SMaHT

Somatic Mosaicism across Human Tissues

The NIH Common Fund's **SMaHT Network** will create knowledge to accelerate research on the impact of somatic variation on human development, aging, and a variety of diseases.

The Network launches in 2023 and will initially run through 2028.

NIH National Institutes of Health
Office of Strategic Coordination – The Common Fund

Did you know?

Our DNA is not always identical in the cells throughout our body. As a one-celled embryo, we inherit unique DNA from our parents. But as our cells multiply and become the various tissues of our bodies, the DNA in these "somatic cells" can acquire new changes.

Though somatic changes (called variants) in our DNA can occur in all tissues and may lead to disease, genetics research mainly studies variants in blood and saliva, resulting in an incomplete picture of the impact somatic variation has on health.

The SMaHT Network will discover how somatic variation contributes to human biology through:

Somatic Variant Discovery

Generating a systematic catalog of human somatic variation from different types of healthy tissues

Technology and Tool Development

Improving our ability to detect and describe somatic variants in small populations of cells

Data Analysis and Organization

Ensuring the somatic variant catalog is accessible, high-quality, and interoperable with other data sets