

PATHOLOGY GRAND ROUNDS

“Resistance and Resilience to Alzheimer's Disease: Pathology in a Community-Based Cohort”



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1:30pm-2:30pm

UWMC NE110

This lecture can also be viewed via teleconference:
HMC: 2NJ251, VA: BD152, SCCA: G-3102, SCH: OC.8.723.

Why Attend?

In the aging human brain, multiple comorbid pathologies are the rule, not the exception, particularly for those who die after age 80 with cognitive impairment. While the amyloid plaques and tau neurofibrillary tangles of Alzheimer's disease remain highly prevalent and strongly associated with cognitive impairment in this age-group, it has become increasingly apparent that there is another proteinopathy at play. TDP-43 is a DNA-binding protein that regulates many aspects of protein production and was first associated with neurodegenerative disease when it was identified as a major constituent of the pathologic inclusions in amyotrophic lateral sclerosis (ALS) and frontotemporal lobar dementia (FTLD). More recently TDP-43 proteinopathy has been described in the brains of people over age 80 years without FTLD or ALS, but often with comorbid AD pathology. These individuals, usually diagnosed with AD clinically, at autopsy lack the degree of AD neuropathologic change expected based on the clinical picture, but do have TDP-43 pathology in the hippocampus and other mesial temporal structures. Until recently there was no consensus-based nomenclature for this pathology, but it is now referred to as Limbic-predominant Age-related TDP-43 Encephalopathy (LATE). The presence of pathological TDP-43 in these cases suggests a novel disease mechanism in older adults with neurodegenerative disease and the increased awareness of this pathology has sparked new research focused on understanding the interactions between multiple pathologic proteins in the aging brain and ways to intervene.

You must sign-in to receive CME credit.

Objectives: Upon completion of this program, attendees should be able to:

- 1) Define the concepts "resistance" and "resilience" in the context of Alzheimer's Disease.
- 2) Recognize the importance of a third pathologic protein, TDP-43, in late-onset AD.
- 3) Understand how the invertebrate model *C. elegans* can be leveraged to study pathways of proteotoxicity in a complex, uniquely human disease like AD.

The University of Washington School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The University of Washington School of Medicine designates this live activity for a maximum of 10.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity. (Each session is 1.0 credit)

To request disability accommodations, contact the Office of the ADA Coordinator at least ten days in advance of the event: 543-6450 (voice); 543-6452 (TDD); 685-3885 (fax); access@u.washington.edu (e-mail).

If you would like to join the Pathology Grand Rounds listserv contact Evan McCoy (evanmc@uw.edu, 206-543-0767)

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