



MIT faculty, alumni cited as top young innovators in Technology Review

Elizabeth A. Thomson, News Office
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Three MIT faculty and eight alumni are among the TR 35, Technology Review Magazine's compilation of the 35 top innovators worldwide under the age of 35.

"The TR35 is an amazing group of people. Their accomplishments are likely to shape their fields for decades to come," said Jason Pontin, editor in chief of Technology Review.

The innovators will be featured in the September-October issue of the magazine; the [story went online](#) Sept. 8.

The MIT faculty to receive the award are Manolis Kellis, Marin Soljacic, and Alice Ting.

Kellis is an assistant professor in the Department of Electrical Engineering and Computer Science who holds the Class of 1964 Distinguished Alumni Career Development Chair; Soljacic is an assistant professor in the Department of Physics; and Ting is the Pfizer-Laubach Career Development Assistant Professor of Chemistry.

Kellis, 29, was cited for developing "algorithms and techniques for analyzing the entire genomes of different species, the better to understand those genomes," according to Technology Review.

"After validating his methods in yeast, Kellis has moved to the human genome, which he has so far compared with those of the mouse, rat, and dog. His work is providing an intimate understanding of the human genome that may give drug developers new points of entry in their attempts to combat viruses and other causes of disease."

Soljacic, 32, won for his work on modeling the flows of light. "By calculating the behavior of light in structures called photonic crystals, Soljacic is paving the way for devices that can process information at ultrafast speeds using light alone," the magazine reported.

He has also "shown how photonic crystals can enable light beams to interact and to control one another, so that photonic devices can carry out logic operations."

Ting, 31, was cited for her work on "cellular movies" that "reveal the minute inner workings of cells in unprecedented cinematic detail," according to Technology Review.

She is currently working to "fluorescently image the junction between nerve cells, illuminating a biochemical process that appears to play a key role in learning and memory. So it may be possible one day to see an actual film of how a brain learns."

MIT alumni among the TR 35 are Kellis, Soljacic, Edward Boyden, Seth Coe-Sullivan, Roger Dingledine, Eddie Kohler, Ling Liao and Michael Wong.

The honorees are selected by the editors of the magazine in collaboration with a prestigious panel of judges from major institutions and corporations such as Boston University, Hewlett-Packard Labs, the Lawrence Livermore Laboratory, Caltech and Applied Materials.

A version of this article appeared in MIT Tech Talk on September 13, 2006 ([download PDF](#)).

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