

# Humanized yeast models to study aspects related to Alzheimer's and Parkinson's disease

*Commonly used acronym: Humanized yeast*

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## Contact person

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## Organisation

**Name of the organisation** Katholieke Universiteit Leuven (KUL)

**Department** Biology

**Country** Belgium

**Geographical Area** Flemish Region

## SCOPE OF THE METHOD

<b>The Method relates to</b>	Human health
<b>The Method is situated in</b>	Basic Research, Education and training, Translational - Applied Research
<b>Type of method</b>	In vitro - Ex vivo

## DESCRIPTION

### Method keywords

Yeast

ABeta42

Tau

MAPT

SNCA

Alpha-synuclein

Synphilin-1  
screening  
drug testing  
cell death  
protein folding  
protein aggregation  
Alzheimer  
Parkinson

### **Scientific area keywords**

neuroscience  
neurodegeneration  
Tauopathy  
Alzheimer  
Parkinson

### **Method description**

We have developed and validated yeast models to study aspects related to protein folding diseases like Alzheimer's and Parkinson's disease. These models allow to gain further insight in the cellular processes involved in the etiology of these disorders and as such identify potential new bio-markers and targets for therapeutic intervention. These models also offer a screening platform to identify lead compounds, to test the efficacy of drugs or to perform mode-of-action studies.

### **Lab equipment**

Standard yeast culture equipment ;  
Multi-well microplate spectrophotometer/shaker.

### **Method status**

Published in peer reviewed journal

## **PROS, CONS & FUTURE POTENTIAL**

### **Advantages**

Proven biological relevant eukaryotic system ;

Low cost compared to mammalian cell based systems.

## Challenges

Unicellular model

## Future & Other applications

Similar yeast based models can be developed for other disease areas, such as cancer.

## REFERENCES, ASSOCIATED DOCUMENTS AND OTHER INFORMATION

### References

<http://lirias.kuleuven.be/cv?Username=U0009565>

### Links

[Additional information](#)

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