

2018 CERN Robert Connor Dawes Scientific Fellowship Summary Report Dr. Claire King at the Cancer Research UK Cambridge Institute

Claire King, Ph.D., research associate at the Cancer Research UK Cambridge Institute at the University of Cambridge, began her research project to investigate the genetic fusion that drives the most aggressive subtype of supratentorial ependymoma, a rare type of pediatric brain tumor that occurs in the forebrain. Dr. King's research is under the leadership of neuro-oncologist Richard Gilbertson, M.D.

Approximately 70% of these tumors express a novel oncogene which is the result of a fusion between the two proteins, C11orf95 and RELA, called CR-Fus for short and is associated with poor prognosis. The researchers have developed complex mouse models to determine the role of C11orf95 gene in normal development, and the role of CR-Fus in the initiation and progression of the tumors. Once the role of the CR-Fus in ependymoma development is fully understood, scientists will start developing new treatments for supratentorial ependymoma attacking this fusion as a novel therapeutic target. This research effort could be fundamental in developing future translational work.

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