Akoya Biosciences Deploys the MaxFuse Algorithm Co-Developed by Dr. Garry Nolan and His Laboratory at Stanford University for Multiomic Integration of Spatial and Single-cell Data on the Enable Medicine Platform

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MaxFuse enables matching and integration of datasets from spatial proteomics, spatial transcriptomics, single-cell sequencing, or other modalities

Development and application of MaxFuse were described in two recent Nature publications

MARLBOROUGH, Mass., Jan. 07, 2024 (GLOBE NEWSWIRE) -- Akoya Biosciences, Inc., (NASDAQ: AKYA), The Spatial Biology Company®, in collaboration with Enable Medicine, a leading provider of AI-powered biological insights, announces the availability of MaxFuse, an advanced algorithm co-developed in the laboratory of Dr. Garry Nolan for integrating multiomic single-cell and spatial datasets*. Dr. Nolan is a co-founder and member of the Board of Directors of Akoya Biosciences.

Recent technology advancements have enabled analyses of the proteome, metabolome, transcriptome, and epigenome both spatially and at the single-cell level. However, the ability to integrate the data from these diverse modalities and platforms is challenging. The MaxFuse algorithm from Dr. Nolan was developed to overcome these limitations and provides a reliable, fast, cost-effective, and scientifically powerful means to integrate spatial proteomic data with single-cell transcriptomic and epigenomic data sets.

The development, co-developers, and applications of MaxFuse were described in recent Nature and Nature Biotechnology publications:

- Integration of spatial and single-cell data across modalities with weakly linked features
- Organization of the human intestine at single-cell resolution

“MaxFuse was developed to address the challenge and opportunity to deliver an algorithmic solution to link multimodal and multiomic datasets,” said Garry Nolan, whose laboratory co-developed MaxFuse. “MaxFuse represents a significant advancement in the analytics capabilities needed to maximize the value of data derived from spatial and single-cell technologies. The relationships that can be revealed by AI and reinforced learning when incorporated into tools such as MaxFuse can enable scientists to maximize the value of both new and historical data sets, contributing to the acceleration of the pace of discoveries derived from these technologies.”

Akoya’s customers can access MaxFuse through the Enable Medicine AI-Cloud Platform.

“Our partnership with Akoya and Dr. Nolan continues to advance in generating new and exciting tools for spatial biology analysis,” said Aaron Mayer, co-founder and Chief Scientific Officer of Enable Medicine. “MaxFuse will help generate powerful data by connecting diverse data-generating modalities, supporting the acceleration of discoveries and the progress towards clinical application.”

A two-part webinar series featuring Garry Nolan and Aaron Mayer entitled "AI-Powered Tissue Atlas: Fusing Single-cell Genomics and Spatial Proteomics with MaxFuse" will be hosted by Genetic Engineering & Biotechnology News (GEN) on February 26th and March 8th, 2024.

* *MaxFuse was developed in collaboration with the laboratories of Nancy Zhang and Zongming Ma at the University of Pennsylvania.*

Forward-Looking Statements

This press release contains forward-looking statements that are based on management’s beliefs and assumptions and on information currently available to management. All statements contained in this release other than statements of historical fact are forward-looking statements, including statements regarding our expectations about the potential of our products and services and other matters regarding our business strategies and plans and objectives for future operations.

In some cases, you can identify forward-looking statements by the words “may,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “project,” “potential,” “continue,” “ongoing” or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. These statements involve risks, uncertainties and other factors that may cause actual results, levels of activity, performance, or achievements to be materially different from the information expressed or implied by these forward-looking statements. These risks, uncertainties and other factors are described under "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in the documents we file with the Securities and Exchange Commission from time to time. We caution you that forward-looking statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. As a result, the forward-looking statements may not prove to be accurate. The forward-looking statements in this press release represent our views as of the date hereof. We undertake no obligation to update any forward-looking statements for any reason, except as required by law.

About Akoya Biosciences

As The Spatial Biology Company®, Akoya Biosciences’ mission is to bring context to the world of biology and human health through the power of spatial phenotyping. The company offers comprehensive single-cell imaging solutions that allow researchers to phenotype cells with spatial context and visualize how they organize and interact to influence disease progression and response to therapy. Akoya offers a full continuum of spatial phenotyping solutions to serve the diverse needs of researchers across discovery, translational and clinical research: PhenoCode™ Panels and

PhenoCycler®, PhenoImager® Fusion and PhenoImager HT Instruments. To learn more about Akoya, visit www.akoyabio.com.

About Enable Medicine

At Enable Medicine, our mission is to organize the world's biological data and make it searchable to generate profound new insights into health and disease. We are building the largest and most comprehensive atlas of human biology to index, interconnect and interrogate diverse data inputs from billions of cells and across thousands of patient data sets. On the Enable biological insight, operating and search (BIOS) platform, scientists use the computational power of generative AI to search these atlases and unlock answers to previously unanswerable questions. Together, we empower those bringing the next generation of diagnostics and therapeutics forward to deliver better patient outcomes. To accelerate your discoveries with AI-powered biological search on the Enable Medicine Platform, visit http://www.enablemedicine.com.

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