**PROJECT RESUME**

**TITLE:** Primary cilia in human cortical development

The cerebral cortex is required for all higher cognitive functions and consists of a large diversity of neural cell types. All this different cell types are formed during development in appropriate numbers and at the correct time and space. This process requires extensive cell-cell signalling which is mediated by primary cilia, small protrusions from the cell surface that act as cellular antennas. Here, we investigate which cell types in the developing human cortex form primary cilia on their surface. We will perform double immunofluorescence stainings for various cilia and cell-type specific markers. We will also interrogate single cell data sets from developing human cortex for the expression of ciliary genes. This combined molecular and computational approach will reveal the cell types that have cilia and their molecular composition. These analyses will form the basis for future analyses on ciliary roles in human corticogenesis and in neurodevelopment disorders.

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