

	GL leader	Petr Těšina, PhD
1	CEIPEX RESEARCH TOPIC LEVEL2	Structural Biology: coupled transcription & translation, translational control
2	RESEARCH GROUP	Translation Control
3	TOPICS/FOCUS	Translation Control
4	SUMMARY	Problems in translation due to faulty mRNA or other modes of cellular stress lead to ribosomal collisions which are sensed by specific cellular factors for stress signaling and for clearance of problematic mRNAs and incomplete nascent polypeptides. Our research utilizes cryogenic electron microscopy together with cellular and biochemical methods and aims at providing mechanistic understanding of these translation control processes, defining working principles of their components and their disease-causing mutations. We also study the molecular mechanisms by which viruses affect host translation control.
5	RG WEBPAGE/CONTACT	https://www.ceitec.eu/translation-control/rg396