Postdoctoral Position in Synthetic Biology

(18 months)

in the laboratory of Dr. Heath Murray in the Centre for Bacterial Cell Biology
of the Institute for Cell and Molecular Biosciences at Newcastle University, UK
(http://www.ncl.ac.uk/cbcb/staff/profile/heath.murray)

EPSRC 5-year program grant: Synthetic Portabolomics

"Leading the way at the crossroads of the Digital and the Bio-Economies"

Synthetic Biology assumes that parts, devices and circuits designed for (or evolved in) one organism can be utilized in another one and that this "orthogonality" will lead to seamless and scalable biological engineering. Yet reality is far different: currently with each new application a bespoke design of both bio-circuits and cell chassis is required, thus wasting large amount of research effort.

The goal of this project is to bring forth a breakthrough in "Synthetic Portabolomics" that will enable the design of bio-circuits that are portable across cell chassis. This vision calls for radical innovations in biological engineering and computational sciences that will empower the synthetic biologist to design a biological circuit in one host chassis and be able to port it into another species with minimal human intervention while maintaining functionality.

The Centre for Bacterial Cell Biology hosts research groups all working on fundamental problems of bacterial cells, providing a dynamic and inspirational research environment.

The ideal candidate will have experience in genetics, microbiology, and molecular biology, as well as evidence of high quality publications. Only applicants holding a PhD degree or the expected imminent submission of a PhD thesis will be considered.

Further information can be obtained by contacting **Dr. Heath Murray**
heath.murray@newcastle.ac.uk
http://www.ncl.ac.uk/cbcb/staff/profile/heath.murray
http://portabolomics.ico2s.org