

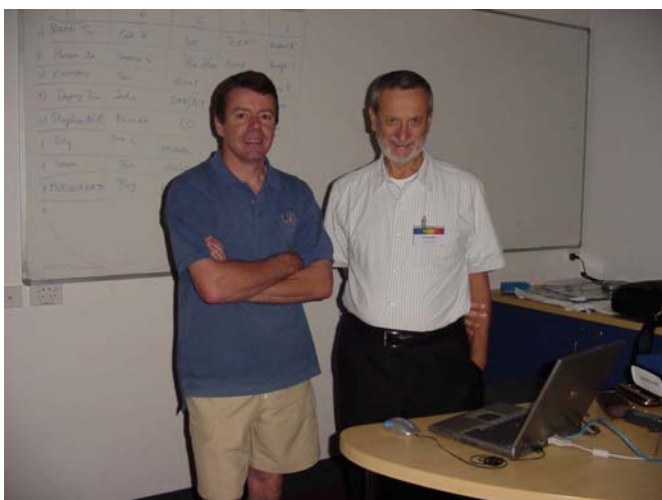
Report on the Fluoro2006 Workshop on use of optical spectroscopic and microscopic techniques in biological and biomedical research, Coffs Harbour 2-6 October 2006.

The Fluoro2006 workshop was a satellite of the 2006 COMBIO conference. The workshop, organised by Pierre Moens, Joelle Coumans and Rob Learmonth, was presented to 44 participants by 6 scientists with support from 10 company technical representatives. A comprehensive series of lectures and practical exercises were presented by the international experts Prof Enrico Gratton (University of California Irvine), Prof Dave Jameson (University of Hawaii) and Prof Ken Jacobson (University of North Carolina). Australian lecturers were Dr Pierre Moens (University of New England) and A/Prof Rob Learmonth (University of Southern Queensland), with Prof Brett Hambly (University of Sydney) contributing to practical teaching. The first day was devoted to lectures, providing a theoretical underpinning for the practical sessions. Thereafter morning lecture sessions were followed by practical workshops. Topics included basics of fluorescence, instrumentation, light and fluorescence microscopy, fluorescent labelling, Förster resonance energy transfer (FRET), fluorescence correlation spectroscopy (FCS), raster image correlation spectroscopy (RICS) and fluorescence lifetime imaging (FLIM), and concluded with 3-D particle tracking. Practical workshops included further discussions of microscopic applications (Jacobson), confocal microscopy and RICS (Gratton, Moens and Leica staff), spectral corrections & polarization (Jameson and Lastek staff), FRET (Hambly and Shimadzu staff) and spectral and membrane fluidity analysis (Learmonth & Varian staff).



The workshop was well supported by professional societies and industry, and we sincerely thank our sponsors without whom the workshop could not be offered at fee economical for early career researchers. Student scholarships were provided by the ARC/NHMRC Research Network for Fluorescence Applications in Biotechnology

and Life Sciences (20) the Australian Society for Biochemistry and Molecular Biology (3) and the Australian Society for Biophysics (2). The following companies were major supporters through provision of instrumentation and staff to assist in the practical sessions; Lastek and Jobin Yvon Horiba, Leica Microsystems, Shimadzu Oceania, Varian and ISS. In addition the workshop was supported by BMG Labtech, Edinburgh Instruments and Invitrogen. The University of New England provided financial and administrative support and access to the National Marine Science Centre facilities. For the first time the of Fluoro workshop series we had access to a confocal microscope (Leica) for all practical sessions. Additionally ISS had organised the provision of a phase-modulation fluorometer for determination of lifetimes; unfortunately equipment did not arrive due to shipping delays, however Mark Parsons from ISS was still able to make useful contributions to the workshop.



Pierre Moens and Enrico Gratton

In addition to pleasant surroundings of Coffs Harbour, the social atmosphere was also facilitated through provision of excellent catering by French chef Daniel Labrosse.

Feedback from the attendees was that they found the workshop a most useful to fluorescence theory, techniques and applications. The scholarship holders were asked to provide individual reports, which will be collated and forwarded to the scholarship providers.

The organising committee would particularly like to thank FABLS for support in administration and promotion of the workshop, and as a major sponsor provision of 20 scholarships to support attendance by postgraduate students.