

## Editorial

# Launch of American Journal of Neurodegenerative Disease

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Neurodegenerative diseases are chronic, progressive neurological disorders associated with neuronal loss of specific populations of neurons in the brain or spinal cord, or both. The most common neurodegenerative diseases are Alzheimer's disease (AD) and Parkinson's disease (PD). There are a large number of less common neurodegenerative disorders. Most of these disorders have a significant impact on the healthcare of the elderly, which is the segment of the population that is most often affected. On the other hand, some neurodegenerative disorders, in particular frontotemporal lobar degenerations and amyotrophic lateral sclerosis, afflict younger adults in the prime of their lives. The most common clinical presentations are dementia, movement disorders, and motor neuron disease, but the clinical phenotypes are diverse, and there is increasing recognition of overlap in these clinical phenotypes within and between diagnostic entities. Characterization of biochemical changes in brain and spinal cord tissue has led to a proposed molecular classification scheme for neurodegenerative diseases [1], but disease mechanisms that are shared by a range of neurodegenerative disorders [2, 3] continue to challenge even the most up-to-date classification scheme.

The National Alzheimer's Project Act [4], a seminal piece of legislation recognizing the impending crisis in health care delivery for a rapidly growing patient population with neurodegenerative disorders signed into law by President Obama in January 2012, considers non-Alzheimer's neurodegenerative disorders and AD together in terms of societal impact. The total economic and societal impact of neurodegenerative diseases is sizable at present and

will continue to grow with the aging of the population in developed and eventually underdeveloped countries, as well. The World Health Organization estimates that more than 35.6 million people were living with dementia in 2010 and that 7.7 million new cases of dementia are diagnosed each year, with current costs estimated at over 604 billion US dollars per year [5]. It is estimated that numbers will nearly double every 20 years, to 65.7 million in 2030 and 115.4 million in 2050 [6]. Given this unprecedented world-wide problem and the large growth in the number of scientists and research activities attacking this multifaceted shared menace, it will become increasingly important to have open access media for rapid dissemination of the latest developments in this expanding research field. It is this pressing need that compels the launch of *American Journal of Neurodegenerative Disease* (AJND, [www.ajnd.us](http://www.ajnd.us)).

AJND is intended to be a free, non-proprietary, searchable electronic publication that can be inexpensively and quickly produced and distributed via the Internet. It is not intended to replace traditional journals in neurology, neuropathology, neuroimaging or neurogenetics, although it is hoped that researchers in each of these specialties will find AJND a hospitable place for dissemination of their best and most important findings.

Given the explosive growth of basic and clinical research in neurodegenerative diseases, there is a need for a journal such as AJND to meet the needs of the research community. The open access format is considered essential by decision makers for publically funded research [7], and open access should also be welcomed by

the scientific community as it fosters collaborative and cooperative research. It is hoped that AJND will be a forum for reporting on high quality research that is based upon well-designed experimental research in humans and animal models, research that explores fundamental mechanisms and genetic underpinnings of disease, research that identifies biomarkers for diagnosis and monitoring disease progression, as well as an avenue for reporting insights from descriptive clinical studies, neuroimaging and neuropathology.

In addition to original scientific and clinical reports, AJND will also offer timely and comprehensive reviews of topics relevant to the research community on the latest developments in research on neurodegenerative disorders. These reviews will provide background information for development of hypotheses and theories about etiology and pathogenesis of neurodegenerative diseases, which will lead to discoveries that are eventually translated into improved diagnosis, treatment, and prevention of these personally and economically devastating disorders.

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