## National Centre for Neuroimmunology and Emerging Diseases

### March 2025

In this issue:-

| Our   | Mission         | • |
|-------|-----------------|---|
| 4th F | RID Conference, |   |

November 2025

**Publications** 

Appreciation and
Acknowledgement of
Granting Organisations,
Agencies, Benefactors
and Fundraisers

International long COVID 2
Awareness Day

Media

3

Welcome to PhD students

#### **Postal Address:**

National Centre for Neuroimmunology and Emerging Diseases

Griffith University

**Gold Coast** 

G40, Mailbox 68

SOUTHPORT QLD 4222



NCNED contact:

(07) 5678 9283 or ncned@griffith.edu.au

## **Our Mission**

The National Centre for Neuroimmunology and Emerging Diseases (NCNED) is a research team located at Griffith University on the Gold Coast. Led by Professor Sonya Marshall-Gradisnik, the team has a focus on Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS), long COVID and Gullf War Illness (GWI).

Our mission is to translate research findings into preventative medicine, social and clinical care and public health outcomes. By collaborating with local, national and international research institutes, we aim to create sustained improvements in health and health care for not only those affected by ME/CFS and long COVID but also other immune disorders.



NCNED welcomes you to our biennial RID (Research Innovation and Discovery) Conference at Tweed Heads, NSW, 12-13 November 2025. The 4th ME/CFS, long COVID and Gulf War International Conference invites leading experts, clinicians, peers and consumers to participate in this two day conference. Please refer to our Facebook page for details or telephone (07) 5678 9283 for further information. A special scheduled event: HDR and Early Career Researchers have an opportunity to showcase their work and network with top researchers, clinicians and people with lived experience of these conditions. Please register for the conference via the link: Registration link. The link for abstract submission is available here https://l.facebook.com/abstract submission



# APPRECIATION AND ACKNOWLEDGEMENT OF GRANTING ORGANISATIONS, AGENCIES, BENEFACTORS AND FUNDRAISERS

Thank you to the Stafford Fox Medical Research Foundation, McCusker Charitable Foundation, the Mason Foundation, Ian and Talei Stewart, the Alison Hunter Memorial Foundation, the Blake Beckett Foundation, Mr Adrian Flack, the Buxton Foundation, the Henty Community, Change for ME Charity, ME/CFS/FM Support Association QLD Inc., the ACT ME/CFS Society, ME/CFS and Lyme Association of WA Inc., MERUK, Dr John Hamwood and the National Health and Medical Research Council.



### **PUBLICATIONS**

Since December 2024, the NCNED team have had a successful few months with accepted publications in the following journals:

**PLOS One Journal** - Dr Kiran Thapaliya (pictured right with Associate Professor Leighton Barnden) and NCNED researchers have published an important neuro imaging paper on the "Hippocampal subfield volume alterations and associations with severity measures in long COVID and ME/CFS: A 7T MRI study". The hippocampus plays an important role in cognitive functions such as memory, executive processing, and reward processing. This study used powerful MRI (7 Tesla), one of only two in Australia, to study human brain tissue non-invasively. This MRI helps to resolve brain structures more precisely or to uncover abnormalities that are not detected in other MRIs.



Our study found hippocampal subfield volumes were significantly larger and similar in long COVID and ME/CFS patients compared to healthy controls indicating overlap between these two conditions.

To read about the key scientific findings, please use the link: <a href="https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0316625">https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0316625</a>



Journal of Translational Medicine—PhD candidate Ms Breanna Weigel, (pictured left) together with the NCNED team of researchers, have identified similar, significant reductions in quality of life and functioning among people with ME/CFS and people with long COVID in their recent publication titled: "Health-related quality of life in Myalgic Encephalomyelitis/Chronic Fatigue Syndrome and Post COVID-19 Condition: A systematic review". This review compiles the existing literature among people with ME/CFS and people with long COVID meeting the most stringent diagnostic criteria available.

To read more about these findings evidencing the real and physically disabling nature of these illnesses, please read the full article:

https://link.springer.com/article/10.1186

## INTERNATIONAL LONG COVID AWARENESS DAY—MARCH 15TH

NCNED wishes to acknowledge the challenges faced by those suffering from long COVID. As Australia's leading research centre for chronic multi-systemic illnesses, including long COVID, ME/CFS, and Gulf War Illness, we are committed to improving health and healthcare for people who live with these conditions through our research.

The NCNED Team is sincerely grateful for all those who have participated in our long COVID studies and acknowledges the lived experiences of people with the condition, which continue to guide our work.

Importantly, our research has identified ion channel, immune and brain dysfunction, as well as genetic changes and poorer quality of life, among people with long COVID. We are also currently conducting a clinical trial investigating Low Dose Naltrexone as a potential treatment for this condition.

More information about these important research findings is available in our seminal publications below:

https://doi.org/10.3389/fimmu.2024.1264702,

https://doi.org/10.1186/s10020-022-00528-y, https://doi.org/10.1172/jci.insight.183810,

https://doi.org/10.1371/journal.pone.0316625, https://doi.org/10.1007/s11136-024-03710-3

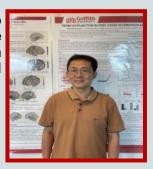
### **MEDIA**

ABC highlighted Dr Thapaliya and NCNED researchers' hippocampal subfield volume investigations into the differences between ME/CFS and long COVID sufferers when compared with healthy volunteers. These findings (as noted in the publication information on Page 2) prompted nationwide media announcements and a television news item. This broadcast can be viewed by copying the link below:

https://www.abc.net.au/news/2025-02-11/study-links-brain-issues-of-long-covid-and-mecfs/104920234

## **WELCOME TO OUR NEW PHD STUDENTS**

NCNED welcomes Mr Tuong Huynh, a PhD student, who has joined the Centre to undertake a project titled 'Implementing Machine Learning Algorithms to identify unique neuronal signatures in ME/CFS and long COVID conditions'. Tuong will work closely with our neuroimaging experts Dr Leighton Barnden and Dr Kiran Thapaliya in their continued research in analysing MRI images of the brain.





The NCNED team would also like to welcome Urooj Ishrat who recently joined the Centre. Urooj's PhD research will involve multimodal investigations into immunological and ion channel disturbances among people with ME/CFS and long COVID.

From everyone in the NCNED Team, thank you to all our supporters and sponsors who continue to make our research possible.