
From: Joichi Ito <j[REDACTED]>
Sent: Monday, May 29, 2017 4:20 PM
To: Jeffrey Epstein
Subject: Re: One Science - second pass

How about this?

We propose a “One Science” initiative hosted at the Media Lab to generate and launch a number of collaborative research programs in science by approaching the development of the questions as well as the framework for addressing them in a new and nontraditional way. This will require discretionary funding that allows flexibility, pivoting and interdisciplinary collaboration beyond the constraints of typical foundation and federal funding approaches.

Almost all of the important problems that science faces are complex and interdisciplinary, yet the majority of traditional research labs still focus on a single discipline or problem. To tackle difficult challenges, such as curing or augmenting the human body; developing, deploying and regulating artificial intelligence; or understanding, designing and managing the future of genomics and our species, we need interdisciplinary—and perhaps more importantly, antidisiplinary—groups of the best researchers in any number of disparate fields. Working together, bound tightly in an operating group, these scientists are unencumbered by the “walls” of disciplines and federal funding silos. These teams develop tools and pull expertise from any field, exploiting “low-hanging fruit” and discoveries in neglected areas. Unlike sciences like physics, which have an established paradigm, these are “pre-paradigmatic sciences”—the principles are not yet clear, the textbook is incomplete, there are no hard and fast rules, so the disciplinary source of a given revolution is highly unpredictable.

While academia can attract the brightest researchers whose thinking is not yet encumbered by traditional disciplinary biases, it does not necessarily provide the best model for attracting funding for “unproven” research initiatives, or for scaling. The Media Lab’s “secret sauce” is its ability to bring together a constantly evolving community of hundreds of faculty members, staff researchers, and graduate students, and draw on the broader research community at MIT and beyond. We can assemble teams of theoretical scientists as well as engineers and designers to build new tools and deploy them. The problems we are trying to tackle today are not as focused as the Manhattan project, but rather involve a range of explorations in complex self-adaptive systems, such as biological systems. We are building a new kind of approach to advancing the understanding, invention, and employment of a non-discipline-segregated “one science.”

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