

National CFIDS Foundation Announces New Grant Recipient April 22, 2021

The National CFIDS Foundation is pleased to announce their latest research grant recipient, Dr. Jack Wands. Dr. Wands is a Professor of Gastroenterology and Medicine at the Warren Alpert Medical School of Brown University in Providence, Rhode Island.

Wands' proposal which is titled, "Aspartate asparaginyl beta-hydroxylase (ASPH) as an etiologic factor in Chronic Fatigue Syndrome (CFS)" has received \$65,000 from the National CFIDS Foundation. Dr. Wands has over 600 peer-reviewed medical journal articles in publication.

According to the Foundation, there is evidence that ASPH may be accumulating in the cells of CFS patients. As such, this can dramatically impact the body's response to oxidative stress and hypoxia. Wands has planned both in-vitro as well as in-vivo studies in an attempt to understand the upregulation of ASPH on cell migration and signaling through various cellular pathways following exposure to an oxidative injury. Wands will also be comparing CFS patient samples with those of hepatic cancer patients with cancer-related fatigue.

In addition, Wands has evidence that ASPH overexpression may be a risk factor for the early development of cancer which may be associated with CFS before the disease becomes clinically apparent or in other words, CFS as a pre-malignancy. Wands has observed this in pancreatic cancer patients. This is of importance since the National Cancer Institute has previously reported that CFS has been associated with increases in pancreatic cancer. As a result, Wands and his team have developed innovative animal models and approaches to not only test these concepts but they have also identified compounds that could be utilized as a potential therapy should these observations pan out.

In the last few decades, accumulating evidence has indicated that ASPH expression is upregulated in numerous types of human malignant cancer and is associated with poor survival and prognosis. ASPH is found on the surface of tumor cells and is highly expressed in cancers of the liver, pancreas, stomach, colon, breast, prostate, lung and brain. ASPH is associated with tumor cell migration, invasion, motility as well as distant metastatic spread.

According to the National CFIDS Foundation, Chronic Fatigue Syndrome (CFS) is also known as Chronic Fatigue Immune Dysfunction Syndrome (CFIDS) as well as Myalgic Encephalomyelitis (ME). Founded in 1997, the goals of the National CFIDS Foundation are to help fund medical research to find a cause and to expedite appropriate treatments for the disease. Since its inception, the National CFIDS Foundation has provided \$4.5 million dollars in self-directed research grants to global scientists. The National CFIDS Foundation, an all volunteer 501(c)(3) federally approved charity, is funded solely by individual contributions. Additional information can be found on the web at www.ncf-net.org or in The National Forum newsletter. The Foundation can be reached at 781-449-3535.