

Dear Einstein Community:

We are pleased to announce the launch of the Albert Einstein Institute for Advanced Studies in the Life Sciences, an entity that will be overseen by the office of the dean and housed within our department of systems and computational biology. This new institute is based on a simple but powerful premise: that to effectively provide answers to the major scientific problems in the life sciences facing researchers today, there must be much greater integration between pure scientific inquiry and the humanities.

Through the institute, we plan to incorporate a variety of disciplines into scientific inquiry, ranging from basic science to the humanities, including mathematics, physics, evolutionary theory, developmental biology, neuroscience, anthropology, animal behavior, psychology, social science, political theory, history, communication, linguistics, and philosophy.

Much of the information below can also be found on <u>the institute's website</u>, which outlines the reasons, rationale, and goals of the new institute. We encourage you to click through and take a look.

Why the Humanities?

While science has made great strides in uncovering the components and mechanisms of living systems, our understanding is still full of unknowns, and new approaches and inquiries are necessary. There also is a need to study systems of organized complexity touching on the "big unknowns" including cognition, development, language, and communication. These challenges require a new approach, involving both a breadth of perspectives and a mode of critical analysis and discourse that does not depend on mathematical formalism, even if such formalization remains an ultimate goal.

Creating a Productive Synergy

Because many investigators focus on a narrow area of research, individuals, or

even teams working within a single discipline, may lack the breadth of knowledge necessary to draw connections and ask broad questions. By bringing together people with expertise in diverse ways of thinking, we hope to create an environment of intense and productive collaboration. In addition, the traditional mode of science publication expects results to be communicated in a precise and narrow form. This removes incentives to work on big questions that cannot immediately be formalized. An institute with the explicit aim of studying such questions can push back against this trend.

Institute Leadership

Aviv Bergman, Ph.D., the Harold and Muriel Block Chair in Systems and Computational Biology and professor and founding chair of that department will serve as the institute's inaugural director, joined by approximately 25 Einstein faculty members who will comprise its founding faculty. This core team will collaborate with additional affiliates, both internally and externally, including an outside advisory council. In addition, the institute will host up to six independent postdoctoral fellows and house two to three scholars to be in-house external faculty for varying degrees of time.

We expect this unique institute, which sets Einstein apart from other researchintensive medical schools, will ultimately help improve health in our community and around the world. Please feel free to reach out if you have any comments or questions about this exciting new dimension to research conducted at Einstein, offering members of our research community creative avenues for envisioning and pursuing their scientific goals.

Sincerely,

Gordon F. Tomaselli, M.D.

The Marilyn and Stanley M. Katz Dean

Albert Einstein College of Medicine

Executive Vice President and Chief Academic Officer

Montefiore Medicine

Aviv Bergman, Ph.D.

Professor and Founding Chair, Department of System & Computational Biology

Harold and Muriel Block Chair of System & Computational Biology Inaugural Director, Albert Einstein Institute for Advanced Study of Life Sciences Albert Einstein College of Medicine