SECOND SESSION, 117TH CONGRESS

U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE, SPACE, & TECHNOLOGY

FROM THE DAIS

Dear Committee Colleagues,

Thank you for your commitment to the Committee on Science, Space, and Technology so far this Congress. While I had hoped we would be starting the second session under different circumstances, I am encouraged by the work we have accomplished thus far and am confident that we have another productive year ahead of us. Last session, we worked hard to address the climate crisis with science and technology; to ensure the U.S. remains a leader in science and innovation; and to fight for scientific integrity throughout our federal government. We also continued our work on COVID-19, including examining vaccine hesitancy, passing legislation to help early-career researchers impacted by the pandemic, and discussing the principles that should guide an effective outbreak investigation.

To date, we have considered numerous pieces of legislation either in the Committee or on the House floor, including reauthorizations of the National Science Foundation, Department of Energy Office of Science, and the National Institute of Standards and Technology—and we have done all of this in a bipartisan manner despite the current divisions on the Hill. We also passed the Build Back Better Act, which contains essential provisions from this Committee to address our Nation's challenges head-on with robust investments in science, research, and innovation. This transformative legislation bolsters and re-energizes our approach to addressing the climate crisis, all while strengthening our scientific enterprise, creating high-quality jobs, and ensuring our continued competitiveness and the wellbeing of our citizens here at home. We will continue to work in a bicameral and bipartisan manner to bring these solutions to the American people.

It has been my privilege and honor to serve as a Member, and as Chairwoman, on this Committee. I am so proud of what we have accomplished and know there is much more work to be done. I will make full use of my final year as Chairwoman of the Science Committee to continue our efforts to build a better and more resilient society for future generations. We plan on moving legislation on a range of topics and are planning hearings on important issues across our jurisdiction ranging from inclusive innovation, to extreme weather events, to the James Webb Space Telescope, among many others.

I hope you enjoy this summary of our accomplishments to date in the 117th Congress and a preview of where we are headed this year. As always, I strongly encourage you to reach out to me and to the Committee staff with anything Committee-related. I wish you all a very happy new year, and I look forward to continuing to work with you in 2022 as we build a better future for all Americans.

Sincerely,

Eddie Bernice Johnson Chairwoman



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COMMITTEE MEMBERSHIP



EDDIE BERNICE JOHNSON

Chairwoman

DEMOCRATIC MEMBERS

Zoe Lofgren, California Suzanne Bonamici, Oregon Ami Bera, California, Vice Chair Haley Stevens, Michigan Mikie Sherrill, New Jersey Jamaal Bowman, New York Melanie Stansbury, New Mexico Brad Sherman, California Ed Perlmutter, Colorado Jerry McNerney, California Paul Tonko, New York Bill Foster, Illinois Donald Norcross, New Jersey Don Beyer, Virginia Charlie Crist, Florida Sean Casten, Illinois Conor Lamb, Pennsylvania Deborah Ross, North Carolina Gwen Moore, Wisconsin Dan Kildee, Michigan Susan Wild, Pennsylvania Lizzie Fletcher, Texas



Ranking Member

REPUBLICAN MEMBERS

Mo Brooks, Alabama Bill Posey, Florida Randy Weber, Texas Brian Babin, Texas Anthony Gonzalez, Ohio Michael Waltz, Florida James R. Baird, Indiana Daniel Webster, Florida Mike Garcia, California Stephanie I. Bice, Oklahoma Young Kim, California Randy Feenstra, Iowa Jake LaTurner, Kansas Carlos A. Gimenez, Florida Jay Obernolte, California Peter Meijer, Michigan Jake Ellzey, Texas Mike Carey, Ohio



SUBCOMMITTEE CHAIRS

CHAIRWOMAN HALEY STEVENS (MI-11) Subcommittee on Research and Technology

"I am extremely proud of all that the Science Committee has achieved over the past year especially the work that we have done to ensure that the U.S. continues to remain competitive in research and development. We introduced and passed the National Science Foundation for the Future Act, allowing us to advance our country's growth and prosperity through investing in unfunded NSF projects. So far in the 117th Congress, our committee has reached across party lines to address some of our country's most pressing challenges by fully funding critical scientific institutions and securing the United States' place as the global leader in scientific research and innovation. I am eager to continue this great work, and I can't wait to see what we accomplish next."



CHAIRWOMAN MIKIE SHERRILL (NJ-11)

Subcommittee on Environment

"I am proud of the Subcommittee on Environment's work to protect our planet through environmental, climate change, and weather research. We are confronting PFAS pollution, improving flood maps, growing our clean energy economy, and much more. In New Jersey, we are still recovering from the devastation of Hurricane Ida after facing severe flooding, which took the lives of 29 New Jerseyeans. It's a sharp and painful reminder that the stakes could not be higher. In order to mitigate the impacts of the climate crisis, we must continue to invest in environmental research and protection. In that effort, this subcommittee is continuing the fight to protect our environment and safeguard our planet for future generations."

CHAIRMAN JAMAAL BOWMAN (NY-16)

Subcommittee on Energy



"To solve the climate crisis, we need to unlock the brilliance and creativity of all Americans, including historically marginalized communities. In New York's 16th District, my constituents are ready for the green energy transition – and they are already leading a range of innovative efforts to get us there. That's one of the reasons I'm so proud to serve as Chair of the Energy Subcommittee. It's been a joy to collaborate with my colleagues to explore several dimensions of how we build a sustainable future. We have delved into materials science for the next generation of batteries, advanced computing and climate modeling, fostering equity in energy research, and much more. I look forward to continuing our visionary work next year."

SUBCOMMITTEE CHAIRS



CHAIRMAN BILL FOSTER (IL-11)

Subcommittee on Investigations and Oversight

"This year, the Subcommittee on Investigations and Oversight has addressed several issues of great importance to the scientific community. From our investigation of the "brain drain" occurring in our federal scientific workforce, to our oversight hearing on several financial assistance awards made by the Department of Energy's Office of Nuclear Energy, our subcommittee has, in partnership with Ranking Member Obernolte, furthered the Committee's reputation as a rational, bipartisan, science-led committee. Thanks to this reputation, our Subcommittee was able to hold the House's first hearing on the origins of COVID-19 in a calm, responsible manner. I look forward to working closely with the Chairwoman to continue the great work of this Subcommittee in the new year."

CHAIRMAN DON BEYER (VA-8)





"2021 has been an important year for space and aeronautics, and it has been an honor to chair this subcommittee through such an exciting time. Among our many hearings we have considered the future of our nation's strategic presence in space with the extension of the ISS, addressed NASA's urgent infrastructure needs, and looked to build a greener future through sustainable aviation. The rapid evolution of science and technology ensures that our work is never done. In the coming year, I look forward to reauthorizing NASA and continuing to work closely with them to advance our nation's ambitious space and aeronautics agenda."

SECOND SESSION 117

LEADERSHIP IN S&T

Global competition in science and technology has emerged as an urgent bipartisan priority - and we are prepared to meet the challenge of our global competitors.

The Committee plans to invests significant time and effort in understanding cutting edge technologies that will drive innovation and economic growth while protecting our Nation's intellectual property and security.

The future of science and innovation is in cross-cutting, state of the art research conducted by our federal laboratories, federal scientists, and colleges and universities. Together, we will not only lead the world in innovation, we will also lead the world in solutions to today's most pressing societal challenges.

CLIMATE ACTION

Throughout the 117th Congress, the House Committee on Science, Space, and Technology acted in the fight against the climate crisis. In this effort we held hearings, drafted and passed legislation, and moved the conversation forward on strong, innovative climate policy. Protecting our planet, our people, and serving as stewards for the next generation requires a coordinated effort. We will continue to pursue the Committee's aggressive climate agenda in 2022.

SCIENTIFIC INTEGRITY

Science does not have a political agenda. As we move forward with policy to better our country and scientific enterprise, we must ensure that federal scientists and agencies are able to do their work free of political interference.

When science is done well, it is because trained professionals can follow the data and subject their findings to rigorous peer review. The scientific breakthroughs of the past year, including the COVID-19 vaccines, have shown the remarkable accomplishments our scientists can achieve when they are supported, work together, and make science-based decisions.



FRESHMEN SPOTLIGHT



CONGRESSWOMAN DEBORAH ROSS

Representing North Carolina's 2nd District

- Subcommittee on Energy
- Subcommittee on Research and Technology



"It has been an honor to serve on the House Committee on Science, Space, and Technology during my first term. As the representative of part of the Research Triangle Park, I know how crucial it is that we invest in American innovation and advance bold solutions to address the climate crisis. Under the inspired leadership of Chairwoman Johnson and with my distinguished colleagues on this committee, we have made extraordinary progress toward a cleaner energy future, investments in the next generation of STEM leaders, and addressing threats against our nation's cybersecurity. From hearings on building back our research enterprise to the impacts of climate change, we have followed the science and allowed it to guide our work on this committee. I'm immensely proud of all that we have accomplished for the people of North Carolina's Second District and across the country. I look forward to the work we will continue to do in 2022."

IN THE NEWS:

THE HILL: To defeat ransomware attacks, build stronger partnerships

SST Bill Sponsor Spotlight:

H.R. 4606, the Energizing Technology Transfer Act



FRESHMEN SPOTLIGHT

CONGRESSWOMAN MELANIE STANSBURY Representing New Mexico's 1st District

- Subcommittee on Energy
- Subcommittee on Research and Technology



"Having worked in the sciences and science policy throughout my career, I have been honored and excited to join the Science, Space, and Technology Committee since taking office earlier this year. New Mexico is a science and technology hub, with two national National Labs, a number of Air Force and other research labs, several major universities, and a thriving aerospace and science and tech economy. From introducing bi-partisan legislation to advance tech transfer and innovation in clean energy technologies to growing and diversifying our STEM pipeline, I look forward to continuing to work with the Committee to invest in our labs and universities, empower our communities, and advance U.S. leadership in science, technology, and innovation."

SST Bill Sponsor Spotlight:

H.R. 4863, Partnerships for Energy Security and Innovation Act







Rep. Melanie Stansbury ② @Rep_St... Jul 30 First major bill introduced! ☑ And, it's all about STEM & economic development.

HR 4863, the bipartisan Partnerships for Energy Security & Innovation Act, would leverage the science and innovation of our National Labs to grow jobs, the economy & build a clean energy future!







- Passed bipartisan legislation to fund American Science and Innovation at National Science Foundation (NSF). The United States has long been a beacon of excellence in science and engineering. As global competition in research and development increases, we must continue to lead and chart a course of growth. H.R. 2225, the National Science Foundation for the Future Act, passed the House on June 28, 2021 by a vote of 345-67. This legislation will set NSF on a path for significant and sustainable growth. The bill addresses challenges at all levels of STEM education and training; supports activities and partnerships to broaden participation in NSF-funded projects; establishes a new directorate to accelerate progress on emerging technologies and advance research-driven solutions to societal challenges like climate change and inequality.
- Passed bipartisan legislation to fully authorize the Department of Energy (DOE) Office of Science. H.R. 3593, the Department of Energy Science for the Future Act, passed by the House on June 28, 2021 by a vote of 351-68, authorizes significant, steady, and sustainable growth for the DOE Office of Science's wide-ranging research. The DOE Office of Science is the nation's largest supporter of research in the physical sciences, and it is the lead federal agency supporting scientific research for energy applications.
- Introduced legislation to fund American Science and Innovation at the National Institute of Standards and Technology. H.R. 4609, the NIST for the Future Act, is a comprehensive 5-year reauthorization for the agency. These accounts fund important measurement and technology research, as well as NIST's extramural manufacturing programs. The bill would also support NIST's infrastructure needs. In total, the legislation authorizes \$7.9 billion over 5 years, allowing for growth that is both ambitious and sustainable. These investments are necessary to support a critical federal agency charged with helping to advance U.S. competitiveness and innovation. On July 27, 2021 the Committee held a full Committee Markup of H.R. 4609, the National Institute of Standards and Technology for the Future Act of 2021. It passed favorably out of Committee.
- Held a hearing on brain drain and the impact it has on our federal workforce. Career scientists in the Federal Government are instrumental in shaping America's scientific priorities, funding cutting-edge research, and ensuring that policies are crafted on the basis of the best available science. Unfortunately, in recent years, due to political and budgetary pressures, the federal scientific workforce has struggled. Too many career scientists have decided to leave. On March 17, 2021 the Subcommittee on Investigations and Oversight held a hearing to assess recent widespread departures of career scientists from the Federal Government. The Subcommittee examined the cause and extent of the employment decline within the federal scientific workforce, as well as the implications of a smaller scientific workforce for science-based agencies. The Subcommittee also discussed potential policies to rebuild federal scientific capacity. Submitted to the record during the hearing was a Staff report prepared by the majority: Scientific Brain Drain: Quantifying the Decline of the Federal Scientific Workforce.



• Held a hearing on plastic waste and how to move from staggering statistics to a sustainable future. Members discussed federal research and development and standards development needs to help address the plastic waste crisis and barriers to the current recycling system. In addition, Members explored challenges and opportunities for adopting sustainable upstream plastic waste reduction solutions and efficacy of existing lifecycle analysis models for assessing the impact of plastic waste and metrics for sustainability. Tackling plastic waste is a priority of Chairwoman Haley Stevens (D-MI) of the Subcommittee on Research and Technology. Her legislation, the Plastic Waste Reduction and Recycling Research Act would play an important role in addressing these issues.



"The challenge is with us. We live with climate change. We talk about it, we study it, and it is time now for all of us to lead in addressing it. Inaction is really not an option."

Chairwoman Eddie Bernice Johnson (D-TX)
Remarks at COP26, November 9, 2021

• Introduced legislation to improve precipitation data to adjust to a rapidly changing climate, prepare for emergencies, and ensure long-term resiliency.

Precipitation data is used in immediate decisions like evacuation orders during a hurricane, as well as long-term decisions like planning zoning restrictions to minimize climate risks, or buying a mortgage for a new home. H.R. 1437, the Providing Research and Estimates of Changes in Precipitation (PRECIP) Act, was introduced by **Chairwoman Mikie Sherrill (D-NJ) of the Subcommittee on Environment** and passed out of Committee on November 16, 2021. This bipartisan legislation would update out-of-date precipitation data in the U.S. by providing NOAA with consistent funding to collect data and conduct studies.

• Passed legislation to protect our oceans. 2021 is the beginning of the UN Decade of Ocean Science for Sustainable Development. As part of a large effort to protect our Oceans, on May 18, 2021 the House passed H.R. 1447, the "Coastal and Ocean Acidification Stressors and Threats (COAST) Research Act of 2021". This bipartisan legislation addresses ocean acidification, the gradual decrease in oceanic pH due primarily to the absorption of excess atmospheric carbon dioxide by seawater, by reauthorizing and updating the Federal Ocean Acidification Research and Monitoring Act. The bill was introduced in the House by Congresswoman Suzanne Bonamici (D-OR), and Chairwoman Johnson (D-TX) is a cosponsor.

- Introduced legislation to ensure qualified scientists are leading our nation's critical agencies. Under current law, the National Oceanic and Atmospheric Administration's (NOAA) Chief Scientist is appointed by the President and given a broad outline of their duties, but details on the qualifications of who would be eligible to serve as Chief Scientist or how the Chief Scientist establishes standards within NOAA's scientific endeavors are lacking. H.R. 3952, the NOAA Chief Scientist Act, introduced by Chairwoman Mikie Sherrill (D-NJ) of the subcommittee on Environment, would provide greater clarity on the qualifications of the presidentially-appointed Chief Scientist, and direct the Chief Scientist to establish and enforce high scientific integrity standards within NOAA and to provide yearly public reports on NOAA's scientific work.
- Held a hearing to articulate the principles for transparency, scientific integrity, and objectivity that must accompany our continued efforts to understand infectious disease outbreaks. The COVID-19 pandemic has raised public interest in infectious disease outbreaks. Past disease outbreaks have illustrated the importance of patience, scientific transparency, objectivity, and international collaboration. On July 14, 2021, the Committee's Subcommittee on Investigations and Oversight held a hearing to consider how infectious diseases normally emerge; how understanding disease origins helps protect public health; methods for tracing outbreaks to a discrete origin; the scientific datasets and access that investigators need; and the principles for transparency, scientific integrity, objectivity, and public communication that accompany an ideal outbreak investigation. Following the hearing, Chairman Bill Foster (D-IL) of the Subcommittee on Investigations and Oversight sent a letter to the Office of Science and Technology Policy (OSTP) Director Eric Lander requesting a review of the adequacy and implementation of their oversight policies for life sciences dual use research of concern and federally-funded research on potential pandemic pathogens.
- Passed bipartisan legislation to support diversity and equality in STEM. On May 18, 2021, the House passed H.R. 210, the Rural STEM Education Research Act; H.R. 144, the Supporting Early-Career Researchers Act; H.R. 204, the STEM Opportunities Act; H.R. 2027, the MSI STEM Achievement Act; and H.R. 2695, the Combating Sexual Harassment in Science Act. Each of these bills will help make significant advancements to improve and strengthen the U.S. STEM pipeline.
- Held a hearing on the pathways of sustainable aviation. The Environmental Protection Agency (EPA), in its annual inventory of greenhouse gas (GHG) shows that aviation emissions have consistently increased at a faster pace than any other area of transportation in recent years. On March 24, 2021, the Subcommittee on Space and Aeronautics held a hearing to examine research and technology approaches to sustainable aviation, including activities for improving the energy efficiency and reducing the climate and environmental impacts of civil and commercial aviation; inform research and development priorities to achieve emissions reduction goals for the aviation sector; and other issues.



IN THE NEWS

WASHINGTON POST: Lawmakers demand oil and gas firms divulge methane leak data **CALLER TIMES:** Preparation for peak hurricane season must include protection against COVID-19

DALLAS MORNING NEWS: People in underserved communities innovate every day, and science should harness that ingenuity

THE HILL: To defeat ransomware attacks, build stronger partnerships

ISSUES: A Bipartisan Vision for the Future of American Science

SEA TECH: Investments in ocean observations enable prosperous, sustainable economy **WASHINGTON POST:** The fight to get tech giants to reveal their data is coming to a head in Congress

THE HILL: US must not only lead in artificial intelligence, but also in its ethical application

E&E NEWS: Committee approves bill to bolster DOE, science spending

POLITICO: House Democrats dole out R&D goodies in partisan spending bill

CBS NEWS: The Arctic Circle saw record-high temperatures in 2020, NOAA report finds

BLOOMBERG: EPA Bans Pesticide linked to health problems in children

LA TIMES: Pesticide linked to health problems in children is banned by FDA for food crops

THE HILL: There's no place in the US safe from the heat

E&E NEWS: 'Answer to the code red': Dems cite IPCC for climate agenda **ROLL CALL:** China's STEM workforce a challenge for US policymakers

FOX: 'Final warning': Lawmakers, Biden administration sound alarm over UN climate report and urge swift action

NEW YORK TIMES: The exodus of expertise under trump

E&E NEWS: DOE science nominee to lawmakers: Stop worrying about China **SCIENTIFIC AMERICA:** 5G Wireless Could Interfere with Weather Forecasts **E&E NEWS:** Experts, advocates push lawmakers on federal heat response

PITTSBURGH POST-GAZETTE: Imitate China to compete with it? Lawmakers debate science funding bills as a way to seed U.S. industry

MERITALK: House Passes Research Funding Bills That Track With Senate's USICA Measure

E&E NEWS: Eastern U.S. growing vulnerable to wildfires, panel warned

NEW YORK TIMES: House Passes Bills to Bolster Scientific Research, Breaking With Senate

POLITICO: House passes its version of science bill to take on China

WALL STREET JOURNAL: House Panel Approves China Scientific Competitiveness Bill

THE HILL: Chief scientist: NOAA is '\$12 billion agency trapped in a \$5.5 billion budget' **NEW YORK TIMES:** Scientists warn U.S. lawmakers about the continued threat

of coronavirus variants

SCIENCE ON SOCIAL



Rep. Sean Casten 🕏

Thank you @POTUS for using your #JointAddress to make clearer than ever that the climate crisis is a global fight—one we can no longer afford to ignore, that doing nothing is not an option, but taking transformative #ClimateAction will fuel our economy & create millions of jobs.





Rep. Dan Kildee 🔮

The #GreatLakes are central to Michigan's livelihood & our regional economy. This week, I joined a @HouseScience hearing to discuss my legislation that became law to protect & preserve the health of our Great Lakes.

Watch my remarks 🛂





Ami Bera, M.D. 🔮 #MayThe4thBeWithYou

As a kid who grew up during the space race dreaming of what lay beyond us (thanks, @starwars!), it's an honor to serve on the @HouseScience Space Subcommittee to help shape and support our space policy. ia

2019







Congresswoman Deborah Ross

cleaner energy future. This

jobs for the next generation.

As a member of @HouseScience, I'm working to move our country toward a #EnergyEfficiencyDay, we recommit ourselves to energy conservation and investing in clean energy - to save our environment and to create good-paying



Donald Norcross 🔮

Today, I stand in support of WMPD individuals who are making a difference in their communities & in their fields of #STEM. 🕕 🔗 💿 🖋

Thank you for empowering the next generation to build a more dynamic & diverse workforce. #WMPDday



Rep. Lizzie Fletcher 🥯

Happy #NationalSpaceDay from the Space City all the way to the International Space Station!

Pictured: @AstroSerena aboard the ISS in





Suzanne Bonamici



It was a pleasure to meet with former President @BarackObama and @ClimateEnvoy John Kerry at #COP26 . We are united in our goal to protect our planet now and for generations to come.







Rep. Eddie Bernice Johnson 🤣

Today, like @POTUS, I received my COVID-19 booster shot.

I encourage everyone who is eligible to get theirs as well. Visit vaccines.gov to learn more!







SCIENCE ON SOCIAL



Vice President Kamala Harris 🥯

.@NASA is critical to U.S. national and economic security. With decades of experience and as a former astronaut, Bill Nelson will advance NASA's science, aviation, and technology missions as Administrator.



Jerry McNerney

Happy #NationalSTEMDay! Was there a teacher that sparked your interest in **#STEM?** Share in the thread below!

White House Office of Science & Technol...

.@WHOSTP celebrates the importance of #STEM education and innovation and recognizes professionals who innovate each day - STEM teachers!

In honor of #NationalSTEMDay, have you thanked the teacher that was your #STEM spark? Share the story with @WHOSTP by replying to this tweet!



Paul Tonko 🌑 📀



EPA's ambitious agenda takes long-needed action to protect the American people from harmful PFAS contaminants.

I thank @POTUS and @EPAMichaelRegan for their bold leadership & look forward to ensuring this action is completed in a timely, science-based manner.

The New York Times @ @nytimes Breaking News: The Biden administration said it would regulate PFAS, the "forever chemicals" in many household items that have contaminated drinking water. Exposure to the chemicals has been linked to certain cancers and other health issues. nyti.ms/3n3gLuO



Capital Weather Gang

U.S. is seeing larger + more frequent wildfires as temps rise; they're also happening earlier & later in year. @HouseScience has passed thru committee

legislation that would fund \$2 billion to support wildfire research and forecasting: wapo.st/30z0xCy by @HazardWriter



Rep. Haley Stevens

Today, I chaired a subcommittee markup on the @NSF for the Future Act & we sent the bill to @HouseScience.

This bipartisan bill will increase funding for @NSF, advance research & address challenges in STEM education.

It passed with all Democrats and Republicans voting AYE.

National Science **Foundation** For the Future Act



Congresswoman Deborah Ross 🕏



I was thrilled to join @EPAMichaelRegan today as he announced the @EPA's Roadmap to confront #PFAS. This Roadmap is one of the most significant steps to date that the federal government has taken to address and mitigate PFAS contamination.





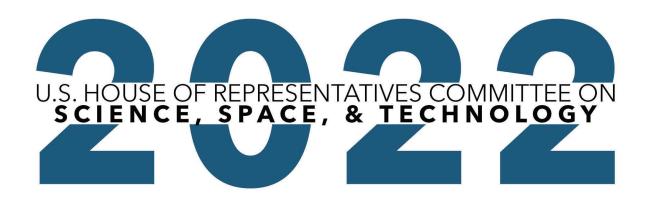


Congressman Charlie Crist 🔮

Proud to support the full range of @NASA activities - from human spaceflight to climate research. #BuildBackBetter invests in NASA's laboratories and facilities - like @NASAKennedv.







SCIENTIFIC SOLUTIONS FOR THE PEOPLE

ACTING ON CLIMATE CHANGE

STRENGTHENING SCIENTIFIC INTEGRITY

ENSURING LEADERSHIP IN SCIENCE AND TECHNOLOGY





