

## Under the Microscope

### With Professor Almeida

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Congestive Heart Failure not only affects the heart – it can also affect other parts of the body, including the brain.

A study lead by RPH researchers has received a grant of \$595,875 from the National Health and Medical Research Council, which will allow continued research into the effect of congestive heart failure on brain function.

The research is based on a pilot study that showed that people with heart failure were more likely to develop memory problems.

Professor Osvaldo Almeida, a consultant in Geriatric Psychiatrist at RPH, leads the study team, which includes Prof Leon Flicker, Prof Leonard Arnold, A/Prof Nicola Lautenschlager, Dr Christopher Beer, Dr Nat Lenzo, Dr Andrew Campbell, Dr Samuel Vasikaran, Frank Van Bockxmeer, Peter Thompson (SCGH) and Mark Ireland (SCGH).

Congestive Heart Failure is a condition in which the heart fails to maintain a sufficiently large output to meet the requirements of other organs of the body.

One of the main causes of this is heart attack – or myocardial infarction – where part of the heart muscle dies.

Prof Almeida said the study's aim was to analyse the effects of heart failure on mental activity – particularly intellectual activity - and brain structure over time.



“As the population ages the number of people with chronic medical conditions increases,” he said.

“Heart failure greatly compromises quality of life, and is often associated with mental problems.”

“If we can clarify the mechanisms that lead to cognitive decline, then we might be able to devise interventions that will contribute to improve the care of patients with heart failure.

We also hope that the findings of this project will offer new insights into the mechanisms that lead to memory impairment and dementia in later life.”

The study will run for three years and will investigate the health of three groups of patients aged over 45 years: people with congestive heart failure, people with myocardial infarction but no heart failure, and people with no cardiac illness.