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# Silicon Valley Gala Awards World's Largest Science Prizes

By Elizabeth Dwoskin



Prize winners onstage during the 2016 Breakthrough Prize Ceremony on November 8, 2015 in Mountain View, California.

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Technology depends on the sciences. Smartphones, for instance, use semiconductor principles discovered by 19th-century English physicist Michael Faraday and communicate through radio waves detected by his German contemporary, Heinrich Hertz.

On Sunday night, Silicon Valley tech execs and Hollywood celebrities paid tribute to that legacy with the 3rd Annual Breakthrough Prizes, held at the NASA Ames Research Center in Mountain View, Calif. The yearly ceremony and gala celebrate scientists who pursue pathbreaking ideas that shape the modern world.

“These people are the unsung heroes behind the amazing technologies we have today,” said Yuri Milner, a Russian entrepreneur and investor in [Facebook](#) , [Twitter](#) , and other high-flying tech companies.

Mr. Milner launched the prize in 2013 with Alibaba CEO [Jack Ma](#) and his wife Zhang Ying; Google founder [Sergey Brin](#) and 23andMe co-founder and CEO Anne Wojcicki; and Facebook CEO [Mark Zuckerberg](#) and Priscilla Chan.

The red-carpet spectacle and award ceremony was conceived as an Oscars for scientific achievement, Mr. Milner said. The public pays more attention to celebrities than to individuals whose scientific breakthroughs have saved millions of lives, he added.

Ms. Wojcicki, whose father chaired the Stanford University physics department, said that many tech executives had scientific aspirations. If the public did not understand science, Ms. Wojcicki said, people would stop supporting it.

This year's event, hosted by Seth MacFarlane, featured Grammy-winning musician Pharrell Williams. It was attended by singer Christina Aguilera, actors Russell Crowe and Hilary Swank, and media mogul Rupert Murdoch, owner of the Wall Street Journal.

Stars of Silicon Valley turned out, too. Uber CEO Travis Kalanick, Theranos CEO Elizabeth Holmes and venture capitalists Vinod Khosla and Bill Gurley were spotted in the crowd.

Mr. Zuckerberg and Ms. Chan hosted the laureates at his home for lunch on Sunday. Karl Deisseroth, a professor of bioengineering and psychiatry at Stanford University, was among the attendees. "They asked questions about everything. They're pretty thoughtful people," he said.

The Breakthrough Prizes awarded \$21.9 million in prize money this year. The main prize laureates received \$3 million each, the highest dollar value of any prize awarded to a scientist and double the Nobel Prize. The large award, which recipients can use in any way they want, is intended to compensate for difficulty that many scientists have raising funds for research or gaining financial compensation from their discoveries, in part because they cannot patent intellectual property.

"You can't patent a gene sequence," said Helen Hobbs, who won a Breakthrough Prize for discovering genes that affect the distribution of cholesterol, a novel approach to preventing cardiovascular and liver disease. Ms. Hobbs is Professor of Internal Medicine and Molecular Genetics at the University of Texas Southwestern Medical Center.

Mr. Deisseroth won his prize along with Edward Boyden, Professor of Biological Engineering and Brain and Cognitive Sciences at the Massachusetts Institute of Technology. The pair developed a way to control neurons using light, opening paths to treat neurological diseases such as Parkinson's, Alzheimer's, and blindness.

The prize in physics went to a team of 1,300 physicists who trapped neutrinos in underground caves, confirming the subatomic phenomenon known as neutrino oscillation.

A new prize was added this year for high school students. Ryan Chester, an 18-year-old from North Royalton, Ohio, won a \$250,000 educational scholarship for his video depiction of Einstein's theory of special relativity. "I want to become an inventor and make the ideas in my head — or make films," he said.

The panel of judges consisted of winners from previous years.

The festivities were broadcast by the Fox Broadcasting Co. and National Geographic Channel.

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