

Southampton SPCR internship projects 2025

Name & email supervisor(s): Mark Lown (m.lown@soton.ac.uk) – James Faulkner (j.a.faulkner@soton.ac.uk)
Length and dates of internship: 06/10/2025-31/10/2025 4 weeks full-time (or part-time over a longer period)
Host department: Primary Care, Population Sciences and Medical Education, University of Southampton
How will the internship be conducted: <input type="checkbox"/> In person at the university <input type="checkbox"/> Virtual/ from home <input checked="" type="checkbox"/> Both are possible, depending on preference of student
Title internship project: A scoping review of modifiable markers for monitoring atrial fibrillation treatment
Summary of the internship project: <i>(max 250 words, can include hyperlinks to further information)</i> One 10 people aged over 65 in the UK have AF and its prevalence is increasing. AF is associated with an increased risk of stroke, Heart Failure (HF), cognitive impairment, and death. Current treatment recommendations include stroke prevention, symptom management and cardiovascular and co-morbidity risk reduction. Although stroke prevention is at the core of AF management, many deaths are due to Sudden Cardiac Death (SCD) and progressive HF in anticoagulated AF populations. There are currently no treatments to specifically target these important causes or morbidity and mortality in AF patients. Effective lifestyle interventions including taking regular exercise and weight loss may help reduce the risk of developing HF and SCD. There has been considerable interest in evaluating antidiabetic medications for cardiovascular disease. Clinical risk predictors such as the CHA2DS2-VASc score can be used to predict the risk of stroke and mortality in AF patients but the score includes non-modifiable variables. Biomarkers such as N-terminal pro-B-type natriuretic peptide, high-sensitivity troponin, echocardiographic markers including left atrial enlargement and other markers which are relatively inexpensive and are accessible in primary care could be used to identify higher risk patients and monitor response to treatment. The aim of this internship would be to assist with a scoping review of modifiable markers for risk prediction and response to treatment in atrial fibrillation. Tasks will include searching electronic databases, screening papers for inclusion, data extraction and writing up of findings.

Learning objectives:

1. Learn how to search electronic databases effectively
2. Screening papers
3. Data extraction
4. Scientific writing skills

Any further information:

This project is suitable for applicants from any academic background, but particularly those with an interest in cardiovascular medicine and atrial fibrillation.