

MEDIA RELEASE

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Grant to boost research into age-related blood vessel health

The Centenary Institute's Professor Jennifer Gamble has been awarded a Senior Researcher Grant under the NSW Cardiovascular Research Capacity Program receiving a total of \$750,000 over three years. The grant will fund Professor Gamble's research into vascular (blood vessel) health to aid healthy ageing and to help prevent disease.

Under the grant, Professor Gamble will lead ground-breaking research to deepen understanding of the ageing process while developing innovative therapeutic approaches to tackle age-related vascular diseases, including Alzheimer's, cerebral amyloid angiopathy (the build-up of abnormal proteins in brain blood vessels) and atherosclerosis (the build-up of fatty deposits in arteries).

Professor Gamble, a senior researcher in the Centenary Institute's Centre for Healthy Ageing said that age is the greatest risk factor for vascular diseases, with endothelial cell dysfunction serving as a significant driver.

"Endothelial cells are the cells that line blood vessels. They play a critical role in disease because they orchestrate blood flow, help regulate the body's immune response and also maintain vascular health," said Professor Gamble.

"Our research will focus on mitigating the detrimental ageing process of endothelial cells to improve health outcomes and to also potentially combat some of the most devastating vascular diseases affecting society today."

Research to be undertaken by Professor Gamble will initially explore how aged endothelial cells contributes to diseases at the molecular level. Subsequently, she will investigate three separate drugs aimed at repairing aged blood vessels, to reduce the risk of age-related vascular diseases.

According to Professor Marc Pellegrini, Executive Director of the Centenary Institute, the successful research grant underscores the Institute's commitment to innovative research addressing substantial global health challenges, particularly in the context of a rapidly aging population.

"As our population ages swiftly, age-related diseases pose escalating economic and societal challenges both in Australia and worldwide," said Professor Pellegrini.

"Professor Gamble's crucial research will not only contribute to fundamental knowledge concerning vascular disease but also bears the potential for positive implications in fostering healthier ageing on a global scale."

The [NSW Cardiovascular Research Capacity Program](#) funds high quality cardiovascular research in NSW in order to drive scientific discoveries, support the development of novel and innovative therapies, and improve health outcomes for patients with cardiovascular disease.

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Images:

Professor Jennifer Gamble (two images):

<https://drive.google.com/file/d/1mfRv8alyoCJAqsxkHRmgwnZFoShSZIB9/view?usp=sharing>

https://drive.google.com/file/d/13bN_sd5eFO0PPkOIWm3N6YU9y_-xJcuN/view?usp=sharing

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About the Centenary Institute

The Centenary Institute is a world-leading independent medical research institute, closely affiliated to the University of Sydney and the Royal Prince Alfred Hospital. Our research spans the critical areas of cancer, cardiovascular disease, rare diseases, inflammation, infectious diseases, healthy ageing and biomedical AI. Our strength lies in uncovering disease mechanisms and applying this knowledge to improve diagnostics and treatments for patients.

For more information about the Centenary Institute, visit centenary.org.au