

# C1net – METABOLIC MODELLING WORKSHOP

Monday 15- Friday 19 December 2014

## About

Redirecting an organism's metabolism towards novel products raises a number of design issues. What is the impact of the new pathway on the cell's energy and redox metabolism? Can the precursor and coenzyme requirements be satisfied? Should some parts of the metabolic network be blocked off to ensure the most efficient routes to the product are favoured? Answering these questions needs tools that can compute and compare feasible routes through the cell's metabolic network, as well as methods for defining and representing the metabolic network in a way the tools can use. This is the domain of structural analysis of metabolism, and techniques such as elementary modes analysis and flux balance analysis. This combined theoretical and practical course will explain the theory behind these techniques and give hands-on experience of calculating feasible and optimal routes through metabolic networks. It will be presented by David Fell and his colleagues in the Cell Systems Modelling Group. The principles of kinetic modelling and the principles of changing metabolic fluxes by altered enzyme expression levels will figure in a subsequent follow-on course.

## Details

What: Free participation, accommodation (for non-local delegates) and meals for 5 days and 4 nights

Participants are required to bring their own laptop, but software will be provided.

When: Monday 15 December 2014, 13:30 – Friday 19 December 2014, 13:30

Where: St Anne's College, Woodstock Road, Oxford, OX2 6HS, UK

For travel instructions, see <http://www.st-annes.ox.ac.uk/about/find-us>

## Application

Attendance is by invitation after application by 31 October 2014 and is only open to signed-up members of C1NET or one of the other BBSRC Networks in Industrial Biotechnology and Bioenergy (BBSRC NIBBs).

Successful applicants will be notified by 14 November 2014.

**Open to C1net and other BBSRC NIBB members only.**

**So join now!!**

[www.c1net.co.uk](http://www.c1net.co.uk)

**FOR MORE DETAILS AND APPLICATION FORM**

visit <http://www.c1net.co.uk/Events-workshop-1.html>



**FREE  
PARTICIPATION  
& BOARD**

