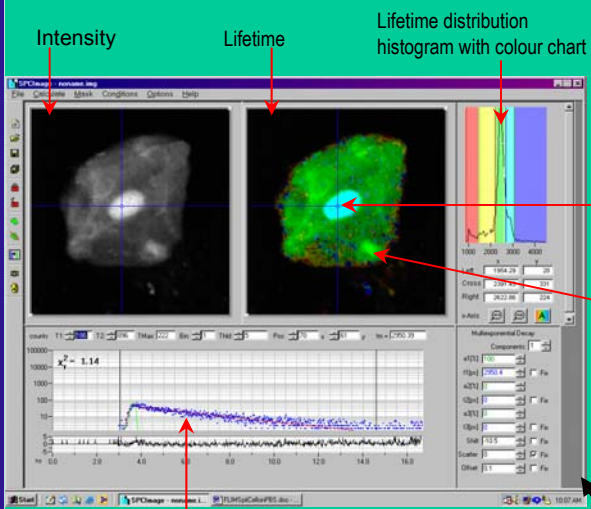


Your ultimate experience in Bio-Imaging

June 13, 2006



Lifetime of dye bound in nucleus: 2.7 – 3.1 ps

Lifetime of dye bound in 'rest' of cell: 2.2 – 2.7 ps

Decay trace for point specified on image and for binning level selected; used to extract the lifetime of the fluorophore

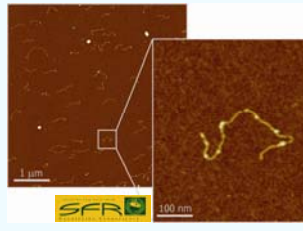
The Saskatchewan Structural Sciences Centre (SSSC) invites you to a "Satellite Workshop" "Advanced Bio-Imaging" on June 13, 2006. Experience a full day of Lectures and hands-on imaging. Bring your samples and dive into new areas of research with expert guidance. "Hands on" will be scheduled through out the CFBS meeting. This workshop is limited to 50 participants and enrolment is on a first come basis. Free for CFBS and CLS meeting registrants and \$50 for others. Register Early and indicate the sessions that you would like to attend.

Register on the CFBS website or contact R.Sammynaiken@usask.ca

Atomic Force Microscopy

Dr. Andrea Slade
Dr. R.Sammynaiken
Mr. J. Maley

Biological AFMs provides high pixel density imaging capabilities. In the case of sparsely dispersed samples, such as the DNA molecules above, this allows one to 'survey' large sample areas and while obtaining these images, pan the area and digitally zoom-in on smaller regions of interest (eg. individual DNA strands) without sacrificing image resolution or losing the original area of reference



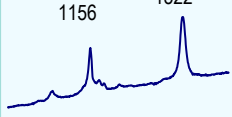
Solutions for a nanoscale world. Veeco

Raman Microscopy

Dr. R. Bormett
Dr. K. Akers
Dr. R. Sammynaiken

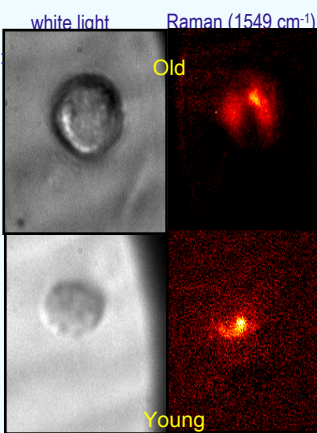


Distribution of DNA within a egg the effects of aging



Raman shift cm-1

Mapping vibrations that are specific to a chemical of interest shows the chemical distribution within the biomaterial



Fluorescence Lifetime Imaging and 2 photon Fluorescence Microscopy

Dr. J. Rocheleau
Dr. S. Brunet
Mr. B. Bobbit



The combined 2 photon and lifetime imaging is the first instrument in Canada to offer the advantages of 2- photon imaging and using a single fluorescent probe to detect chemically different areas.

2 photon FLIM of cell showing the t_m of Cells dyed with NAO in DMSO
Excitation: 830 nm (2-photon)
Repetition Rate: 4.75 MHz
40X objective (oil immersion), zoom
Non-descanned port, PMC-100-4, no emission selection filter (IR blocking only)
Total time for acquisition: 5 min



Advanced Bio-Imaging Workshop

An Invitation

Saskatchewan Structural Sciences Centre
Thorvaldson Building, University of Saskatchewan
306-966-4373 sssc@usask.ca