

Research Project

NCCR RNA & Disease (phase II)

Third-party funded project

Project title NCCR RNA & Disease (phase II)

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Organisation / Research unit

Departement Biozentrum / Bioinformatics (Zavolan)

Department

Departement Biozentrum / Bioinformatics (Zavolan)

Project Website <https://nccr-rna-and-disease.ch/>

Project start 01.05.2018

Probable end 30.04.2022

Status Completed

In the large collaborative project NCCR RNA&Disease, funded by SNF, we have two main sub-projects. In the first project we explore the function of an isoform of Argonaute 1 protein, which is generated by translation readthrough, beyond the canonical stop codon. This isoform is extremely conserved in evolution, and we have indications that it carries out an entirely distinct function relative to other human mammalian Argonautes, promoting proliferation of cancer cells. The second sub-project follows our computational inference that a particular RNA binding protein, the polypyrimidine tract binding protein 1, affects the processing of RNAs in a particular cancer, glioblastoma. In this project we aim to characterize the mechanism and targets of this protein, as well as the contribution of specific targets in glioblastoma development.

Keywords molecular life science, RNA processing, RNA metabolism, noncoding RNA, disease mechanism, translation, ribosome, RNA interference, miRNA, gene regulation, mRNA, tRNA, rRNA, lncRNA, nucleic acid

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Swiss National Science Foundation (SNSF)

University of Basel

Follow-up project of [2750044 NCCR RNA & Disease](#)

Add publication

Published results

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Add documents

Specify cooperation partners

ID	Kreditinhaber		Kooperationspartner	Institution	Laufzeit - von	Laufzeit - bis
2354689	Zavolan,	Mihaela	Hall, Jonathan	ETH Zürich	01.11.2009	31.12.2035
2834575	Zavolan,	Mihaela	Hall, Mike, Prof	Biozentrum, University of Basel	01.01.2010	31.12.2040
2834582	Zavolan,	Mihaela	Mühlemann, Oliver, Prof	Department of Chemistry and Biochemistry, Universität Bern	01.05.2014	30.12.2025
3721944	Zavolan,	Mihaela	Jeker, Lukas	DBM, University Hospital Basel	01.01.2015	31.12.2025
4613969	Zavolan,	Mihaela	Ruepp, Marc-David	Kings College London	01.05.2018	30.04.2022
2354647	Zavolan,	Mihaela	Allain, Frédéric	ETH Zürich	01.11.2011	30.04.2022
3721911	Zavolan,	Mihaela	Spang, Anne	Biozentrum, University of Basel	01.05.2014	31.12.2040