

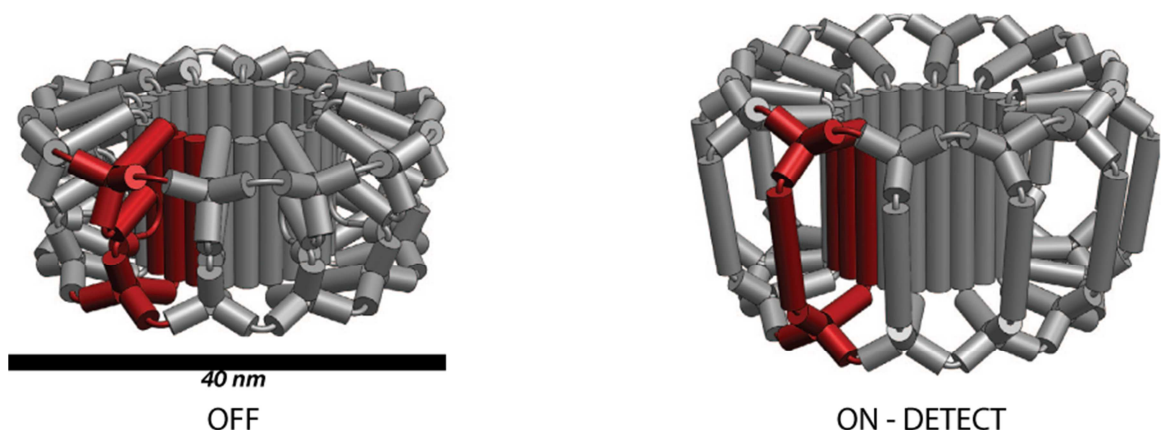


Lawrence Lee, PhD
Group Leader
Structural and computational Biology Division

Building bioinspired nanodevices

The molecular motors group at the Victor Chang Cardiac Research Institute in Sydney Australia seeks enthusiastic applicants to undertake exciting short-term projects in molecular or synthetic biology, or bionanotechnology. The molecular motors group is a newly established research program that uses multi-disciplinary and innovative approaches to understand large biological machines and to create new nanoscale devices from a fusion of synthetic and biological components.

Successful applicants will have the opportunity to be involved in the design and synthesis of novel biosensors built from DNA and inspired by nature's molecular mechanisms in sensing developed over 4 billion years of evolution. The project entails the construction and parameterisation of mathematical models with single molecule fluorescence microscopy to describe and tune biosensors, the engineering and construction of optical readout devices and potentially the opportunity to couple sensors to mobile devices for rapid and cheap diagnostics.



The internship will provide a rare opportunity to work with a diverse range of techniques. These include, the design and synthesis of DNA origami nanostructures, construction of single molecule fluorescence microscopes, mathematical modelling, software development and the construction of laser optic devices.

Successful candidates will be awarded a modest stipend to cover return airfares and some living expenses in Sydney, Australia.

Interested applicants should email a recent CV to Dr Lawrence Lee (l.lee@victorchang.edu.au)