As the April March for Science approaches, we have received several questions from ESEP members regarding best practices for messaging before, during, and after the march. Below are some of the questions we have received along with some thoughts and advice in response to them. We hope ESEP members and those that would like to engage in science policy who might have been inspired by the March for Science find this information useful.

**Question: Based on your experiences, what are some effective short phrases, slogans or points I should keep in mind during the March for Science?**

The Association of American Universities (AAU), with guidance and input from others, including former Congressman Brian Baird and University of Michigan science communications expert Arthur “Skip” Lupia, recently launched a PR and social media campaign aimed at promoting and defending the value of science. The campaign has been both launched to coincide with the March for Science and to help respond to significant budget cuts proposed for key U.S. science agencies in the President’s proposed FY 2018 Budget.

As part of this effort, AAU sent a memo to its university campus public and government affairs representatives suggesting key messages that could be utilized as a part of the campaign. The Association of Public and Land-grant Universities (APLU) sent out a similar message.

Here are the core messages that were recommended:

**American Science...**

- creates jobs and is an engine for economic growth;
- inspires young minds;
- welcomes the world’s best and brightest scientific talent;
- saves lives through medical advances;
- supports U.S. agriculture;
- protects the environment;
- has kept us #1 in the world for innovation and technology;
- supports and trains students to be our future scientists and engineers;
- is a positive force and symbol for American progress and ingenuity;
- has made U.S. research universities the best in the world;
- is essential for the prosperity and health of the nation.
Producing good examples and stories that convey exactly how “American Science” does one or more of these things is more important now than ever, given the significant cuts that have been proposed for key science agencies in the Administration’s proposed federal budget.

Such stories can come in the form of news articles, op-eds, infographics, and/or blogs. These stories need to be amplified using various social media platforms such as Twitter, Facebook, and LinkedIn. To help to do this, AAU is promoting the use of the hashtag #AmericanScience along with other possible variations including #AmericanScientists #AmericanUniversities #ScienceWorksForUS.

It will also be important to convey stories about the value and importance of science to Members of Congress. In making Congressional contacts, it would be particularly useful to encourage scientists, engineers, STEM graduate and undergraduate students, and other non-scientists who support #AmericanScience to contact their U.S. Senators and Representatives and to specifically urge their elected officials to reject the significant cuts proposed for key science agencies in the President’s Budget. A good summary of the proposed budget cuts by AAAS’s Matt Hourihan is available here.

Some additional “Do’s”

- **Messages should be aimed at actively celebrating and promoting the positive impact that science has on our everyday lives.**
- **Develop an “elevator pitch” for science and its importance.** You should be prepared to tell your story in four sentences or less. This can be a relevant story about your own science or science that has been conducted by others. Ideally, your story would relate to your scientific discipline, but it doesn’t have to. The key is that the science has already had or may have an impact and value that resonates with non-scientists.
- **Stories that focus on research programs that have a local “hook” and direct impacts on communities are especially valuable.**
- **Good stories can also be woven around why you were inspired to pursue a career in scientific research. The key is to try to make the story personal.**
- **Local hometown newspapers are good targets.** You don’t have to target the New York Times, Wall Street Journal, or Washington Post for such articles. Getting an article on the value of science published in your hometown (as in the town in which you grew up) would be great. Smaller local papers often welcome such content and are happy to publish pieces from people that have connections in the towns in which they are published. Plus, people and Members of Congress often read the local papers in great detail to find out what their constituents are thinking and reading. If you are interested in writing an op-ed in your hometown newspaper, contact ESEP steering committee member Dan Pomeroy (dpomeroy@mit.edu). Dan is working with a cadre of science communicators, journalists, and communications directors to organize scientists across the nation to help them write "Why I Will March" op-eds for their local newspapers. The op-ed will focus on positive themes that resonate with non-scientific audiences. You
may want to read the strategy document Dan has prepared for this effort, which suggests talking points and provides general op-ed advice.

- **Students should emphasize the importance of scientific research in generating the next cohort of faculty and researchers working to advance #AmericanScience.** Many people do not realize that the U.S. system for supporting science is unique in the world in how it uses research grants as a mechanism not only to generate new knowledge and innovation, but also to train the next generation of scientists and engineers. Undergraduate and graduate students currently engaged in research are often the best spokespeople to talk about the importance of federal investments in research and why they matter. It is important that these students make clear that they stand to suffer some of the greatest hits if the budget cuts that have been proposed for science are implemented. There is a great piece in The Conversation that outlines the impact that the proposed cuts would have on students.

- **You may want to highlight the staunch support that has been expressed for science from the business community.** Given that the current administration is comprised of people with strong business backgrounds who are accustomed to the role of science in fostering economic growth, it may be useful to highlight the support that federally funded science has received from the business community. Good ways to do this are to reference the 2015 CEO-issued call to action, Innovation: An American Imperative, and this 2016 full page “Fund Basic Research” advertisement from CEOs that ran in the New York Times and the Wall Street Journal.

**Some definite “Don’ts”**

- **Don’t** focus on overly political messages.
- **Don’t** target or criticize specific individuals, politicians, or political parties. Such messages will only serve to be divisive and could polarize people’s views against supporting science as opposed to helping encourage them to be allies.
- **Don’t** be partisan in delivering your message. Try to deliver a message that is appealing to members of both parties. Remember that science has no political party and has long been supported and used to inform policy by both Democrats and Republicans.

*Question: What can I do after the March for Science to help shape a positive message (emailing members, Twitter, etc.)?*

Scientists and engineers, as well as students and non-scientists who support science, must continue to promote positive science-related stories in the days following the March for Science. This can take the form of social media and blog posts along with op-ed pieces about science and its impact on local communities and everyday living. Think agricultural extension programs, crop blight research and assistance, invasive species research and mitigation, fishery management and recovery, health clinics, life-saving drugs and diagnostics, weather prediction and warning, manufacturing incubators, university spin-offs, etc.
Scientists and engineers should focus on explaining why research matters not only to them, but why it should matter to others. This will sometimes force them to get out of their comfort zone and to tell stories about the impact of science that goes beyond their direct and immediate research. That said, it is necessary for scientists and engineers to be their own advocates for the importance of the work they do. If they don’t do it, no one else will do it for them.

When specifically engaging with policymakers, perhaps more important than trying to explain your specific research is instead explaining why science is important to you and why it should be important to others, especially the constituents that live in the states and districts of their respective elected officials.

Students should talk about how they are able to work with top-notch researchers and to help conduct cutting-edge research to advance and further their STEM careers through the grants provided by the major federal research agencies. They should emphasize that federal research support is critical for training the next generation of American scientists and engineers.

Finally, non-scientists who support the importance of science should talk about how science and technology have impacted their lives, whether by providing life-saving medical treatments, by helping them to increase their crop yields, by protecting the quality of their local drinking water, or by enabling modern-day technologies such as smartphones and other modern-day conveniences. Of course, it is also worth it for non-scientists to point out that science inspires us, provides both children and adults with a sense of wonder, hope, awe, and some degree of understanding about our world and our universe.

Given proposed budget cuts to key U.S. science agencies, it will also be important to illustrate what could be lost in terms of science. MIT has produced “The Future Postponed,” which discusses where there are major and immediate opportunities to greatly increase our current scientific knowledge. Many of these scientific opportunities may have to be delayed or put on hold if the proposed budget cuts are implemented. Not to mention the devastating impact that such cuts will have upon our economy and the interest of U.S. students to pursue STEM careers.

Everyone should also talk about how #AmericanScience has greatly benefited from its open borders and from welcoming immigrants throughout history. Some of our most notable #AmericanScientists have been immigrants, including Albert Einstein, Enrico Fermi, Nikola Tesla, and Mario Molina.

Out of the 72 Nobel Prizes won by U.S. citizens in Chemistry, Medicine, and Physics since 2000 alone, 25 (35 percent) were awarded to immigrants. All six of America’s 2016 Nobel prize recipients in science were immigrants. Moreover, 42 percent of researchers at the top 7 U.S. Cancer Research Centers were foreign-born

Finally, and most importantly, remember that engaging in policy is not just a one-day activity. We need scientists and engineers to continue to engage with elected officials and other members of the public long after the March for Science. Only 18 percent of the public say they
can name a living scientist. This can’t be allowed to continue. You should work to ensure that the scientist that your neighbor, state legislator, and U.S. Representative is able to name is you! And make sure they know your views on why science and engineering are valuable to you, to them, and to the nation.

Find your Congressional representative using this tool, and make sure to share with others who may not know their representative. In the coming weeks, ESEP will be listing more resources to help you connect with your local, state, and federal representatives on our website — Science-Engage.org.

Question: Many March for Science attendees may be frustrated by the current political environment. What can I say or do during the march to encourage my fellow demonstrators to adopt positive messaging?

While it is easy to be frustrated right now with politics and politicians, it will not be helpful for people to try to politicize science or to suggest that one party ‘believes’ in science more than another. This will likely do more damage than good.

Support for science has been bipartisan throughout history. Vannevar Bush, author of “Science: The Endless Frontier,” which is viewed as the blueprint for Post-World War II U.S. science policy, was a Republican. The doubling of the NIH funding which occurred from 1998 to 2003 was led by Republicans in the U.S. House and Senate. At the same time, Democrats have also been known to launch attacks against specific peer reviewed scientific research projects for being wasteful of taxpayer dollars. Such was the case with many of the projects targeted by Senator William Proxmire, Democrat of Wisconsin, as a part of his Golden Fleece Awards. Therefore, it is important that people focus not on politics, but rather on the positive benefits of science to society.

Finally, if you look at the 2016 Harris Poll listing of which careers/occupations are the most prestigious, scientists rank second only to doctors. Similarly, recent polling data from the Pew Research Center indicate that both science and scientists enjoy broad-based public support. These data indicate that majority of Americans trust scientists to act in the best interests of the public. They also believe that scientists tend to be neutral in their political beliefs and that they do not to hold strong liberal or conservative views.

It is important that the scientific community continue to maintain this high-level of respect and be viewed as having impartial and non-political viewpoints. Before, during, and after the March for Science, scientists and engineers must work to deliver the message that science should be used more often to help to inform and shape policy decisions as opposed to entrenched political views or ideological perspectives. The scientific community should use science to bring people together to solve major national challenges, not to further divide and feed the increasingly polarizing rhetoric that has come to dominate discussions in Washington D.C. and in state legislatures.