Why March?

By thinking critically about the natural world, we begin to uncover the truth about how the world works and to equip ourselves with tools to better ourselves, society, and our environment. Seeking the truth about the mechanisms that govern the world around us by analyzing evidence requires a disciplined, unbiased approach. Scientific research benefits society as a whole, and can be used by policymakers of any political affiliation. However, the current political climate threatens the ability to complete unbiased research and thus hinders scientific advancements that could enhance our society and overall quality of life.

The increasing polarity of our political climate has threatened the public’s perceived value of science by favoring opinion-based debates over evidence-based facts to develop public policies. By creating policies in this manner, politicians undermine the value of unbiased scientific inquiry and promote anti-science rhetoric. This approach threatens the future of our country and the world by ignoring evidence about the state of our world when the facts are unappealing to policymakers. Further, policymakers restrict federal funding to research that they have deemed non-threatening to their political agendas. The restriction of funding to a few branches of scientific research introduces inherent bias into the future of science by forcing investigators to study topics more likely to receive funding, rather than to seek the truth without influence. Scientists, and their supporting community, have a responsibility to stand up for science and to inform the public of the value of scientific research and evidence based policy development.

A group of CMB students attended the March for Science this past Saturday both to celebrate science and scientific achievement and to participate in a movement warning policymakers that we will not tolerate the current political system’s attitude toward science. Hopefully this march encourages the public and policymakers to recognize the importance of basic research and the need to develop policies around evidence rather than opinions.

Our Marching Experience

Students from the CMB program attended marches in Burlington, Albany, Boston, and Washington D.C on April 22nd. In all locations, the weather was cold and rainy, but the spirits of those of us participating in the marches and rallies were high. The tone of the marches was largely positive. Most people attending promoted a pro-science message rather than a message that lauded or attacked particular political figures. As marchers, we chose to carry signs with approachable, non-partisan symbols and slogans in favor of evidence-based policy and critical thinking. Speakers at each location also shared examples of the positive role science can play in public policy, as well as cautionary cases where policies that disregarded scientific knowledge had negative impacts on lives and communities.

There were, unfortunately, some exceptions to the overall constructive tone of the marches. Some signs were more focused on ad hominem criticism and mockery than on promoting the value of science. At some marches, local politicians seemed to be using the gatherings as campaign stops, which gave those events an unwelcome partisan overtone.

Overall, though, participation in these marches left us feeling encouraged and hopeful. It was satisfying to see many people of different backgrounds gathered to stand up for funding for
scientific research and policies centered around scientific evidence. The crowds of science supporters, ranging from thousands to tens of thousands of individuals in different cities around the world, provided a feeling of solidarity and common purpose.

**Media Coverage**

Marches across the country and throughout the world drew many out of the lab and into the streets for the March for Science. In total, hundreds of thousands of supporters participated in over 600 satellite marches throughout the world. In Washington D.C., prominent figures turned out such as Bill Nye (CEO of The Planetary Society and Host of "Bill Nye Saves the World"), Nancy Roman (Chief of NASA's astronomy and relativity programs), Rush Holt (CEO of AAAS), Mona Hanna-Attisha (pediatrician, Michigan State University, crucial figure in the discovery of the Flint Water Crisis), and Christiana Figueres (former UN Executive Secretary crucial in the Paris Climate Agreement). The speeches delivered by these figures helped bring attention to the significant role science plays throughout our society.

Much of the coverage of the March for Science included viral pictures of marchers’ signs. Many scientists showcased their creative abilities with clever, though sometimes insubstantial signs such as “Up and Atom,” “Time to react,” and “I was told to bring a SINE,” displaying an image of a sine function. Some jokes, unfortunately, seemed too niche for public appeal, and may have alienated individuals not working in a scientific field. The media also took note of politically charged signs, bearing statements such as “Save the Planet, Recycle Trump,” “I’m with her” with an arrow pointing to Mother Earth in reference to Hillary Clinton’s campaign, and “This is the only Orange Muppet I trust to tell me about science” with an image of the Muppet, Beaker. Despite the few controversial signs carried at various marches, the apparent majority of signs were nonpartisan and focused on the current issues scientists face today.

The Twittersphere was blanketed with tweets about the event, with a top favorited tweet coming from Siobhan Thompson (@vornietom), “The numbers for the Science March seem high but we won’t know until we compare it to the numbers at the placebo march that’s also happening.” A follow-up tweet read, “I honestly feel bad for the people on the Placebo March who thought they were at the Science March but double blind testing is important.” This witty tweet reminds the public of the responsible research conduct standards followed by all scientists while commenting on the apparent turn-out of her city’s march.

Overall, the march sought to emphasize the importance of verifiable and peer-reviewed data collected by responsible research conduct over personal or biased beliefs. This ideology extends beyond science itself, echoed by the sentiment “science is not just for scientists.” Science is stigmatized as being complex and foreign, beyond the reach of the general public. Marches this past weekend sought to stymie this idea and to demonstrate that science is universal and accessible by everyone. This message was strengthened by the presence of protesters from a diverse range of backgrounds. The march and those who participated showed that science is pertinent to all of us, no matter our political leanings or our professional or educational backgrounds.

**What’s Next?**

The message promoted by the March for Science has resonated with many audiences, ranging from legislators to students to anyone with an internet connection. Hopefully, young people from all backgrounds will be encouraged by these peaceful marches to pursue education
and careers related to science and technology, or, at least, to be made aware of its importance and relevance. Marching is meant to start a conversation, and it has been successful in that goal, but to effect real change, we must follow through with this conviction. To truly change the discussion about how to frame policy for the future of our country and to reestablish the value of science in our community, we will need continued efforts from the scientific and supporting community beyond the march. Scientists and citizens must continue to convey the ideals regularly: the power of asking questions, how scientific method and inquiry impact us all, and, most importantly, the universal nature of science. Prolonging the energy and message of the march will also involve writing to legislators in support of science to impact legislation decisions. In this way, we can make policymakers aware of our concerns regarding the future of federally funded research in the United States. If you are interested in helping communicate the value of science to policymakers, the following link connects to an online tool that will help you identify your legislators and allows you to write them emails directly to express these concerns: https://save-science.org/#/.