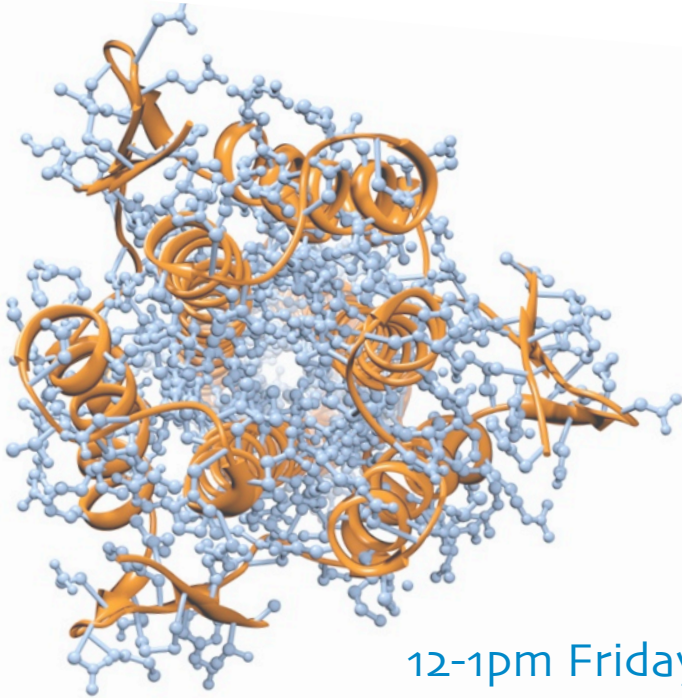


LIFE SCIENCE COMPUTATION SEMINAR SERIES



12-1pm Friday September 25

Genomic Data Analysis of Ovarian Cancer

Professor David Bowtell

Cancer Genomics & Biochemistry Laboratory, Peter MacCallum Cancer Centre

12-1pm Fridays

Semester 2

Level 1 Seminar Room

Borchardt Library

La Trobe University

Video link-up between
Monash, La Trobe and
Melbourne



Cancer can be considered to be a genetic 'software' problem. The cellular complement of DNA (genome) represents an embedded code that allows the cell to perform autonomous and cell-environment interactive functions. The DNA code is disrupted in a cancer cell, due to inherited and/or acquired defects, allowing the cell to inappropriately divide, spread (metastasize) and survive. Cancer research of the last two decades has focused finding genes that are defective in cancer, with several hundred identified to date. Recent research has allowed whole genome scans for inherited risk factors and somatic mutational events. These surveys are at a particularly intense stage at present, with many genome

wide associations studies reported in the last year and whole genome sequencing of cancer genomes now underway. It is anticipated that in the future there will be an increasing focus on modeling the interaction between these mutational events. The VLSCI should be of substantial value in allowing analysis of cancer genomes and in particular, helping understand how mutations cooperate to allow the major phenotypes of malignancy. The presentation will overview these concepts and developments.

Further information:

<http://www.versl.edu.au/versl/lsc-chalmers.html>

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