



Universität
Basel

Research Project

A novel tumor suppressor function of Notch receptors in glioma

Third-party funded project

Project title A novel tumor suppressor function of Notch receptors in glioma

Principal Investigator(s) [Giachino, Claudio](#) ; [Taylor, Verdon](#) ;

Co-Investigator(s) [Taylor, Verdon](#) ;

Organisation / Research unit

Departement Biomedizin / Embryology and Stem Cell Biology (Taylor)

Department

Project start 01.01.2016

Probable end 31.12.2018

Status Completed

The origin of brain tumours is the focus of much research. Gliomas are the most common brain tumours and the prognosis in many cases is very poor. Any advances in understanding the biology of this type of cancer are likely to be important for developing novel and effective therapies.

The adult brain contains stem cells that can generate new nerve cells within restricted brain regions, and this has important implications for cancer. Since uncontrolled proliferation and impaired differentiation of neural stem cells may lead to the formation of gliomas, interfering with these processes would be important to target the cells at the origin of this type of tumour. Moreover, stem-like cells exist in brain tumours leading to the question of whether they require the same signals as normal neural stem cells. We aim to elucidate molecular mechanisms underlying transformation of neural stem cells into tumour cells. We will address this question with genetic loss of function experiments in novel mouse models of human gliomas. These experiments will address differences and similarities in the molecular requirements of glioma stem cells versus neural stem cells.

Financed by

Foundations and Associations

Add publication

Published results

3828978, Giachino, C.; Boulay, J. L.; Ivanek, R.; Alvarado, A.; Tostado, C.; Lugert, S.; Tchorz, J.; Coban, M.; Mariani, L.; Bettler, B.; Lathia, J.; Frank, S.; Pfister, S.; Kool, M.; Taylor, V., A tumor suppressor function for Notch signaling in forebrain tumor subtypes, 1535-6108 ; 1878-3686, Cancer Cell, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

Add documents

Specify cooperation partners