Research: 83% of America’s Top High School Science Students Were the Children of Immigrants in 2016

Study on Leading Science Competition Finds Blocking High-Skilled Immigrants Would Deny America the Contributions of Their Children

Arlington, Va. – An impressive 83 percent (33 of 40) of the finalists of the 2016 Intel Science Talent Search, the leading science competition for U.S. high school students, were the children of immigrants, according to a new report released by the National Foundation for American Policy (NFAP), an Arlington, Va.-based policy research group. Moreover, 75 percent – 30 out of 40 – of the finalists had parents who worked in America on H-1B visas. That compares to 7 children who had both parents born in the United States. The science competition has been called the “Junior Nobel Prize.” Seven of the top 9 award winners were the children of immigrants in 2016. The finals of the 2017 competition will be held starting on March 9 in Washington, D.C.

“These outstanding children of immigrants would never have been in America if we had not let in their parents,” said NFAP Executive Director Stuart Anderson, author of the report and former head of policy at the Immigration and Naturalization Service under President George W. Bush. “The findings tells us that if we prevent high-skilled foreign nationals from coming to America, we will not only lose their contributions but the significant contributions that will be made by their children.”


Today, both the Trump administration and some members of Congress would like to impose new restrictions on legal immigration, including on high-skilled immigrants. The study notes policymakers seeking to restrict high-skilled immigration should note that an important, underappreciated benefit of high-skilled foreign nationals is the contributions made by their children. It is likely there are many more children of H-1B visa holders who will make outstanding contributions beyond those who qualified for one of the coveted 40 finalist spots in the 2016 Intel Science Talent Search, according to the research.

Among the key findings of the research conducted through interviews with children and parents:

- Even though former H-1B visa holders represent less than 1 percent of the U.S. population, they were 4 times more likely to have a child as a finalist in the 2016 Intel Science Talent Search than were parents who were both born in the United States. Under current law, an H-1B visa is generally the only practical way for international students or high-skilled foreign nationals recruited from abroad to work long-term in the United States. Due to the long waits because of low annual quotas and per country limits, a high-skilled foreign national typically must work in H-1B status before being sponsored for permanent residence (a green card). That will continue absent a major change in U.S. immigration law.
Parents who were international students were also more likely to have a child as a finalist than native-born parents. A total of 27 of the 40 children – 68 percent – had a parent who came to America as an international student. That means failure to facilitate the ability of international students to remain in America after graduation (through Optional Practical Training and improved visa policies) will deprive America of the potentially substantial contributions of their children.

Three of the finalists, or 7.5 percent, had parents who came to America as family-sponsored immigrants.

Among the 40 finalists of the 2016 Intel Science Talent Search, 14 had parents both born in India, 11 had parents both born in China, and 7 had parents both born in the United States. To put these numbers in perspective, people of Indian and Chinese birth represent only about 1 percent of the U.S. population each, according to the Pew Research Center.

In addition to China, India and the United States, the countries of origin for the parents of 2016 Intel Science Talent Search finalists represent a diverse set of countries, including Canada, Cyprus, Iran, Japan, Nigeria, Singapore, South Korea and Taiwan.

The evidence indicates that the children of immigrants are increasing their influence on science in America. Sixty percent (24 of 40) of the finalists of the 2004 Intel Science Talent Search had at least one immigrant parent. In 2011, that proportion rose to 70 percent (28 of 40) who had at least one immigrant. And in 2016, the number rose again to 83 percent (33 of 40) of the finalists of the Intel Science Talent Search who had at least one immigrant parent.

At the 2016 Intel Science Talent Search, 7 of the 9 top awards were earned by the children of immigrants, including first place prizes for innovation and basic research. Amol Punjabi won the First Place Medal of Distinction for Basic Research for developing software that could be used by pharmaceutical companies to combat cancer and heart disease. Maya Varma won the First Place Medal of Distinction for Innovation for creative problem-solving skills. Milind Jagota was awarded the Second Place Medal of Distinction for Innovation for research on “a less costly alternative to the transparent conductors now used in touchscreen devices.”

Afflictions among family members inspired many of the students to pursue medical research.

The children of immigrants among the finalists interviewed greatly appreciated the sacrifices their parents made to ensure they received the best education possible. “Seeing what my parents did to make a better life for their children has inspired me to do everything I can to succeed. This is the land of opportunity,” said Augusta Uwamanzu-Nna, whose father, a physical therapist, came to America on an H-1B visa.

More than 95 percent of winners of the Intel Science Talent Search (STS) traditionally have pursued science as a career, with 70 percent earning Ph.D.’s or M.D.’s. One of the unintended consequences of new immigration restrictions is that America could lose the substantial contributions made by the children of immigrants.

In 2017, the talent search competition was renamed the Regeneron Science Talent Search after its new sponsor Regeneron Pharmaceuticals. A new group of 40 finalists – young scientists, engineers and mathematicians – will meet in Washington, D.C., from March 9 to 15, 2017, to compete for awards and scholarships.
About the National Foundation for American Policy

Established in the Fall 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, former U.S. Senator and Energy Secretary Spencer Abraham and other prominent individuals. 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.

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