BIOPTIMUS

Press Release - January 14, 2025

Bioptimus hits $76M

funding milestone and prepares to launch groundbreaking foundation model for biology

- Bioptimus announces a $76M funding milestone, with the latest injection of $41M led by Cathay Innovation less than 12 months from its initial seed round

- Since the successful release of the largest AI foundation model for pathology in July, the company has been continuing its groundbreaking work and is now poised to release a breakthrough new multi-scale, multi-modal foundation model for biology in 2025

- The new model will allow the simulation of biology at unprecedented scale and dimension, creating biological innovation for medical, biotech, cosmetic industries, and beyond

Bioptimus, the pioneering AI foundation model company, announced today that it has reached a significant funding milestone of $76 million. This total includes

a $41 million cash injection, led by Cathay Innovation with participation from prominent investors, including Sofinnova Partners, Bpifrance through its Large Venture Fund, Andera Partners, Hitachi Ventures, Boom Capital Ventures, Pomifer Capital, Sunrise, and angel entrepreneurs Emmanuel Cassimatis and Thomas Wolf. The funding will accelerate Bioptimus's mission to build the world's first universal AI foundation model for biology, aimed at revolutionizing research and innovation across the medical, biotech, cosmetic industries, and beyond.

The company has been building momentum this year, assembling a world-class team, securing access to unique data sources, and successfully releasing its first model, H-Optimus-0, the world's largest foundation model for pathology. H-Optimus-0 has already outperformed all other pathology models in independent benchmarks, including assessments conducted by Harvard Medical School's HEST program[1] and the University of Leeds.[2] These studies highlighted the model's unparalleled ability to predict gene expression from morphology and to subtype ovarian cancer with exceptional accuracy.

Breaking down silos in biology

Bioptimus is redefining how we approach biological research by addressing a longstanding issue: the siloed nature of biological understanding. Historically, research has focused on isolated biological components, such as DNA, proteins, cells or tissues. Even existing AI foundation models operate within these silos, limiting their potential impact. Bioptimus's revolutionary approach integrates data across multiple scales (molecules, cells, tissues, organisms) and modalities (imaging, genetics, etc), enabling a holistic view of biology as it exists in reality.

Jean-Philippe Vert, co-founder and CEO of Bioptimus, stated:

> What we are building is not just a technological breakthrough; it's a transformative tool for understanding biology in its full complexity. By learning how biology works directly from raw data across scales, from molecules to whole organisms, our model will empower researchers in the pharmaceutical industry to simulate complex biology,

> predict disease outcomes and response to treatment, and design therapies with unprecedented precision. Beyond pharmaceuticals, this model will unlock limitless possibilities across many other industries, driving biological discoveries in ways we are only beginning to imagine. Essentially, it's like the GPT of biology—but instead of generating text, we're simulating biology.

The funding will enable Bioptimus to enhance its multi-modal AI platform, integrating even more diverse data sources and therapeutic areas, forge strategic partnerships with pharmaceutical and biotech companies and expand critical datasets to further refine and validate its models.

Jacky Abitbol, Partner at Cathay Innovation, said:

> Bioptimus is at the forefront of transforming biological research, leveraging cutting-edge AI to break down silos and unlock the full complexity of biology. By integrating data across multiple scales and modalities, Bioptimus is paving the way for groundbreaking innovations across industries, from pharmaceuticals to biotechnology and beyond. We are delighted to see that since our initial investment a year ago, Bioptimus has succeeded in structuring a world-class team, while achieving key milestones in its development, notably with the launch of its AI foundation model for pathology in July, the largest in the world.

By combining the power of AI with a truly integrated view of biology, Bioptimus will empower researchers and multiple industries to solve some of the most

complex challenges in medicine, biotechnology, and beyond.

For more information, visit bioptimus.com.

[1] Jaume et al., HEST-1k: A Dataset for Spatial Transcriptomics and Histology Image Analysis, NeurIPS 2024, available at https://arxiv.org/abs/2406.16192

[2] Breen et al., A Comprehensive Evaluation of Histopathology Foundation Models for Ovarian Cancer Subtype Classification, arXix 2024, available at https://arxiv.org/abs/2405.09990

About Cathay Innovation

Cathay Innovation is a multistage venture capital firm, affiliated to Cathay Capital, investing in founders building transformative businesses across Europe, North America, Asia, Latin America and Africa. Its platform connects founders with investors and its ecosystem of leading Fortune500 corporations to help startups scale and transform industries with consumer to enterprise and AI solutions in commerce, fintech, digital health and mobility / energy. Founded in Paris in 2015, Cathay Innovation now manages over €2.5B AUM with additional offices in Berlin, San Francisco, Shanghai and Singapore and has invested in over 100 startups including Chime, Pinduoduo (NASDAQ: PDD), Glovo, Wallbox (NYSE: WBX), Owkin, Getaround, Ledger, ZenBusiness, Alma, Descartes Underwriting and more.

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Media Contact: press@bioptimus.com

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