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Technology Review

MIT's Magazine of Innovation

★ *Special Issue*

10 EMERGING TECHNOLOGIES

They're raw. But they'll transform the Internet, computing, medicine, energy—and more. p43

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MIT News

Memorable Mentors page m14
Boosting Immunity page m20
The Amazing Kresge Turns 50 page m23

Someone should make hydrogen vehicles and their refueling stations a reality. Only GM could. Only General Motors has teamed up with Shell to introduce the nation's first hydrogen refueling pump at a retail station. It's the endgame of a multi-faceted strategy GM set in motion years ago to make cleaner cars and trucks powered by hydrogen. Right now, a test fleet of hydrogen-powered GM vehicles

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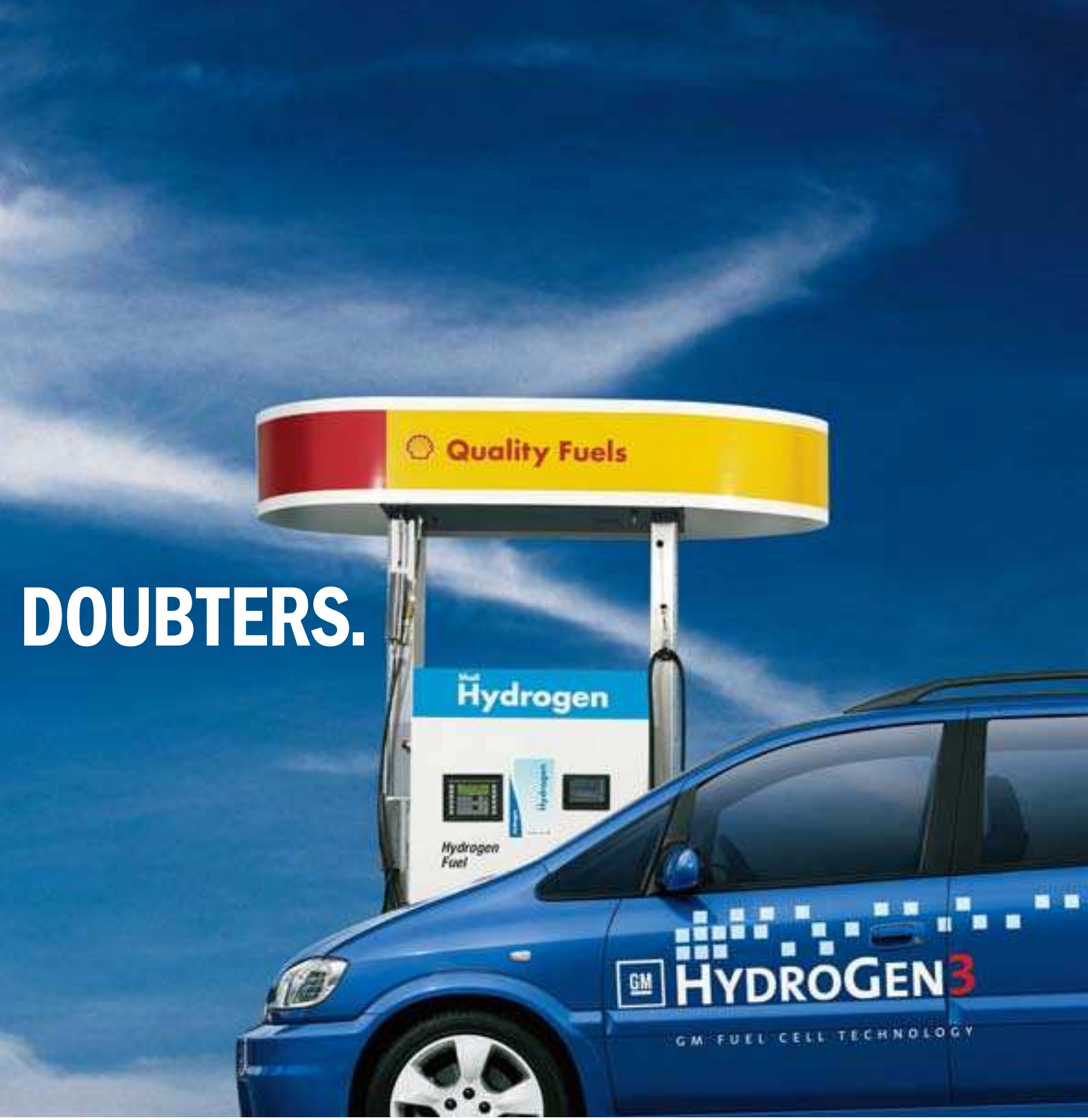

DOUBTERS.

is negotiating traffic in downtown Washington, D.C. GM introduced the first fuel cell-powered concept vehicle nearly forty years ago, and we've continued to push fuel cells forward ever since. With over five hundred GM engineers on three different continents working on hydrogen technologies, it's clear the hydrogen economy isn't a pipe dream anymore.

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Of the numerous technologies now in gestation at companies and universities, we have chosen 10 that we think will make particularly big splashes. They range from bacterial factories to silicon photonics to quantum wires—and any one of them could change your world.

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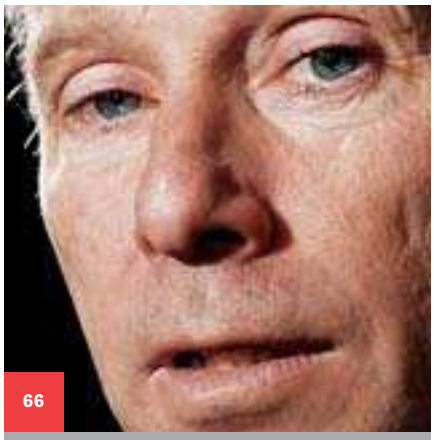

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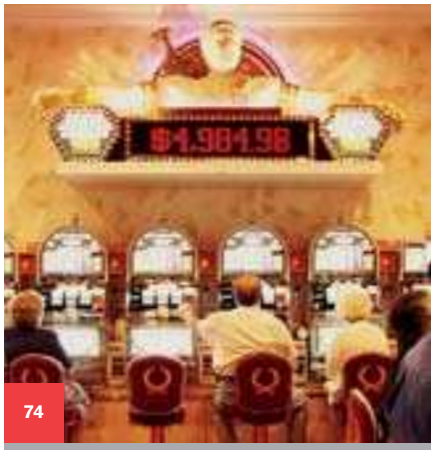
Portraits of six men who spend big on tech



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Julius Axelrod's research helped launch the multibillion-dollar antidepressant market.
By Andrew P. Madden

What's new at technologyreview.com

For the fourth year, *Technology Review* has chosen 10 emerging technologies that our editors believe will change the world. How have our past picks turned out? We were curious, and thought you might be too.

On our website, Stu Hutson gets us up to date on the latest news in grid computing, digital rights management, RNA interference, nanowires, biometrics, flexible transistors, and glycomics.

Plus: Charles Ferguson, who wrote our January 2005 cover story "What's Next for Google?", got so much thought-provoking feedback from *Technology Review* readers that he decided to further explore Microsoft's role in the digital world. (In his magazine piece, he contended that Google ought not underestimate Microsoft.) Ferguson is an entrepreneur who, in 1995, sold Vermeer Technologies to Microsoft for $130 million.

About Technology Review *Technology Review*, the oldest technology magazine in the world, is published by Technology Review, Inc., an independent media company owned by the Massachusetts Institute of Technology. Founded in 1899, *Technology Review* describes emerging technologies and analyzes their commercial, economic, social, and political impact for an audience of senior executives, researchers, financiers, and policymakers, as well as for the MIT alumni. In addition, Technology Review, Inc. produces technologyreview.com, a website that offers daily news and opinion on emerging technologies. It also produces live events such as the Emerging Technologies Conference. The views expressed in *Technology Review* are not necessarily those of MIT.

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