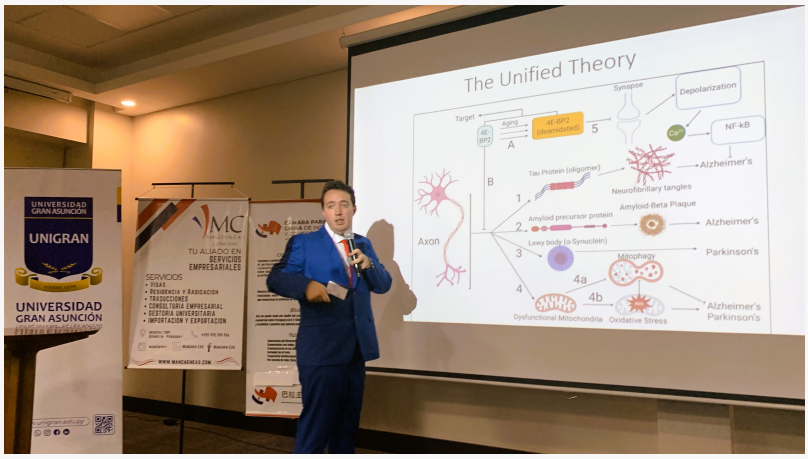
A groundbreaking discovery of a common master switch to cure Alzheimer’s, Parkinson’s, and other brain-related diseases

A breakthrough that could save millions of lives

LOS ANGELES, CA, UNITED STATES, May 9, 2025 /EINPresswire.com/ -- The 21st edition of Sustainability Through Science and Technology Summit 2025 (SIPS 2025), dedicated to Prof. Aaron Ciechanover, Nobel Laureate in Chemistry, to be held in Cebu, Philippines, from 17-20 November 2025, has confirmed the participation of Davis Joseph as an invited summit plenary lecturer for his recent ground-breaking discovery of the common master switch for numerous brain-related diseases.



Davis Joseph during the plenary presentation about his second groundbreaking discovery of a common master switch to cure Alzheimer's, Parkinson's, and other brain-related diseases at the International Congress of Sustainable Innovations in Medicine 2025

Davis Joseph discovered something that could not be found in the entire scientific history of Alzheimer’s and Parkinson’s research: a common master switch that can potentially cure both these and other brain-related diseases with a single method, despite the unique characteristics of each disease. This was achieved by developing a unified theory, which establishes that the occurrence and progression of these neurodegenerative diseases can be controlled mainly by regulating the rates of axon-based 4E-BP2 protein deamidation, a chemical reaction that disrupts protein function, whose fundamental mechanism in the brain was recently discovered by Davis Joseph. Since the common characteristic of these diseases in aging patients is an excessive 4E-BP2 protein deamidation that causes protein overproduction and malfunction, lowering the common master switch to bring the deamidation rates to

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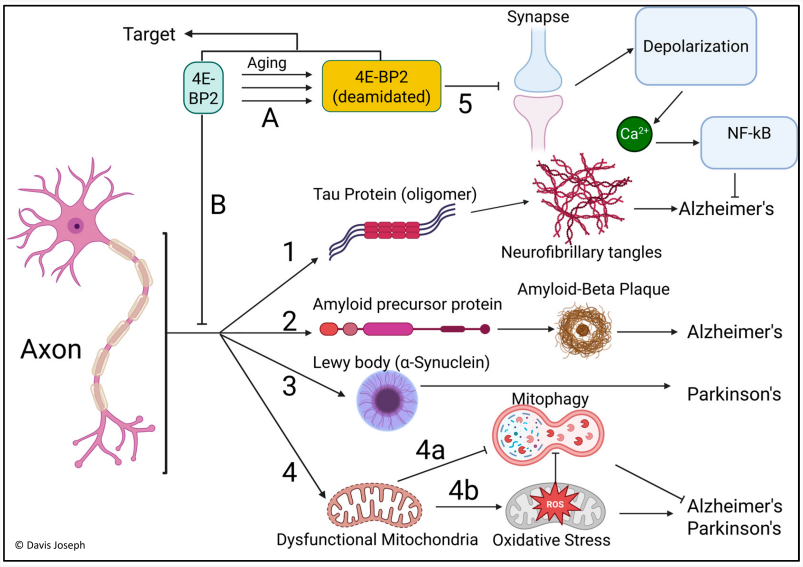
>
> *Anthony Housefather, Member of Parliament, Canada*

normal values, depending on the patients' characteristics, can cure these brain-related diseases.

This breakthrough is significant because Parkinson's disease, first described in 1817, Alzheimer's disease, first described in 1906, and other neurodegenerative diseases have been studied separately in biochemistry and therapeutic drug development, and no causal link has ever been established between them. Davis Joseph discovered this link and made the dividing wall between these brain-related diseases disappear, making it possible to treat them by regulating a shared master switch.



Davis Joseph's Unified Theory of Alzheimer's, Parkinson's and other brain-related diseases

Additionally, this breakthrough is crucial since it bridges for the first time four different research fields: the biochemical processes of deamidation, translational control, oxidative stress, and neurodegeneration through axon-based 4E-BP2 protein deamidation that serves as a common denominator for all of them.

Davis Joseph giving an Interview at the Paraguay-China Chamber of Commerce and Industry in Asunción, Paraguay, about his major second discovery of a common master switch to cure Alzheimer's, Parkinson's, and other brain-related diseases

Furthermore, this discovery is an example of sustainable medicine as per FLOGEN Sustainability Framework because it fulfills the three criteria of sustainability: (1) Social Development since it improves the quality of human life (2) Economic Development, since it decreases the cost of medicine applicable to numerous diseases and (3) Environment Protection since it decreases the amount of resources that is needed to produce medicine.

Based on this newly developed Unified Theory and his critical review of the scientific literature, he also designed for the first time three biochemical flowsheets of (1) deamidation in living organisms, (2) protein synthesis initiation and translational control, and (3) 4E-BP2 deamidation as a control system of the four biochemical processes.

The discovery was published on April 27th, 2025, in the prestigious International Journal of Molecular Sciences (IJMS), a Q1 journal. The full paper given here https://www.mdpi.com/1422-0067/26/9/4143 has been accessed more than 1000 times in less than 7 days, a world record for a single-author scientific publication. It was also presented as a plenary lecture at the Congress of Modern Sustainable Medicine in Asuncion, Paraguay, on 30th April 2025.

This is Davis Joseph's second discovery in the last five months. The first discovery, known as Davis Joseph's principle, was the fundamental neurobiological mechanism of 4E-BP2 protein deamidation, which determined that axons, a cable-like structure of brain cells, are the key factor of deamidation in the brain. This first discovery, described as Nobel Prize worthy by Dr. Harvey Alter and Dr. Gregg Semenza, 2020 and 2019 Nobel Laureates in Physiology and Medicine, respectively, was published on November 15, 2024, also in IJMS. The full paper (https://www.mdpi.com/1422-0067/25/22/12268) has been accessed more than 8000 times in less than 6 months, another world record for a single-author scientific publication, and has been covered by more than 500 media outlets, including the Associated Press: https://apnews.com/press-release/ein-presswire-newsmatics/medical-research-b14b0c18105eac4f46e9e14b74f72cbc. For this discovery, Davis Joseph was awarded Semenza International Cell Engineering Award at the FLOGEN Stars Outreach/2024 Sustainability through Science and Technology Summit (SIPS 2024) held in Crete, Greece in October 2024. (https://www.flogen.org/?p=195&bio=2024_Davis_Joseph)

"Alzheimer's and Parkinson's diseases are two awful diseases, and Davis's work to try to combat them is extraordinary. I am proud to be his representative in the House of Commons", says Anthony Housefather, Member of Parliament, Canada

Photos, full videos of the presentation and an interview can be viewed here: https://www.flogen.org/?p=33&an=2025&m=4

About:
Davis Joseph is a researcher at the Faculty of Medicine, McGill University and Biochemistry Research Director at FLOGEN Technologies Inc. Davis has received 18 honors, awards, and distinctions for his academic performance in Mathematics (twice), Natural and Social Sciences (twice), French, English (twice), awards for his overall academic results and his service to his community from various Canadian institutions including the Collège Notre-Dame, Collège Jean-de-Brébeuf and the Montreal Geriatric Institution. He is recipient of 2024 Semenza International Cell Engineering Award named after Nobel Laureate in chemistry, Prof. Gregg Semenza.

FLOGEN Technologies (www.flogen.com) is a High-Tech applied research institute dedicated to developing new sustainable technologies and transforming existing ones into sustainable ones in four different fields: Biochemistry, Chemistry, Metals Extraction, and Environment, based on the FLOGEN Sustainability Framework.

FLOGEN Stars Outreach (www.flogen.org), is a not-for-profit corporation dedicated to achieving

sustainability through science and technology, raising the profile of science and engineering in society and properly honoring scientists and engineers.

SIPS - Sustainability through Science and Technology Summit (https://www.flogen.org/sips2024/) is a science-focused and industrial engineering-oriented multidisciplinary conference held every year around the world with an average participation of five hundred authors from academia, industry, government, and the entrepreneurship world representing on average 80 countries. The summit is dedicated to achieving sustainability through science and technology and hosts numerous Nobel Laureates regularly.

FLOGEN sustainability Framework (https://www.flogen.org/?p=206#toop) is an innovative concept that establishes 3 criteria to be achieved simultaneously to be Sustainable i.e. Environmental Protection, Social Development and Economic Growth sustained by three equally important pillars/actors i.e. Science and Technology, Governance and management and Education and Civil Society. In September 2024, this framework became a constitutional law in the city of Nova Friburgo, Rio de Janeiro, Brazil, a first in the world in which a scientific concept is transformed into law.

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