# Structure and volume of the olfactory brain: Relationships to olfactory dysfunction, cognitive decline and prospective dementia.

https://neurodegenerationresearch.eu/survey/structure-and-volume-of-the-olfactory-brain-relationships-to-olfactory-dysfunction-cognitive-decline-and-prospective-dementia/

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Sweden

# Title of project or programme

Structure and volume of the olfactory brain: Relationships to olfactory dysfunction, cognitive decline and prospective dementia.

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3

## **Keywords**

# **Research Abstract**

Recent evidence suggests that olfactory performance can partly be explained by the architecture of the olfactory brain. Given that aging takes a toll on olfactory functions, it is of value to further localize predictors of olfactory decline in old age populations to elucidate why some individuals have an intact sense of smell and other experience significant degradation (i.e., anosmia and hyposmia). In addition, impaired olfactory abilities are often prevalent in early

stages of Alzheimer?s disease (AD) and may thus serve as an early marker for cognitive decline and preclinical AD. The aim of the research program is to investigate structural brain correlates of olfactory performance in relation to genes, olfactory disorders, cognitive impairment, and dementia. These questions will be investigated in an older large-scale population-based sample, the SNAC-K project. The SNAC-K project is unique for its longitudinal data comprising health aspects, cognitive functions, olfactory abilities, genetic information, and brain imaging data. The data will be analyzed at Dresden University that offers unique technical expertise in olfactory brain mapping. Also, additional information regarding olfactory disorders will be collected at Dresden University. These findings will help to deepen the understanding of olfactory dysfunction and its relationships with cognitive decline and preclinical dementia.

# **Further information available at:**

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