

Female neuroscientist of the month:

May-Britt Moser

3rd release

She was born in 1963 and raised in Fosnavåg, a small town on an island on the west coast of Norway

Her parents owned a small farm and she lived there with her 4 older siblings. As a child, she loved studying the animals behaviour. For example, she used to watch how snails eat the grass



After their degree, they worked with Dr Per Andersen, studying the **hippocampus** as an area involved in spatial learning and memory

When they returned to Norway they discovered the **grid cells**

Neurons of the **entorhinal cortex** (in the medial temporal lobe) that fire action potentials tracking the movement of the individual. As their function persists in darkness, they may be part of a self-motion based map of the spatial environment



Dr May Britt Moser, Dr Edvard Moser and Dr John O'Keefe were given the **Medicine Nobel Prize in 2014** for her discoveries in spatial memory



Then she moved to Oslo, where she met her future husband, Edvard Moser. They both studied psychology at the University of Oslo

Some years later, they went to Dr O'Keefe's lab in London to continue their research. Dr O'Keefe had discovered the so called **place cells**

Neurons in the hippocampus that allow the animal models to locate a specific small region of space by firing action potentials when there is some external sensory information from the local environment that can be useful.

Grid cells form networks with place cells to establish a comprehensive positioning system: an inner GPS of the brain



"If men are not accustomed to working with women, they will continue to support other men. It's about changing the cultures." - MBM

