ADJUNCT PROFESSORS

Professor Roger Amos

Uses quantum chemistry to calculate molecular properties from first principles. Calculation of electromagnetic properties. A particular interest in Density Functional Theory, and its application to excited states using time-dependent DFT.

Professor Veronica J James OAM

Fibre diffraction of hair can be used as a totally noninvasive screening test for breast cancer for women of all ages. (With Professor J Kearsley [Cancer Care, St George Hospital, Sydney], Dr B E Willis [Eastmoreland Hospital, Portland Oregon], Dr Osmo Räsänen [Breast Cancer Centre, Turku, Finland])

Fibre diffraction is able to diagnose the presence of these cancers at an earlier stage than any other cancer. (*With Dr T Robertson, Dr A Boyd, Professor J Papadimitriou* [*Division of Pathology, School of Surgery and Pathology, UWA*])

Fibre diffraction of hair can be used as a totally noninvasive screening test for colon cancer. (With Dr A Polyglase [Monash U Medical School])

Fibre diffraction of hair may be able to be used as a totally noninvasive screening test for some forms of liver, lung and skin cancer. (With Professor D Morris [St George Hospital, Sydney], Professor P Heenan [UWA], Professor B McCaughan [Royal Prince Alfred Hospital, Sydney])

Fibre diffraction of hair may be used as a relatively inexpensive, noninvasive gene test. (With Professor R Scott [Molecular Genetics and Cytogenetics, Hunter Area Pathology Service, NSW])

Chemical analysis to determine the origin of the change in the α -keratin structure of hair in breast cancer. (With Dr G Corino [CSIRO Fibre Technology, Geelong], Dr J Ouwagie [Innogenetics, Belgium])

Fibre diffraction of hair can be used as a totally noninvasive screening test for Alzheimer's Disease. (With Dr T Robertson and Professor J Papadimitriou [Division of Pathology, School of Surgery and Pathology UWA], Professor R Martins [Alzheimer's and Ageing, School of Biomedical and Sports Science, Edith Cowan U, Sir James McCusker Alzheimer's Disease Research Unit, School of Psychiatry and Clinical Neurosciences, U WA, Hollywood Private Hospital, Perth])