America's Best & Brightest

Gene Jockeys
Flu Gurus
Nuclear Mavericks
Rogue Pianists
The Next Great Blond
& 25 Others Who Are Saving Our World

Bill Clinton
The Most Influential Man in the World Starts Getting His Hands Dirty

And... The Vandal of the Year (Pg. 198)

Also:

The World's Hardest Quiz (Pg. 174)

Flying Windmills & the Other Inventions of the Year

47 Genius Gift Ideas
sand bits of DNA from all known virus families. DeRisi also designed and wrote the software for a robot dexterous enough to imprint the slide with all those little bits of genetic material.

DeRisi had barely finished the microarray two years ago when he suddenly found himself on the world stage. Healthcare workers in China were dropping dead from a new and vicious respiratory ailment, and it was starting to spread. The Centers for Disease Control rushed DeRisi a sample, and in a singular mo-

The U.S. Brain Drain

RICHARD FLORIDA'S PLAN FOR SAVING AMERICA

1. America has always been dependent on foreign talent. Even more so today. Foreign-born scientists and engineers made up 22 percent of our workforce in 2000. Foreign-born entrepreneurs cofounded Google, Sun Microsystems, and Intel.

2. Our domestic pipeline can't fill this talent gap. Turning out only eighteen thousand science and engineering Ph.Ds per year, our university system simply isn't big enough to accommodate the millions of science and engineering jobs we need to fill each year.

3. The rest of the world is not smarter than us; it just has more people. With only 4.5 percent of the world's population, the U.S. simply can't produce enough innovators to corner the market.

4. We need to retool our borders. The U.S. turned down nearly 30 percent of all student-visa applications between 2001 and 2003 (the most recent available figures) from an application pool that shrank by nearly 20 percent. Our visa restrictions—and growing xenophobia—are the equivalent of a costly tariff on talent.

5. We need to compete for people. China and India are beginning to retain their best and brightest, while smaller nations like the UK, Canada, and Australia are offering the scientists who typically would have come here larger labs, more funding, and fewer research restrictions.

6. We have to make America look more like America. We need to do what we do best—offer opportunities that can't be found anywhere. And we need to think big. Florida argues that we ought to adopt a new GI Bill for the postindustrial economy, build significantly more top-notch research universities, and commit ourselves to not just educating our population but educating the world's.

—TYLER CABOT

Vidadi Yusibov

VACCINE FARMER

He plants growing vaccines in plants to "breed" them, essentially creating a mini-computer for the production of vaccines. As a result, he can produce 500 million doses of anthrax vaccine for the military in 120 days, compared to 180 days with traditional methods.

Vidadi Yusibov, a forty-five-year-old Russian who is the executive director of the Fraunhofer Center for Molecular Biotechnology in Delaware, directs all of the center's plant-based vaccine and therapeutic development. All of this is a testament to the power of science and the potential for vaccines to be produced more efficiently.

While the anthrax vaccine is a great example of the potential of vaccines, it is important to remember that vaccines are not a panacea. They are effective in preventing the spread of infectious diseases, but they cannot cure existing infections. It is crucial to continue developing and testing new vaccines to combat emerging and re-emerging infectious diseases.