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

How about this?

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

Almost all =f the important problems that science faces are complex and =nterdisciplinary, yet the majority of traditional research labs still =ocus on a single discipline or problem. To tackle difficult challenges, =uch as curing or augmenting the human body; developing, deploying and =egulating artificial intelligence; or understanding, designing and =anaging the future of genomics and our species, we need =nterdisciplinary—and perhaps more importantly, =ntidisciplinary—groups of the best researchers in any number of =isparate fields. Working together, bound tightly in an operating group, =these scientists are unencumbered by the “walls” of =isciplines and federal funding silos. These teams develop tools and =ull expertise from any field, exploiting “low-hanging fruit”=9D discoveries in neglected areas. Unlike sciences like physics, which =ave an established paradigm, these are “pre-paradigmatic =sciences”—the principles are not yet clear, the textbook is =ncomplete, there are no hard and fast rules, so the disciplinary source =f a given revolution is highly unpredictable.

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

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