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## Multiple sclerosis drug research funded

Associate Professor Anthony Don, Head of the Lipid Metabolism and Neurochemistry Laboratory at the Centenary Institute has received a funding grant of \$115,000 from MS Research Australia to help investigate and develop drugs that can better treat multiple sclerosis (MS).

A debilitating, chronic neurodegenerative disease, MS affects approximately two million people world-wide including over 25,000 Australians. It is a classical inflammatory disease, caused by the immune system mistakenly attacking and depleting myelin, the fatty substance that insulates and protects nerve cells in the central nervous system.

"Current treatments for MS are limited to immunosuppressive drugs that suppress autoimmunity and inflammation," said Associate Professor Don.

"There is a pressing need for a new approach–for an effective drug that can both protect existing myelin and stimulate myelin repair, as this will open up the possibility for functional recovery in people with MS."

In his project, Associate Professor Don will be investigating a group of drugs known as sphingosine-1-phosphate receptor agonists (S1Ps) which mimic the signals produced by the naturally occurring hormone-like molecule sphingosine 1-phosphate (S1P) in the body.

"Our current research suggests that S1P is essential in myelin regeneration. We will be determining if these S1P enhancing drugs are indeed myelin protective, if they promote the formation of myelin and the processes by which this may happen."

Associate Professor Don is appreciative of the funding from MS Research Australia.

"This grant supports a project operating at the very forefront of multiple sclerosis research and that could lead to the development of a new therapeutic approach to improve outcomes for people with MS."

Dr Julia Morahan, Head of Research, MS Research Australia said, "This innovative research proposal addresses the urgent need for therapies to stimulate myelin repair in MS. While remyelination or myelin repair is important for all types of MS, it is extremely important in tackling the lack of treatment options for those people with progressive MS. We look forward to seeing the outcomes of this study."

## [ENDS]

Image: Associate Professor Anthony Don: https://tinyurl.com/yytlppjx

For all media and interview enquiries, please contact

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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 focuses on three key areas: cancer, inflammation and cardiovascular disease. 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 <u>www.centenary.org.au</u>