
Nigel Cairns, PhD

The frontal and temporal lobes of the brain degenerate to cause severely debilitating cognitive and motor symptoms in a group of disorders collectively called frontotemporal diseases. These diseases are both clinically and pathologically heterogeneous and although genetic causes have been identified in several families, the causes and pathogenesis of these diseases remain largely unknown. Nigel Cairns is interested in clarifying the pathological changes in the brains of these patients who come to autopsy and the mechanisms by which nerve cells die and cause dementia. His multidisciplinary approach uses histological, biochemical, and cell biological methods, and a mouse model of dementia to determine the role of candidate pathological proteins in frontotemporal diseases. These experiments may throw new light on the pathogenesis of this enigmatic group of diseases and generate novel avenues for therapeutic intervention.

Training

A native of the United Kingdom, Nigel Cairns received his BA from London University and BS from the University of Bristol. He obtained a PhD in 1995 in experimental neuropathology while working on the pathogenesis of Alzheimer's disease at the Institute of Psychiatry, King's College, University of London. In 1998, he became a member of the Royal College of Pathologists of the United Kingdom. In 2002, the American Association of Neuropathologists presented him with the Moore Award.

Between 2003 and 2004, he worked at the Center for Neurodegenerative Disease Research, University of Pennsylvania.

Nigel joined Washington University School of Medicine in 2004 as Research Associate Professor and in 2012 he was appointed Research Professor in the Departments of Neurology and Pathology & Immunology. He is the Core Leader of the Neuropathology Core of the Knight Alzheimer's Disease Research Center, the multicenter Alzheimer's Disease Neuroimaging Initiative (ADNI), and the international Dominantly Inherited Alzheimer's Network (DIAN). He leads the Betty Martz Laboratory for Neurodegenerative Research.



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Related Links

- Cairns Laboratory
- <u>Knight Alzheimer's Disease Research</u> <u>Center (ADRC)</u>
- Alzheimer's Disease Neuroimaging Initiative (ADNI)
- Dominantly Inherited Alzheimer Network

<u>Dr. Nigel Cairns</u> of Washington University (St. Louis) is the recipient of one of the four CART Fund Research Grants awarded for 2014. [The 4 grants in 2014 totaled \$500,000.]
