

Researchers discover potential therapeutic approach to treat chronic fatigue syndrome

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Researchers have discovered the pharmacological drug, Naltrexone, significantly restored the function of faulty receptors associated with myalgic encephalomyelitis, also known as Chronic Fatigue Syndrome

(ME/CFS).

Researchers from the National Centre for Neuroimmunology and Emerging Diseases (NCNED), Menzies Health Institute Queensland, Griffith University led the research, which has been published in the journal *Frontiers in Immunology*.

NCNED is the peak research center nationally and is internationally recognized for its world-leading research on the identification of the pathology, developing a screening test and pharmacotherapeutic intervention for ME/CFS.

NCNED researchers were the first in the world to develop the gold standard in [experimental research](#) known as patch clamp technique in immune cells to measure TRP receptor function.

The immune cells are used as a model for assessing TRP receptor function and reflect physiological activity in all body tissues expressing these [receptors](#).

NCNED researchers have paved the way for the identification of the pathology of ME/CFS and biomarker development by further reporting in several recent research papers that these receptors were faulty from ME/CFS patients when compared to healthy people.

These receptors are widely found in the body and implicated in symptoms and onset of this illness. Importantly, the current research has used Naltrexone to restore the function of these faulty receptors in the immune cells from ME/CFS patients.

"This world-first discovery suggests new potential pharmaco-therapeutic interventions in ME/CFS," co-author and Stafford Fox [medical research](#) professorial fellow Professor Sonya Marshall-Gradisnik said.

"We continue to confirm the pathology of these faulty receptors and now we are thrilled we are moving into possible treatments for ME/CFS."

Dr. Helene Cabanas, post-doctoral research fellow and first author, said:

"We used the patch clamp technique to measure the faulty receptor function. Following Naltrexone treatment we found the faulty receptor function was significantly improved in [immune cells](#) from ME/CFS patients, suggesting beneficial effects for patients."

Professor Paul Scuffham, director of Menzies Health Institute Queensland, said NCNED continued to lead the world in the identification of the pathology of ME/CFS and this latest research signified possible ways forward for the treatment of ME/CFS patients.

"Our aim is to continue employ the gold standard technique to investigate the pathology and possible pharmacological inventions for the benefit of ME/CFs patients," Professor Marshall-Gradisnik said.

"Our research aims to translate our research findings to benefit ME/CFS patients. The core of NCNED values is patients are our priority.

"We thank the Queensland Government, national granting organizations and our benefactors without whom this groundbreaking research would not be possible."

The publication is released today in the journal *Frontiers in Immunology*.

Provided by Griffith University

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