



## **Pixelgen Technologies Launches to Advance Single-Cell Spatial Proteomics**

*Raises \$6 million seed round to commercialize Molecular Pixelation DNA visualization technology for cell surface proteins*

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STOCKHOLM, Sweden - [Pixelgen Technologies](#) emerged from stealth today with a mission to bring a new dimension to single-cell spatial proteomics. The launch follows the close of an approximate \$6 million seed round, led by [Navigare Ventures](#), which will support the commercialization next year of the company's groundbreaking Molecular Pixelation technology for spatial analyses of cell surface proteins in 3D.

"We are pioneering a completely new approach to spatial proteomics with Molecular Pixelation, which we view as a long-term foundational technology for spatial biology in cells and tissue," said co-founder and CEO Simon Fredriksson, Ph.D. "There are massive gaps in our understanding of cellular activity, and we aim to close those gaps by offering an unprecedented view of cell-surface proteins and their spatial inter-relationships."

Significant cell mapping efforts have focused on the gene expression of single cells. Yet, cell function and activity are primarily governed by the spatial orchestration of cell surface proteins, particularly immune cells. Understanding cellular activity through the spatial organization of proteins remains largely uncharted because current tools cannot identify many proteins simultaneously and map their spatial inter-relationships. Molecular Pixelation is the only technology able to show spatial protein polarization and co-localization on the cell surface in a highly multiplexed manner.

To offer this level of deep cellular phenotyping, Molecular Pixelation uses oligo-conjugated antibodies and nucleic acid encoded pixels to identify and spatially locate cell surface proteins. After staining, cells are tagged with Pixelgen's proprietary DNA pixels to map out the surface proteins' locations. Next-gen sequencing enables the generation of a spherical and spatial map of cell surface proteins for each single cell.

"Pixelgen's DNA-based visualization technology represents a significant advance over light-based technology," said Navigare Ventures' Investment Manager Alex Basu, Ph.D.. "We believe the data generated by Molecular Pixelation will provide novel insights into basic biology, accelerate drug discovery and development, and lead to new and better diagnostics. We're extremely excited to support Pixelgen on this journey."

Pixelgen was founded in 2020 by Fredriksson, Alvaro Martinez Barrio, Ph.D., Fredrik Dahl, Ph.D., and Filip Karlsson. Fredriksson, a serial entrepreneur, was co-founder, CEO and chief science officer at the proteomics firm [Olink](#), where he invented and commercialized the multiplexed Proximity Extension Assay. He also co-founded [Genagon Therapeutics](#), a groundbreaking immuno-oncology company. Fredriksson will lead the executive team including:

- Co-founder and Chief Data Analysis Officer Alvaro Martinez Barrio Ph.D, is a seasoned computational scientist and former group leader at 10x Genomics
- Co-founder and Chief Technology Officer Filip Karlsson is a co-inventor of Molecular Pixelation, and previously led development efforts for key product lines at Halo Genomics (now Agilent) and Vanadis (now Perkin Elmer)
- Chief Business Development Officer Erik Pettersson, Ph.D., was formerly at Olink and Olink Proteomics, where he was head of business development
- Director of Sales and Marketing Annika Branting previously held marketing manager and product manager roles at 10x as well as field support managing roles at 10x, Life Technologies and Thermo Fisher

The company has assembled a world-class board and team of scientific advisors. Serving on the board, in addition to Fredriksson and Martinez Barrio, are Chair Fredrik Dahl Ph.D., a partner at [Colibri Ventures](#) and a biotech executive and entrepreneur, Björn Algvist, CEO at Fibonacci Growth Capital AB and Alex Basu Ph.D., Investment Manager at [Navigare Ventures](#). Brad Crutchfield, joins the board following his roles as chief commercial officer of 10x Genomics, and as an executive at companies including QIAGEN and Illumina

Pixelgen's Scientific Advisory Board includes:

- [Petter Brodin M.D., Ph.D.](#), a highly regarded immunologist and professor at Imperial College London and the Karolinska Institutet in Stockholm
- [Emma Lundberg Ph.D.](#), a pioneering researcher in spatial proteomics, associate professor at Stanford University, and a director of the Cell Atlas, of the Human Protein Atlas program.
- Tarjei Mikkelsen Ph.D., chief technology officer at [ArsenalBio](#), a programmable cell therapy company, and former vice president of biology at 10x Genomics

## **About Pixelgen Technologies**

Pixelgen Technologies AB was founded in 2020 by a team of passionate, experienced innovators and entrepreneurs with a vision to bring a new spatial understanding to biology by mapping cell surface proteins and their spatial inter-relationships. The company has developed Molecular Pixelation, a DNA-based visualization technology for analyzing cell surface proteins, to gain novel insights into cellular activity that will advance better medicines and diagnostics. Pixelgen is headquartered in Stockholm, Sweden.

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