

## Nanoscience and Nanotechnology Cross Borders

he recent Executive Order by President Trump attempting to ban temporarily the citizens of seven countries (Iran, Iraq, Libya, Somalia, Sudan, Syria, and Yemen) from entering the United States is having significant consequences within the country and around the world. The Order poses a threat to the health and vitality of science, barring students and scientists from these countries from traveling to the United States to study or to attend conferences. In preventing those members of the international scientific community from traveling beyond U.S. borders without guaranteed safe return, the Executive Order demeans them; in so doing, it demeans us all. Universities and research communities are especially impacted, as major universities have students and often faculty holding passports from one of these seven countries.

This temporary ban would affect refugees fleeing war-torn areas, challenging the long-standing notion that the United States is a safe haven for those fleeing persecution and war in addition to being a magnet for talent from every corner of the world. The pages of this journal reflect the geographic, ethnic, and cultural diversity that underpins great science. The ban impacts domestic and global scientific efforts and communities. Science succeeds through the cooperation between collections of individuals and teams around the world discovering and learning from each other. To ensure rapid scientific progress, open communication and exchange between scientists are essential. As scientists, engineers, and clinicians, we have benefited from open interactions and collaborations with visitors and students from all

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parts of the world as well as through scientific publications and discussions at scientific meetings.

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The United States is a country of immigrants who have worked hard to make it prosper. Immigrants from the banned countries have contributed greatly to the American economy. For example, Iranian immigrants and their families have contributed to the founding and early progression of prominent technology companies including Oracle, Google, EBay, and Dropbox. Immigrants also have a long legacy of enriching American science. Albert Einstein is perhaps the most famous scientist who immigrated to the United States, but he is only one in a long list of pioneers. All American laureates of the 2016 Nobel Prizes in Chemistry and Physics are immigrants. Similarly, immigrants from the countries listed on the Executive Order have made major contributions to American science, engineering, medicine, and entrepreneurship. These immigrants have made discoveries ranging from the invention of gas lasers to the development of LASIK eye surgery. Immigrants from these countries have received the National Medal of Technology, Fields Medal, Breakthrough Prize, RussNano Prize, Presidential Early Career Award, and are members of each of the United States National Academies. We anticipate that banning large segments of the



Current Iranian members of ACS Nano editor Ali Khademhosseini's laboratory at Harvard University. Image courtesy of Yu Shrike Zhang.

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world's population from entering the United States will have long-lasting consequences on our scientific and economic competitiveness.

Our own *ACS Nano* Editorial team reflects the diversity that is characteristic of America. Many American members of our team have immigrated to the United States. Some have been refugees and come directly from the countries that are listed by the ban. Others of us have spent time training and have strong scientific and personal ties in the United States. Their frequent trips to the United States to develop and to accelerate the future of nanoscience and nanotechnology are threatened.

We at ACS Nano believe that there is immense value in promoting a culture of inclusiveness, tolerance, and diversity.

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This goal is central in the field of nanoscience and nanotechnology that bridges many scientific disciplines as it moves to solve the world's most challenging problems in energy, health, sustainability, and security. Creativity, innovation, and impact are not based on scientists' age, sex, race, or culture. Avoiding discriminatory measures is a long-standing American value that has made the United States a shining example of how immigrants (and their descendants) from various cultures live and prosper together. We believe that these values are human rights that need to be protected and promoted.

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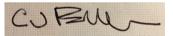
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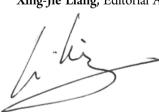
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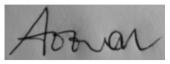


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## Notes

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