

Monash e-Research Centre



Thursday, 25 November 2010

e-Research Exemplars and Discussion Forum / eCoffee

'Biology and Engineering: A Strong Brew'

Presented by Professor Kerry Hourigan

(Director of the Division of Biological Engineering, Faculty of Engineering)

Time: 10am-11am (coffee from 9.45am)

Location: Room 135, Bldg 26, Clayton Campus

Enquiries: Debra.Truin@adm.monash.edu.au or Gaby.Bright@versi.edu.au

You are invited to an informal discussion forum - open to all interested researchers and staff:

Biological Engineering combines the constructionist engineering approach to the reductionist biology tack. It is a multidisciplinary pursuit. - It draws on biology, engineering, physics, chemistry, mathematics and increasingly on eScience. It involves a wide range of physical and time scales. It is performed in vivo, in vitro, in silico and in plumbago, using bioreactors, microscopes, synchrotrons and supercomputers.

Many challenges confront the biological engineer, including complexity of processes, control of experiments, range of scales, and bridging the language between different disciplines. Some examples of these challenges will be put forward for discussion.

Biography:

Kerry Hourigan is a Professor of Mechanical Engineering and Director of the Division of Biological Engineering at Monash University. He was a Senior Principal Research Scientist at the CSIRO and has served in the aerospace, automotive, manufacturing, and mineral processing industries. His research interests have ranged from astrophysics to aeronautics, to acoustics, but with a particular focus on biofluids in recent years. His main aim is to develop the capacity of the University in biological engineering and link engineers with biologists and other scientists in multidisciplinary attacks on important problems.

e-Research Exemplars and Discussion Forum / eCoffee:

These monthly presentations bring together the e-Research support network at Monash University, along with all interested researchers and staff, to discuss the opportunities and challenges presented by the application of e-Research technologies and strategies for the particular research domain of the discussion. The presenter first introduces the audience to the topic / case study and then the session is opened up for questions. The monthly forum is co-hosted by the Monash e-Research Centre and VerSI.