

New lab in Singapore to advance studies of complex diseases with spatial genomics

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A collaborative effort to result in significant discoveries that can be translated into the clinic



A*STAR's Genome Institute of Singapore (GIS), NanoString Technologies, Inc., and Next Level Genomics (NLG), have announced the establishment of a joint laboratory in Singapore focusing on the application of spatial biology to identify biomarkers that can predict disease progression and treatment response.

The new lab, called the SpACE-Dx lab (**S**patial **A**tlas of **C**linical **E**volution of **D**isease), will harness spatial multiomic (gene and protein expression) technologies to drive research in complex diseases, with a primary focus on cancer.

The SpACE-Dx lab will be situated within A*STAR's GIS facility and be accessible to the local research community. It aims to foster collaboration and accelerate advancements in spatial genomics research.

A*STAR brings to the table its advanced scientific infrastructure and expertise in genomics research, sequencing technologies, data analytics, and spatial omics in the areas of translational cancer biology, infectious disease, and neurobiology.

On the other hand, NLG will provide the laboratory expertise in spatial genomics utilising NanoString instruments to aid researchers in applying cutting-edge spatial technology to their ongoing research. And as a leader in the growing field of spatial biology, NanoString's platforms allow researchers to measure the multi-modal expression of genes and proteins in the natural context of tissue structure, including diseased cells such as cancer cells and the cells within their microenvironment (stromal and immune cells). The technologies enable scientists to determine how cells change and interact during the development and progression of disease.