

National Foundation for American Policy

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New Research: Immigrants Have Been Awarded 38% of the Nobel Prizes Won by Americans in Physics, Chemistry and Medicine Since 2000; 35% Since 1901

Immigrants Won 3 of 4 U.S. Nobel Prizes in Physics, Chemistry and Medicine in 2021

Arlington, Va. – Immigrants have been awarded 38%, or 40 of 104, of the Nobel Prizes won by Americans in physics, chemistry and medicine since 2000, according to [an analysis](#) by the National Foundation for American Policy (NFAP), a nonpartisan policy research organization. In 2021, three of the four U.S. recipients of Nobel Prizes in physics, chemistry and medicine were immigrants to the United States. Between 1901 and 2021, immigrants have been awarded 35%, or 109 of 311, of the Nobel Prizes won by Americans in chemistry, medicine and physics.

The study, “Immigrants and Nobel Prizes: 1901-2021,” can be found at <https://nfap.com/>.

“The achievements of immigrants in the form of Nobel Prizes, successful businesses and contributions in other fields are a testament to the American Dream,” said Stuart Anderson, executive director of the National Foundation for American Policy. “Being open to immigration allows America to reap the benefits of scientific and technological innovation and provides U.S. students the opportunity to learn from many of the world’s leading professors and researchers. It also allows many immigrants to reach their full potential after coming to the United States, which in turn benefits Americans and the U.S. economy.”

In 2021, David W.C. MacMillan, born in Scotland and a professor of chemistry at Princeton University, was awarded the Nobel Prize in chemistry. He came to the United States as an international student and earned a Ph.D. at the University of California-Irvine. Syukuro Manabe, who immigrated to America from Japan to take a job at the U.S. Weather Bureau, received the 2021 Nobel Prize in physics. He is a senior meteorologist at Princeton University. Ardem Patapoutian, who immigrated to America at age 18 from war-torn Lebanon, received the 2021 Nobel Prize in physiology or medicine, sharing the award with David Julius, who was born in the United States. Dr. Patapoutian came to United States after being [“captured and held by armed militants”](#) in Lebanon and enrolled at UCLA. He said he never viewed becoming a scientist as a career until after arriving in America.

Among the findings of this report:

- Since 1901, immigrants have been awarded 37% of the U.S. Nobel Prizes in physics, 35% in chemistry and 33% in medicine.
- The proper immigration laws matter, particularly in determining whether the United States gains from increased globalization and rising educational achievement in the world. The Immigration and Nationality Act of 1965 eliminated the discriminatory national origin quotas and opened the door to Asian immigrants, while the Immigration Act of 1990 increased

employment-based green card numbers. Those two pieces of legislation have been essential factors in drawing international students to the country and enhancing the ability of America to assimilate talented individuals into our culture and economy.

- The rise in immigrant Nobel Prize winners reflects an overall increase in the reputation and capability of American institutions and researchers post-1960, and a greater openness to immigration has helped make the United States the leading global destination for research in many different science and technology fields, including computer and information sciences, cancer research and others.
- One can see the increasing influence and importance of immigrants on science in America reflected in Nobel Prize winners. Between 1901 and 1959, immigrants won 21 Nobel Prizes in chemistry, medicine and physics but won 88 prizes in these fields – *more than four times as many* – between 1960 and 2021.
- The pre-1960 immigrant (and U.S.) Nobel Prize total would have been lower if not for the many Jewish scientists who overcame significant restrictions against immigration in the 1930s and fled to the United States to escape European fascism.
- Since 2000, immigrants have been awarded 44% of the U.S. Nobel Prizes in physics, 37% in chemistry and 33% in medicine.

Table 1
U.S. Nobel Prize Winners in Chemistry, Medicine and Physics: 2000-2021

Category	Immigrant	Native-Born	Percentage of Immigrant Winners
Physics	16	20	44%
Chemistry	13	22	37%
Medicine	11	22	33%
TOTAL	40	64	38%

Source: National Foundation for American Policy, Royal Swedish Academy of Sciences, George Mason University Institute for Immigration Research.

In 2020, Reinhard Genzel, who was born in Germany and is a professor emeritus of physics and astronomy at the University of California, Berkeley, was awarded the Nobel Prize in physics, which he shared with U.S.-born UCLA professor Andrea Ghez for their research on black holes. In 2019, the U.S. winner of the Nobel Prize in physics (James Peebles) and one of the two American winners of the Nobel Prize in chemistry (M. Stanley Whittingham) were immigrants to the United States.

In 2019, two of the three U.S. winners of the Nobel Prize in economics were immigrants – Abhijit Banerjee, born in India, and Esther Duflo, born in France. Both are professors at the Massachusetts Institute of Technology (MIT). They shared the award with Michael Kremer for their “new approach to obtaining reliable answers about the best ways to fight global poverty.”

The showing by immigrants in 2019, 2020 and 2021 is consistent with recent history and illustrates the contributions of immigrants to America. In 2018, Gérard Mourou, an immigrant from France, won the Nobel Prize in physics. In 2017, the sole American winner of the Nobel Prize in chemistry was an immigrant, Joachim Frank, a Columbia University professor born in Germany. Immigrant Rainer Weiss, who was born in Germany and came to the United States as a teenager, was awarded the 2017 Nobel Prize in physics, sharing it with two other Americans, Kip S. Thorne and Barry C. Barish. In 2016, all 6 American winners of the Nobel Prize in economics and scientific fields were immigrants.

About the National Foundation for American Policy

Established in 2003, the National Foundation for American Policy (NFAP) is a 501(c)(3) non-profit, non-partisan public policy research organization based in Arlington, Virginia focusing on trade, immigration and related issues. The Advisory Board members include Columbia University economist Jagdish Bhagwati, Ohio University economist Richard Vedder, Cornell Law School professor Stephen W. Yale-Loehr and former INS Commissioner James W. Ziglar. Over the past 24 months, NFAP's research has been written about in the *Wall Street Journal*, the *New York Times*, the *Washington Post* and other major media outlets. The organization's reports can be found at www.nfap.com. Twitter: [@NFAPResearch](https://twitter.com/NFAPResearch)

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