

PROJECT: Modulation of RELB/p52-dependent NF-KB activities to improve neurodegenerative symptoms of AT



SCIENTIFIC LEAD: Dr Svetlana Khorenenkova, Cambridge University, UK

LENGTH: The study will commence in 2021

COSTS: £90,000

STUDY: Over the course of the year, we invited scientists from around the world, to submit proposals exploring the areas of neurodegeneration or cancer in AT, our priority research areas. It was a lengthy but rewarding process as the year culminated with our Scientific Advisory Board, and additional external scientists, shortlisting 5 high calibre applications for funding. Following further rounds of presentations and interviews, the Review Panel, joined by three AT family members, were unanimous in selecting Dr Khoronenkova to receive the funding. Dr Khoronenkova's study will research the underlying explanation of why neurodegeneration in AT involves loss of cerebellar neurons, particularly the Purkinje cells and granule neurons. Microglia are a form of immune cell present in the cerebellum, which are becoming increasingly implicated in neurodegenerative disorders. Dr Khoronenkova has evidence that when AT microglia are aberrantly activated, they can destroy undamaged neurons. The Cambridge University team will be seeking to confirm that microglia are abnormally activated when ATM is lost. This work is exciting as there is a strong possibility of therapeutic intervention since drugs already exist that can dampen microglial activation.