

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

**Commonly used acronym:** Humanized yeast Created on: 08-02-2020 - Last modified on: 11-02-2020

# **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

The Method relates to	Human health
The Method is situated in	Basic Research, Education and training, Translational - Applied Research
Type of method	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











