Science, Technology, and Innovation Policy: CRS Experts

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Related Policy Issue

- Science, Space, and R&D

Science, technology, and innovation (STI) play important roles in the nation's economic and military strength, public health and safety, and the quality of our lives. Individuals, companies, governments, universities, and other organizations fund, conduct, disseminate, and acquire science and technology for a myriad of purposes. Among the purposes: providing for the national defense and homeland security; improving manufacturing processes and enabling the manufacture of new products; developing new materials; advancing computing and communications tools; preventing and treating disease, illness, and injury; developing new medicines, diagnostic tools, and therapies; understanding Earth's climate and weather; improving nutrition, crop yields, and food safety; reducing emissions; remediating environmental damage; improving energy efficiency and expanding energy production; exploring space; improving and enhancing education; and understanding the origins of our universe and its governing rules.

The federal government supports a wide range of research and development (R&D) activities that support federal agencies in the conduct of their missions; underpin development of new fields of science and technology; enable innovation and productivity improvements that support economic growth and job creation; and support policymaking in areas such as regulation. In addition, the federal government plays a role in science, technology, engineering, and mathematics (STEM) education. Many federal government programs seek to foster a strong U.S. science and engineering workforce for industry, government, and academia. Federal agencies also collect and disseminate data that bear on science, technology, and innovation, including public and private R&D funding levels; the number of students earning bachelor's, master's, and doctoral degrees in STEM fields; and the size and composition of the nation's scientific and engineering workforce.

Congress has an extensive role in federal science, technology, and innovation policies, including authorizing programs and funding, making appropriations, and conducting oversight activities. The following table provides names and contact information for CRS experts on these issues.

Legislative Issue	Name/Title	Phone	E-mail
Science, Technology, and Innovation			
Additive/3-D Manufacturing	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Advanced Technology Vehicles Manufacturing (ATVM) Loan Program	**Bill Canis** Specialist in Industrial Organization and Business	7-1568	bcanis@crs.loc.gov
America COMPETES Act and Reauthorization	**Heather B. Gonzalez** Specialist in Science and Technology Policy	7-1895	hgonzalez@crs.loc.gov
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Battery Manufacturing for Hybrid and Electric Vehicles	**Bill Canis** Specialist in Industrial Organization and	7-1568	bcanis@crs.loc.gov

	Business		
Educational Technologies	**Heather B. Gonzalez** Specialist in Science and Technology Policy	7-1895	hgonzalez@crs.loc.gov
Environmental Regulation and Compliance	**Megan Stubbs** Specialist in Agricultural Conservation and Natural Resources Policy	7-8707	mstubbs@crs.loc.gov
	Robert Esworthy Specialist in Environmental Policy	7-7236	resworthy@crs.loc.gov
	Claudia Copeland Specialist in Resources and Environmental Policy	7-7227	ccopeland@crs.loc.gov
	Mary Tiemann Specialist in Environmental Policy	7-5937	mtiemann@crs.loc.gov
Follow-on Biologics	**Frank Gottron** Specialist in Science and Technology Policy	7-5854	fgottron@crs.loc.gov
Genetic Testing	**Amanda K. Sarata** Specialist in Health Policy	7-7641	asarata@crs.loc.gov
Innovation Prizes	**Heather B. Gonzalez** Specialist in Science and Technology Policy	7-1895	hgonzalez@crs.loc.gov
Laboratory Developed Tests (LDTs)	**Amanda K. Sarata** Specialist in Health Policy	7-7641	asarata@crs.loc.gov
	Judith A. Johnson Specialist in Biomedical Policy	7-7077	jajohnson@crs.loc.gov
Intellectual Property: Patents and Copyrights	**Frank Gottron** Specialist in Science and Technology Policy	7-5854	fgottron@crs.loc.gov
	John R. Thomas Visiting Scholar	7-0975	jrthomas@crs.loc.gov
Internet Governance	**Lennard G. Kruger** Specialist in Science and Technology Policy	7-7070	lkruger@crs.loc.gov
Medical Device Regulation	**Judith A. Johnson** Specialist in Biomedical Policy	7-7077	jajohnson@crs.loc.gov
21st Century Nanotechnology R&D Act and Reauthorization	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Patents and Pharmaceutical Innovation	**Frank Gottron** Specialist in Science and Technology Policy	7-5854	fgottron@crs.loc.gov
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Publishing of Scientific Papers with Potential Security Risks	**Dana A. Shea** Specialist in Science and Technology Policy	7-6844	dshea@crs.loc.gov
	Frank Gottron Specialist in Science and Technology Policy	7-5854	fgottron@crs.loc.gov
Technology Transfer	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov

Research and Development: Federal Agencies

Office of Science and Technology Policy, Executive Office of the President	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov

	Dana A. Shea Specialist in Science and Technology Policy	7-6844	dshea@crs.loc.gov
Department of Agriculture (USDA)	**Jim Monke** Specialist in Agricultural Policy	7-9664	jmonke@crs.loc.gov
Department of Commerce: National Institute of Standards and Technology (NIST)	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Department of Commerce: National Oceanic and Atmospheric Administration	**Harold F. Upton** Analyst in Natural Resources Policy	7-2264	hupton@crs.loc.gov
Department of Defense (DOD)	**John D. Moteff** Specialist in Science and Technology Policy	7-1435	jmoteff@crs.loc.gov
Department of Energy (DOE)	**Daniel Morgan** Specialist in Science and Technology Policy	7-5849	dmorgan@crs.loc.gov
	Heather Gonzalez Specialist in Science and Technology Policy	7-1895	hgonzalez@crs.loc.gov
Department of Homeland Security (DHS)	**Daniel Morgan** Specialist in Science and Technology Policy	7-5849	dmorgan@crs.loc.gov
	Dana A. Shea Specialist in Science and Technology Policy	7-6844	dshea@crs.loc.gov
Department of the Interior (DOI)	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Department of the Interior: U.S. Geological Service (USGS)	**Pervaze Sheikh** Specialist in Natural Resoures Policy	7-6070	psheikh@crs.loc.gov
Department of Transportation (DOT)	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Environmental Protection Agency (EPA)	**Robert Esworthy** Specialist in Environmental Policy	7-7236	resworthy@crs.loc.gov
National Aeronautics and Space Administration (NASA)	**Daniel Morgan** Specialist in Science and Technology Policy	7-5849	dmorgan@crs.loc.gov
National Institutes of Health (NIH)	**Judith A. Johnson** Specialist in Biomedical Policy	7-7077	jajohnson@crs.loc.gov
National Science Foundation (NSF)	**Heather B. Gonzalez** Specialist in Science and Technology Policy	7-1895	hgonzalez@crs.loc.gov

Research and Development: Multi-agency Initiatives

Advanced Manufacturing Partnership (AMP)	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Doubling Effort (NSF, DOE Office of Science, NIST)	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Materials Genome Initiative (MGI)	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
National Nanotechnology Initiative (NNI)	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Networking and Information	**Patricia Moloney Figliola**	7-2508	pfigliola@crs.loc.gov

Technology Research and Development program (NITRD)	Specialist in Internet and Telecommunications Policy		
U.S. Global Change Research Program (USGCRP)	**Jane A. Leggett** Specialist in Energy and Environmental Policy	7-9525	jaleggett@crs.loc.gov

Research and Development: Selected Topics and Fields

Academic R&D and Related Issues	**Heather B. Gonzalez** Specialist in Science and Technology Policy	7-1895	hgonzalez@crs.loc.gov
Biodefense	**Dana A. Shea** Specialist in Science and Technology Policy	7-6844	dshea@crs.loc.gov
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Climate Science	**Jane A. Leggett** Specialist in Energy and Environmental Policy	7-9525	jaleggett@crs.loc.gov
Cooperative Research and Development	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Competitiveness	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
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Cybersecurity	**Eric A. Fischer** Senior Specialist in Science and Technology	7-7071	efischer@crs.loc.gov
	Patricia Moloney Figliola Specialist in Internet and Telecommunications Policy	7-2508	pfigliola@crs.loc.gov
Defense	**John D. Moteff** Specialist in Science and Technology Policy	7-1435	jmoteff@crs.loc.gov
Federal R&D Funding for Historically-Black Colleges and Universities (HBCUs)	**Heather B. Gonzalez** Specialist in Science and Technology Policy	7-1895	hgonzalez@crs.loc.gov
Federally-funded Research and Development Centers (FFRDC)	**Daniel Morgan** Specialist in Science and Technology Policy	7-5849	dmorgan@crs.loc.gov
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Government, Industry, and University R&D Data	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Health	**Judith A. Johnson** Specialist in Biomedical Policy	7-7077	jajohnson@crs.loc.gov
Homeland Security	**Daniel Morgan** Specialist in Science and Technology Policy	7-5849	dmorgan@crs.loc.gov
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	Policy		
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	Jonathan Medalia Specialist in Nuclear Weapons Policy	7-7632	jmedalia@crs.loc.gov
Manufacturing	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Nanotechnology	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Public-Private R&D Partnerships	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Research and Experimentation (R&E) Tax Credit	**Gary Guenther** Analyst in Public Finance	7-7742	gguenther@crs.loc.gov
Space Exploration	**Daniel Morgan** Specialist in Science and Technology Policy	7-5849	dmorgan@crs.loc.gov
Stem Cell Research	**Judith A. Johnson** Specialist in Biomedical Policy	7-7077	jajohnson@crs.loc.gov
	Edward C. Liu Legislative Attorney	7-9166	eliu@crs.loc.gov

Selected Research, Development, and Innovation-related Programs

Experimental Program to Stimulate Competitive Research (EPSCoR)	**Heather B. Gonzalez** Specialist in Science and Technology Policy	7-1895	hgonzalez@crs.loc.gov
Manufacturing Extension Program (MEP)	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
National Network for Manufacturing Innovation (NNMI)	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR)) programs	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov

Science, Technology, Engineering, and Mathematics (STEM) Education and Workforce

STEM Education	**Heather B. Gonzalez** Specialist in Science and Technology Policy	7-1895	hgonzalez@crs.loc.gov
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STEM Workforce	**John F. Sargent, Jr.** Specialist in Science and Technology Policy	7-9147	jsargent@crs.loc.gov
Immigration of Foreign Scientists and Engineers	**Ruth Ellen Wasem** Specialist in Immigration Policy	7-7342	rwasem@crs.loc.gov
Visas for Foreign STEM Students	**Alison Siskin** Specialist in Immigration Policy	7-0260	asiskin@crs.loc.gov

Telecommunications Policy

Federal Communications Commission (FCC)	**Patricia Moloney Figliola** Specialist in Internet and Telecommunications Policy	7-2508	pfigliola@crs.loc.gov
First Responders Network/ Next Generation Communications for Public Safety	**Linda K. Moore** Specialist in Telecommunications Policy	7-5853	lmoore@crs.loc.gov
Internet Freedom	**Patricia Moloney Figliola** Specialist in Internet and Telecommunications Policy	7-2508	pfigliola@crs.loc.gov
National Broadband Plan	**Lennard G. Kruger** Specialist in Science and Technology Policy	7-7070	lkruger@crs.loc.gov
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Spectrum Policy	**Linda K. Moore** Specialist in Telecommunications Policy	7-5853	lmoore@crs.loc.gov
Universal Service Fund	**Angele A. Gilroy** Specialist in Telecommunications Policy	7-7778	agilroy@crs.loc.gov