Israel Innovation Authority Invests Approx. NIS 70 Million in National Infrastructure for AI Models Based on Bio Data

New Israel BioToken Factory Initiative (IBFI) Brings Together NVIDIA, Teva, Sheba Medical Center, Startups and Universities to Develop Next Generation of Bio AI

Dror Bin, CEO of The Israel Innovation Authority (Credits: Israel Innovation Authority)1

JERUSALEM, ISRAEL, July 12, 2026 /EINPresswire.com/ -- The Israel Innovation Authority today announced a NIS 70 million investment, together with leading industry partners, in the establishment of the Israel BioToken Factory Initiative (IBFI), a new national research and development consortium that will develop a shared technological infrastructure for the next generation of artificial intelligence applications in biology, drug discovery, and personalized medicine.

The consortium will develop a common technology platform that will enable companies, researchers, and healthcare organizations to build the next generation of AI models based on biological data. Among the consortium's partners are NVIDIA, Teva Pharmaceutical Industries, Sheba Medical Center, CytoReason, TerraCyte Analytics, and MeMed, alongside leading researchers from the Weizmann Institute of Science, the Technion – Israel Institute of Technology, and Ben-Gurion University of the Negev.

The initiative is designed to address one of the most significant challenges in computational biology: the ability to represent, process, and integrate complex, multimodal, and dynamic biological data. By establishing a unified technological infrastructure, the consortium will enable the development of advanced AI models that improve the understanding of biological processes, predict treatment responses, accelerate drug discovery, and support both clinical and research

decision-making.

Gila Gamliel, Minister of Innovation, Science and Technology said: "Israel continues to lead at the forefront of global innovation. The collaboration between technology companies, the pharmaceutical industry, hospitals, and academia creates a unique force multiplier that will enable the development of the next generation of AI-based medical solutions. The investment in the IBFI consortium is an investment in health, the economy, and the future of Israel."

Dror Bin, CEO of the Israel Innovation Authority, said: "In recent years, artificial intelligence has transformed the way we develop drugs, research diseases, and understand biological systems. Today, the major challenge is no longer simply developing more advanced models, but building the infrastructure that will enable those models to learn from the complexity of human biology. The new consortium will develop a unique Israeli infrastructure of global caliber that will enable standardized representation of biological data, integration of prior biological knowledge, development of computational disease models, and clinical validation of the resulting outputs. This is a strategically important initiative for Israel's life sciences industry, enabling companies to develop more advanced solutions, more rapidly, on the basis of a shared infrastructure that will serve the entire ecosystem."

Yoav Nissan Cohen, Chairman of the Consortium, CEO and Chairman of TerraCyte, said: "Everyone is talking today about AI in biology, but biology still does not speak a language that AI can understand. IBFI was established to build the infrastructure and the language on which the next generation of biological AI will be based. The goal is to bring closer the day when medicine will truly be personalized, medicine that understands the unique biology of every individual and makes it possible to predict disease progression, develop better drugs and treatments, and match every patient with the right treatment."

As part of the consortium, a shared technological infrastructure will be developed comprising two core components. The first, Bio Tokens, will provide a standardized representation layer for different types of biological data. The second, Factory Model, will serve as a platform enabling the development, integration, execution, and accessibility of AI-based biological models. Together, these two components will make it possible to connect molecular, cellular, dynamic, and clinical data within a single computational framework, creating a shared infrastructure that will serve industry, academia, and the healthcare system.

The consortium is based on broad collaboration between industry companies, healthcare organizations, and leading research groups. Partners in the initiative include CytoReason, TerraCyte Analytics, and MeMed, alongside NVIDIA, Teva, and Sheba Medical Center. The scientific activities are led by Prof. Eran Segal and Prof. Nir Yosef of the Weizmann Institute of Science, Prof. Shai Shen-Orr of the Technion – Israel Institute of Technology, and Prof. Assaf Zaritsky of Ben-Gurion University of the Negev. The collaboration among all partners is intended to enable the development of a shared, pre-competitive R&D infrastructure that will serve the entire Israeli life sciences ecosystem.

The consortium's initial applications are expected to focus, among other areas, on predicting responses to oncology treatments, evaluating immune system activity, predicting drug hypersensitivity, supporting clinical decision-making in sepsis, assessing transplant rejection, autoimmune diseases, and drug discovery.

The establishment of the consortium aligns with the Israel Innovation Authority's policy of advancing breakthrough technological infrastructures that connect industry, academia, and the healthcare system. Through investments in infrastructures of this kind, the Authority seeks to strengthen Israel's competitive advantage in artificial intelligence, biotechnology, and personalized medicine, while enabling the development of technologies that will serve both industry and the healthcare system in the years ahead.

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