

MOLECULAR AND CELL BIOLOGY

Bridging Science and Care: 14 Years of Genetic and Biomarker Research in Neurodegenerative Diseases at an Argentine Memory Clinic

Ezequiel Ignacio Surace¹ | Leonardo Romorini² | Mariela Marazita² |
Giulia Solange Clas³ | Victoria Massazza⁴ | Maria Florencia Alvarez⁴ |
Daniel Avendaño⁴ | Tatiana Itzcovich⁵ | Horacio Martinetto⁶

¹Institute of Neurosciences (INEU),
Fleni-CONICET, Buenos Aires, Buenos Aires,
Argentina

²FLENI, Escobar, Buenos Aires, Argentina

³Fleni, Buenos Aires, Buenos Aires, Argentina

⁴FLENI, Buenos Aires, Buenos Aires, Argentina

⁵Fleni, Escobar, Buenos Aires, Argentina

⁶Fleni, Buenos Aires, Argentina

Correspondence

Ezequiel Ignacio Surace, Institute of
Neurosciences (INEU), Fleni-CONICET,
Buenos Aires, Buenos Aires, Argentina.
Email: esurace@fleni.org.ar

Abstract

Understanding the biological and genetic landscape of neurodegenerative diseases in diverse populations deepens our insight into complex pathophysiological mechanisms. Our laboratory, established 14 years ago in Buenos Aires, Argentina, serves as a regional hub for Latin America, focusing on familial and sporadic cases of Alzheimer's disease (AD), frontotemporal dementia (FTD), and amyotrophic lateral sclerosis (ALS). We were among the first in the region to incorporate cerebrospinal fluid AD biomarker analysis into clinical diagnostics. Our research includes genetic counseling, the study of novel genetic variants, and the development of patient-derived cell models using induced pluripotent stem cell technology. In this talk, we will discuss the challenges of staying at the forefront of technological advancements and underscore the importance of international collaboration in advancing both local and global knowledge.

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2025 The Alzheimer's Association. *Alzheimer's & Dementia* published by Wiley Periodicals LLC on behalf of Alzheimer's Association.