Egyptian Network for Neurodegenerative Diseases

A Success Story of Africa-Europe Research Collaboration in Personalised Medicine



Overview

Founded in December 2013, the Egyptian Network for Neurodegenerative Diseases (ENND) began as a visionary collaboration among neurology and neuroscience units across Egypt. Recognizing the urgent need to address neurodegenerative diseases within the region, ENND set out to group the different expertise, identify technical gaps, and forge international partnerships to enhance its capabilities. This mission led to a foundational partnership with the Technical University of Munich (TUM) and the German Center for Neurodegenerative Diseases (DZNE), focusing on capacity building and knowledge exchange. ENND's collaborative spirit extended beyond borders with the development of the Egyptian Reference Genome, a landmark achievement supported by the DAAD and DFG.

Published in Nature Communications, this comprehensive genome serves as an invaluable resource for global research communities. Further expanding its international reach, ENND partnered with University College London (UCL) to establish IPDGC-Africa, uniting research groups from 12 African countries in a consortium dedicated to studying the genetic basis of Parkinson's disease. This collective effort culminated in significant findings published in The Lancet.



Funding

German Academic Exchange Services (DAAD), National Institute on Aging (NIA), and Academy of Scientific Research & Technology in Egypt (ASRT), among other scientific societies & foundations, supported ENND work.

Highlights of the Africa-Europe Collaboration

From its inception as a two-partner collaboration, ENND has evolved into a multifaceted network engaging partners across Europe and Africa. Its achievements underscore the immense value of Africa-Europe collaboration in personalized medicine. By uniting diverse expertise and resources, ENND has made significant advancements in understanding neurodegenerative diseases, identifying risk genes, causative factors, and crucial biomarkers.

These discoveries are paving the way for personalized medicine approaches, enabling patient stratification and the development of tailored therapeutic and diagnostic strategies. ENND's success is anchored in three key pillars: sustainable operation through effective communication and partnerships, scientific credibility fostered by rigorous research and impactful discoveries, and robust community engagement that ensures research remains relevant to those it serves. The network's commitment to trust, shared ownership, capacity building, and patient involvement has been instrumental in transforming challenges into opportunities.

Learn more about the ENND story here:

https://shorturl.at/4i9wV



