

Non protein coding RNAs as diagnostic biomarkers and therapeutic targets in Alzheimer's disease

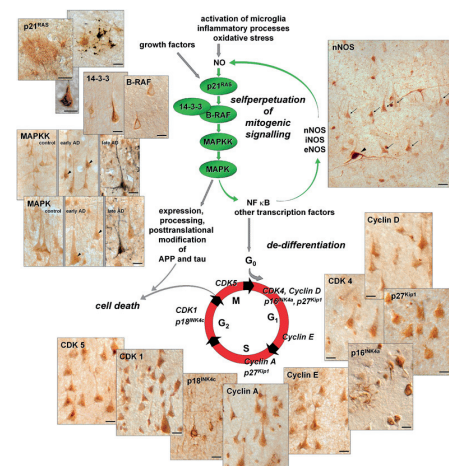
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Keywords

- Alzheimer's disease
- Neurodegeneration
- Cell cycle and apoptosis

The research group is working on the pathomechanism of Alzheimer's disease and related neurodegenerative disorders of higher age. He was involved in the discovery of the degeneration of the cholinergic basal forebrain system in Alzheimer's disease which provides the basis for the currently available treatment of the disease. More recently, he has shown that aberrant regulation of oncogenes and tumor-suppressor genes leading to a neurone-specific cell cycle activation and DNA-replication are critically involved in the process of neurodegeneration in Alzheimer's disease which links neurodegeneration to malignant cell transformation of dividing

cells. Currently, a major focus of the group's research is to develop an anti-apoptotic strategy for therapeutic purposes through interference with the process of neuronal cell cycle-activation and to identify molecular signatures suitable for early diagnosis.



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