Immigration and science

Fauxmania 2020



Science in entirely dependent on international collaborations and immigration

- Of approximately 80,000 postdocs in the US, two-thirds are international scholars
- 1 M international students in the US; around 400,000 in graduate programs
- Immigrants make up around 25% of all US science and technology workers and around 50% of the doctoral-level science
- 34% of all U.S. Nobel laureates have been immigrants to the United States

Our labs without immigrants.





... and without ...

Our Lab with Immigrants

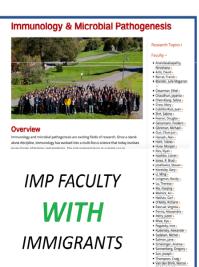
Our lab without immigrants



Immunology & Microbial Pathogenesis













Current and not so current anti-immigration rhetoric...

- Major impact on the status and lives of numerous trainees and scientists from China, muslin countries, Cuba etc...
- In June 22, 2020, the US announced a new proclamation suspending entry of certain H, J and L visa. The proclamation expires on December 31, and may be modified during this period as deemed necessary.
- Current and prospective H-1B Employees and their dependents inside the U.S. are still eligible for extensions and changes of status....as of now
- J-1 Research Scholar and Short-Term Scholar categories are exempt from this proclamation....as of now

Short term and long term impact...

- The long-term impact on science can be catastrophic (2 /3 of post docs !!)
- There has been a <u>measurable decline</u> in international students and post docs applying to come to the US. The number of applications from international graduate students to study in the US has dropped across all fields.
- Rising concerns about research espionage and conflicts of interest have made some U.S. universities and labs reluctant to open their doors to foreign researchers.
- Cumulative impact of having foreign-born scientists feel unwelcome (if they are already here, or feel that they don't want to come) they are already seeking other options
- Acute stress on our fellows, precarity of their status, fear of leaving the country
- Many of our trainees and colleagues are in desperate situations (from Muslim countries, Cuba, China...)
- Financial hardship (e.g. students waiting for OPT > 6 months etc..)

Some Responses...

Support for the innovation engine of American science: immigrants





Ushma Neill, Ruslan Medzhitov



Vilcek foundation



Science Beyond Borders

AAAS will engage leaders in the U.S. federal government and academic institutions.... We will consider ways that various stakeholders can support immigrant scientists studying and working in the U.S. during this time of rapidly changing immigration and international travel policies and broad geopolitical shifts. The latter phase of this project will be informed by the first, so we need to hear from you!

Some Responses...

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Science Beyond Borders

But on the overall, relatively modest responses from major scientific institutions and universities (where is AAI?)

- Catastrophe fatigue?
- Fear of retaliation/ attracting attention?
- Hopelessness? Let's wait for November...

Discussion points/ action items?



- Immigrants have no voice and this is also true for immigrants in science; no representation
 within institutions; who will speak for them? Representation and advocacy within
 institutions? Coercive relationships...
- <u>Better quantifying impact on science and economy</u>, highlighting major discoveries in immunology, medical breakthrough made by scientist immigrants...who is the target audience?
- Advocacy/ communication with the public, government?
 A broad and loud unified letter of concern/manifesto against this executive order?
- Raising funds to protect trainees in hardship situations (delays in obtention of Visa/ renewal/ OPT etc); institutions? Philanthropy?

Discussion points/ action items?



- <u>Limitation of opportunities for Immigrant scientists</u>, Fellowships / special programs are often restricted to US citizens/ green card (e.g. HHMI fellowships, independent program at the NIH, K22 awards etc). Why?
- Raising funds to protect trainees in hardship situations (delays in obtention of Visa/renewal/ OPT etc); institutions? Philanthropy?
- Advocate for legislation to permanently protect immigrant scientists from executive actions on their visa status
- Make all J1s for science stamp=ds2019 (no need to renew stamp every year)
- Allow partners of H1-B to work
- Easier j1-h1 transitions?