

# Neuroprotective effects of novel analogs of anorexigenic prolactin-releasing peptide (PrRP) in mouse models of neurodegeneration and obesity

<https://neurodegenerationresearch.eu/survey/neuroprotective-effects-of-novel-analogs-of-anorexigenic-prolactin-releasing-peptide-prrp-in-mouse-models-of-neurodegeneration-and-obesity/>

## Principal Investigators

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### Country

Czech Republic

## Title of project or programme

Neuroprotective effects of novel analogs of anorexigenic prolactin-releasing peptide (PrRP) in mouse models of neurodegeneration and obesity

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Czech Science Foundation

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€ 317,888

## Start date of award

01/01/2016

## Total duration of award in years

3

## Keywords

### Research Abstract

Alzheimer disease (AD) has been recently linked to disturbed central insulin signaling, leptin resistance, obesity and type 2 diabetes. Insulin, leptin and glucagon-like peptide-1 agonists showing anorexigenic effect were found to prevent pathological phosphorylation of Tau protein

and/or formation of Amyloid beta peptide plaques in animal models of AD. The major aim of our proposal is to find out if novel anorexigenic peripherally administered and centrally acting analogs of prolactin-releasing peptide (PrRP) have similar beneficial effect on the mentioned neurodegenerative changes in hippocampi of APP/PS1 and Thy-Tau 22 mice and their common aged wild type controls fed either with high fat or normal diet, as well as metabolic changes. Implication of PrRP analogs on spatial memory will be also assessed. Besides, effects of PrRP analogs on induced neuronal damage in cultured neurons will be studied. We aim to prove that our novel PrRP analogs have potent beneficial effects on neurodegenerative changes and memory.

**Further information available at:**

**Types:**

Investments < €500k

**Member States:**

Czech Republic

**Diseases:**

N/A

**Years:**

2016

**Database Categories:**

N/A

**Database Tags:**

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