EMERGE
Equipping Minoritized and Emerging Research Institutions to Grow their Enterprises

NIH R16 Program Summary and Guide for Investigators

A peer-reviewed EMERGE resource from the NORDP Consultants Program

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About the NORDP Consultants Program

The NORDP Consultants Program is dedicated to increasing the diversity of the national research ecosystem by providing research development services to minority-serving institutions (MSIs) and emerging research institutions (ERIs) at no cost to the institution.

The program pairs research development professionals with investigators and research leadership to:

1. Strengthen researchers' capacity to compete for external funding,
2. Enhance research enterprise infrastructure and capacity,
3. Inspire institutional research cultures, and
4. Magnify the visibility and competitive reputation of MSIs and ERIs in the research enterprise.

Summary

The NIH Support for Research Excellence (SuRE) Award and SuRE-First Independent Research (SuRE-First) are relatively new funding opportunities from NIH that support faculty investigators at institutions with limited NIH funding who serve underserved student populations. The awards help investigators and institutions build capacity to advance scientific discoveries and enrich research environments, adding to the diversity of perspectives in the national scientific workforce.

Quick Facts

Title: Support for Research Excellence (SuRE) Award (R16 Clinical Trial Not Allowed)
Opportunity Number: PAR-24-144
Funder: National Institutes of Health (NIH)
Budget: $100,000 in direct costs per year
Project Period: Up to 4 years
Due dates for new submissions: May 29, 2024, September 27, 2024, May 28, 2025, September 29, 2025, May 27, 2026, September 28, 2026

- and -

Title: Support for Research Excellence – First Independent Research (SuRE-First) Award (R16 - Clinical Trial Not Allowed)
Opportunity Number: PAR-24-145
Funder: National Institutes of Health (NIH)
Budget: $125,000 in direct costs per year
Project Period: Up to 4 years
Due dates for new submissions: May 29, 2024, September 27, 2024, May 28, 2025, September 29, 2025, May 27, 2026, September 28, 2026

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RD SAYS:

Look for these author notes throughout. They provide research development (RD) insights and best practices to help you submit a successful proposal/application.

Purpose

SuRE and SuRE-First are relatively new funding programs with the same goals. The purpose of the awards is three-fold:

1. Provide research grant support for faculty investigators who NIH does not currently fund to lead a research project;
2. Build research capacity and strengthen the culture of research at institutions with limited NIH funding; and
3. Engage students in undergraduate and/or graduate research experiences to, ultimately, broaden and diversify the biomedical workforce.

RD SAYS:

Don't get distracted by NIH's broad intent for this program. Eligible principal investigators (PIs) at eligible institutions will help NIH achieve its purpose by including students in the research project and proposing a biomedical research project of appropriate scope for the budget allowed.

PIs eligible for SuRE-First are also eligible for SuRE and will need to choose a program to apply to. Briefly, the key differences between the two award mechanisms are:

- The annual budget for SuRE is $100K in direct costs vs. $125K for SuRE-First
- SuRE-First requires 6 months (50%) of effort
- SuRE-First requires investigators to have a mentor or mentors
- SuRE-First must be the first federal research award

If you cannot commit 6 months of effort, apply to SuRE. Though this decision comes with a smaller budget, it leaves more room to allocate funds to project costs other than PI salary and fringe.

Additional eligibility criteria and information are discussed in this resource.

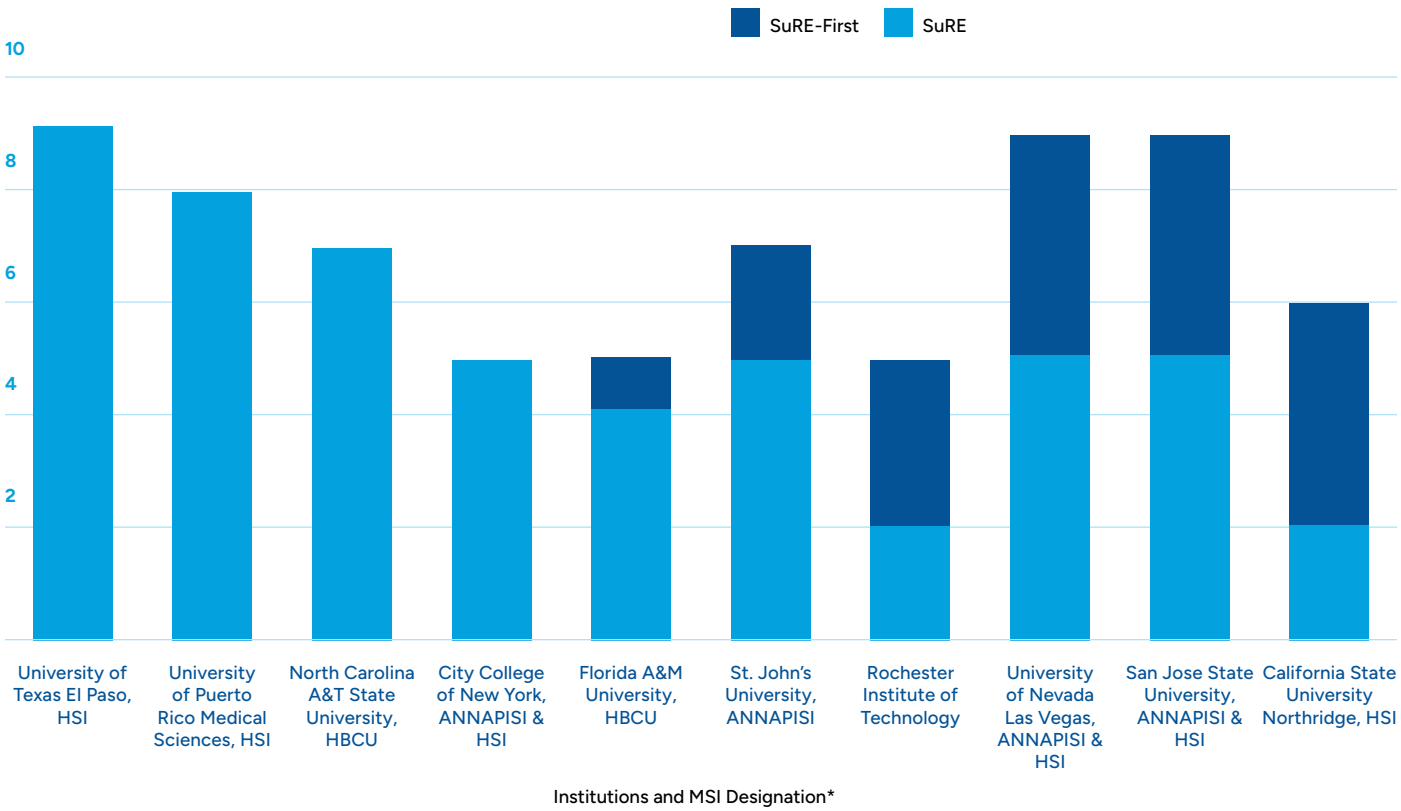
Background and Funding Trends

NIH award-making trends provide useful insights into the funding mechanism. Identifying investigators and institutions that have secured awards, participation levels by NIH institutes, the total number of awards, and funding success rates, can inform a PI's decision-making.

At the time of publication, R16 awards were made in 2022 and 2023. Figure 1 presents the ten institutions that received five or more R16 SuRE or SuRE-First awards. All ten institutions in Figure 1 are emerging research institutions, and all but one are minority-serving institutions (MSI). More SuRE awards were made than SuRE-First awards; only six institutions received SuRE-First awards.

Given the funding pattern shown in Figure 1, it is possible that PIs at some institutions are choosing to pursue SuRE and not SuRE-First awards. This may be because of the 6-month minimum time commitment required for SuRE-First awards, which is discussed more below.

Figure 1. Institutions receiving five or more R16 SuRE or SuRE-First awards, FY22-23 (NIH Reporter)



*MSI – Minority Serving Institution; HSI – Hispanic Serving Institutions; ANNAPISI – Asian American and Native American Pacific Islander-Serving Institution; HBCU – Historically Black Colleges and Universities

As shown in Table 1, although all NIH institutes participate in the R16 funding mechanism, the National Institute of General Medical Sciences (NIGMS) makes the most R16 awards.

The success rate of R16 proposals is very high:

- The overall success rate for NIH R16 proposals in 2023 was 45% (much higher than the 19% success rate for NIH R01 proposals).
- Success rates varied greatly between NIH institutes.

NIGMS is likely the most common funder because most R16 applications are reviewed by NIGMS Special Emphasis Panels. After the review, meritorious applications may be transferred to other NIH institutes. Contact the NIH program officers listed in the solicitation to confirm the fit of your project with an institute's funding priorities.

Table 1. NIH R16 Proposals and Awards in FY2023 from NIH RePORTER

NIH Institute*	Proposals	Awards	Success Rate	Award amount
National Institute on Aging (NIA)	1	1	100%	$186,638
National Institute of Neurological Disorders and Stroke (NINDS)	3	3	100%	$440,755
National Institute of Allergy and Infectious Diseases (NIAID)	31	4	12.9%	$616,931
National Institute of General Medical Sciences (NIGMS)	131	66	50.4%	$10,379,704
National Eye Institute (NEI)	1	1	100%	$136,250
TOTAL	**167**	**75**	**45%**	**$11,760,278**

*NIH institutes not listed above participate in the R16 mechanism but have not yet made R16 awards.

Eligibility

SuRE and SuRE-First have eligibility criteria for both the institution and the investigator. To be successful, both the institution and investigator must meet the criteria.

Institutional Eligibility: Institutions of higher education that:

- Award undergraduate and/or graduate degrees in the biomedical sciences;
- Enroll at least 25% of undergraduate students supported by Pell Grants, or are designated as Historically Black Colleges and Universities or Tribal Colleges and Universities;
- Have less than $6M in NIH Research Project Grants (RPGs) for each of the preceding two fiscal years; and
- Have no more than 20 active SuRE, SCORE SC1, and SCORE SC3 awards.

Contact your office of sponsored programs to determine institutional eligibility. You may also contact the SuRE Resource Center to discuss eligibility.

SuRE Investigator Eligibility: A Principal Investigator (PI):

- Must have a full-time tenure-track (or equivalent) faculty appointment; and
- May not be a PI of an active NIH Research Project Grant (e.g. R01, R21, R00, R15, and more).

SuRE-First is intended to be a PI's very first research grant.

SuRE-First Investigator Eligibility: A PI:

- Must have a full-time tenure-track (or equivalent) faculty appointment; and
- Have not been the PI of ANY peer-reviewed, externally funded, federal or non-federal research award.

Allowed and Typical Activities

The majority of SuRE and SuRE-First awards are made for mechanistic projects that focus on the underlying biological or disease processes that may lead to advances in diagnosis, treatment, and prevention. Clinical trials are not allowed.

Descriptive studies that focus on observations tend to be scored poorly by NIH reviewers. Exclusively or mainly mechanistic grants tend to do better.

Budget Considerations

Personnel effort is determined by the amount of work the PI will perform.

Typically, 10-25% PI effort is an appropriate amount of proposed effort.

SuRE Effort: For the SuRE program, the PI effort should align with the proposed project.

SuRE-First Effort: The SuRE-First program requires the PI to commit 6 months of effort to the research project. This means that the PI will need to receive a course buyout (buyout from teaching) to fulfill the requirements of the grant. The PI's salary costs will likely take up a good portion of the budget, though some of this may be offset by institutional cost-sharing of effort.

Discuss this requirement with your Department Chair and/or Dean early! The policies at your institution will shape your effort availability. Options to explore include summer effort, and half-time buyout and/or overload during the fall and spring semesters. The timing of the grant's award period should align with institutional best practices.

Students: Undergraduate student involvement is a high priority for R16s:

- Some of the budget should be reserved for paying student researchers. This allows students to participate in and benefit from research experiences without great financial sacrifice.
- While graduate and professional students are welcome to participate, there are budget limitations to adding a postdoctoral scholar (postdoc) who requires salary and fringe costs.

You should not include postdocs if doing so sacrifices the budget for student involvement.

Equipment: It is expected that the PI will have access to the equipment and resources necessary to conduct the proposed research. While equipment is technically an allowable expense, the limited budget for R16s will not support purchasing large pieces of equipment.

Due to the often-limited resources available at R16-eligible institutions, some PIs may need to conduct a portion of their research at other institutions/ sites. This is allowed only in limited circumstances and it must be well-justified. Any associated costs should be reflected in the budget. Contact the NIH program officer to discuss the limited use of special facilities at another institution.

Unique Features & Special Sections

The R16 program has a few features and components that are not standard in other R mechanisms:

Student Involvement Plan: The research strategy must include a separate section that describes how students will be involved and supervised in conducting hands-on, rigorous research.

The plan should be about a half page and detail strategies to recruit students, especially those underrepresented in research.

Plan for Enhancing Diverse Perspectives (PEDP): This one-page document should thoroughly and thoughtfully summarize the strategies to advance both the scientific and technical merit of the project through an expanded and holistic view of inclusivity. Research teams that have a diversity of individuals, ideas, and perspectives outperform homogenous teams. NIH wants to see that investigators have thoughtfully and completely considered how this will be operationalized in their research activities.

While there are PEDP resources available online and included in this resource, the PEDP **should not use boilerplate language** or be copied from a template. This plan should be specifically tailored to the proposed research project, the institutional environment, and the investigator's expertise.

Institutional Letters: There are two required institutional letters.

- A letter from a Provost, President, Vice President for Research, or equivalent that describes the institution's commitment to and strategic plan for developing and sustaining institutional research capacity and excellence.
- A letter from a Department Chair or Dean that confirms the PI will be able to commit the required effort and describes any additional capacity-building activities (e.g., mentoring, training, professional development, etc.) and the research support for the PI.

Research Enhancement Plan: SuRE-First requires a Research Enhancement Plan that describes how the grant will help the PI increase research productivity and ultimately establish and sustain an independent research program. This plan should be developed in collaboration with the PI's mentor(s).

Mentor(s): The SuRE-First program requires investigators to have a mentor or mentors. The mentor(s) should have both expertise in and a strong extramural funding record in the proposed area of research (preferably via an NIH R01), and experience in mentoring trainees. The mentor(s) do not lead the research project, but guide and support the PI.

The mentor(s) do not need to be at your home institution, and multiple mentors may work together to provide comprehensive guidance in both conducting research and transitioning to independent extramural funding. PIs are encouraged to have established relationships with their mentors. However, it may not be appropriate for a postdoc mentor or other long-standing mentor to serve in this capacity unless you can justify how they will go beyond how they've already mentored you.

Application Review

R16 applications are reviewed by a special emphasis panel tasked with reviewing SuRE or SuRE-First submissions. In addition to NIH's standard review criteria, R16 applicants should carefully consider the objectives and intent of the R16 program and the "Specific to this NOFO" criteria described in the solicitation. The standard review criteria and criteria specific to the solicitation are summarized below.

R16 applications are not compared to R01s or applications from institutions with large biomedical research portfolios. PIs should focus on proposing feasible approaches within the R16 budget limitations.

For due dates after January 25, 2025, NIH will utilize the *Simplified Framework for NIH Peer Review* as the standard review criteria.

Factor 1: Importance of the Research considers significance and innovation. Significance assesses whether the application addresses an important knowledge gap in the field, solves a critical problem, or creates a valuable conceptual or technical advance. Innovation refers to the extent to which a project applies novel concepts, methods, or technologies or uses existing concepts, methods, and technologies in novel ways, to enhance the overall impact of the project. Factor 1 is assigned a score from 1 to 9; 1 is the best and highest score.

- **Specific to R16s, reviewers will assess** to what extent the strategies described in the PEDP further the significance of the project and meaningfully contribute to innovation.

Although only one page, the PEDP is considered in all three review factors and will be reviewed closely. Drafting a feasible and impactful PEDP is an essential component of your application. A strong PEDP will succinctly demonstrate how the strategies will be operationalized in your research activities.

Factor 2: Rigor and Feasibility considers the approach, including rigor and feasibility. Approach refers to the likelihood of generating compelling, reproducible findings (rigor) and whether the proposed research can be done well and within the proposed timeframes (feasibility). Factor 2 is assigned a score from 1 to 9; 1 is the best and highest score.

- **Specific to R16s, reviewers will also assess,**
  - whether the plans for incorporating students into the research program are suitable,
  - how the project provides students with a high-quality research experience, and
  - if the PEDP timeline and milestones are well-developed and feasible.

Factor 3: Expertise and Resources considers the investigator and the environment. It assesses whether the PI has the background, training, and expertise, appropriate for their career stage, to conduct the proposed work (investigator). And whether the institutional resources can ensure the successful execution of the proposed work (environment). Factor 3 is not scored; it will be rated as "appropriate" or "needing additional expertise and/or resources".

- **Specific to R16s, reviewers will assess the following related to expertise:**
  - Does the proposed project and PI's prior research experience inspire confidence that the PI will achieve and/or maintain strong research productivity;
  - Does the PI's prior experience in supervising and engaging students in research; and
  - If the strategies described in the PEDP strengthen and enhance the expertise required for the project.
- **Related to resources the reviewers will consider:**
  - If the majority of the research will be directed by the PI and conducted at the home institution;
  - The adequacy of institutional support to provide the PI with sufficient time and resources to conduct the research project;
  - The institution's effort to build its research capacity and culture; and
  - How the environment described in the PEDP contributes to the success of the project (e.g., collaborative arrangements, geographic diversity, institutional support).

Reviewers may consider the following items but will not give criterion scores for these items; they will consider them in providing an overall impact score.

- Protections for Human Subjects
- Inclusion of Women, Minorities, and Individuals Across the Lifespan
- Vertebrate Animals
- Biohazards
- Resubmissions
- Renewals
- Revisions
- Applications from Foreign Organizations
- Select Agent Research
- Resource Sharing Plans
- Authentication of Key Biological and/or Chemical Resources
- Budget and Period of Support

Submission Strategy

New Submissions

The R16 program has two annual submission deadlines, one in the fall and one in the spring. The fall due date is in September; in 2024 it lands on the last Friday and in 2025 and 2026, the last Monday. The spring due dates all land on the last Wednesday in May.

For applications submitted in the fall (September), the earliest start date is July of the following year. For those submitted in spring (May), the earliest start date is April of the following year.

To decide your target submission, consider your teaching, research, and service obligations during each semester. Our proposed timeline suggests allowing yourself **eight months to prepare a strong, on-time application** that has benefited from feedback and multiple revisions. Contact your sponsored program office to learn about your institution's timelines and cycles.

Resubmissions

If the original application is not funded, the reviewers' summary statement will include comments that provide important insights about needed changes/improvements. Consider these helpful tips for digesting and analyzing the summary statement:

1. Reread the summary statement 48-72 hours after an initial read;
2. Summarize reviewer comments and outline ideas for a possible response; and
3. Discuss possible next steps with colleagues and the NIH Program Officer.

Resubmissions are a common step towards getting funded. And it provides an opportunity to improve your grant-writing skills. Consider making it an expectation of your process.

Strong resubmissions thoroughly address the reviewers' comments by the next biannual deadline. Given the unique eligibility criteria of the R16, coordinate with your sponsored programs office to reconfirm institutional eligibility before planning to resubmit. Changes in your organization's student population or NIH awards could make an institution ineligible.

For AIDS and AIDS-related applications, follow NIH's standard due dates.

RESOURCES

A. R16 Notice of Funding Opportunity: https://grants.nih.gov/grants/guide/pa-files/PAR-24-144.html

B. NIH RePORTER: https://reporter.nih.gov/

C. NIGMS 2024 webinar: https://www.nigms.nih.gov/News/meetings/Pages/SuRE-R16-Webinar-2024.aspx

D. The University of Kentucky hosts the SuRE Resource Center: https://www.research.uky.edu/sure-resource-center

E. The University of Vermont – Plan for Enhancing Diverse Perspectives (PEDP) Template: https://www.uvm.edu/sites/default/files/Research-Development/Resource%20Library/NIH/Templates/H_Plan_for_Enhancing_Diverse_Perspectives_Template_December_2023.docx

F. NIH BRAIN Initiative® – PEDP Frequently Asked Questions: https://braininitiative.nih.gov/vision/plan-enhancing-diverse-perspectives/pedp-frequently-asked-questions

G. NIH Simplified Peer Review Criteria: https://grants.nih.gov/policy/peer/simplifying-review/framework.htm

H. NIH Sample applications: https://grants.nih.gov/grants/how-to-apply-application-guide/resources/sample-applications.htm

I. Tips After NIH Grant Review: https://cadc.ucsf.edu/sites/g/files/tkssra881/f/wysiwyg/files/After%20Your%20NIH%20Grant%20Review%20-%20Next%20Steps%20V5.pdf

J. NIH Standard Due Dates: https://grants.nih.gov/grants/how-to-apply-application-guide/due-dates-and-submission-policies/due-dates.htm#:~:text=Cycle%20III-,Application%20

This suggested timeline follows RD best practices. It is possible to follow a shorter timeline, but you should devote more hours per week to the development process and still include time for feedback.

PROPOSAL TIMELINE

DECIDE WHEN TO APPLY

8 months before

Carefully read the notice of funding opportunity (NOFO) and this resource to determine eligibility.

- Contact your sponsored program office to determine institutional eligibility.
- Start a discussion with your dean or department chair about the program effort commitments.
- Determine if you will pursue the SuRE or SuRE-First mechanism.
- Review the application cycles to determine if you should apply in the fall or spring.

Review funding history and success rates and start planning your application.

- Sign up for the SuRE Resource Center's email list.
- Review this FAQ
- Use NIH Reporter to review the funding history for these programs and to recheck success rates.
- Look for and sign up to participate in sponsor briefings.
- Review the mission and priorities of the NIH Institutes and Centers participating in SuRE and SuRE-First to determine where to apply.

Review the full application components (summarized below) and create a proposal development calendar with target completion dates for each component. This webinar goes over the application sections in detail.

FULL APPLICATION CHECKLIST

Either Mechanism

1. Project Summary/Abstract
2. Project Narrative
3. Research Plan - Specific Aims/Research Strategy
4. Budget and Budget Justification
5. Facilities and Other Resources/Equipment
6. Data Management and Sharing Plan
7. Bibliography and References
8. Biosketches

SuRE (Standard)

1. Provost letter
2. Department letter
3. Student involvement plan (within Research Strategy)
4. Current and Pending
5. Biosketch (student mentoring)
6. Plan for Enhancing Diverse Perspectives (PEDP)

SuRE-First

1. Provost letter
2. Department letter
3. Mentor letter
4. Student involvement plan (within Research Strategy)
5. Prior, Current, and Pending
6. Biosketch (student mentoring)
7. Research Enhancement Plan
8. Plan for Enhancing Diverse Perspectives (PEDP)

Optional attachments

1. Authentication of Key Biological or Chemical Resources
2. Vertebrate Animals
3. Resource Sharing Plan
4. Consortium/Contractual Agreements
5. Letters of Support
6. Human Subjects Forms

PROPOSAL TIMELINE

CREATE THE PLAN

7 months before

Begin planning the project, identify your mentor (if pursuing funding from SuRE-First) start drafting the specific aims page, and prepare to meet with an NIH program officer.

As you plan your timeline, allow time to co-develop the research enhancement plan with the mentor(s) and request their letter of support and biosketches.

With a mentor or trusted colleague, discuss your proposed work, considering the following:

- How will you incorporate students into the research program?
- How will this project provide students with a high-quality research experience focused on the execution, analysis, and reporting of the study?
- Can you do the majority of the proposed project? Can it be conducted at your institution?
- Will your institution provide the time and resources needed to conduct the proposed project?
- What is your institution's research capacity and culture?

6 months before

Draft a specific aims page and budget outline.

- The specific aims page should position your work in the broader context/literature, outline the narrower context of your proposed contributions, and detail how are you going to accomplish those goals with this proposal.
- Share a draft with trusted colleagues for feedback and revisions.
- The budget outline is a sketch of the things you'll need to complete the project. At this stage, you don't need to know the exact costs, but you will want to think about salaries, funding for students,

Share your specific aims with the program officer and request a meeting to clarify/discuss:

- Questions you have about the NOFO;
- How your proposed ideas align with their priorities;
- The feasibility and scope of your proposed idea;
- Key priorities or unwritten rules; and
- Tips or tricks from previous program experience or their subject matter expertise.

Program Officers tend to have educational and work experience related to the NOFO and are intimately familiar with the programs they manage. Use this opportunity to get some insights from the experts before you begin writing.

PROPOSAL TIMELINE

WRITE AND COMPILE THE APPLICATION

5 months before

Begin writing sections of the application that may require multiple rounds of feedback and revision, for example:

- Research Strategy
- PEDP
- Research Enhancement Plan (SuRe-First only)

The strongest applications benefit from revisions and helpful feedback from colleagues. Allow at least three weeks to get feedback from your colleagues and sufficient time to revise and incorporate their suggestions.

4 months before

Request the following:

- Provost letter
- Department letter
- Mentor letter (SuRE-First only)
- Letters of Support
- Existing descriptions of the facilities, resources, and equipment that will help you draft the Facilities and Other Resources/Equipment documents

It is common to provide a draft of the letters you are requesting.

2 months before

Send well-developed drafts of the research strategy, PEDP, and research enhancement plan to colleagues/mentor(s) and your institution's research development professional about 6 to 8 weeks before the deadline.

1 month before

Incorporate feedback and draft other application attachments (i.e. your biosketch, the budget and budget justification, data management plan, Facilities, and Other Resources/Equipment, etc.)

2 weeks before

Submit the full application package to the sponsored programs office.

Your institution will have established norms or policies regarding submission deadlines. Given that there are many administrative steps and compliance reviews required for submission to NIH, give your colleagues sufficient time to adhere to all requirements and meet the NIH deadline.

Print this out and keep it handy!

TIMELINE: DESK GUIDE

If your target submission date is **MAY:**	September	October	November	December	January	February	March	April	May
If your target submission date is **SEPTEMBER:**	January	February	March	April	May	June	July	August	September
Determine eligibility and gather award-making insights.	✓								
Create a proposal development calendar with target completion dates for each required item.	✓								
Begin planning your project and if pursuing SuRe-First identify your mentor(s)		✓							
Draft your specific aims.			✓						
Meet with the NIH Program Officer to discuss your proposed project			✓						
Begin writing sections of the application that require multiple rounds of feedback.				✓					
Request the necessary documentation.					✓				
Send well-developed drafts for review							✓		
Incorporate feedback and draft other application attachments.								✓	
Submit the full package to the sponsored programs office.									✓

AUTHORS

Brigette Brown is a Research Development Specialist at San Jose State University (SJSU), an HSI (Hispanic-Serving Institution) and AANAPISI (Asian American and Native American Pacific Islander Serving Institution). Thirty-eight percent (38%) of SJSU's student population are first-generation students and 35% are Pell-qualified. As a result, the university is ranked fourth nationally in increasing student upward mobility. Brigette has provided grant support and training at three MSI and ERI campuses, conducted SuRE-First writing groups, and has helped four investigators earn R16s.

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