

SKAN, Wellcome Sanger Institute and University of Newcastle to study early stem cell mutations in rare blood disorder

25 June 2024 | News

Research collaboration will extend cutting-edge stem cell genomic analysis to cancer subtypes



Bengaluru-based SKAN Research Trust (SKAN), promoted by Indian entrepreneur Ashok Soota, has announced a joint research project with the UK-based Wellcome Sanger Institute and University of Newcastle, to study early somatic mutations in blood stem cells that researchers believe drive several cancerous and non-cancerous conditions.

The research collaboration will extend cutting-edge stem cell genomic analysis to cancer subtypes such as Langerhans Cell Histiocytosis (LCH), an immune cell disorder that largely afflicts children aged between 0 to 15 years.

The research project titled Deciphering the Origins of Langerhan Cell Histiocytosis and Related Histiocytic Neoplasms will be led by Dr Jyoti Nangalia, Group Leader at the Wellcome Sanger Institute and Wellcome-MRC Stem Cell Institute. The study will examine the timestamp of the genetic mutations that drives LCH and the presentation of its clinical symptoms.

Researchers will work with leading LCH treating research centres worldwide to cover LCH driven by different genetic mutations with SKAN specifically creating a large cohort of Indian children for the study.

The study comes at a time when researchers are still grappling with understanding how some genetic mutations that drive LCH result in lesions appearing in different parts of the body at different times. Researchers hope that the study will pave the way for better understanding the disease's progression and possible early interventionist strategies for its management.

Newcastle University and its Principal Investigator, Prof. Matthew Collin, who have played a major role in establishing diagnostic and blood monitoring pipelines for LCH, (now adopted by the UK NHS Genomic Medicine Services), will also be part of this collaboration.