Science and Diplomacy: A Practical Path

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Science diplomacy, although in its nascency, is a rapidly growing area. I am a research scientist who had my brush with science diplomacy during my work on stem cells. I took a workshop at the Marine Biological Laboratories in Boston on using human embryonic stem cells (hESCs) in 2008 when induced pluripotent stem cells (iPSCs) had just been discovered in humans. I went home to Jordan, reflecting on whether ethically I can work with hESCs. I reviewed the literature to explore if there were any consensus on the ethics of using hESCs from an Islamic perspective convened by Muslim scientists. Unfortunately, there wasn't any usefully updated consensus. Therefore, I took it upon myself to spearhead an effort to establish what later became the first law that governs stem cell research and therapy in an Islamic country.[1] I did so by establishing a committee of stakeholders with scientists at the core.

It made me realize the importance of scientists being involved in issues that relate to the public good. Otherwise, the policies and regulations that are being created will not be informed by science, and religious scholars would not be guided by science to produce the appropriate ethical guidelines. It led to a plethora of commentary on any new scientific advances that required legal/religious stand informed by science, such as CRISPR babies.[2]

I shared the experience with my students to make them understand the necessity to inform larger communities, correct erroneous information and raise awareness among the general public. As a result, my students became more media aware and could call out fake news and misinformation. This understanding became relevant when the COVID19 pandemic hit, and the misconceptions, myths and half-truths began spreading.

Science diplomacy is helping the wider community understand science and its impact on everyday life. The community or societal understanding has a bearing on policymaking as scientists are also involved in the formulation of important policies that eventually help in better decisions and healthier communities and a safer globe.

The importance of science diplomacy also lies in building partnerships and providing equal opportunities to all. Today with COVID19, we have come to see that we are only as safe as the last human being in the remotest village in the farthest jungle. Therefore, everyone is important and can and must contribute to the world.

That is why I encourage my students and fellow scientists to write and share their stories with the world. I wrote my own story so that it may act as a vehicle for science diplomacy from the south to the north and across the south.[3]

As we learn about each other's stories, we start to connect and create networks across the globe to work together to share and learn and engage in doing better science by listening to each other and trusting each other. Examples of such networks are the one I direct; the Society for the Advancement of Science and Technology in the Arab World (SASTA). This network of Arab senior scientists in the diaspora promotes science in the Arab world through mentorship and collaboration. The unique approach of this network that I adopted is that the members own the network through their work. The more they work on their projects, the more the nexus grows and thrives. Thus, it is led by the members, not by the management. This guarantees sustainability in the long run through its members. Bringing people to work together is a challenge, especially across disciplines and cultures, etc. The idea is to foster a mindset of ownership and freedom with no judgment in a bottom-up, people-driven philosophy. It results in a win-win situation celebrating diversity while maintaining unity reflecting biological systems.

One way to encourage such system changes is to create awards to direct how we want organizations to change by developing criteria for the awards that these organizations would aspire to comply with.

With growing unemployment and the high turnout of graduates, I see an opportunity for creating new career opportunities that include science diplomacy, diplomats who have a strong background in science.

Lastly and most importantly is the fact that science should lead to serving humanity with fairness, equality, justice and freedom. At times, science can not be set apart from politics, and the scientific community also gets to bear the brunt of such disagreements. Science diplomacy can indeed play an essential role in tackling such challenges. One such example is in the case of refugee and displaced scientists, where many support structures have been established to support them.[4]

In conclusion, science matters in every sector and dimension, and it is up to us as scientists to stand up and speak up and be the change.

References

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