

LOUISIANA NASA EPSCoR



Research Awards Program (RAP)

A NASA EPSCoR Research Infrastructure Development (RID) Project

Sponsored by NASA & the Louisiana Board of Regents (BoR)
With Technical & Management Support from the
Louisiana NASA EPSCoR Team at LSU

La NASA EPSCoR Management Office
364 Nicholson Hall, Department of Physics and Astronomy
Louisiana State University, Baton Rouge, LA 70803
http://lanasaepscor.lsu.edu/ | laspace@lsu.edu

RAP Program Summary Page

About the RAP

The RAP sub-program is designed for those researchers who have made a NASA contact and are ready to take the next step of initiating a small project. This could involve almost any type of NASA relevant work, such as utilizing a specific NASA facility, employing NASA expertise, or building upon previous NASA work (akin to technology/knowledge transfer) or working with a NASA group on problems of common interest. In all cases, the Louisiana researcher must have the interest of a NASA researcher and include a plan for developing a research partnership, and the proposal must clearly state which Mission Directorate this project aligns with as well as how it aligns with current Federal STEM Research Priorities. The goal here is to lay the foundation to develop larger, longer-lasting collaborative projects that can transition to the next level.

RAP Projects are designed to provide seed grants for R&D that have demonstrated a tie-in to a NASA priority and alignment with overall federal goals. Projects are open to any area relevant to NASA's mission. Each project proposal must include a NASA Collaboration Development Plan that describes what effort has already been, and will be, undertaken to establish a partnership with one or more NASA researchers.

An NOI is required in advance of proposal submission. Institutional sign-off is not required for the NOI. RAP awards will be issued for a 12-month period of performance. RAP awards are anticipated to be in the \$30K-\$40K range. Proposing institutions are expected to provide a 50% total cost-match; e.g. if you request \$40K in funding from the RAP program, you must commit at least \$20K from your institution. The project PI must be a faculty member at one of Louisiana's institutions of higher education.

Proposal Submissions

- Submit a compliant RAP NOI to laspace@lsu.edu by 11:59 pm on Friday, December 19, 2025
- Submit a fully compliant, signed proposal via email as a <u>fully searchable pdf</u> document to laspace@lsu.edu by 11:59 pm on Friday, February 6, 2026.

Important Dates:

- Proposal Release Date: Friday, November 7, 2025
- NOI Due Date: Friday, December 19, 2025
- o Proposal Due Date: Friday, February 6, 2026
- Anticipated Award Announcements: March/April 2026
- Anticipated Period of Performance: July 15, 2026 July 14, 2027

RAP Program Guidelines

Introduction to the NASA EPSCoR RID Program

The NASA Established Program to Stimulate Competitive Research (EPSCoR) is administered through NASA's Office of STEM Engagement. The purpose of NASA EPSCoR is to strengthen the research capability of jurisdictions that have not participated equitably in competitive federal research and development activities.

The NASA EPSCoR Research Infrastructure Development (RID) program for 2022-2027 focuses on building the core strength needed to develop competitive research and technology development methods and activities for the solution of scientific and technical problems of importance to NASA as defined by one or more of the five Mission Directorates and one or more of the ten NASA Centers (including JPL). RID programs will also contribute to the overall research infrastructure, science and technology capabilities, higher education, and/or economic development of the EPSCoR jurisdiction. An emphasis should be placed on developing a core expertise and robust research program capable of successfully competing for funds offered by NASA, industry, other federal agencies, and additional external sources beyond the EPSCoR program.

NASA 2022 Strategic Plan

NASA's 2022 strategic plan aligns the Agency's future activities along three strategic themes of Discover, Explore, and Develop, as well as a fourth theme focused on the activities that will enable the Agency's mission.

- DISCOVER: Expand human knowledge through new scientific discoveries
- EXPLORE: Extend human presence to the Moon and on towards Mars for sustainable long-term exploration, development, and utilization
- INNOVATE: Catalyze economic growth and drive innovation to address national challenges
- ADVANCE: Enhance capabilities and operations to catalyze current and future mission success

The complete plan can be downloaded here.

NASA Vision

Exploring the secrets of the universe for the benefit of all.

NASA Mission

NASA explores the unknown in air and space, innovates for the benefit of humanity, and inspires the world through discovery.

NASA Office of STEM Engagement

NASA's journeys have propelled technological breakthroughs, pushed the frontiers of scientific research, and expanded our understanding of the universe. These accomplishments, and those to come, share a common genesis: education in science, technology, engineering, and math. NASA's Office of STEM
Engagement (OSTEM) delivers tools for young Americans and educators to learn and succeed. OSTEM seeks to:

- Create unique opportunities for students and the public to contribute to NASA's work in exploration and discovery.
- Build a future STEM workforce by engaging students in authentic learning experiences with NASA people, content, and facilities.
- Strengthen public understanding by enabling powerful connections to NASA's mission and work.

To achieve these goals, NASA's Office of STEM Engagement strives to increase K-12 involvement in NASA projects, enhance higher education, support all communities, strengthen online education, and boost NASA's contribution to informal education. The intended outcome is a generation prepared to code, calculate, design, and discover its way to a new era of American innovation.

NASA Mission Directorates (MD)

Research, technology, and development priorities of your proposed project must align with one or more of NASA's Mission Directorates:

Aeronautics: Results achieved by NASA's aeronautical innovators through the years directly benefit today's air transportation system, the aviation industry, and the passengers and businesses who rely on those advances in flight every day. As a result, every U.S. commercial aircraft and U.S. air traffic control tower uses NASA-developed technology to improve efficiency and maintain safety.

Exploration Systems: The Exploration Systems Development Mission Directorate manages human exploration system development for lunar orbital, lunar surface, and Mars exploration. Artemis missions will open a new era of scientific discovery and economic opportunity on the Moon while validating operations and systems and preparing for human missions to Mars. Programs in the directorate include the Space Launch System rocket, Orion spacecraft, supporting ground systems, human landing systems, spacesuits, and Gateway.

Science: The Science Mission Directorate is an organization where discoveries in one scientific discipline have a direct route to other areas of study. This flow is something extremely valuable and is rare in the scientific world. From exoplanet research to better understanding Earth's climate to understanding the influence of the sun on our planet and the solar system, the directorate's work is interdisciplinary and collaborative.

<u>Space Operations</u>: The Space Operations Mission Directorate maintains a continuous human presence in space for the benefit of people on Earth. The programs within the directorate are the heart of NASA's space exploration efforts, enabling Artemis, commercial space, science, and other agency missions through communication, launch services, research capabilities, and crew support.

Space Technology: Technology drives exploration and the space economy. NASA's Space Technology Mission Directorate aims to transform future missions while ensuring American leadership in aerospace. The directorate develops, demonstrates, and transfers new space technologies that benefit NASA, commercial, and other government missions.

All NASA Space Grant & EPSCoR subprograms must relate to and support one or more of these directorates. Likewise, all programs supported by LaSPACE must support the NASA organization, align with the NASA Strategic Plan, and support the goals of the Office of STEM Engagement. Any alignment with NASA Center programs should also be detailed.

NASA MD Contacts for University Researchers

Aeronautics Research Mission Directorate (ARMD)

POC: Dave Berger, OSTEM Embed for ARMD, dave.e.berger@nasa.gov, 202.358.2473

Exploration Systems Development Mission Directorate (ESDMD)

POC: Veronica Seyl, OSTEM Embed for ESDMD, <u>veronica.l.seyl@nasa.gov</u>, 281.483.5110 **Science Mission Directorate (SMD)**

POC: Susan Poland, OSTEM Embed for SMD, susan.m.poland@nasa.gov, 202.358.1082

Space Operations Mission Directorate (SOMD)POC: Veronica Seyl, OSTEM Embed for SOMD, <u>veronica.l.seyl@nasa.gov</u>, 281.483.5110

Space Technology Mission Directorate (STMD)

POC: Stephanie Yeldell, OSTEM Embed for STMD, stephanie.l.yeldell@nasa.gov, 202.358.1162

NASA Center Liaisons

Armstrong Flight Research Center Veronica Wilson veronica.l.wilson@nasa.gov	Johnson Space Center Jakarda Varnado jakarda.w.varnado@nasa.gov
Ames Research Center Veronica Wilson veronica.l.wilson@nasa.gov	Kennedy Space Center Patricia Gillis patricia.j.gillis@nasa.gov
Goddard Space Flight Center James Harrington james.l.harrington@nasa.gov	Langley Research Center Bonnie Murray bonnie.murray@nasa.gov
Glenn Research Center Gerald Voltz gerald.w.voltz@nasa.gov	Marshall Space Flight Center Vemitra Alexander vemitra.m.white@nasa.gov
Jet Propulsion Lab Petra Kneissl petra.a.kneissl-milanian@jpl.nasa.gov	Stennis Space Center Louis Thompson louis.m.thompson@nasa.gov

NASA EPSCoR RID Program in Louisiana

The Louisiana Board of Regents (BoR) has received an EPSCoR Research Infrastructure Development (RID) award from the NASA EPSCoR program. Moving a jurisdiction forward in competitiveness is the foundational goal of all EPSCoR programs and is measured by a jurisdiction's rank in its percentage of federal R&D funds received over a three-year period. Louisiana's success with EPSCoR can be seen by looking at the state's rankings over time – moving from the bottom toward the top on the EPSCoR list. Aerospace has accounted for much of our growth with expertise developed in areas ranging from smart materials to air traffic management, from additive manufacturing to astrophysics. But the work is far from completed. We need to build upon what has been accomplished and move forward into increased competitiveness.

Achieving this goal requires a number of plans and actions: (a) expanding university educational opportunities, (b) enhancing research infrastructure and capacity, (c) fostering R & D capabilities, and (d) capitalizing upon the resultant intellectual property. NASA EPSCoR provides university students and faculty exposure to and involvement in the Aerospace research enterprise, improves faculty research capabilities (both at a given institution and between institutions), enhances research facilities and infrastructure, and opens opportunities for faculty (particularly junior faculty), post-doctoral researchers, and students to engage in meaningful Aerospace R&D all with the goal of graduating from the EPSCoR program designation. The Research Infrastructure Development (RID) component of NASA EPSCoR is of critical importance to prepare Louisiana's researchers to become involved in larger projects which can be proposed as NASA EPSCoR Research Implementation Projects or proposed to NASA opportunities issued by the directorates. Thus, the overall goal for the NASA EPSCoR RID is to elevate the competitiveness of the state's researchers in aerospace science and technology Development.

Research Award Program (RAP)

The RAP sub-program provides seed funding for Louisiana researchers working on a NASA-related research project with the documented interest of a NASA researcher. This could involve almost any type of NASA relevant project, such as utilizing a specific NASA facility, employing NASA expertise, building upon previous NASA work (akin to technology/knowledge transfer), or working with a NASA group on problems of common interest. In all cases, the Louisiana researcher must 1) have documented interest from a NASA researcher and include a plan for developing a research partnership and 2) provide evidence of direct alignment with at least one NASA Mission Directorate. The goal here is to create the foundation to develop larger, longer-lasting collaborative projects.

RAP projects are designed to provide seed grants for R&D projects to be conducted at a single Louisiana institution that have a demonstrated tie-in to a NASA priority. Projects are open to any area relevant to NASA's mission. Each project proposal must include a NASA Collaboration Development Plan that describes what effort has already been, and what will be, undertaken to

establish a partnership with one or more NASA researchers. Proposal evaluation criteria will include whether the PI has already established a NASA link as evidenced by a letter or e-mail from one or more NASA supporters indicating their interest in the project and willingness to host a visit by the PI or the PI team. During the period of the award (nominally 12 months), the research team should plan to make one or more trips to the NASA facility to interact with the NASA researcher who supports the project. The project PI must be a faculty member at one of Louisiana's institutions of higher education. Post-doctoral associates, graduate students, and undergraduate student researchers should be involved as needed. RAP Projects may involve more than one faculty researcher, but only one faculty member can serve as the PI.

These seed grants from NASA EPSCoR are not just research grants. Excellent research must be performed, but the project should also be designed to (a) increase research capacity and competitiveness and (b) be scalable to a team approach for a larger future endeavor. Evidence of the probability of (a) and (b) must be presented in the proposal and addressed in the project report.

Eligibility

The project PI must be a faculty member at one of Louisiana's institutions of higher education. Post-doctoral associates, graduate students, and undergraduates should be involved as needed.

The RAP sub-program is designed to provide seed grants to LA researchers for R & D that has a demonstrated tie-in to a NASA program. Projects must involve Research or Technology and are open to any area relevant to NASA. Proposals must explicitly link the proposed project to a research priority within one of NASA's five Mission Directorates or alignment to Federal Research Priorities identified by OMB & OSTP. A letter/email of interest from a NASA researcher which shows support for the project, a willingness to host a visit from the PI/team, and an acknowledgement of potential for future collaborations must be included. During the period of the award (nominally 12 months), the researcher must make one, or more, trips to the NASA center to interact and/or work with the NASA researcher who has shown interest in the project. Contact info for Mission Directorate Leads and University Affairs Officers at the various NASA centers are included earlier in these guidelines.

NASA Collaboration Development Plan

Each project proposal must include a NASA Collaboration Development Plan that describes what effort has already been, and will be, undertaken to establish a partnership with one or more NASA researchers. Proposal evaluation criteria will include whether the PI has already established a NASA link as evidenced by a letter or e-mail from one or more NASA supporters indicating their interest in the project and willingness to host a visit by the PI or the PI team. Due to restructuring at federal science agencies like NASA, we were unable to secure an updated list of research areas of interest typically curated by NASA EPSCOR HQ Program Managers. Instead, we expect you to identify priority areas at NASA on your own and find alignment with Federal Research Priorities

included in the joint memorandum issued on September 23, 2025 by the Office of Management and Budget and the Office of Science and Technology Policy (included only in the pdf version of these guidelines).

Period of Performance

RAP awards will be issued for a 12-month period of performance. No cost extensions (NCEs) for ongoing projects may be considered if submitted to the La Board of Regents Sponsored Programs office no later than 60 days before the initial project end-date. All NCE requests must include a multi-page status report (similar to a final technical report) which addresses all accomplishments made to date on the project (including all publications, proposals, presentations, patents, etc), where the project is in relation to the originally proposed end date, reasons why the project has been delayed, and a proposed plan for completing the project. This status report must also identify all participants on the project and include details for each (students, post-docs, faculty, and staff). NCE options will be suspended when the parent award's end date requires it.

Award Funding Amounts

RAP awards are anticipated to be in the \$30K-\$40K range. We anticipate funding 3 to 5 proposals this cycle. RAP projects are funded with LA Board of Regents Support Fund match dollars.

Proposed Costs

This program is intended to improve research capability in Louisiana and, consequently, costs should primarily support effort within the state. Direct labor costs will be allowed exclusively for faculty, staff, students, and visiting researchers at Louisiana institutions. Funding allocated outside of the state is not recommended. If proposed, it should be minimal, must be well justified with compelling evidence that such an investment would still offer substantial permanent improvement to Louisiana's research infrastructure. A statement that funding external sites would improve the probability of proposal selection would not be sufficient justification. Project costs should be documented in the proposal as necessary to meet the project goals and objectives. Reasonable costs include salary and wages for faculty, research associates, and student researchers, travel to NASA centers for collaboration development meetings, and basic materials and supplies to conduct the research. This program is not designed to fully support a graduate student, and student tuition is not an allowable expense. Any rebudgeting in excess of 20% requires prior approval from the Board of Regents. Rebudget requests must be submitted in writing to the Board of Regents using the Budget Revision Request Form available on LaSPACE Document Center. Rebudget requests should include a complete explanation as to why the funds could not be spent as proposed, why a rebudget is necessary, and how the newly structured budget will still meet the spirit of the award. Rebudget requests must include the original budget and budget justifications along with the proposed revised budget and budget justification. The Louisiana NASA EPSCoR Management Office should be copied on all rebudget requests by email at laspace@lsu.edu.

Cost-Share

Proposing institutions are expected to provide at least a 50% cost-match. For example, if you request \$40,000 from the RAP program your institution must commit to \$20,000 in cost-share. This is taken by the reviewers as evidence of commitment on the part of the proposing institution(s). Such an institutional commitment in the form of re-assigned responsibilities is most significant since it allows the faculty member(s) sufficient time to participate in and manage the proposed research. Lack of such time calls into question the ability of the proposers to carry the project to a successful conclusion. All cost sharing must be certified in the final financial report.

Indirect (F&A) Costs

RAP awards are typically funded with BoR cost-share funds and as such indirect (F&A) cost recovery will be allowed at the BoR rate, i.e. 25% of salaries, wages, and fringe benefits. Unrecovered indirect is allowable (and recommended) cost sharing. The LaSPACE/La NASA EPSCoR program management team may choose to use any available NASA funds to support a RAP project, and in such instances the proposing institution agrees to retain the BoR indirect rate charges and cost restrictions, as originally proposed.

Award Subcontract

Award funds will be provided by subcontract from the Board of Regents to the lead applicants' college or university, which will assume responsibility for administering the funds according to standard procedures.

Animal Use

Any project proposing the use of an animal model for validation <u>must include a local IACUC</u> approval letter, fully signed, which specifies a validity period longer than the proposed project <u>period</u>. Failure to obtain the Institutional Animal Care and Use Committee's approval in advance is grounds for returning the proposal unreviewed. Attach the IACUC material as an additional appendix.

Human Subjects

Projects that involve human subjects are not acceptable for this program.

Certifications

When preparing a proposal that requires institutional certification, waiver, or approval the proposers will need to address applicable compliance issues in advance. All necessary internal approvals from the proposing institution must be secured and documented in writing. A letter (see sample in the attachments section of these guidelines) signed by the authorized organizational representative certifying that all reviews and waivers relevant to the proposal have been completed must be submitted to laspace@lsu.edu no later than 30 calendar days after the proposal due date but will preferably be included at submission. Even though extra time is allowed to submit the commitment document, the letter is considered to be part of the

proposal and will be included as an appendix in the subaward contract from the Board of Regents. Failure to provide this commitment in the approved time frame may result in disqualification and selection of alternate proposals.

Public Nature of Applications

Once an application is received, it becomes public record. Although the staff will not disseminate applications to individuals other than to reviewers, applicants should be aware that, if a request for information is made by the public (e.g., the news media), a copy of the application, by law, must be provided.

Disclosure of Information

All La NASA EPSCoR programs must conform to applicable Federal, State, and NASA Agency regulations and stipulations. This includes annual reporting of award participant information to both the Louisiana Board of Regents and NASA. Part of this information will include both directory information such as name, address, telephone number, date of birth, and demographic information such as gender, ethnicity, and race for all award participants including faculty, staff, and students. Further, outreach includes public dissemination of its supported programs through newsletters, press releases, the La NASA EPSCoR website (http://laNASAepscor.lsu.edu/), as well as papers and/or presentations at Space Grant or related Education & Public Outreach conferences. The contents of award reports, including participant names, titles, institution, project summaries, results or conclusions and images, might be included in such public outreach articles. It is not intended that these public articles will disclose directory or demographic information except as aggregated statistical data.

Final Deliverables

At the end of the project, two final reports are required: the Final Technical Report and the Final Financial Report. These reports are due within 30 days after the subcontract expiration date. A link to the online platform for report submission, as well as a document with detailed guidance for writing the report, are posted in the <u>LaSPACE Document Center</u> on our website.

The Final Technical Report will be a multi-page write-up that is suitable for transmission to NASA and BoR. A final report must be submitted by the PI/Project Lead no later than 30 days after the project end date. Photographs and copies of all papers, presentations, and posters generated should be shared with LaSPACE as they occur and collected/referenced in the final report. Final Report guidelines can be downloaded from the LaSPACE website's document center. Please review the reporting guidelines at the start of your project to identify in advance the kinds of information you must share at the end of your award. For example, you must track participation hours & total funding per student and collect reflective statements from your students. Develop a plan to collect this info early! The Final Financial Report is an official report that shows the final expenditure of the funds and certifies the cost-sharing. This report is to be submitted to the Board of Regents by your university's financial office using the BoR electronic reporting system. Additional instructions for reporting are given in the sub-award document.

Evaluation Criteria

A panel of external reviewers will evaluate all the proposals on the following criteria.

- (15%) The degree to which this proposal is relevant to NASA (& current Federal Research Priorities).
- (25%) Scientific and technical merit of the proposed project.
- (10%) Demonstrated ability to carry out the research plan and achieve the stated goals.
- (10%) Probability for the project to develop new capabilities and secure additional funding.
- (10%) Clarity and appropriateness of the budget to carry out the project, including institutional commitments & matching funds.
- (10%) Clarity and appropriate degree of student involvement in the Research Plan.
- (10%) Degree to which the project contributes to workforce and/or economic development.
- (10%) Contribution of the proposed project to research infrastructure development in the state, specifically by increasing the scope and geographic representation of NASA research disciplines and institutional participation throughout Louisiana.

RAP Proposal Format & Submittal

RAP proposals should be submitted as fully searchable pdf documents via email to laspace@lsu.edu. A RAP proposal must include the following completed sections in the order presented:

- RAP Cover Page
- Proposed Project Summary Page
- Current & Pending Support Form
- Proposal Narrative (not to exceed 10 pages, including figures and tables, no smaller than 11 point font & one-inch margins)
 - 1) <u>Introduction</u> (overview of the scope of work for this proposal, include mention of the NASA mission directorate and any major ongoing NASA research projects this work is relevant to).
 - 2) <u>Background</u> (provide a bigger picture of how the proposed work fits into your overall research plans and the field of study at large).
 - 3) Research Objectives (clearly identify all science and technical objectives for this proposal).
 - 4) Relevance to NASA and NASA Mission Directorates/Centers (identify all the current and potential applications/relevance to NASA, including future scalability of this project and where a larger scale project would fit in. Explicitly identify the mission directorate to which this project aligns with details on the related research priorities of said MDs). Show alignment to Federal Research Priorities identified by OMB & OSTP.
 - 5) <u>Implementation Strategy and Milestone Schedule</u> (detail exactly what deliverables are expected, when, and by whom).
 - 6) NASA Collaboration Development Plan (map out any contact you have had thus far with a reasonable plan for development over the course of this project, including number of meetings in person or via phone/web technology; be sure to identify what you will get from NASA and what NASA will get from you over the period of the award).
 - 7) Management Plan (lay out a hierarchy of individuals/institutions working on the project, a recruitment plan for team members not yet identified, and methods for tracking and reporting progress throughout the project; partnership proposals must clearly divide tasks and lay out a clear plan for managing work at multiple institutions).
 - 8) Anticipated Outcomes/Plans for Future Endeavors/Future Collaborations with NASA (include anticipated impacts on LA research infrastructure growth and workforce development; plans for publications, conferences, funding opportunities, and full-scale collaborations).
- References Cited within the proposal
- Budget Section: Budget Form followed by a narrative explanation of all costs listed on the form.
 Explanations are required for both requested funds and proposed cost-share budget lines.
- Letter(s) of Interest from a NASA Researcher
- Short Vita for Principal Investigator
- Letter Certifying all Institutional Reviews are complete (can be submitted 30 days after proposal due date. See section on Certifications.)

Attachments Required Proposal Forms

Required Forms for Proposal

All proposals submitted must use the forms included following this page. Proposals not using these forms may be rejected without review.

- NOI (due December 19, 2025)
- Cover Sheet
- Proposed Project Summary
- Current & Pending Support Form
- Proposal Budget Form
- Sample Letter for Certifying all Institutional Reviews are complete

La NASA EPSCoR RAP Program Notice of Intent (NOI) to Propose

This NOI must be submitted by the PI to LaSPACE on, or before, Friday, December 19, 2025 via email to laspace@lsu.edu. No institutional signature is required for the NOI, but no proposals will be accepted from PIs who fail to submit this NOI.

NAME OF PRINCIPAL INVESTIGATOR (PI):	NAME INSTITUTION:
PI DEPARTMENT/ MAILING ADDRESS	PI PHONE NUMBER and EMAIL ADDRESS
TTBETAKTWENTA WATERNO ABBINESS	THE HOME NOMBER and EMPLE ABBRECO
TITLE OF PROPOSED PROJECT	
TITLE OF PROPOSED PROJECT:	
LIST PROJECT DISCIPLINES:	
THE PROPOSED WORK WILL SUPPORT THE RESEARCH PRIORITIES OF	THE FOLLOWING NASA DIRECTORATES:
☐ Aeronautics ☐ Exploration Systems ☐ Science	\square Space Operations \square Space Technology
LIST ASSOCIATED NASA FIELD CENTERS HERE:	
NAME & TITLE OF NASA CONTACT:	
Check here to confirm you have already requested a letter of support from this	contact □
PROJECT ABSTRACT (maximum 250 words):	

A NASA EPSCoR – La BoR RID Project

Research Awards Program (RAP) Cover Sheet

1.	Title of Propose	d Project: _			
2.	Principal Investi	gator:	(Name)		
			(Department)		
3.	Institution of Hig	gher Educa	. ,		
4.	PI Address:				
		(Street A	ddress/P.O. Box	(Number)	
		(City, Sta	te)		(Zip Code)
5.	Telephone:			FAX:	
	PI E-mail:				
6.	NASA Contact:				
		(Name)		(Pos	sition)
(Cer	nter)			(e-mail)	
7.	Total Funds Req	uested: <u>\$</u>		Instit	rutional Commitment:\$
Certi signa agre- and to, E: Discr Restr	ification of Compliance atories certify that the e to comply with LaSP/proposed project are in xecutive Order 12549, rimination; Certificatio riction as detailed in Post	e with Applica statements m ACE award ter n compliance Debarment a n against Lobl ublic Laws 112 d Further Cor	able Executive Orderade in this propose ms and conditions with all applicable and Suspension, 34 or oping imposed by section 1340(a tinuing Appropriation	ers and U.S. Co al are true and o if an award is n Federal and Sta CFR Part 85, Se ection 1352, tit and 112-55, S ions Act of 201	******************************* ode: By signing and submitting this proposal, the complete to the best of their knowledge; they made as a result of this proposal; and the institution ate laws and regulations including, but not limited ection 85.510, Participant's responsibilities; Noncle 31, U.S. Code; Compliance with China Funding Section 539; ACORN Compliance in accordance with 2 (Pub. L.112-55); and does not have a federal tax 12-55).
8.	Signature of Prir	ncipal Inves	tigator:		
9.	Name of Author	ized Institu	tional Rep:		
10.	Signature of Aut	horized Ins	titutional Rep:_		
11.	Date Signed:				

Proposed RAP Project Summary

NAME OF INSTITUTION (INCLUDE BRANCH/CAMPUS AND SCHOOL OR DIVISION)
ADDRESS (INCLUDE DEPARTMENT)
PRINCIPAL INVESTIGATOR
THIRDINAL INVESTIGATOR
NASA MISSION DIRECTORATE ALIGNMENT (Check all that apply to your project. Narrative proof for selected alignment(s) must be included in your proposal narrative.)
□SMD □STMD □ARMD □ESDMD □SOMD
LIST ASSOCIATED NASA FIELD CENTERS HERE:
Identify Federal Research Priority Alignment here:
NASA CONTACT
PROJECT TITLE
ABSTRACT (DO NOT EXCEED 250 WORDS, suitable for general distribution)

Current and Pending Support Form

This Form is to be filled out for the Principal Investigator. For each Project provide the following information: Funding Agency, Title, Funding Amount, Starting and Ending Dates, and Personnel Effort Committed to the Project (person-months or % of effort). Please add additional pages as needed.

1. Current Support

Agency/Grant No.:

Title:

Amount

Period:

Effort:

Location:

Agency/Grant No.:

Title:

Amount

Period:

Effort:

LIIOI t.

Location:

2. Pending Support

Agency:

Title:

Amount

Period:

Effort:

Location:

Agency:

Title:

Amount

Period:

Effort:

Location:

A NASA EPSCoR – La BoR RID Project Research Awards Program (RAP) Budget Request Sheet

Include a budget narrative page with explanations and justifications for all costs following each budget form submitted.

roposal Title:	
rincipal Investigator:	
nstitution:	

		NASA/BORSF Funds Requested	Institutional Proposed Cost Share*
A. <u>Direct Labor</u>			
1. Faculty/S	taff Researchers	\$	\$
2. Graduate	Student(s)	\$	\$
3. <u>Undergra</u>	duate Student(s)	\$	\$
4. Fringe Be	nefits	\$	\$
5. <u>Total A</u>		\$	\$
B. <u>Supportive Expenses</u>			
1. <u>Travel</u>		\$	\$
2. Supplies	& Materials	\$	\$
3. Other Dir	ect Costs	\$	\$
(Identify)			
4. Total B		\$	\$
C. Facilities & Ad	ministration		
1. F&A (Indi	rect Costs)**	\$	\$
		•	
D. <u>Total Budget</u>			
Total Budget (A5	+B4+C1 <u>)</u>	\$	\$

^{*}Must be certified on all financial billings/reports. ** BoR rate (25% of Subtotal A) allowed.

Proposed Budget Justification

NASA/BORSF Requested Funds

A. Direct Labor

- 1. Describe any faculty/staff support costs with explicit calculations.
- 2. Describe any graduate student support costs with explicit calculations.
- 3. Describe any undergraduate student support costs with explicit calculations.
- 4. Describe any fringe benefit costs with explicit calculations.

B. Supportive Expenses

- 1. Describe any proposed travel costs with explicit details regarding proposed travelers, destination, and estimated costs.
- 2. Describe any proposed supplies & materials costs with explicit details regarding proposed purchases, estimated costs, and justification of need.
- 3. Other Direct Costs must be explicitly named and defined and may include things like facility usage fees and printing services.

C. Facilities & Administration

 RAP awards are typically funded with BoR cost-share funds and as such indirect (F&A) cost recovery will be allowed at the BoR rate, i.e. 25% of salaries, wages, and fringe benefits. Unrecovered indirect is allowable (and recommended) toward cost sharing. Describe all applicable costs for which you will charge the modified F&A rate. Be explicit and show calculations.

Institution Proposed Cost Share

A. Direct Labor

- 1. Describe any faculty/staff support costs with explicit calculations.
- 2. Describe any graduate student support costs with explicit calculations.
- 3. Describe any undergraduate student support costs with explicit calculations.
- 4. Describe any fringe benefit costs with explicit calculations.

B. Supportive Expenses

- 1. Describe any proposed travel costs with explicit details regarding proposed travelers, destination, and estimated costs.
- 2. Describe any proposed supplies & materials costs with explicit details regarding proposed purchases, estimated costs, and justification of need.
- 3. Other Direct Costs must be explicitly named and defined and may include things like facility usage fees and printing services.

C. Facilities & Administration

1. Provide a letter or link to the official F&A rate for your campus. Describe all applicable cost-sharing costs for which you will apply your F&A rate. Show calculations. Describe any unrecovered F&A costs you are claiming for cost share above the 25% allowable on the requested funds and show calculations.

Sample Letter Certifying Completion of Institutional Reviews

Month, Day, Year

LaSPACE / LA NASA EPSCoR Program Office Colleen Fava, Director LSU Department of Physics and Astronomy Baton Rouge, LA 70803

Dear Ms. Fava:

"Insert Institution" agrees to participate as a subrecipient in Louisiana Board of Regents' and NASA EPSCOR RID program, RAP project entitled "Insert Proposal Title." The "Insert Institution" portion of the work as described in the attached proposed scope of work will be under the primary direction of "Insert Name of PI."

This letter acknowledges that the institution has conducted all reviews, and signed all waivers, and certifications associated with the proposed effort so that the project can be immediately implemented following award by the Board of Regents.

We look forward to a rewarding and productive research effort.
Sincerely,
Authorized Institutional Rep Printed: Full Name
Authorized Institutional Rep Signature:
Enclosures: <any attachments="" necessary=""> Authorized Institutional Rep Signature:</any>

Appendix A

Memorandum from the White House Office of Management and Budget & Office of Science and Technology Policy

Subject: Fiscal Year (FY) 2027 Administration Research and Development Budget Priorities and Cross-Cutting Actions

Dated: September 23, 2025



EXECUTIVE OFFICE OF THE PRESIDENT WASHINGTON, D.C. 20502



M-25-34 / NSTM-2

September 23, 2025

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM:

RUSSELL T. VOUGHT

DIRECTOR, OFFICE OF MANAGEMENT AND BUDGET

MICHAEL J. KRATSIOS >

DIRECTOR, OFFICE OF SCIENCE AND TECHNOLOGY POLICY

SUBJECT:

Fiscal Year (FY) 2027 Administration Research and Development Budget

Priorities and Cross-Cutting Actions

"We are going to conquer the vast frontiers of science, and we are going to lead humanity into space and plant the American flag on the planet Mars and even far beyond. And, through it all, we are going to rediscover the unstoppable power of the American spirit, and we are going to renew unlimited promise of the American dream."

- President Donald J. Trump, 2025 Address to Joint Session of Congress

America's science and technology (S&T) engine is—and must remain—the greatest in the world. Long before rockets reached the moon or microchips powered our economy, the outcomes of Federal research and development (R&D) won World War II and laid the foundations for technological breakthroughs that secured our military dominance, built our industries, and improved the everyday lives of the American people. America's post-war recognition of the strategic importance of R&D investments, and its deliberate reshaping of the R&D ecosystem, transformed the United States into the most innovative, prosperous, and powerful nation in history.

Recognizing new circumstances and new challenges, the Trump Administration is aligning the Federal Government's role in the S&T enterprise to once again drive R&D that is bold, mission-driven, and unapologetically in service of the American people. In a world where American dominance is not guaranteed and our adversaries pursue whole-of-nation approaches to S&T competition, federally funded R&D must focus on targeted, transformational investments in areas such as artificial intelligence (AI), quantum science, nuclear energy, biotechnology, national security technologies, and ambitious space exploration.

Today, America's innovation ecosystem is built on a unique partnership between government, academia, industry, and nonprofit research institutions. Universities have served as vital centers of scientific discovery and technical talent development. The private sector plays an increasingly central role, not only in late-stage development and commercialization, but also in applied research, bringing speed and scale to turn basic research into real-world products and platforms. And nonprofit research institutions can pilot novel models of collaboration and inquiry. Across this ecosystem, it is the role of the Federal Government to set clear priorities, align incentives, and ensure that public investments translate into strategic advantage.

Following years of unfocused Federal investments weighed down by woke ideology and diversity, equity, and inclusion initiatives, we are realigning the Federal R&D portfolio to serve its core purposes: driving economic growth and high-wage employment for all Americans, promoting high quality of life, and ensuring U.S. leadership in critical sectors to our national security.

OVERVIEW OF THE FY 2027 MEMORANDUM

For FY2027, the *five R&D budgetary priorities* in this memorandum will ensure that America secures its position as the unrivaled world leader in critical and emerging technologies, including AI and quantum information S&T. Additional priorities will advance and secure America's leadership in energy, national security, health and biotechnology, and space. Across the Federal R&D budget, agencies should prioritize the physical, biological, and engineering sciences to accelerate technological innovation and strengthen national capabilities.

This memorandum also describes *five high-priority crosscutting actions*. These actions will revitalize America's S&T enterprise, unleashing researchers to achieve groundbreaking discoveries. These crosscutting actions underpin the five R&D budgetary priorities and ensure agencies advance scientific progress and technological innovation to fuel economic growth and improve the lives of all Americans.

R&D BUDGETARY PRIORITIES

1. Ensure Unrivaled American Leadership in Critical and Emerging Technologies

The Trump Administration prioritizes the R&D required to ensure and extend American leadership in key critical and emerging technologies, as well as the digital ecosystem and physical infrastructure that underpin advances in these technologies. These critical and emerging technologies promise to fuel American prosperity, improve quality of life and national security, and create high-paying jobs for American workers.

Artificial Intelligence: The potential of AI as a new frontier of exploration and application promises breakthroughs across a range of scientific disciplines and industrial sectors. Federal investment in fundamental research into novel AI paradigms and computing architectures will support continued American leadership in this field. Areas of emphasis include AI architectural advancements; data-efficient and high-performance AI techniques and systems; the interpretability, controllability, and steerability of AI systems; and AI adversarial robustness, resilience, and security. Applied AI priorities include AI for the acceleration of scientific discovery; nuclear fission and fusion for energy production; quantum information science; advanced space analytics, remote sensing, and navigation; and embodied AI (autonomous robotics, drones, self-driving cars, and advanced sensors). Additional priorities include enhanced methodologies for AI evaluation and measurement (e.g., reliability, accuracy, robustness) and the creation and publication of structured scientific datasets for AI model training.

Quantum Information S&T: As quantum technologies mature and become increasingly available on the commercial market, bolstering U.S. leadership will require advancing fundamental science while also tackling emerging engineering challenges and strengthening the critical technologies enabling the quantum ecosystem. Agencies should deepen focused efforts, such as centers and core

programs, to advance basic quantum information science, while also prioritizing R&D that expands the understanding of end user applications and supports the maturation of enabling technologies. Opportunities to support pre-competitive R&D through mechanisms such as consortia and other technology transition efforts, investment in critical infrastructure and testbeds, and advanced manufacturing to enable next-generation quantum devices should also be pursued. Funding for related basic and applied materials research and mathematical and physical sciences should also be prioritized.

Semiconductors and Microelectronics: Federal investments in semiconductor and microelectronics R&D are critical to enabling the development and deployment of AI and quantum applications and strengthening supply chain resilience. Agencies, working together and in collaboration with industry and academic partners where appropriate, should prioritize investments to ensure government access to trusted and assured microelectronics and continued American leadership in semiconductor technologies. Efforts should include underlying materials, devices, designs, and software, with particular focus on and coordination of the fabrication and characterization tools and facilities required for next-generation semiconductor technologies.

Advanced Communications Networks: Agencies, in close coordination with the private sector, should strengthen basic research in advanced communications technologies. This research should further America's leadership in 5G, 6G, and beyond wireless networks, such as proliferated space-based communication networks, to spur innovation and growth. This includes research on AI techniques optimized for wireless systems, novel approaches to spectrum sharing, and application of AI to communications and cybersecurity, toward the goal of secure and trusted applications. Agencies should encourage the development of applications that leverage 5G, 6G, and advanced networks that incorporate security and privacy by design.

Future Computing Technologies: To accelerate critical and emerging technologies, agencies should prioritize efforts to integrate advanced computing, software, and data resources from exascale to the edge towards enabling end-to-end application workflows, while supporting innovations in and translation of future technologies. Investment priorities include fundamental R&D in future computing technologies and paradigms including testbeds, computing infrastructure, experimental systems, and prototypes. Agencies should explore innovative models for resource aggregation and sharing, and for public-private partnerships. Priorities include translational efforts such as consortia or centers of excellence that leverage such partnerships towards the development and sustainability of computing, software, and data solutions.

Advanced Manufacturing: Agency R&D investments should advance innovation that fuels the resurgence of domestic manufacturing. Agencies should focus efforts on advanced and next-generation manufacturing methods (e.g., additive manufacturing, robotics, and automation) as well as application of technologies that improve the efficiency and security of manufacturing (e.g., cyber security, digital twins, and AI). Of particular importance is accelerating the discovery-to-insertion timeline for advanced materials, including with AI and autonomous experimentation.

2. Unleash American Energy Dominance and Explore New Frontiers

Partnering with industry to unleash energy technologies to ensure a secure and abundant energy supply, understanding our unexplored ocean and expanding use of ocean data, and advancing

American interests in the polar regions will enhance the Nation's economic vitality and national security, contributing to the well-being and prosperity of all Americans.

American Energy Dominance: To make America energy-dominant, agencies should prioritize investments in affordable, reliable, and secure energy technologies, including fossil fuels, advanced nuclear fission and fusion, geothermal, and hydropower. Agencies should also support the technological development and demonstration of advanced reactors, including microreactors, small modular reactors, Generation IV reactors, and fusion energy demonstrators, as well as nuclear fuel cycle R&D, including for nuclear fuel recycling and reprocessing. To unleash American critical minerals, agencies should invest in R&D for the identification, characterization, and assessment of domestic mineral resources in the United States, as well as critical mineral processing technologies. Federally funded energy R&D should reflect an increased reliance on the private sector to fund later-stage R&D and commercialization of energy production, storage, and consumption technologies, while also supporting user facilities that can improve multisector collaboration.

Polar Regions Research: As an Arctic nation, the United States is affected by rapidly changing conditions in the Arctic that have national security, commerce, infrastructure, and transportation implications. Agencies should prioritize research and associated research infrastructure investments that enhance America's ability to observe, understand, and predict the physical, biological, geologic, and socioeconomic processes and interacting systems of the Arctic to protect and advance American interests and ensure prosperity of America's Arctic residents. Agencies should invest in R&D that assures America's uncontested navigation and strategic utilization of the Arctic. Additionally, the dominant presence of the United States in Antarctica, under the Antarctic Treaty, is expressed through a world-leading science program. Agencies should maintain and, where feasible, strengthen Antarctic research infrastructure.

Ocean Exploration and Observation: Agencies should prioritize new and emerging technologies and collaborative approaches to efficiently map, explore, and characterize the resources of the United States exclusive economic zone and sea beds under international waters, particularly in connection with deep-sea mining. Agencies should also focus on increasing their capacity to effectively and efficiently manage large volumes of ocean observation and research data.

3. Strengthen American Security

American leadership in R&D for strategic competitiveness—including national security and economic security—is key to achieving American strength and prosperity. Each of the R&D budgetary priorities established in this memorandum includes elements with critical relevance to U.S. national security. Targeted Federal investments in those and additional R&D priority areas in national security will lead to robust and flexible capabilities for mitigating and responding to evolving challenges posed by strategic competitors and adversarial threats, as well as natural hazards.

Advanced Military Capabilities: Agencies should invest in R&D to deliver the advanced military capabilities necessary for meeting emerging threats and protecting American security, including offensive and defensive hypersonic weapons capabilities, unmanned and autonomous systems, resilient national security space systems, and modernized and flexible strategic and nonstrategic nuclear deterrent capabilities and supporting infrastructure. Agencies should advance R&D for AI-

enabled intelligence collection, surveillance, and reconnaissance, to enable enhanced decision-making and situational awareness across all domains. Future military space architectures should focus on R&D for new and enhanced national security capabilities for the warfighter that are autonomous, automated, and deliver decisive advantage in conflict, such as ubiquitous sensing and communications, trusted space autonomy, and tactically responsive space. Agencies should develop technology approaches to, and spur innovation in, the defense industrial base to increase novel capabilities that are responsive to emerging threats across all domains, including space and cyber.

America's Golden Dome: Agencies should invest in critical capability needs that will support the President's bold vision for homeland missile defense as outlined in the Golden Dome for America initiative. These include the S&T underpinning sensing and sensemaking, trusted autonomy, space maneuverability, directed energy, advanced materials, and affordable scalability. Agencies should also closely evaluate how their talent communities and unique resources can align towards risk reduction or capability enhancement activities for Golden Dome and explore opportunities for dual-use applications of the exquisite capabilities that the Golden Dome will afford.

Preparedness and Resilience: Agencies should invest in R&D that improves the Nation's safety and resilience and empowers state and local governments and communities, the private sector, and individuals to advance their mutual preparedness. This should include R&D to enhance capabilities for anticipating, preventing, responding to, and recovering from threats and natural disasters. Such R&D priorities should be risk-informed and encompass, as appropriate, integrative approaches across threat and hazard domains, including cyber and electromagnetic attacks on critical infrastructure, supply chain weaknesses, power grid vulnerabilities resiliency, airspace threats, biological threats, severe terrestrial and space weather, and other geophysical hazards. Agencies should prioritize R&D for cybersecurity resilience, to ensure the Nation is prepared with post-quantum cryptography to defend against future threats. Additionally, agencies should explore novel datasets and identify opportunities to leverage AI applications to enable improved resilience.

4. Strengthen and Safeguard American Health and Biotechnology

A top priority of the Trump Administration is to strengthen and safeguard the health and quality of life of individuals, families, and communities. Federal R&D investments in health, biosafety, biosecurity, and biomanufacturing will help the Nation combat critical health challenges facing our citizens while also countering biological threats.

America's Health: Agencies should prioritize funding and generating Gold Standard Science that leads to interventions to prevent and treat America's most pressing health challenges, including chronic diseases, obesity, metabolic disorders, Alzheimer's and other neurodegenerative diseases, autoimmune conditions, cancer, and rare and undiagnosed diseases. Relatedly, agencies should prioritize basic and applied R&D in plant health, animal disease prevention, and food safety technologies to strengthen U.S. agricultural resilience and food security. Leveraging next-generation -omics and AI, agencies should prioritize R&D to improve our understanding of the environmental, lifestyle, and genetic causes of disease and appropriate prevention approaches to maximize health and quality of life for Americans.

Biosafety and Biosecurity: Preparing for and responding to biological threats remains essential for our national security. Agencies should ensure R&D investments in life sciences research

improve biosecurity by advancing our ability to detect, respond to, and mitigate potential biological threats, whether intentional, accidental, or of natural origin. Agencies should also prioritize research into function-based screening for the pathogenicity and toxicity of nucleic acids, proteins, small molecules, and other biochemical products, as well as approaches to test the accuracy and reliability of such screening methods. Agencies should ensure that funded projects unequivocally follow biosafety and biosecurity standards.

Domestic Biomanufacturing Capabilities: The United States holds the resources to lead the world in producing next-generation bio-manufactured products. Feedstocks from America's heartland and novel biological processes can be used to secure our supply chains, create jobs, and build scalable and universal manufacturing capacity. Agencies should support innovation in modular and scalable biological platforms and ensure that promising technologies have clear lab-to-market pathways by leveraging lab and biofoundry infrastructure.

5. Assure America's Continued Space Dominance

R&D investments in space contribute to both civilian and defense mission needs and should prioritize ambitious targets that unlock new mission capabilities, enable discoveries, and achieve exploration goals. These investments should include building capacity for human missions to the moon and Mars. Agencies should prioritize R&D for human space exploration and development, including long-duration travel and habitation, in-space aggregation and assembly, local resource utilization, space weather hazard prediction and mitigation, space nuclear power systems and biotechnologies for space applications. National security R&D should focus on basic and applied research to unlock currently untenable and transformative space capabilities, including novel sensing modalities, accurate forecasting of the space and near-Earth environment, radiation belt remediation, high-precision chip-scale frequency standards, and advanced power and propulsion systems. Agencies should also leverage new business models and cost constructs enabled by commercial space capabilities, such as science enabled by signals of opportunity, rideshares, hosted payloads, and commercial partnerships.

PRIORITY CROSSCUTTING ACTIONS

To usher in the Golden Age of American Innovation, we must renew the American S&T enterprise for the century ahead with a number of crosscutting actions. At the forefront of these efforts is the need to restore Gold Standard Science. Efforts are also needed to educate and train the future workforce with the skills in science, technology, engineering, and mathematics (STEM) required to compete in the global marketplace and support American businesses. Maintaining and expanding a world-class research infrastructure is imperative to empower researchers and train next-generation innovators. Additionally, new paradigms for collaboration must be explored to fully leverage existing resources and capabilities and spur robust private sector investment in the research enterprise. In all efforts, focus should be on high-value R&D aligned with the core purposes of agency missions. Together, these efforts will advance scientific progress and technological innovation to fuel economic growth and better the lives of all Americans.

1. Implement and Support Gold Standard Science

As detailed in the June 23, 2025 OSTP memorandum, "Agency Guidance for Implementing Gold Standard Science in the Conduct & Management of Scientific Activities," agencies should prioritize efforts to support the tenets of Gold Standard Science. In addition to establishing appropriate requirements for the conduct, management, and communication of scientific activities, agencies should foster training and support relevant efforts to advance Gold Standard Science. For example, where possible, agencies should support replication studies and statistical validation methods in addition to funding potential breakthrough science programs. Agencies should categorize funding as basic research, applied research, or experimental development (according to the definitions of these types of research in OMB Circular A-11) in their performance reporting. Agencies should also prioritize support for the development of federated, publicly accessible databases and other research-sharing platforms and identify ways to streamline administrative burdens in the grantmaking and research process to maximize the use of taxpayer resources.

2. Build the S&T Workforce of the Future

As R&D investments expand the frontiers of knowledge in S&T, opportunities arise to provide students access to the most advanced knowledge that will prepare them to enter the workforce of the future. Agencies should support and advance existing efforts to provide all Americans with access to high-quality STEM education and workforce development pathways throughout their lifetimes. Agencies should identify efforts at all stages of learning to prioritize promising programs and activities in collaboration with the private sector, nonprofits, and local and state governments. With the rapidly accelerating advancements in emerging technologies, including AI, agencies should invest in programs that utilize technology to support students and teachers.

3. Expand and Make Accessible World-Class Research Infrastructure

Access to specialized tools and facilities enables and empowers researchers to achieve groundbreaking discoveries and advance R&D efforts. Agencies should prioritize research infrastructure investments that provide broad access, including for researchers from small colleges and businesses. Research infrastructure includes characterization and fabrication tools and facilities, as well as computational and data infrastructure, testbeds, prototyping, qualification facilities, and globally distributed assets such as ships and research stations. Where possible, agencies should use existing capabilities and collaborate with the private sector and international partners. Digital tools, data sets, and data sharing and communications infrastructure underpin the enabling research infrastructure for emerging technologies and support Gold Standard Science efforts. Agencies should prioritize efforts that advance and share new paradigms for research, including the expansion of autonomous experimentation facilities that can accelerate R&D efforts.

4. Revitalize and Strengthen America's S&T Ecosystem

The S&T ecosystem of the United States encompasses government, academia, nonprofits, and industry working together to ensure research discoveries lead to commercial advancements that fuel the economy and better the lives of all Americans. Agencies should explore innovative models for funding and sharing scientific research infrastructure and results to accelerate research and to strengthen domestic supply chains and manufacturing. Agencies should consider initiatives to ease

administrative and regulatory burdens for Federal technology transfer to increase private sector investment in R&D. Agencies should prioritize funding for cooperative projects that align organizational incentives and advance new public-private partnerships and multisectoral consortia, including engagement with philanthropic organizations. Multisector activities should focus on efforts to accelerate entrepreneurship and innovation to support the next generation of industry leaders.

Agencies should increase interagency collaboration, including through the National Science and Technology Council, to strengthen coordination on existing and new partnerships to fully leverage whole-of-government efforts. Agencies should coordinate and collaborate with each other and non-Federal stakeholders to drive discovery and innovation in high priority research areas by leveraging research infrastructure, including tools, platforms, and protocols. Agencies should make data generated or funded by the agency discoverable, accessible, and useable, consistent with all applicable laws, regulations, and policies governing data use, disclosure, and sharing.

Agencies should prioritize efforts to protect R&D programs critical to our national security objectives from theft, diversion, and exploitation by strategic competitors. Agencies should institutionalize risk-based and data-driven technology protection practices, and provide resources and actionable guidance to academic and industry R&D partners across the defense industrial base and manufacturing sector.

5. Focus on High-Value Research Efforts

As the Trump Administration realigns the Federal Government's role in the S&T enterprise to focus on R&D that is purpose-driven and unequivocally beneficial to the American people, there is an opportunity to double down on high-value research efforts. Agencies should support R&D efforts that are focused and fully aligned with the core purpose of the agency's mission. Funding programs may require reorganization to address changes in funding levels to focus on promising and high-value research. These programs should be consolidated and managed, as necessary, to focus research on efforts that produce meaningful outcomes.