

- **Biology Theme:** Constructing simple function network motifs (switches, oscillators, etc.) from standardized parts.
- **Electrical/Computer Engineering Theme:** The “Art of electronics” - building transistors, op-amps etc.
- **Control/Systems Engineering Theme:** Modelling and understanding the robustness of simple biological and electrical circuits.

Ethical, economical, philosophical, legal and societal issues as well as measurement methods will form **underlying themes**.

Confirmed Speakers:

Professor Ron Weiss (Massachusetts Institute of Technology, USA)

Professor Jeff Hasty (University of California at San Diego, USA)

Professor Domitilla Del Vecchio (University of Michigan at Ann Arbor, USA)

Professor Mustafa Khammash (University of California at Santa Barbara, USA)

Professor Hana El Samad (University of California at San Francisco, USA)

Professor Julian Savulescu (University of Oxford, UK)

Professor Chris J. Myers (University of Utah, USA)

Professor Ralf Wagner (GENEART)

Professor David Fell (Oxford Brookes University)

Dr Jim Haseloff (University of Cambridge, UK)

Dr George Wadhams (University of Oxford, UK)

Dr Jane Calvert (University of Edinburgh, UK)

Fill in the registration form now!

Website: <http://www.rosbnet.org>

Wiki: <http://sysos.eng.ox.ac.uk/control/RoSBNet/>

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