



Scale Biosciences Unveils Platform for Dramatic Scaling of Single-Cell Experiments and Announces Partnerships to Drive Ease of Use and Enable New Biological Insights

Company announces roadmap anchored by new two plate workflow enabling preparation of samples up to 2 million cells and beyond

New collaborations with Vizgen, BioLegend, and SPT Labtech will extend range and ease of high parameter research using ScaleBio tools

SAN DIEGO, CALIF.- February 5, 2024 – Scale Biosciences (ScaleBio™), an innovator in exponentially scaled single-cell sequencing, providing instrument-free workflows and accessible cost, today announced its development of a new two plate workflow to enable dramatic scaling of its technology and a first set of partners to improve ease of use and enable the deployment of their portfolio across new omics applications. The new platform, announced at the 2024 Advances in Genome Biology and Technology (AGBT) general meeting being held February 5-8, 2024 in Orlando, Fla., allows researchers to prepare sequencing-ready single-cell libraries of up to 2 million cells in a experiment and reduces the plates needed from three to two. This technology will form the basis for future ScaleBio innovation and product development.

“As we look to the future, we are focused on enabling dramatic scaling of single cell-based experiments with higher throughputs across a wider range of parameters and applications,” said Giovanna Prout, CEO of ScaleBio. “Empowering researchers to discover more is as much about building high-quality tools as it is about working across the industry to expand what’s possible when different types of tools and datasets are brought together. We’re not only adding high throughput capabilities to our kits, we are also working with industry partners to enable new applications of single-cell research and alternate product options.”

ScaleBio will initially commercialize their new platform technology as part of a single-cell high parameter protein profiling workflow leveraging BioLegend’s (part of Revvity) highly validated TotalSeq-A™ antibody panels.

ScaleBio also plans to incorporate this new platform technology into its single-cell RNA sequencing portfolio, to enable researchers to conduct ultra-high throughput experiments in functional drug screening and other applications, accessing thousands of samples and millions of cells at a time.

ScaleBio partners with Vizgen Inc. to support growing demand for integration of single-cell and spatial technologies across omics applications

ScaleBio is partnering with Vizgen to give the scientific community more options to combine

single-cell and spatial technologies for integrated data analysis. The complementary nature of these methods will allow scientists to understand tissue composition and the roles and interactions of heterogeneous cell types within a tissue for further insights than performing the methods on their own. Bringing these methods together has utility across a variety of applications including neuroscience and cancer biology.

At AGBT, the companies will share combined datasets of high-resolution data from mouse brain tissue sections generated using their respective technologies. These datasets will demonstrate the measurements from single-cell RNA-seq and targeted spatial gene expression profiling to identify matching cell types, including all major cell types in the brain and subtypes of neurons. The matched datasets will also allow for integration of Vizgen's targeted neuronal panel with spatial mapping and cell-typing with ScaleBio's high-throughput single-cell RNA data which enables profiling of low-abundance cells and non-targeted gene expression to map to the spatial analysis.

"Advancing biological research and biomedical innovation requires a wide range of tools and data types to answer increasingly complex research questions," said Terry Lo, President and CEO of Vizgen. "Partnering with ScaleBio provides our customers with complementary multiomic solutions that work in parallel to offer useful insights about the role of cells within tissues, driving biological discovery."

In partnership with other companies, ScaleBio aims to streamline and improve the customer experience with its products with an eye towards driving efficiency around its existing instrument-free workflow and data analysis. Through a new relationship with SPT Labtech, ScaleBio is working to offer customers an automation option to implement their workflows on SPT Labtech's firefly® platform by creating plug and play, cloud-based scripts optimized for ScaleBio library preparation protocols. ScaleBio also has a partnership with Basepair to offer the ScaleBio Seq Suite on the Basepair platform. This data analysis offering enables researchers, regardless of in-house bioinformatics capabilities, an easy way to access an optimized bioinformatics pipeline through a user-friendly, web-based tool.

Connect with ScaleBio at AGBT

Sponsored Talk: The Single Cell Era, Scaled

Presenter: Giovanna Prout, CEO, ScaleBio

Time: Wednesday, February 7, 2:20 p.m. – 2:40 p.m., ET

Location: Palms Ballroom II & III

Scientific Talk: Atlas-scale Single-cell DNA Methylation

Presenter: Andrew Adey, Ph.D., Professor of Molecular and Medical Genetics, School of Medicine, Oregon Health & Science University

Time: Wednesday, February 7, 7:50 p.m.–8:10 p.m., ET

Location: Palms Ballroom II & III

Poster #627: Scaling Single-Cell Sequencing: Multiplexing Innovations for Cost-Effective High-Throughput Profiling

Presenter: Frank Steemers, Ph.D., Cofounder and Chief Scientific Officer, ScaleBio

Time: Wednesday, February 7, 4:45 p.m. – 6:10 p.m., ET
Location: Palms Ballroom I

Poster #559: Enhanced Single Cell DNA Methylation Analysis Using Combinatorial Indexing
Presenter: Margaret Nakamoto, Ph.D., Manager, Product Applications
Time: Wednesday February 7, 4:45 p.m. – 6:10 p.m., ET
Location: Palms Ballroom I

In Suite Poster: Ultra-high Parameter, Instrument-free, Protein Profiling by Sequencing Using TotalSeq™-A Antibodies at Scale
Location: Suite Bonaire 6

For more information visit <https://scale.bio/agbt-2024/> or join us in suite Bonaire 6.

About Scale Biosciences

ScaleBio is a single-cell sequencing solutions company founded by a multidisciplinary team of scientists and technologists with combined expertise in next-generation sequencing, genomics, proteomics, and bioinformatics, and a common mission for unlocking the potential of single-cell analysis at scale by eliminating barriers to discovery. ScaleBio is financed by leading life sciences tools investors ARCH Venture Partners, BNG01, and Tao Capital. ScaleBio has facilities in San Diego and San Carlos, Calif.

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