Neurogenesis: Protein Stress Influences Brain Development

During brain development, cells have to divide and differentiate in a very coordinated way. An international team around Laurent Nguyen (GIGA Institute of the University Liege, Belgium) and Sebastian Leidel (Max Planck Institute for Molecular Biomedicine, Münster) has identified an important switch that controls this process. By examining mouse mutants, they could show that the production of falsely folded proteins causes a signal that changes the differentiation of neurons. As a result, mice are born with smaller brains. This work shows that an important mechanism, which the group of Sebastian Leidel discovered in yeast and nematodes, is also effective in vertebrates. This successful international cooperation originated from a chance encounter of the scientists Danny Nedialkova and Juliette Godin at a scientific conference.

Original publication:

More information:
http://www.mpi-muenster.mpg.de/