

FEDERAL UPDATE SESSION – FUNDING AND POLICY DEVELOPMENTS, APRIL 2021

JONATHAN NURSE
DIRECTOR OF FEDERAL RELATIONS



Session Outline

- i. Executive and Legislative Branch R&D Priorities
- ii. COVID-19 Relief Bills
- iii. FY 2022 Appropriations
- iv. American Jobs Plan
- v. National Science Foundation Reconfiguration
- vi. FY 2023 Community Project Request (Earmark) Preparation
- vii. Other



Executive and Legislative Branch R&D Priorities

- Increase Overall U.S. R&D Investment as a Percentage of GDP
- Industries of the Future Quantum Information Science, Artificial Intelligence, Advanced Manufacturing, and Biotechnology
- Climate Research
- Biomedical Research
- Social Sciences
- Broaden STEM Participation
- Combatting Foreign Theft of, and Influence on, Research
- Solutions-driven Research



Relevant COVID-19 Relief Bills

- 3/6/20 Coronavirus Preparedness and Response Supplemental Appropriations Act of 2020
- 3/18/20 Families First Coronavirus Response Act of 2020
- 3/27/20 Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020
- 12/27/20 FY2021 Omnibus and COVID Relief and Response Act of 2020
- 3/11/21 American Rescue Plan Act of 2021
 - \$39.6B for Higher Education COVID-19-Related Costs
 - \$350B for Relief to State and Local Government
 - \$1.135B to Select Research and Related Agencies, including NSF (\$600M), IMLS (\$200), NIST (\$150M), IES (\$100M), NEH (\$135M), NEA (\$135M)



FY2022 Appropriations – Research

Research Account			FY20 –	FY22	FY22 PBR – FY21	FY22 Preliminary	FY22 APLU Request
Dollars in Millions	FY20	FY21	FY21 % Change	PBR EST/TBD	Enacted % Change EST/TBD	APLU Request* (>)	FY21 Enacted % Change
Department of Defense, Science & Technology (6.1-6.3)	16,074	16,873	+4.97%			17,885	+6.00%
Department of Defense, S&T, Basic Research (6.1)	2,603	2,671	+2.61%			2,831	+5.99%
Department of Defense, DARPA	3,458	3,501	1.24%			3,712	+6.03%
ED, Institute of Education Sciences	623.5	642.5	+3.05%			700	+8.95%
Energy, Office of Science	7,000	7,026	+0.37%	7,400	+5.32%	7,700	+9.59%
Energy, ARPA-E	425	427	+0.47%			500	+17.10%
EPA, Office of Science	716	729.3	+1.86%			773	+5.99%
National Aeronautics and Space Administration (NASA), Science Mission Directorate	7,139	7,301	+2.27%			9,000	+23.27%
NASA, Aeronautics Research Directorate	784	828.7	+5.70%	915	+10.41%	900	+8.60%
NASA, Space Technology	1,100	1,100	0.00%	1,400	+27.27%	1,500	+36.36%
National Endowment for the Humanities	162.3	167.5	+3.20%			225	+34.33%
National Institute of Food Agriculture, Ag. and Food Research Initiative	425	435	+2.35%			470	+8.05%
National Institutes of Health	41,700	42,900	+2.88%	51,000	+18.88%	46,111	+7.48%
National Institute for Standards and Technology (NIST), Manufacturing Extension Partnerships	146	150	+2.74%	275	+83.33%	165	+10.00%
NIST, National Network for Manufacturing Innovation	16	16.5	+3.13%			40	+142.42%
National Oceanic and Atmospheric Administration (NOAA), Oceanic and Atmospheric Research	548	570.6	+4.12%			640	+12.16%
NOAA, Sea Grant	67	69.5	+3.73%			107.9	+55.25%
National Science Foundation	8,280	8,487	+2.50%	10,200	+20.18%	10,000	+17.83%



FY2022 Appropriations – Student Financial Aid

	esearch Account in Millions, except Pell	FY20	FY21	FY20 – FY21 % Change	FY22 PBR TBD	FY22 PBR – FY21 Enacted % Change TBD	FY22 Preliminary APLU Request* (>)	FY22 APLU Request - FY21 Enacted % Change
Pell G	rant Maximum Award	6,345	6,495	+2.36%	6,895	+6.16%	13,000	+100.15%
Supplemental	Educational Opportunity Grant	865	880	+1.73%			1,061	+20.57%
Fe	ederal Work Study	1,180	1,190	+0.85%			1,480	+24.37%



FY2022 Appropriations – Earmarks

- House and Senate Earmark Discussions
- Community Project Requests
 - New Ethics and Transparency Guidelines
 - Limit of 10 Requests for Each House Office
 - Process Limited to Non-Profits
- Florida Delegation
- Implications for FY 2023 Appropriations Process and Beyond

United States Senate



WASHINGTON, DC 20510

Dear Colleague:

We, the undersigned, stand committed to the ban on earmarks. We will not vote to repeal it. We will not participate in an inherently wasteful spending practice that is prone to serious abuse.

Respectfully,

Michael S. Lee United States Senator

Ben Sasse United States Senator

tat Vomen Pat Toomey

United States Senator

Mike Braun United States Senator

Steve Daines

United States Senator

Joni Ernst United States Senator April 19, 2021

John Cornyn United States Senator

Mitt Romney United States Senator

United States Senator

Josh Hawley United States Senator

Rick Scott

United States Senator

Marco Rubio United States Senator

Rand Paul United States Senator

Ted Cruz United States Senator



FY2023 Appropriations – Earmark Preparation

- Distinct from the FY2022 Process
- Educate Congressional Offices Early on FSU Strengths and Needs
- General Programmatic Increases a Potential Substitute for Some Earmarks
- Partnerships are Important
- Internal FSU Solicitation of Proposals
 - Late September 2021 Information Release and Webinar
 - Late October 2021 Submission Deadline
 - Late November 2021 Selection of 4-6 Projects to Submit to Florida House Members
 - Late January 2022 Projects Submitted to Florida House Members



FY2023 Appropriations – Earmark Preparation Cont'd

Relevant Earmarkable Accounts:

- Department of Agriculture Agricultural Research Service, Buildings and Facilities
- NASA Safety, Security and Mission Services
- NOAA Operations, Research, and Facilities under the Department of Commerce
- State and Local Law Enforcement Assistance—Byrne Justice Assistance Grants (JAG) under the Department of Justice
- Defense, Air Force/Navy/Army Research, Development, Test and Evaluation
- Homeland Security, Pre-disaster Mitigation Projects; Nonprofit Security Grant Program
- Labor, Employment and Training Administration
- Health Resources and Services Administration (HRSA)
- Substance Abuse and Mental Health Services Administration (SAMHSA)
- Education, Fund for the Improvement of Postsecondary Education (FIPSE)
- Department of Housing and Urban Development Economic Development Initiative (EDI)



American Jobs Plan (Infrastructure Proposal)

\$180 billion investment in R&D

- \$50 billion to the National Science Foundation, in part to support a new technology directorate
- \$40 billion to **upgrade research laboratories**, with half going to MSIs
- \$35 billion to help address the climate crisis, including the launch of an Advanced Research Projects Agency-Climate that is modeled after DARPA
- \$30 billion to increase innovation and job creation with a focus on underserved areas
- \$25 billion for R&D at minority serving institutions, including the creating of 200 centers of excellence that serve as research incubators that focus heavily on educating the next generation of STEM professionals





NSF Reconfiguration Proposals

Endless Frontiers Act Reintroduction (Senate) – Draft

- April Reintroduction Expected
- Removed from Prior Version:
 - NSF Name Change
 - Deputy Director for New Technology Directorate
 - Advisory Board
- \$100 billion Authorized for NSF for Fiscal Years 2022 through 2026



NSF Reconfiguration Proposals Cont'd

EFA Establishes a new Directorate for Technology and Innovation

- Advance Innovation in Key Tech Areas, through Basic and Translational Research, Including:
 - (1.) Artificial Intelligence, Machine Learning, and other Software Advances
 - (2.) High Performance Computing and Information Systems
 - (3.) Robotics, Automation, and Advanced Manufacturing
 - (4.) Natural and Anthropogenic Disaster Prevention or Mitigation
 - (5.) Advanced Communications Technology
 - (6.) Biotechnology, Genomics, and Synthetic Biology
 - (7.) Cybersecurity, Data Storage, and Data Management Technologies
 - (8.) Advanced Energy, Batteries, and Industrial Efficiency
 - (9.) Advanced Materials Science, Engineering, and Exploration
 - (10.) Innovation Methods, Processes and Promising Practices that can Affect the Speed and Effectiveness of Innovation Processes at Scale



NSF Reconfiguration Proposals Cont'd

EFA Other Items of Note

- DARPA Model
- Funds Supplement not Supplant Existing Efforts
- Collaboration with other NSF Directorates and other Research Agencies
- Planning and Coordination, by Community Stakeholders, to Build Regional Innovation Ecosystems
- 10-15 Regional Technology Hubs
- University Technology Centers
- Scholarships, Fellowships, Traineeships and Postdoctoral Awards in the Key Technology Focus Areas



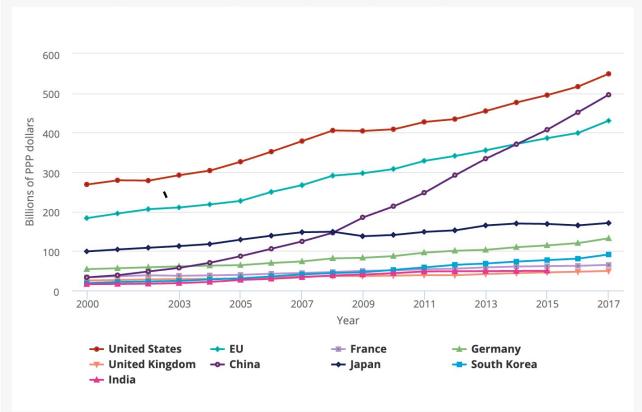
NSF Reconfiguration Proposals Cont'd

National Science Foundation for the Future Act (House of Representatives)

- Budget Increase from \$8.5 billion (FY21) to \$10.5 billion in FY22, \$18.3 billion by FY 2026
- Creates a Directorate for Science and Engineering Solutions
 - Initial Funding Authorization of \$1billion in FY22 increasing by 50% annually to \$5 billion in FY26
- Infrastructure Investments, Including Midscale Research Infrastructure Program
- STEM Workforce Funding Increase of 50% over 5 Years
- Increases Research Security and Accountability







National Science Board, Science & Engineering Indicators 2020



Other R&D Proposals

American Innovation Act (Senate, House)

 Authorizes Increases of 5% Plus Approximate GDP-indexed Inflation for 10 Years for the DOE Office of Science, NSF, DOD S&T Programs, NASA Science Mission Directorate, NIST S&T Services

Securing American Leadership in Science & Technology Act (House)

- Double Basic Research Over 10 years
- Focus on Clean Energy
- Investment in Industries of the Future
- STEM Workforce Investments
- Protects Federally-Funded Research from Foreign Theft



Other R&D Proposals

American Cures Act (Senate, House)

Authorizes Annual Budget Increases of Five Percent Plus Inflation for the NSF, CDC,
 DOD Health Program, and VA Medical and Prosthetics Research Program



Contact Information

Jonathan Nurse

Director of Federal Relations
Office of the Vice President for Research
Florida State University
jnurse@fsu.edu

Follow us on Twitter @FSUFedRel (202) 716-5575 (mobile)

444 North Capitol Street, NW, Suite 619

Washington, DC 20001-1512 (202) 220-1317 (office)

253 Materials Research Building

2005 Levy Avenue Tallahassee, FL 32310 Mail Code – MC 2738