bioRender State of U.S. Science Funding 2025 Report

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A note from Shiz Aoki CEO and Co-founder of BioRender

To our scientific community,

At BioRender, our mission is clear: to accelerate the world's ability to learn, discover, and communicate science. Because when science is clearly understood, it advances faster—and that benefits everyone.

Right now, our community is facing something unprecedented. Federal funding cuts are rippling across the U.S. research landscape, affecting labs of every size and field. Scientific progress is at risk. For many—especially early-career researchers—uncertainty looms around funding, career trajectories, and the future of your work.

We've heard you. And we know our role has to extend beyond software and tools. That's why we created *The State of Science Funding*—a special report to better understand how this crisis is affecting scientists at every level: from administrators faced with impossible decisions to PhDs wondering how they'll make it through the next grant cycle.

Drawing on insights from over 300 scientists and research administrators, what emerged was sobering: real concerns about funding, the future of your work, your teams, and the research you've dedicated your careers to. From institutional leaders to early-career scientists, there's shared anxiety about sustaining progress as resources tighten. But we also heard something else - persistence, creativity, community. In the midst of uncertainty, you find new ways to move forward, applying for more grants, teaming up across labs and institutions, exploring every possible path to keep the science going. You're doing what scientists have always done: adapting and pushing forward.

This report captures both the gravity of this moment and the strength of the people moving through it. We hope it offers a sense of solidarity - a reminder that whatever you're feeling, you're not alone.

At BioRender, we're listening. We may not have all the answers, but we're committed to understanding what you're going through and to standing with you as you navigate what comes next. This report is just the beginning of that commitment.



Shiz Aoki CEO, Co-founder of BioRender



Survey Methodology (N=311)

West N=55

Berkeley Lab California Institute of Technology Children's Hospital Los Angeles City of Hope Cancer Center City of Hope National Medical Center Fred Hutchinson Cancer Center Seattle Children's Research Institute Stanford University The Salk Institute for Biological Studies University of California. Los Angeles University of California, Berkeley University of California. Davis University of California, San Diego University of California, San Francisco University of Colorado Anschutz Medical Campus University of Southern California University of Utah University of Washington

Southwest N=31

Arizona State University Baylor College of Medicine Oklahoma Medical Research Foundation Salk Institute Texas A&M University Texas Tech University University of New Mexico University of North Texas Health Science Center University of Oklahoma Health Sciences Center University of Texas Health Science Center at Houston University of Texas MD Anderson Cancer Center University of Texas Medical Branch Galveston

Midwest N=56

Cincinnati Children's Hospital Medical Center Indiana University School of Medicine Mayo Clinic Nationwide Children's Hospital Northwestern University The Ohio State University The University of Chicago University of Illinois Urbana-Champaign University of Kansas Medical Center University of Wisconsin Madison Van Andel Research Institute Washington University in St. Louis

Southeast N=83

Duke Universitv Emory University Tulane University

This report is based on data collected from 311 respondents across the U.S. academic research community. Respondents comprised two primary groups: senior academic leaders (VPs for Research, Provosts) and Deans) and research scientists (Principal Investigators, Non-PI Staff Scientists and Postdoctoral Researchers). Approximately 70% of the respondents were BioRender users.

Seventy-five academic leaders and a small subset of Principal Investigators were recruited directly through an expert network platform beginning mid-April 2025. In late May 2025, an additional cohort of approximately 230 respondents was sourced from BioRender's active user base through an in-app survey. This second group primarily included Non-PI Staff Scientists and Postdoctoral Researchers, with some representation from Principal Investigators and administrative leaders. Data collection closed for all pools on June 12, 2025.

Respondents represented a diverse cross-section of U.S. research institutions, including public and private R1, R2 and R3 doctoral universities, medical centers and nonprofit institutes. They also spanned various research fields, though the vast majority came from biological, clinical and health sciences. Responses were geographically representative, with balanced participation across Northeast, Southeast, Midwest, Southwest and Western regions of the United States.

Participants were compensated for their time with a digital gift card.

Augusta University Georgia Institute of Technology H. Lee Moffitt Cancer Center Johns Hopkins University Johns Hopkins University School of Medicine Louisiana State University National Heart, Lung and Blood Institute Old Dominion University St. Jude Children's Research Hospital University of Alabama at Birmingham University of Arkansas for Medical Sciences University of Central Florida University of Delaware University of Florida University of Georgia University of Kentucky University of Maryland University of North Carolina at Chapel Hill University of Tennessee Health Science Center Vanderbilt University Medical Center Virginia Commonwealth University Wake Forest University

Northeast N=86

Albert Einstein College of Medicine Boston Children's Hospital Boston University School of Medicine Brigham and Women's Hospital **Brown Universitv** Columbia University Dana-Farber Cancer Institute Harvard Medical School Harvard University Icahn School of Medicine at Mount Sinai Massachusetts General Hospital Memorial Sloan Kettering New York University New York University School of Medicine **Rutaers University** State University of New York at Buffalo The Pennsylvania State University Thomas Jefferson University Tufts University School of Dental Medicine **UMass Amherst** University at Buffalo University of Connecticut Health Center University of Massachusetts Medical School University of New England University of Pennsylvania University of Pittsburgh School of Medicine University of Rochester Yale School of Medicine Yale University

Survey Methodology (N=311)



Region



Type of Institution



Years in ResearchCarnegic Classification28%More than 15 years410 15 years13%11 to 15 years24715%7 to 10 years24716%4 to 6 years2928%1 to 3 years2928%1 to 3 years2935R1

Field of research



bioRender

5





1 Federal Funding Crisis

Key Findings

67%

of respondents express extreme concern about ongoing changes to federal funding



of Research Administrators cite low faculty morale at their institutions



80% of respondents believe budgets will continue to decline over the next 18 months, by -20% on average



of respondents believe budget cuts will hinder research progress

Summary

The contraction of federal funding has caused significant uncertainty across the research ecosystem. Federal agencies provide approximately 60% of university research funding, with NIH representing the largest share at 67% of federal research dollars.

Nearly two-thirds of survey respondents express significant concern about the future, and over 90% of Principal Investigators (PIs) anticipate that research progress will be stifled. The outlook remains pessimistic - faculty morale is low at 75% of institutions, and over 80% of respondents expect the situation to worsen, projecting a 20% budget decline over the next 18 months. This underscores the urgency with which the academic community views current funding challenges.

Federal agencies fund ~60% of the average university research budget; most dollars come from the National Institutes of Health (NIH)

Breakdown of research funding by funding source

Mean % of total research budget (N=151, Research Administrators, PIs and Faculty only)



* Thinking about all of your external research funding in a typical year, please allocate a total of 100 points (representing 100%) across the following categories.

** Now, focusing on your total federal funding alone, let's suppose that adds up to 100%. Please allocate that 100 across the federal agencies that typically give your institution funding.

Department of Agriculture Department of Education Department of Energy Department of Justice Office of Naval Research Health Resources and Services Administration

61%

of the average institution's budget comes from federal agency sources

2/3of federal funds come from the **National Institutes** of Health



Federal funding cuts have raised extreme concerns across the research ecosystem

Degree of concern about changes to federal funding

% respondents (N=311, all respondents)

5 = Extremely concerned 4 = Very concerned 3				erately concerned
			0%	20%
		All responde	ents	
	Pul	olic research universi	ties	
Type of Institution	Priv	Private research universities		
	Other (non-	profits, medical cente	ers)	
		VPs for Resea	arch	
	Other I	Other Research Administrators		
Role	Principa	al Investigators / Fac	ulty	
		Non-PI Staff Scient	ists	
	Р	ostdoctoral Research	ners	
		Tenu	ired	
Tenure Statu	S	Tenure-tra	ack	
		(not yet tenur	red)	
		non-tenure-tr	ack	



of respondents express extreme **concern** about ongoing changes to federal funding

92%

of tenure-track researchers report extreme concern

* How concerned are you about potential or ongoing changes to funding from NIH and other federal agencies (e.g., overhead/F&A caps, budget reductions)?



Morale is low among faculty at ~75% of institutions

Morale among faculty, according to Research Administrators

% respondents (N=43, Research Administrators only)



This is really **damaging the morale of a whole generation** of scientists.

These changes threaten to eliminate an entire generation of scientists and the discoveries they might make. It threatens the US's position as a scientific leader, but more importantly... this threatens to result in thousands if not millions of preventable deaths in the future due to impaired scientific progress.

It's a disaster for morale; a disaster for innovation, science, and technology for the United States; and a potential disaster for my research trajectory as a non-tenured new PI.

It's making life in the USA very hard. The success of a research environment depends upon the passionate pursuit of many individuals. Poor financial circumstances create an environment that is insecure, and feels futile, sapping passions and reducing success.

* How would you describe faculty morale at your institution given current and potential funding shifts?

- Principal Investigator Medical Center (West)

- Postdoctoral Researcher R1 Public Research University (Northeast)

> - Principal Investigator R1 Public Research University (West)

- Principal Investigator R1 Private Research University (Northeast)



>80% of respondents believe the situation will continue to worsen through 2026, falling another ~20% from current state

Outlook on how grant funding will change: 6-12 months vs. 12-18 months

% respondents (N=311, all respondents)



* Which best describes your outlook on how grant funding from federal funding sources will be in the below time periods?

Some NIH grants have already been halted or delayed, leading to less funding. Scientific review and/or council review and final funding decisions have been **delayed** on many other grants, meaning the impact on funding is likely to **keep worsening as time goes on**.

> - VP / Dean for Research R2 Private Research University (Midwest)

At our institution, grants are being discontinued by the NIH at a steady rate and existing grants are having such delays in Notice of Award that they are effectively being discontinued. I expect that this will continue and that the proposed restructuring to the NIH will further diminish federal funding.

> - Non-PI Staff Scientist R1 Private Research University (Northeast)

Some of our funding that has already been approved (officially) has not been received on time, and costs are going unpaid or being paid from other budgets, creating a chain reaction of budget deficits. This is a separate issue from awards suddenly being rescinded or grants cancelled.

> Postdoctoral Researcher, Medical Center (West)

90% of respondents believe these funding changes will hinder research progress

Outlook on how grant funding will affect research progress

% respondents (N=311, all respondents)



* How do you think these funding changes will affect your ability to conduct research or guide research at your institution over the next 1-2 years?

The uncertainty in funding is more paralyzing than the actual budget cuts. It limits our planning and investment.

- Principal Investigator R1 Private Research University (Northeast)

Yes, funding changes have a noticeable impact. The resources will be limited and very competitive. **This can stifle innovation and discourage high-risk**, **high-reward research**.

– Non-PI Staff Scientist
Medical Center (Midwest)

The federal funding changes will significantly reduce innovative research because of the disproportionate reduction in trainees and early career investigators. The key to my own research work is the influx of new perspectives and skills that the undergrad, graduate, post-doc and early career faculty bring.

- Principal Investigator R1 Private Research University (Northeast)

Uncertainty is making it very difficult to ultimately plan experiments. Good experiments boost publishing and funding, but the burden of cost is all upfront. This uncertainty makes it less likely for a PI with moderate budget to splurge on a big experiment, which will be detrimental for the success of

Postdoctoral Researcher
R1 Private Research University (Northeast)



Challenges for Staff Scientists and Postdoctoral Researchers



2 Challenges for Staff Scientists and Postdoctoral Researchers

Key Findings



of Principal Investigators are facing or expect to face financial hardships in their lab

70%

of staff scientists and postdoctoral researchers **express concern about job security** or renewal of their contract



of staff scientists and postdoctoral researchers **report reduced access to mentorship**/career development resources



of staff scientists and postdoctoral researchers who are reconsidering their careers are planning to **leave Academia or relocate outside the US**

Summary

The effects of funding cuts are already visible in the laboratories. More than half of Principal Investigators (PIs) report that their labs have already faced significant negative financial impacts, with an additional 30% expecting changes in the near future. These pressures are prompting career reconsiderations.

About 70% of non-PI staff scientists and postdoctoral researchers are concerned about their job security over the coming year, with many considering leaving academia or relocating outside the United States. Communication gaps compound these challenges, with only one-third of staff scientists and postdoctoral researchers satisfied with institutional transparency about funding-related changes.

Swift and widespread impact: 87% of labs affected or expecting disruption

Impact on labs' financial sustainability

% respondents (N=108, Principal Investigators / Faculty only)



* Have you already seen any direct impact on your lab's financial sustainability from changes to NIH funding?

We are making sure to spend down our budgets and not save too much because [saving funds] might look bad and [the govt] could try to take it from us.

Principal Investigator
Medical Center (West)

As a PI, these funding uncertainties are having a tangible impact on nearly every aspect of our lab operations. Hiring is the first area affected.

100%

- Principal Investigator R1 Public Research University (Southeast)

[It's] definitely affecting my hiring, experimental scope and conference attendance. I am reducing all of them: avoid[ing] expensive experiments and hiring less."

> - Principal Investigator R1 Private Research University (Northeast)

The US research ecosystem is **very intertwined**. Cuts to one area will affect ability to conduct research in other areas and **may even affect price and access to research materials and supplies**.

> - VP / Dean for Research R1 Public Research University (West)

Across all types of institutions, 70% of non-PI staff scientists and postdoctoral researchers express at least moderate concern about the security of their position or contract

Degree of concern about contract/position renewal

% respondents (N=160, Non-PI Staff Scientists and Postdoctoral Researchers only)



* How concerned are you about your position or contract being reduced, not renewed, or otherwise affected in the next 12 months?

Researchers are extremely worried and the scientists who have not had funding cut yet are feeling a lot of 'survivor's guilt'.

- Principal Investigator R1 Public Research University (Midwest)

We are unsure if we will have the funding to keep our staff, myself included, and if we have no staff then no experiments can be done.

> - Non-PI Staff Scientist Medical Center (Southwest)

I am concerned that I cannot keep my current position if the funding is affected.

– Postdoctoral Researcher Medical Center (Southwest)

[My biggest concern is] **that I will be jobless very soon**.

Postdoctoral Researcher
R1 Public Research University (Southeast)

The chances of successfully having a career in academic research and becoming a lab head feel slimmer and slimmer.

- Postdoctoral Researcher R1 Public Research University (Southeast)

The majority of non-PI staff scientists and postdoctoral researchers report uncertainty about job security, cuts to travel budgets and pressure to narrow the scope of experiments

Effects of funding uncertainty on Non-PI Staff Scientists and Postdoctoral Researchers

% respondents selecting each option, select all that apply (N=160, Non-PI Staff Scientists and Postdoctoral Researchers only)

Non-PI Staff Scientists 🗾 Postdoctoral Reseachers



* Which of the following effects have you already experienced-or do you expect to experience-because of current funding uncertainty?

70% of non-PI staff scientists and postdoctoral researchers report reduced access to mentorship and training resources



* Have recent funding constraints reduced your access to mentorship, training workshops, or professional-development resources?

With uncertain funding, it becomes risky to invest in ambitious, high-impact work that requires multi-year stability. **This unpredictability** also disrupts collaboration, delays innovation, and **makes it harder to mentor early-career researchers who depend on consistent support and training opportunities.**

> - Principal Investigator R1 Public Research University (Midwest)

[I've experienced] open hostility from perceived constraint on resources and who should have access to them. [As well as] **restricted number of projects and mentoring support.**

Postdoctoral Researcher
R1 Public Research University (Northeast)

Decreased support for trainees (whose experiments/studies are typically funded by mentor); decreased trainee travel support.

Postdoctoral Researcher
R1 Public Research University (Northeast)

The biggest concern is losing talent and **declines in graduate student training.** These changes will result in future declines in discovery, research, and the talent pipeline needed to keep the US competitive.

> - VP / Dean for Research R1 Public Research University (Midwest)



Among the ~70% of non-PI staff scientists and postdoctoral researchers reconsidering their career plans, 81% plan to leave the U.S. or leave Academia altogether

Have recent conditions changed your near-term career plans?

% respondents

(N=160, Non-PI Staff Scientists and Postdoctoral Researchers only)

Non-PI Staff Scientists



If yes, how have they changed your near-term career plans?

% respondents, select 1

(N=111, Non-PI Staff Scientists and Postdoctoral Researchers who answered "Yes" to preceding question only)

Postdoctoral Researchers



Among the ~70% of non-PI staff scientists and postdoctoral researchers reconsidering their career plans, 81% plan to leave the U.S. or leave Academia altogether

I fear significant brain drain, with leading and top researchers moving abroad to pursue research careers elsewhere, or leaving behind academia and research all together to pursue other careers.

- VP / Dean for Research R1 Public Research University (Midwest)

Everyone is making plans to leave or work in other areas. Every watercooler conversation is about the funding cuts and how many layoffs there will be. – Non-PI Staff Scientist R1 Private Research University (West)

I may need to leave academia because I cannot afford to stay in a low paying role with these funding cuts with uncertainty of promotion.

Postdoctoral Researcher
Non-profit Research Institute (Northeast)

I am no longer actively pursuing a future as a professor. I am actively looking for an industry job or core facility job. I worry that we could lose funding because we used words like "environment" and "climate change" in our grants.

Postdoctoral Researcher
Non-profit Research Institute (Northeast)

[I feel] extreme uncertainty about the important next steps in my career. Applications to NIH for independent funding is uncertain too. Academic jobs that were supposed to be available are not listed any longer.

Postdoctoral Researcher
Medical Center (Northeast)

My postdoc timeline is being cut short due to my fellowship that was cancelled. While I did want to stay in the US (as a citizen) to continue working either at NIH or industry, **I no longer feel safe or valued in the US.** Thus, I am applying for research positions overseas.

Postdoctoral Researcher
R1 Private Research University (West)

I fear that I will be out of the research work force when the grant currently funding my salary runs out. Several personal factors have led to me having to dip into my retirements savings, so the possibility of losing my job causes me severe anxiety.

— Non-PI Staff Scientist R2 Private Research University (Northeast)

I did not want to go into consulting or private equity, but I do know jobs in those sectors are opening up - and I may need to alter my career plans to shift to that industry. – Postdoctoral Researcher *Medical Center (Northeast)* We are actively looking for jobs outside academia. We also had to reduce the lab personnel. Time to close up lab in few years.

Postdoctoral Researcher
R1 Private Research University (Northeast)

I might leave the country in the next few years. Many colleagues are already looking abroad. We are losing valuable contributions from foreign scientist living here as they feel afraid and targeted... and [are] leaving to countries where they may not end in jail just for being foreigners and scientist[s].

> - Principal Investigator R1 Private Research University (Southeast)

The uncertainty around the availability of research funding is prohibiting me from recruiting new graduate students. The students themselves are discouraged and are seeking graduate degrees elsewhere. Some international students are afraid to come to the U.S.

> - Principal Investigator, R1 Private Research University (Northeast)



Less than 1/3 of non-PI staff scientists and postdoctoral researchers are satisfied with how their institutions have communicated about funding changes

Satisfaction with communication from Admin about funding changes

% respondents (N=160, Non-PI Staff Scientists and Postdoctoral Researchers only)



* How satisfied are you with the clarity and timeliness of information your institution provides about funding-related changes (e.g., hiring freezes, core-facility fees, visa renewals)?

Morale at my institution is pretty bad.

The leadership is gaslighting us that "nothing has changed" when many are facing imminent layoffs due to non-renewed grant funding.

They are also continuing with new faculty hires due to a large number of anticipated retirements, which will suck even more resources. I am going to try to hang on because I think a lot of people will leave science, and I really hope to still be here to see a better future.

> - Principal Investigator R1 Public Research University (West)









Key Findings

Research Administrator Ranked Priorities

Core Research Facilities

Tenured Faculty

Principal Investigator Ranked Priorities

Supporting staff / postdoctoral researchers

Continuing Experiments



of Principal Investigators rank 'losing or not renewing staff / postdocs' as their #1 concern



of Principal Investigators express worry about having sufficient budget to fund graduate students and postdoctoral researchers

Summary

Research Administrators are prioritizing the protection of core research facilities, tenured positions, and support for trainees. Their main concerns are retaining key personnel, maintaining morale, and ensuring research continuity and competitiveness. Principal Investigators are most worried about retaining skilled staff and students, as well as maintaining the operational capacity of their labs.



For Research Administrators, maintaining core research facilities, supporting tenured faculty and funding graduate students/postdoctoral researchers are the highest priority resources to protect

Research Administrators' ranking of resources to protect at all costs

Weighted rank score; Rank 1 = 3 points; Rank 2 = 2 points, Rank 3 = 1 point (N=43, Admin only)



* In your opinion, which resources are the most critical to protect at all costs, even if budgets shrink?

Due to loss of longevity and funding, we [may] also **lose space to** *do the science*. **Once you lose your research space** (which is based on indirect recovery) **it is a downward spiral** and nearly impossible to recover from.

> – Principal Investigator R1 Public Research University (Midwest)

The core facilities are running on reduced hours. These budget cuts [affect] all research operations from the top down and tie our hands about what science can be done.

– Non-PI Staff Scientist R1 Public Research University (Southwest)

Service operations of research facilities in climate and other fields are **delayed**, impacting public safety and operational planning.

> - VP / Dean for Research R1 Public Research University (Midwest)

Many of the core facilities will cease to function. We are already seeing cuts and closures in the core facilities.

– Principal Investigator Public Research University (Midwest)

For Research Administrators, maintaining core research facilities, supporting tenured faculty and funding graduate students/postdoctoral researchers are the highest priority resources to protect

I am afraid it will decrease the service and research of faculty members across campus. I am also afraid that faculty lines will have to be eliminated if the cuts remaining dollars continues.

> – VP Finance R3 Public Research University (Southeast)

A huge fear is hemorrhaging talent because people are fearful for their jobs.

- VP / Dean for Research R1 Private Research University (Southwest)

[My biggest fears are a] **significant reduction in the size of research institute**, inability to expand academic offerings, [and] inability to impact the future of healthcare and other research, etc.

> - VP / Dean for Research Medical Center at R1 Research University (West)

[My biggest fear is the] loss of an entire generation of young people who can not be trained as scientists; some of our very best undergraduates have already had PhD program admissions rescinded due to funding (at major ivy league programs). We will not have research infrastructure needed to introduce students to research.

> - VP / Dean for Research R1 Public Research University (Northeast)

A loss of their (faculty) identity as a researcher is deeply concerning. And the diminished patronage from federal sources to research will adversely affect the enthusiasm and inspirations to conduct research. And faculty might look overseas for other opportunities or move to industry. So innovations from higher ed institutions might not come out at the same pace as before.

> - VP / Dean for Research R2 Public Research University (Midwest)

* As a VPR or research leader, what is your biggest fear regarding destabilization of your organization if cuts to federal funding become permanent or deeper?

A big fear is the amount of **time it will take to restart the multiple campus research programs** once things hit bottom. We know **it will not be "pushing the button and everything returns to** [how they were last year]." It will take years to regain everything that has been lost. It will be like a lost generation of faculty and students in research and education.

> - VP / Dean for Research R1 Public Research University (West)

There will be a **long term shift toward direct costs** which could greatly **limit the flexibility of operations** and ultimately drive costs up as you are more restricted on shared service models.

> - VP / Dean for Research R1 Public Research University (Southeast)



Principal Investigators care deeply about postdoctoral researchers, students and staff; they express most concern about having sufficient budget to support their team

PI and Faculty ranking of concerns

Weighted rank score; Rank 1 = 3 points; Rank 2 = 2 points, Rank 3 = 1 point (N=108, Pls and Faculty only)



* If you had to absorb more costs within your lab budget (e.g., F&A/overhead no longer covers certain fees), which of the following would you be most worried about?

I am very worried about ensuring that I can pay for graduate students, so am hesitant about taking on more students.

> - Principal Investigator R1 Public Research University (Midwest)

I am not taking new staff or students on. I am not conducting pilot or already funded experiments. I am planning to retire early, or look for a non-academic job, or leave the country.

> - Principal Investigator R1 Public Research University (Northeast)

[I'm] hurrying to graduate remaining students [and] **figuring how to get them funded**.

> - Principal Investigator R2 Private Research University (Northeast)

Principal Investigators care deeply about postdoctoral researchers, students and staff; they express most concern about having sufficient budget to support their team

Resources that PI and Faculty worry most about losing

% respondents checking "Yes" for each lab resource (N=108, PIs and Faculty only)

	Graduate student / postdoc. funding	Technical staff (RAs, lab managers)	Equipment maintenance / upgrades	Core fac access (e.g. spectrom microsco
All Principal Investigators and Faculty	85%	77%	60%	61%
Public universities	87%	77%	60%	72%
Private universities	87%	77%	65%	52%
Other (non-profits, medical centers)	80%	77%	57%	53%

I am **not taking on any new grad students or postdoc trainees** unless I secure additional external funding.

> - Principal Investigator R1 Public Research University (Northeast)

[I've had to] decrease staff and [accept] **a** lower base salary for myself.

- Principal Investigator Medical Center, R2 Research University (Northeast)

* Beyond actual research funding, which of these lab resources are you most worried about losing or seeing reduced due to budget constraints? (select all that apply)



The budget for my lab is significantly decreased, so the **postdoc in the lab is reduced to <80% effort and will need to be let go** if new funding is not received in the next 6 months - 1 year (unlikely).

- Principal Investigator R1 Public Research University (West)

Principal Investigators care deeply about postdoctoral researchers and staff; they express most concern about having sufficient budget to support their team

Staff and junior faculty is very worried so I **need to spend more effort providing assurance** [to them].

- Principal Investigator R1 Public Research University (Southeast)

It's everything. I'm concerned about my ability to do research both in directly paying people but also having colleagues to collaborate with in the future.

> - Principal Investigator R1 Public Research University (Southeast)

I am not recruiting any new lab members until the "dust settles." I am spending less funds in anticipation of cuts.

> - Principal Investigator R1 Public Research University (Midwest)

We are 2 faculty short, and will be losing 2 more in the next couple years, and have been told that we will not be replacing them right now. We've been told that our costs will increase for core equipment usage and for service contracts which will strap us even further.

> - Principal Investigator R1 Private Research University (Southwest)

I will not be recruiting any new personnel (graduate students or postdocs) in the upcoming year, until I am more certain about the funding landscape and the security of my current awards.

> - Principal Investigator R1 Private Research University (Northeast)

Not taking new students this next year, may have to lay off staff next year. Animal facility may be closing; my colony may get reduced.

> - Principal Investigator R1 Private Research University (Northeast)







Key Findings

54%

of institutions have already frozen staff hiring

19%

of institutions have closed facilities or consolidated research programs



Despite these pressures, the research community is responding with resilience and flexibility. The most common strategies include seeking private and philanthropic funding, freezing new hires, and, in some cases, considering reductions in startup packages for new faculty. About 40% of institutions expect to reduce headcount—primarily among research and administrative staff—with another 40% likely to follow. Principal Investigators are preparing for tighter budgets, which may increase administrative responsibilities and threaten research productivity.



of institutions have reduced startup packages, but another 44% are actively considering it



Research Administrators report that they will **"Definitely" or "Probably" reduce headcount over the next 12 months**

Institutions prioritize hiring freezes and new funding sources. Facility cuts remain rare, but startup package cuts are looming

Actions that Research Administrators are taking or plan to take

% respondents (N=43, Research Administrators only)



* Which of the following cost-saving or revenue-generating measures are you considering or have already implemented?

Actions taken on startup packages

% respondents (N=43, Research Administrators only)



* Has your institution changed or considered changing startup packages for new faculty hires in response to uncertainty around funding from NIH and other federal agencies?



~40% of institutions will reduce headcount over the next 12 months, most likely affecting research staff and administrative or support staff

Expectations of reducing faculty and/or staff headcount over the next 12 months

% respondents (N=43, Research Administrators only)



Most likely groups to be affected by headcount reductions

Weighted rank score; Rank 1 = 3 points; Rank 2 = 2 points, Rank 3 = 1 point (N=34, Research Administrator respondents who answered "Definitely yes" or "Probably yes" to previous question only)

* Which are the top 3 categories of headcount that you anticipate reducing over the next 12 months?

Principal Investigators frequently report pivots in the focus of their research or experimental scope

I would change my focus some more, such as if animal research is not promoted, we will switch to in vitro system. If we can, we will also work on clinical research more.

> - VP / Dean for Research R1 Private Research University (Northeast)

Mostly we'll be doing "cheaper" science: no HT-seq experiments, back-to-basics with PCR, those kinds of things. More ambitious global or high-throughput projects would be on hold.

> - VP / Dean for Research R1 Private Research University (Northeast)

Will have to restructure projects, pull back on equipment purchases, try to figure out how to save money on projects. Definitely will consider not renewing contracts.

> - Principal Investigator Medical Center at R1 Research University (West)

We will not be able to replace aging equipment so we will have to simplify our experimental procedures.

> - Principal Investigator R1 Public Research University (Midwest)

We have to be less creative [with experimental procedures] to save money on reagents; trying to pause some projects to save money on reagents as well. Rethinking if I should go to national meetings even though they are important for my career.

> - Principal Investigator R1 Public Research University (Midwest)

[We're adjusting by] reducing size of lab [and] foregoing more expensive experiments.

> - Principal Investigator R1 Public Research University (Midwest)







Key Findings



of Principal Investigators have increased their grant submission volume (trying to "cast a wider net")



of PIs and Research Administrators are at least 'Likely' to pursue alternative funding sources



The research community's primary response has been to increase grant submissions, with 60% of Principal Investigators submitting more applications and staff scientists and postdoctoral researchers taking on greater grantwriting and administrative responsibilities. There is strong momentum toward diversifying funding sources, including industry partnerships and private foundations, and strengthening collaborations.



of PIs and Research Administrators intend to stay at their institutions,

with only 2% of Research Administrators expressing any intent to relocate, change institutions or leave Academia

60% of PIs are submitting more grants; staff scientists and postdoctoral researchers are helping out, with ~50% taking on more grant-writing and administrative tasks than before



% respondents (N=108, PIs and Faculty only)



because of budget pressures?

Postdoctoral researchers and non-PI staff scientists: change in grant-writing tasks

* Have you been asked to take on more grant-writing or administrative tasks



60% of PIs are submitting more grants; staff scientists and postdoctoral researchers are helping out, with ~50% taking on more grant-writing and administrative tasks than before

I have no private life now, cause I have to apply for as must grants as possible. I work12-16 hours a day.

Principal Investigator
Medical Center (Northeast)

University scientists are also demoralized and **spending time on how to respond** rather than on scientific discoveries.

> - VP / Dean for Research R1 Public Research University (West)

I am continuing to work on whatever I can each day to submit new grant proposals to maintain my funding sources. I am also noticing that the day-to-day involves more administrative paperwork and cost tracking.

VP / Dean for Research (also a PI)
R1 Public Research University (West)

I've managed to submit two grants per cycle, but there's a trick to it: one of them is a resubmission that requires a lot less work than a new submission... [For a given cycle], you put in one [submission], and before that comes back, you start on the next one. Then by the third cycle, you're submitting both: you're just constantly stacking them on top of each other. But everything else suffers: you can't work on a manuscript and *then* grants, unless you're working sixteen hours a day (which I'm not).

I have changed my day to day dramatically. I no longer review science publications or grant applications and say no to any new requests by my department or programs for teaching. **100% of my effort is focused on obtaining new grant funding.** I have fired and let half of my staff go and will not replace them until new federal funding is obtained. I **submit one new grant each cycle and will continue to until one is funded or I am fired.**

My lab manager will have to take on substantially more administrative duties as our institutional admins are going to be the first ones to go.

- VP / Dean for Research R1 Public Research University (Southeast)

- Principal Investigator R1 Public Research University (Midwest)

— Principal Investigator Non-profit Research Institute (Midwest)



Beyond increasing grant submission volume, the overwhelming majority of leaders plan to pursue alternative, non-federal funding sources



Anticipated changes in grant application strategy, beyond volume

% respondents (N=23, PIs who indicated "No change in grant submission volume" only)

funding sources	61%				
orating with other institutions more	35%				
nt research areas	30%				
ntinuing as before	26%				



Beyond increasing grant submission volume, the overwhelming majority of leaders plan to pursue alternative, non-federal funding sources

I fear changes in the overall research programs at my institute will **never recover** to the levels we have seen in the past **without some other creative methods to fund them.** We are looking at **industry and partnerships to fill the gaps** in the foreseeable future.

> - VP / Dean for Research R1 Private Research University (Southwest)

[We're] actually looking for private funds to increase hiring given many leaving fed positions. [We're also] re-scoping a lot of preliminary research to **make more suitable for immediate Pharma support.**

— Principal Investigator Medical Center at R1 Research University (West) I am writing more non-government grant applications.

PIs are increasingly eager to apply for private foundation grants rather than DOD or NIH grant because they know these huge NIH cuts will make the remaining funding increasingly competitive.

This [environment] will slow our research trajectory and **shift focus to smaller problems or industry-directed problems.** We are discussing types of research that require no funding.

Principal Investigator
R1 Public Research University (West)

Postdoctoral Researcher
R2 Private Research University (Northeast)

- VP / Dean for Research R1 Private Research University (Southwest)



On a positive note, leaders are choosing to stay, drawing on a broad set of strategies to navigate challenges and ensure research continuity

Institutional and career strategies among leaders (PIs and Research Administrators)

% respondents (N=151, Research Administrators, PIs and Faculty only)

	()%	20%	40%	60%	80%
	All Research Administrators, PIs and Faculty					
Type of Institution	Public research universities					
	Private research n universities					
	Other (non-profits, medical centers)					
Rese (VPRs, Role Pr	Research Administrators PRs, Deans, VP Finance,					
	Academic Affairs)					
	i inicipatinivestigators					

* In an environment of potential NIH cuts, which best describes your near-term career or institutional strategy?



On a positive note, leaders are choosing to stay, drawing on a broad set of strategies to navigate challenges and ensure research continuity

Challenges such as these are always possible; we will persevere and adapt.

- VP / Dean for Research R1 Public Research University (Southeast)

We are experiencing a monumental shift in the way we conduct research. This is a sink or swim situation for many institutes, and new and creative methods need to be taken if research is to continue.

> - VP / Dean for Research R1 Public Research University (Southeast)

This is not a time to delay decisions based on fear. Time is of the essence to preserve some of the most critical and core research functions within the academy.

I think it's important to concentrate on what is concrete, not what could be. Speculation of negative outcomes that could happen only aids in placing fear.

I lead STEM initiatives for the largest public institution in the United States. In this role I speak on behalf of the chancellor in STEM-related areas and focus my efforts in developing collaborative proposals with many faculty across the system. I am encouraging faculty to pivot to state and foundational funding opportunities, to work with their advancement offices, to collaborate across disciplines, campuses, and higher educational systems, and to make efforts to fit into the current administration research priorities. All of this will help them sustain their research and keep their morale up.

 Provost / Dean of Academic Affairs R1 Public Research University (West)

- VP / Dean for Research R1 Private Research University (Southwest)

> - VP / Dean for Research R1 Public Research University (West)



On a positive note, leaders are choosing to stay, drawing on a broad set of strategies to navigate challenges and ensure research continuity

Decreased morale but **overall sentiment at our institution to continue working nonetheless until we are no longer funded**.

Non-PI Staff Scientist
R1 Public Research University (Southeast)

There is an increased emphasis on doing more clinical research with industry and later stage clinical trials.

Non-PI Staff Scientist
R1 Public Research University (Southeast)

It is possible to **explore alternative funding methods** not yet realized. **Thinking outside the box will be essential** for research institutes going forward.

- VP / Dean for Research R1 Private Research University (Southeast) Success is going to be determined by **how quickly researchers can pivot** to align with the federal priorities. **Honestly, after all of this blows over, I** believe we will end up with strategic scientific **priorities that mirror where we were before the cuts** (AI, biotech, etc.)

Researchers are disconcerted but **hold strong to their purpose as** scientists. They are smart enough to **pivot their research focus and** develop innovative ways to fund their research.

- VP / Dean for Research R1 Private Research University (Southeast)

Principal Investigator
R1 Public Research University (West)



To our respondents

Thank you for your candid responses to our survey and for shining a light on the challenges in the current funding environment.

If you want to get more involved with our efforts to support the scientific community, or have feedback on the report, please email supportingscience@biorender.com

To our readers

Thank you for supporting science.



"

We must tell the story of science— i.e., how individuals and the broader community are benefitting in so many ways including lifesaving treatments and we must do what we can to preserve and protect our early career investigators.

> - VP / Dean for Research R1 Public Research University (West)

I still plan to stay in academia because it is my life's purpose. I will remember everything about this time. I will work to make things better.

— Postdoctoral Researcher Medical Center at R1 Private Research University (Northeast)