

Transgenic Rat Model for Cerebral Amyloid Angiopathy

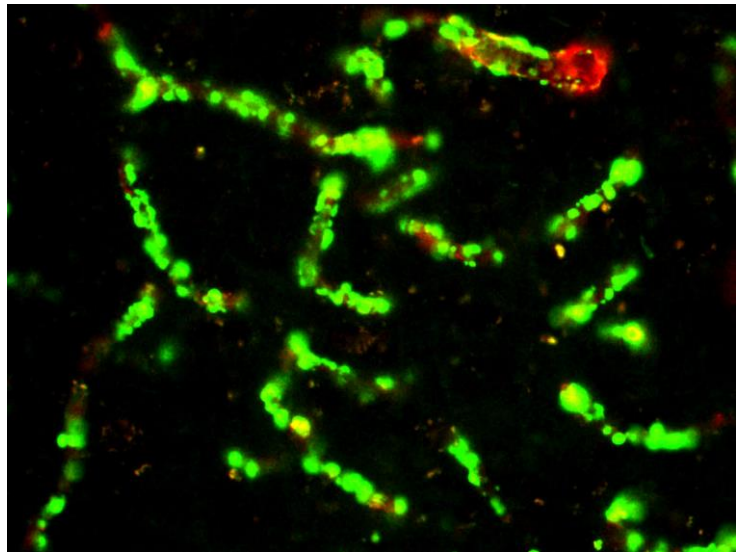
This novel rat model for small vessel cerebral amyloid angiopathy has distinct advantages over the mouse models and provides an invaluable platform to investigate therapeutic strategies effective biomarkers

Background

Transgenic mouse models, such as Tg-SwDI, have provided a useful paradigm to investigate the contribution of small vessel cerebral amyloid angiopathy (CAA) to neuroinflammation and vascular cognitive impairment & dementia (VCID). However, mouse models have obvious shortcomings with regards to sophisticated cognitive testing and structural neuroimaging. Therefore, more appropriate animal models of small vessel CAA are necessary to move the field forward towards understanding the pathogenesis and its contribution to structural changes in the brain and VCID.

Technology

Dr. William Van Nostrand, Professor in the Departments of Neurosurgery and Medicine at Stony Brook University has developed a transgenic rat model for CAA, which is a significant improvement over the existing mouse models. These novel transgenic rats provide an important advanced model to help elucidate how pathological processes of CAA, Alzheimer's and dementia evolve and provide a means to develop and test biomarkers and therapeutic agents that can prevent this disease



Advantages

- Provides a more suited animal model for CAA, dementia Alzheimer's pathology and progression
- Useful for testing novel compounds and treatment strategies

Applications

- Rat Model
- **Research tool**
- **Therapeutic Screening**
- **Drug delivery**

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