

From Lab to Legislation: Young Scientists Speak Up at Voice of the Future 2023

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Before I began my research in genetically modified (GM) crops, I had never really considered the importance of 'science policy'. I thought of science as this fascinating realm of discovery, where 'eureka' moments by scientists created new advances that changed the world instantly. But as I delved deeper into my research, I realized that the situation was far more complicated, and despite the incredible advancements that GM crops could bring, the lack of support from governments could prevent these advances from ever reaching the public.

The fact is that science and policy are inextricably linked. No scientific discoveries, no matter how groundbreaking they may be, can make an impact on the world without the support of government, the funding they can provide and the legislation or regulations they need to pass to allow public use. From climate change to artificial intelligence, the decisions made by policymakers will have a profound impact on our everyday lives.

This is why I was so excited to be chosen to represent the Biochemical Society at Voice of the Future 2023. Hosted by the Royal Society of Biology, this event provided a unique platform for young researchers like me to engage with policymakers and voice our concerns on matters related to science (Figure 1). The day was filled with fascinating questions from a range of learned societies, including representatives from the Institute of Physics, Royal Society of Chemistry, the Geological Society, Royal Astronomical Society and more.



Figure 1. Rebecca and other delegates from other learned societies. Photo credit: Royal Society of Biology.



Figure 2. MPs of the House of Commons Science and Technology Committee, Katharine Fletcher MP, Stephen Metcalfe MP, and Carol Monaghan MP. Photo credit: Royal Society of Biology.

The Institute of Physics questioned the role of nuclear energy in the goal to achieve net zero by 2050, (Figure 2) while the Council for Mathematical Sciences highlighted the gender disparities in math professors and asked how the government was planning to address this. The Royal Society of Biology focused on the effect of long COVID syndrome and the Ecological Society questioned what the government was doing to prevent raw sewage release into UK rivers. A particular highlight for me was from the Association of Applied Biologists that asked how parliament was going to ensure that the public will be well informed about the benefits of genetic technologies.

Questions were answered from a range of science policy officials, including members of the Science and Technology Committee, Professor Gideon Henderson, Chief Scientist of DEFRA and the Rt Hon Philip Dunne MP, chair of the Environmental Audit Committee.



Figure 3. Delegates listening to a question from the Institute of Physics. Photo credit: Royal Society of Biology.

The new Science Minister George Freeman was also scheduled but was unable to attend, which is a shame as I know it would have been a great opportunity for him to engage with the scientific community.

When the Biochemical Society reached out to members to apply for this event, I submitted three questions, one of which I asked on the day to the Science and Technology Select Committee. This focused on research that has shown that the number of scientists within the UK government decreased by 20% between 2003 and 2018, a worrying trend when contrasted with comparator countries where numbers are increasing. I asked what more the government could be doing to encourage more scientists into policy roles. This was first answered by Stephen Metcalfe MP, who expressed concern that the decline of scientists in government could result in the loss of analytical and evidence-based thinking. He suggested that the government should have a chief engineer and mathematician in addition to its network of scientific advisors, to provide comprehensive advice and guidance.

In her answer, Carol Monaghan MP highlighted the reputational damage caused by politicians who do not use evidence effectively and suggested that this poor reputation may be discouraging scientists from

entering politics. She pointed out the difference of thinking between the two groups; that politicians will often craft an argument regardless of what the evidence says, while scientists use the data and evidence to come to a conclusion afterwards. Katherine Fletcher MP further emphasized the importance of having a strategic reserve of capability in government, referencing a time early in the Covid Pandemic when she had to use salt and pepper shakers to explain to other MPs about viral spike proteins. Fletcher suggested creating more science policy role models such as Sir Chris Whitty and that MPs should more publicly embrace their interest in science to encourage others to do so.

Overall, this event was a fascinating opportunity to get face-to-face with senior science policy officials and see how scientific regulations and goals are created. It was also exciting to see the range of science disciplines with representatives and to discuss with them about their areas of interest. Personally, I came away from this event more certain than ever that I wanted to pursue a career in science policy, and I was extremely grateful to the Biochemical Society for choosing me as their representative. If you have any interest in science policy, I would recommend applying to attend next year. It is the only event of its kind and a unique opportunity to engage in meaningful discussions and make scientific voices heard! To watch the full discussion, go to the Voice of the Future 2023 on Parliament TV (Figure 3). ■

I am a Master's student at the University of Birmingham studying Biochemistry, focusing on the mechanisms of crossover formation during meiosis in plants. Soon after the Voice of the Future event, I was excited to be offered a job in the Government Office for Science which will begin after my studies. You can find me on LinkedIn, where you can also see a video of my question to the Science and Technology Select Committee. Email: rhbudden@btinternet.com