Course Announcement

Live Cell Imaging 2006
A Practical Workshop for Biologists

Website details: http://microimaging.monash.org/training.html

3 – 8 December, 2006
Monash Micro Imaging
Monash University, Melbourne, Australia

COURSE CONTENT
Principles of optics and microscopes
Light microscopy and image formation
Fluorescence & Confocal microscopy
Fluorescent Probes and Proteins
Fluorescence applications: FRET, FRAP, FLIM
Multiphoton Microscopy
3D and Deconvolution microscopy
TIRF
Working with cells
Optimising for Live cell imaging
Digital Imaging and Analysis of multidimensional datasets

INSTRUMENTATION
Point scanning confocal microscopes from the major companies, including Leica, Zeiss, Olympus and Nikon, with disc scanning systems from Perkin Elmer and Andor. Some of these are spectral confocal microscopes (FV1000, SP5 etc). The Leica SP5 is also equipped with a multiphoton laser and NDD’s, and there will be TIRF systems available. Apart from that, there are a range of widefield automated fluorescence microscopes with deconvolution, cameras, including EMCCD’s, various cell chambers, incubating systems, accessories and a fluorescence probes. For analysis of multidimensional data and fluorescence quantitation, there will be several flavours of software for use. As companies confirm the specific details of systems, the information will be updated.

Instructors
Ian Harper, Monash University (convener)
Simon Watkins, University of Pittsburgh
Stephen Cody, Ludwig Institute for Cancer Research, Melbourne
Stephen Firth, Monash University
Sarah Ellis, PeterMacCallum Cancer Centre

There will also applications specialists from vendors, and assistance from postgraduate research assistants to further support the practical activities.

AIMS
This workshop will present an intensive and comprehensive course in Live Cell Imaging for all students and researchers of biology requiring functional imaging of molecules, cells, tissues and organs. A wide range of instrumentation will be available, and extensive use will be made of cell cultures to outline imaging modalities, experimental approaches and biological applications. This is not a
course for beginners: participants must have some prior experience with microscopy, and specifically fluorescence and confocal imaging. The course is intended to give participants a strong overview and experience of imaging modalities, and to provide an opportunity to learn experimental imaging using a range of modern imaging systems.

**FORMAT**
The course will cover 5 days, with registration and ice-breaker welcome on 3 December, and coursework from 4-8 December. The program provides approximately 12 hours of theory and over 16 hours of practical and experimental activities. Participants who would like to bring specific cell lines to work on are encouraged to contact the organizer. We will provide several cell lines for work, and also access to an imaging laboratory with a range of image processing software. Participants are expected to undertake a short study and to present results on the final day.

**General Information**

**Cost**
Full registration is $1100 (incl GST) which includes all refreshments, lunch and dinner, course notes etc), and for those wishing to attend lectures only, the half course fee is $550. Accommodation is extra, but we have sourced local University residence rooms at $50 which may be requested and paid with the registration. Other accommodation is listed below and you will need to make all your own arrangements for that.

**Student Scholarships**
Several scholarships are available care of the FABLS ARC Network. Postgraduate students (MSc/PhD) may apply for a scholarship to the value of 50% of registration. This funding is limited, so please put your application in early: a half page submission stating what research you are undertaking, and how Live Cell Imaging will benefit it, plus a photocopy of student ID. Submit by fax ASAP (see registration form).

**Venue**
The conference will be held on the Clayton campus of Monash University, which is located 22km east of the centre of Melbourne. Monash is 42km from Melbourne International Airport, travel arrangements are outlined below. Melbourne is the 2nd largest city in Australia and capital of the state of Victoria. It is an elegant city which is known for its Arts precinct, restaurant and parks and gardens. Close by are excellent beaches, vineyards etc.

**Transport**
Buses and taxis are available for transport from the airport to the Clayton campus of Monash University or the city. Here is some information on taxis and car hire companies.

Black Cabs Combined
35 Downing St, Oakleigh, VIC 3166, Phone: 13-2227, Fax: (03) 9569-5621.

Avis, Hertz and many other car hire companies are available from the airport or alternatively from other areas (make a selection from the Citysearch website, below)
Accommodation
Participants will be able to stay on campus in the Halls of Residence, a 10-15 min walk from the venue. This is basic accommodation, single room with shared bathroom, breakfast included. Cost approx $50/day, at your expense, but payable via LCI2006.

Meals
Lunch and dinner provided, the dinner being at the Halls of residence. Some walking is required, so anyone with disabilities should ensure they inform the convener. If you have any specific dietary requirements, eg, vegetarian, vegan, diabetic, please inform us.

Other accommodation
The following accommodation is located close to Monash and is most convenient:

CLAYTON MONASH MOTOR INN
1790 Dandenong Road, (Princes Highway), Clayton, Victoria 3168
Ph: 61-3-9544-0911, Email: clayton.monash.m.inn@bigpond.com
Rates: $118.00 Room (Single), 122.00 Room (Twin share)
Also, serviced one bedroom apartments with full cooking facilities, available from $155 per night (for 2-6 nights) from $140 per night (for 7 nights)
0.5 Kilometer from Monash University (i.e. crawling distance)

GATEWAY ON MONASH BOUTIQUE HOTEL
630 Blackburn Road, Mount Waverley, Victoria 3149
Ph: 61-3-9561-4455
Rates: $187.00 Room (Single), includes continental breakfast. Approx 1 Kilometer from Monash University (i.e. walking distance)

BRUCE COUNTY MOTOR INN
445 Blackburn Road, Mount Waverley, Victoria 3149
Ph: 61-3-9803-5411
Rates: $165.00 Room (Single/double), and second bed for an additional $22. Includes continental breakfast.
2.5 Kilometers from Monash University (i.e. good walking distance)

NOVOTEL  (http://www.novotelglen.com.au/)
285 Springvale Road, Glen Waverley Melbourne, Victoria 3150
Phone:(03) 8561 2345, Fax: (03) 8561 2391
Email: H2068-RE01@accor-hotel.com
Single: $225 per night
Approx 4 Kilometers from Monash University  (i.e. good running distance)

Other web sites of interest
General accommodation service at Melbourne: http://www.melbourneontheweb.com/
The official City of Melbourne tourist information site: http://www.visitmelbourne.com/
Melbourne Citysearch: http://melbourne.citysearch.com.au
Weather and Dress

December in Melbourne is variable and although generally warm, the weather can fluctuate between cold, colder and warm-ish. Prepare for rain and cooler weather (we live in hope), and dress like an onion (layered) so that you can regulate your own body temperature.