An invitation to build a centre of excellence in stroke research and treatment in Western Australia

A collaboration between the Perron Institute and The University of Western Australia
“The Chair in Stroke Research represents a significant step towards establishing the Perron Institute Stroke Centre of Excellence. The Chair has been made possible through a significant financial commitment from The University of Western Australia (UWA), which we have been proud to match through the generous support of the Western Australian philanthropic community.

We welcome the partnership and collaboration with UWA as a significant step in combining our resources to focus on stroke research, and importantly in developing advancements in the prevention and treatment of stroke as well as rehabilitation following the impact of a stroke.

We were delighted to secure Professor Graeme Hankey, recognised as an international leader in stroke research, as the inaugural Chair in Stroke Research.

Professor Hankey joins the Perron Institute’s Medical Director, Clinical Professor David Blacker AM and the Institute’s Co-Head of Neurotherapeutics Research, Clinical Professor Neville Knuckey, supported by our expanding team of highly respected clinicians and researchers.”

Steve Arnott
CEO, Perron Institute

Perron Institute Chair in Stroke Research at UWA, Professor Graeme Hankey is recognised nationally and internationally for excellence in medical and health science in the field of stroke research. A medical graduate of UWA, he trained in neurology at Royal Perth Hospital, Mayo Clinic, USA, and Western General Hospital, Edinburgh, UK.

Professor Hankey’s main research interests focus on epidemiological studies and clinical trials of treatment strategies for acute stroke and stroke prevention.

He has been principal investigator of several international studies and has co-authored over 1000 scientific publications, including 13 books and 27 book chapters. With a h-index of over 150, Professor Hankey is one of Australia’s most highly cited neurology researchers.

As a clinician-scientist, Professor Hankey has made an outstanding lifetime contribution to stroke research, with a special interest in epidemiological studies and clinical trials of interventions for the treatment and prevention of stroke. Internationally recognised for his achievements, he has led several pivotal studies in collaboration with leading researchers worldwide.

Our aim is to build on the outstanding stroke research now undertaken at the Perron Institute in collaboration with existing clinical and stroke research groups. Another important aim is to extend our local, regional, rural, national and international collaborations, engaging new partners in the quest to reduce the impact and burden of stroke globally.
Of all the medical conditions that confront us, stroke is one that is perhaps less understood by the wider community. The importance of this research is best seen in the context of the significant impact of stroke as a disease in our community. The impact of stroke in our community is growing, with 1 in 4 Australians over the age of 25 likely to suffer a stroke. In 2021 there were 8,500* deaths in Australia directly attributed to stroke and 29,000 new stroke victims. The impact of stroke on our health system is highlighted by the fact that there are over 41,000 hospitalisations each year directly attributed to stroke. (*Australian Institute of Health and Welfare)

The direct cost of stroke in Australia has been estimated to be in excess of $6.2bn annually, however the cost attributed to wellbeing and disability arising from stroke has been estimated at $26bn. This figure puts a financial scale on the impact of stroke but does nothing to highlight the physical and emotional impact that a stroke can have on the stroke patient and their family, work and support networks.

The challenge we face is evidenced by the scale of the rate of stroke across Australia. Under the leadership of Professor Hankey, the Perron Institute Centre of Excellence in Stroke Research will enable the specialists and resources to meet this challenge head on.

A Centre of Excellence in Stroke Research will build on the significant success already achieved by researchers at the Perron Institute, however, will be accelerated with the added resources and collaboration now in place with The University of Western Australia.

The foundation of this collaboration was made possible with a matched contribution from UWA, the Perron Institute and generous philanthropists.

Funds raised through this campaign will enable the employment of world class neurologists and the very brightest medical graduates to create a nucleus of leading stroke research experts. This team will be supplemented with the highly skilled clinicians already located at the Perron Institute, enabling leading edge research to be translated into treatments, programs and clinical care.

**Perron Institute Centre of Excellence in Stroke Research has four main objectives:**

1. Medical research into the identification of stroke susceptibility and preventative treatments.
2. Advances in medical procedures to treat Stroke emergency – both physically and remotely.
3. Immediate after-care treatment to minimise the impact of brain damage following a stroke.
4. Rehabilitation and therapies to improve post stroke quality of life outcomes.
Building on world leading research success

To date, our primary research focus has been to develop neuroprotective treatments to minimise brain damage after a stroke.

The discovery by the Perron Institute research team led by Clinical Professor Neville Knuckey and Professor Bruno Meloni, that peptides rich in the amino acid arginine are highly neuroprotective and can limit brain damage after a stroke has led to further work to develop a lead peptide known as ARG-007 as a potential therapy to reduce brain damage immediately following a stroke.

The UWA and Perron Institute ASX listed spin-out company Argenica Therapeutics was established in 2021 to progress ARG-007 to clinical trials and expedite research development.

This new therapy could potentially extend the therapeutic time window for medical interventions to repair a rupture or remove a blood clot in the brain which caused the stroke, ultimately preserving brain tissue and improving patient outcomes.

In 2022, a Phase 1 trial for ARG-007 commenced, and in early 2024, a Phase 2 trial started in Melbourne, a significant step in the development of this important potential research discovery.

Focus for the Stroke Centre of Excellence

An ambitious program of research planned will advance and build on the success already achieved at the Perron Institute. Our current stroke research focus has expanded to include:

1. Genetic predictors of stroke and cardiovascular disease in the Western Australian population.
3. Aneurysm re-rupture prediction using machine learning.
4. Cerebral Amyloid Angiopathy studies.
6. Leveraging mHealth to enhance stroke prevention through screening and lifestyle intervention.
7. Stroke prediction algorithm for first-ever and recurrent strokes.

Research is an investment in our future

The foundation contribution from UWA and the Perron Institute to create a Chair in Stroke Research has created a generational opportunity for Perron Institute to create a Centre of Excellence in Stroke Research in Western Australia. The Centre will not only advance globally relevant research, it will also concentrate on issues in stroke treatment specific to Western Australia due to its vast distances.

Our goal is to tackle new and difficult neurological conditions, and to build on the remarkable discoveries being made at the Perron Institute that are already improving the survival rate and the quality of life for survivors of a stroke.

Attracting, nurturing, and retaining a highly skilled team of world standard quality, needs the backing of community and generous philanthropic support.

Perron Institute invites you to be a part of this vital initiative

Private and Corporate support is sought by the Perron Institute to build a world class Centre of Excellence in Stroke Research, directed by Professor Graeme Hankey. The lifetime of research, clinical experience and global networks Professor Hankey has amassed over his career is a priceless asset to be maximised for the benefit of Western Australia.

We are building on this legacy by attracting Researchers at the very highest levels to train under Professor Hankey, growing a world class nucleus of stroke professionals. We seek your support to build on the legacy of the Perron Institute for the benefit of all Australians, and ultimately, the world.

Your support can be made via:

Corporate Support:

1. Principle Benefactor: Naming rights for Centre of Excellence in Stroke Research. Total funding for the Centre of Excellence in Stroke Research: $15m for 5 years ($7.5m), providing for 12 staff, including PhD students, Technicians and Admin support.

2. Benefactors: 5-year commitment to support individual research positions: Funding from $15,000 to $240,000 for a 5-year commitment providing support to positions from PhD students to Associate Professors.

Private Support:

Any donations over $2 are fully tax deductible. For maximum impact, the Perron Institute is seeking your support for individual positions, either in full or in part, for a 5-year period, to give security of tenure. It should be noted the Perron Institute will offer up to 8 external scholarships to PhD/Masters Students as part of the Centre. For further details please email susie.jackson@perron.uwa.edu.au.
Perron Institute
Centre of Excellence in Stroke Research