



Project description

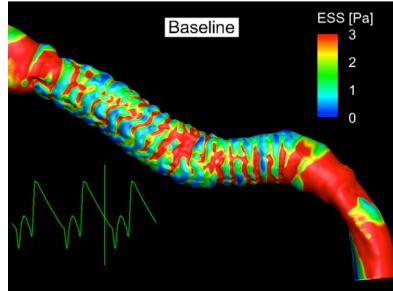
Cardiovascular diseases have been widely acknowledged as the major cause of the death in our community. Experience has shown that the build-up of plaque develops into stenosis or blockage in the arteries. Insertion of stents is one of the most applied interventions to rectify this problem but implantation of stents can be awkward in these geometrically complex areas. There are reported cases whereby patients' condition deteriorates within 5 years leading to high mortality.

Primary aim

Fundamental knowledge in mechanical engineering science will be used to study the hemodynamics (blood flow) in coronary arteries with high curvatures and stents implanted. The aim is to determine the mechanism that causes restenosis.

Student attributes

Strongly motivated candidates with a Bachelor Degree (with honours), or Masters in Mechanical/Aerospace Engineering and who have demonstrated experience in aerodynamic research are encouraged to apply. The applicant should have



outstanding academic results to be competitive for an academic scholarship. A good knowledge of fluid mechanics particularly in aerodynamics, flight mechanics, and turbulent flows is essential. The candidate is also required to have good programming skills, particularly with MATLAB and C.

For further enquiries

Rey Chin

The University of Adelaide
SA 5005 Australia

Telephone: +61 8 8313 5471

Free-call: 1800 061 459

Online enquiries: rey.chin@adelaide.edu.au

or

Telephone: +61 8 8313 5208

Free-call: 1800 061 459

Online enquiries: adelaide.edu.au/student/enquiries