

## **Audio Transcript: (1) Module 1: Introduction to Chemistry Advocacy**

### ***1.1 Module 1 goal and objectives***

#### **1.1.1 Module 1 goal**

Module 1, *Introduction to chemistry advocacy*, presents you with the core concepts of science advocacy and its importance to the policymaking process. By the end of this module, you will be familiar with the key principles of science policy and how they apply to chemistry through ACS resources.

#### **1.1.2 Module 1 objectives**

Specifically, there are three learning outcomes that you will accomplish in this module. First, you will learn to define science advocacy in order to distinguish it from the broader understanding of advocacy. Second, you will identify the importance of scientific expertise in the policy process. Third, you will relate ACS' resources to its role in science (and chemistry) advocacy.

### ***1.2 Define science advocacy***

The first step in this workshop is to assess your familiarity with the topic of science advocacy. Please take a moment to think about and share what comes to mind when you think of science and chemistry advocacy, why it is important to you. Click on the blue 'reply link on the lower right side of this screen to make a new post. Once you have provided your own response, be sure to reply to someone else's response to gain a sense of what other participants think.

### ***1.3 Defining science policy***

#### **1.3.1 What is science policy?**

Science policy, as covered in this course, can be broken into two distinct roles shown by cards – Science FOR Policy and Policy FOR Science. The distinction between the two roles is usually nebulous when discussing matters of science policy. But these roles provide a helpful framework for understanding what science policy is and what it does.

On the left is 'Science FOR Policy' which uses data to inform evidence-based policies with societal impact. If you turn the card, you will see examples of this role, namely: environmental and public health regulations, which are based in large part on results of scientific studies.

On the other side is 'Policy FOR Science' which are policies based on societal input that govern how science is conducted. Again if you turn the card you will see examples: R&D funding and research oversight are ways that society influences and shapes the practice of science.

Science for Policy and Policy for Science are not mutually exclusive and are closely intertwined. Science backgrounds help people navigate the nuances and complexities of these roles and it is why YOU are so important to this process.

### **1.3.2 What will not be covered**

It is important to also note what will NOT be covered in this training. This course will not cover two topics: The first being activism: which is the use of direct and public methods to try to bring about social and public changes. If you turn the card you will see sit-ins, protests, and petitions as some examples of activism which aim to exert pressure on policymakers.

The other topic that will not be covered is lobbying: which is a professional occupation aiming to influence policymakers for an entity or organization, and must be registered with the government. If you turn the card here you'll see examples of lobbying behavior which include: consistent meetings and fostering of long-term relationships with staff, suggesting legislative language or witnesses to provide testimony, and organizing Congressional events to inform staff or members of Congress.

## **1.4 Why engage?**

### **1.4.1 Why should scientists care about policy?**

You're taking this course so you probably already agree with the assertion that scientists should care about policy. But it bears remembering that science is involved in every issue of importance. Policymakers are there to address these issues but it's critical that they involve scientific expertise to inform them, because science and society are interwoven. The newspaper front pages displayed here are a few examples of global issues where science is involved or could be applied to find solutions.

### **1.4.2 The U.S. Congress is not inherently science oriented**

Congress is made up mostly of people with many different backgrounds. A large portion of whom are lawyers or business professionals. As a result, most members of Congress may not be familiar with or 'savvy' when it comes to considering science to inform their choices.

Additionally, there are MANY factors that go into the decision of a policymaker. For example finances, values, politics, constituent views, etc. But science and data CAN and should be crucial parts of making well-informed choices.

### **1.4.3 YOU must make science a priority**

Given that policymakers largely are not experts in science, it is the responsibility of scientists to ensure the policymaking process includes science and data. YOU can be the provider of such information, or at the very least, remind policymakers that the consideration of science is important.

### **1.4.4 STEM degree holders in the 116<sup>th</sup> Congress**

Please take a moment to guess how many members in the 116<sup>th</sup> Congress have a background in a STEM subject. Drag the numbers into the correct boxes to find out the number of members of Congress with a STEM bachelor's, master's, or Ph.D., and chemistry degrees of any kind.

### **1.4.5 The right to advocate**

In addition to having a responsibility to engage in the policy process as a scientist, you have a constitutional obligation to engage as a citizen. The first amendment, in addition to providing for free speech, freedom of religion, and the press, notes that you have the ability to present issues you care about to your government.

### **1.4.6 Everyday scientists have a voice!**

Not only should you take away that Congress isn't scientifically savvy and that it is your constitutional right to advocate, you should feel qualified to speak about what you know. You don't have to be a policy wonk to be heard – ACS members like you are routinely meeting with members of Congress to share their expertise or to broadly speak for science.

The photograph shown here is one example of ACS members using their scientific expertise to provide testimony for the Committee on Science, Space, and Technology on critical materials and their importance.

With this training, you too will be prepared to harness your experience as a scientist and citizen, to speak with policymakers.

### **1.4.7 Chemistry advocacy in practice**

There are a number of ways you can put chemistry advocacy into practice. Some examples include:

You can engage with friends, family, and the media about issues that matter to you – whether it be through casual discussion, scientific outreach, op-eds, or as a subject matter expert resource for the media.

You can talk directly to your elected officials – this option will be covered in detail in module 3. You can submit comments on proposed rules and regulations – more detail on this will be provided in module 2; and finally, you can harness and employ your scientific expertise by working professionally with policymakers – more information on this will also be provided in module 2.

## ***1.5 ACS Government Affairs team***

### **1.5.1 ACS Government Affairs**

Though getting involved in advocacy may seem daunting, ACS is here for you! ACS is a membership organization, and exists to amplify and address the policy concerns of chemists and chemical engineers (YOU). You may or may not be aware that the ACS Office of the Secretary and General Council houses an External Affairs & Communications team that is responsible for communications outside of the society, including in policy matters. External Affairs and Communications has a specific Government Affairs office, which is ALREADY advocating on your behalf and has resources to help you, personally, engage. The Government Affairs office is

split into four main teams. The next few slides will go over the teams and their main roles and the rest of the Workshop will explain ways for YOU to take part in the advocacy process.

### **1.5.2 ACS Government Affairs: Public Policy**

The first team is Public Policy. This team works with ACS members to create, revise, and retire official ACS positions on policy issues. This team also reviews current legislation and tracks issues for alignment with ACS statements. Click on the hyperlinked word ‘statements’ to open the ACS public policy statement website to learn more.

ACS is a membership organization, and these statements tell the Society (and the public) what members think and care about. Every issue that the ACS Government Affairs team engages with must have coverage in one of these statements. Similarly, all legislative bills supported by ACS must have some alignment with ACS public policy statements. If you identify yourself as an ACS member in advocacy activities, you *must* ensure that your positions are in keeping with ACS policy statements *or*, you must clearly state that you are advocating on issues outside of ACS’ purview as a private citizen.

### **1.5.3 ACS Government Affairs: Legislative Advocacy**

Second is the Legislative Advocacy team which: tracks activity in Congress; represents member interests in Congressional meetings; drafts and lobbies for specific pieces of legislation; and organizes briefings and events to educate Congress on chemistry-related issues.

The chart shown here shows the progress for H.R.2051, the Sustainable Chemistry Research and Development Act. It is an example of the activities and actions undertaken by the Legislative Advocacy team to secure this piece of legislation into law. The ACS team’s efforts resulted in drafting the language for this legislation, publically endorsing it, holding various meetings with policymakers, continuously negotiating the language, and providing written testimony. These efforts have so far spanned ten years. This is the closest ACS has come to ensuring this piece becomes law!

Lastly, please take the short quiz in the purple circle: does ACS have registered lobbyists?

### **1.5.4 ACS Government Affairs: Federal Affairs**

The third Government Affairs group is the Federal Affairs team which: tracks activity in federal agencies; voices chemists’ concerns to agencies through meetings and public comments; supports member nominations to advisory positions; and raises public awareness of the chemistry enterprise. The images on the right are just a few examples of how they do so, namely: tracking of federal chemistry funding and helping to organize the annual National Nanotechnology Day celebration.

### **1.5.5 ACS Government Affairs: Member Engagement**

Last but certainly not least is the Member Engagement team which: creates and distributes advocacy resources; provides advocacy education and training for members; and continuously shares information about current happenings in Washington D.C. via Act4Chemistry’s twitter

and webpage. The picture on the right shows you the main Act4Chemistry page for member engagement resources. You can click on the Act4Chemistry hyperlink to go to the website or the twitter handle to follow the Act4Chemistry account.

### ***1.6 Chemistry advocacy discussion***

Please take a moment to assess the material covered in this module and provide an answer to at least one of the following questions: What is one thing you were surprised to learn about science policy? How do you see your role as an advocate for chemistry? What ACS resources might be of help to you as a chemist interested in advocacy? Remember, to make a new post, click on the blue 'reply' link on the lower right side of this screen and once you provide your response, be sure to reply to someone else's response.

### ***1.7 Module 1 key takeaways***

That completes the material for the *Introduction to chemistry advocacy* module. Here are some key takeaways: you can engage in science advocacy to provide critical input on issues pertaining to your expertise. In addition, the ACS Government Affairs team advocates for YOU and provides resources to facilitate your engagement in the science policy process.