



Princeton > Faculty  
Research Research Forum

# Putting Together a Grant

2023-2024

Office of the Dean for Research

<https://research.princeton.edu>

<https://innovation.princeton.edu>



# Putting Together a Grant

- Requirements for proposal preparation vary by sponsor.
- Preparing early will allow for proper review and approval of your proposal.
- Princeton has a 5-day rule for routing full and complete proposals to ORPA for review and official signature by the University. Some departments implement their own deadlines to streamline the preparation process.
- Grants Managers are the first point-of-contact for any requests for funding from sponsors, and will assist in developing budgets, obtaining signatures and certifications, and uploading and routing documents for review.





# Sponsor Review

- › National Institutes of Health funding
  - › Sara Guerin, Senior Grants Manager, Molecular Biology
  - › Jared Toettcher, Associate Professor, Molecular Biology
- › National Science Foundation funding
  - › Tina Chandler, Lead Shared Services Grants Manager, ORPA
- › National Endowment for the Humanities
  - › Courtney Kohut, Training & Shared Services Manager, ORPA



## National Institutes of Health (NIH) funding

- Sara Guerin, Sr. Grants Manager, Molecular Biology



# Structure of NIH

- › NIH is made up of 27 institutes and centers (ICs), 24 of which award grants
  - <https://www.nih.gov/institutes-nih/list-institutes-centers>
- › Each IC has a distinct mission that focuses on a specific disease area, organ system, or stage of life.
- › Applicants should review the missions and funding priorities for each IC to determine the best fit for their projects (in some cases it may be more than one)



# Funding Opportunities

- › NIH funds grants, cooperative agreements and contracts
- › Most common funding opportunities are issued as:
  - **Program Announcements** – issued by one or more ICs for specific areas of interest
  - **Requests for Proposals** – issued by one or more ICs for specific areas of interest to accomplish specific program objectives
  - **Parent Announcements** – Broad funding opportunities for investigator-initiated applications

<https://grants.nih.gov/funding/searchguide/index.html#/>

# Types of Grant Funding/Activity Codes



Common types of grant funding and example activities:

- Research Grants (R series)
  - R01, R21, R35
- Program Project Center (P series)
  - P01, P20, P30
- Career Development Awards (K series)
  - K99/R00
- Research and Training (T & F series)
  - T32 (training grant) and F30, F31, F32 (fellowship)
- Trans NIH Programs
  - DP1, DP2, DP5

[https://grants.nih.gov/grants/funding/funding\\_program.htm](https://grants.nih.gov/grants/funding/funding_program.htm)



# Common Types of Grant Applications

- › New
- › Renewal
- › Resubmission
- › Competing Revision
- › Extension
- › Change of Organization

<https://grants.nih.gov/grants/how-to-apply-application-guide/prepare-to-apply-and-register/type-of-applications.htm>





# Personnel Roles on NIH Awards

- Senior Key Personnel – has measurable effort & needs eRA Commons ID
  - Program Director/Principal investigator (PD/PI)
  - Multi PIs (MPI)
  - Co-Investigator (co-I) – NIH does not use term co-PI
  - Collaborators, other personnel as deemed necessary
- Other Significant Contributors (OSC) – no measurable effort & needs eRA Commons ID
- Consultants
- Other staff: Postdocs, Graduate Students, Technicians, etc.



# Common Proposal Documents

- Project Summary
- Project Narrative
- Facilities and Other Resources
- Equipment
- [Biosketch](#) (*Sr. Key/OSC only*)
- Specific Aims
- Research Strategy
- Bibliography & References Cited
- Data Management and Sharing Plan (*not for fellowships*)
- Resource Sharing Plan
- PHS Assignment Form

Standard Due Dates: <https://grants.nih.gov/grants/how-to-apply-application-guide/due-dates-and-submission-policies/due-dates.htm>

Instruction Guide: <https://grants.nih.gov/grants/how-to-apply-application-guide.html>

Formatting: <https://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/format-attachments.htm>

Page Limits: <https://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/page-limits.htm>



# Research Budget Types

## MODULAR Budget

- Request up to \$250,000 in direct costs per year (budgeted in modules of \$25,000)
- Only total requested direct costs and indirect costs are included in the application budget form.
- Personnel Budget justification included, which details of the personnel and committed effort
- Consortium justification, if applicable, detailing the total consortium costs to the nearest \$1,000 and personnel effort
- Additional Narrative Justification, includes variations in modules, direct cost exclusions in F&A rate, and costs for Data Management and Sharing Plan costs

## Detailed (R&R) Budget

- Request up to \$500,000 in direct costs per year (typically budgets over \$500,000 DC require prior approval)
- Personnel – Section A&B – details costs for personnel budgeted on the project
- Equipment, Travel, and Trainee Costs (Sections C, D, & E)
- Other Direct Costs (Section F) – all other direct costs
- Detailed Budget justification
- Consortia/Subawards – separate budget and justifications

# New vs. Early-Stage Investigator



## New Investigator (NI)

- Has not been a PI on a substantial, independent NIH research award
- Benefits: Some ICs have programmatic or strategic policies for funding non-ESI NIs.

## Early-Stage Investigator (ESI)

- Has not been a PI on a substantial, independent NIH research award
- Is within 10 years of terminal research degree or end of post-graduate clinical training
- Benefits: Prioritized for funding, eligibility for ESI opportunities
- PI should check ESI status in their Commons Profile

<https://grants.nih.gov/policy/early-stage/index.htm>

# Review Process



- › Receipt and Referral
  - Applications are reviewed by the [Division of Receipt and Referral](#) (DRR) within the Center for Scientific Review (CSR) for completeness and Assignment to an Institute and Scientific Review Group (SRG)
- › Peer Review
  - SRG – first level of review by non-federal scientists with relevant expertise
  - Advisory Council – second level of review by IC and Advisory Council to determine funding
- › Directors of the IC make final funding decisions

<https://public.csr.nih.gov/ForApplicants/SubmissionAndAssignment>

# NIH Staff and Scoring



## NIH Staff

- **Scientific Review Officer (SRO)** – Center for Scientific Review (CSR) staff. They oversee the SRG and are the scientific contact for the PI prior to SRG meeting.
- **Program Officer (PO)** – IC staff. They are the point of contact prior to submission and after review for the life of the award.
- **Grants Management Specialist** – Administrative contact in the IC for the award if funded

## Scoring

- **Impact Score:** reviews give a score of 1 to 9, with 1 being the best. The average is then multiplied by ten for a score between 10-90.
- **Percentile** – impact score ranked against the other scores for the SRG for three rounds
- **Not Discussed**- not competitive, do not receive impact score
- **Summary Statement** – prepared by the SRO with review feedback
- **Paylines** – Some ICs publish cutoffs for funding based on the scoring



# Pre-Award Tasks

- › Post Submission Materials - [NOT-OD-19-083](#)
  - Submitted to SRO 30 days prior to SRG meeting
- › [Just-In-Time](#)
  - NIH [Other Support](#) and other compliance information
- › [Resubmission Policy](#)
  - Follows unfunded new, renewal, or revision application (A0)
  - Only single resubmission accepted (A1)
  - Summary statement must be received prior to resubmission



## eRA Commons

Used for Post Submission Tracking and Award Management:

- Tracking application status during review process
- Submitting Just-In-Time
- Viewing Award Notices
- Post-award tasks





# Useful Links

- Grants Process Overview -  
[https://grants.nih.gov/grants/grants\\_process.htm](https://grants.nih.gov/grants/grants_process.htm)
- Deciphering NIH Application/Grant Numbers -  
[https://www.era.nih.gov/files/Deciphering\\_NIH\\_Application.pdf](https://www.era.nih.gov/files/Deciphering_NIH_Application.pdf)
- Data Management and Sharing Policy -  
<https://sharing.nih.gov/data-management-and-sharing-policy>
- NIH Grants Policy Statement at  
<https://grants.nih.gov/grants/policy/policy.htm#gps>
- Grant Writing Tips Sheets at  
[https://grants.nih.gov/grants/grant\\_tips.htm](https://grants.nih.gov/grants/grant_tips.htm)

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## National Science Foundation (NSF) funding

- Tina Chandler, Lead Shared Services Grants Manager, ORPA



## Background

- National Science Foundation (NSF) is the only federal agency whose mission includes support for all fields of fundamental science and engineering, except for medical sciences. In addition to funding research in the traditional academic areas, the agency also supports "high-risk, high pay-off" ideas.
- With an annual budget of \$9.87 billion (FY 2023), NSF is the funding source for approximately 25% of all federally supported basic research conducted by America's colleges and universities.



## Proposals Preparation at Princeton

- All proposals must be reviewed by Office of Research and Project Administration (ORPA)
  - Exceptions: LOIs or pre-proposals that do not require a budget or institutional signoff - best to check with your grant administrator
- Proposals should be completed at least 5 days ahead of the proposal due date set by the sponsor
- Every proposal requires an assurance or certification to be completed for all internal key personnel
- Your grants administrator will enter the proposal in the sponsor portal.
- They will work the appropriate ORPA representative to submit the proposal to the sponsor once all documents have been reviewed and approved



## NSF Proposals

- Standard Full Proposal
- Collaborative Proposals: A collaborative proposal is one in which investigators from two or more organizations wish to collaborate on a unified research project. Collaborative proposals may be submitted to NSF in one of two methods:
  - as a single proposal, in which a single award is being requested (with subawards administered by the lead organization)
  - or by simultaneous submission of proposals from different organizations, with each organization requesting a separate award.

\*Your grant administrator may help identify the appropriate collaborative proposal type if not stated in the RFP



## Getting Started

- Once you find an opportunity you are interested in, notify your grants administrator as soon as possible - make sure to let them know the request for proposal (RFP) number or provide a copy of the RFP

### **Faculty Early Career Development Program (CAREER)**

**Includes the description of NSF Presidential Early Career Awards for Scientists and Engineers (PECASE)**

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**PROGRAM SOLICITATION**  
**NSF 22-586**

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**REPLACES DOCUMENT(S):**  
**NSF 20-525**



## Helpful Guidance

- Identify all PIs/Co-PIs/Key personnel and affiliated organizations
- Start Dates: If the RFP does not outline a specific start date, we typically recommend a start date 6 months from the proposal due date
- Budget:
  - Who will be working on the project and should they get paid from the project?
  - Will any equipment be required to perform the work or will you be building equipment?
  - Travel - domestic, foreign, or both?
  - Is any funding going to external collaborators?



## Proposal & Award Policies & Procedures Guide (PAPPG)

- The source for information about NSF's proposal and award process. Each version of the PAPPG applies to all proposals or applications submitted while that version is effective.
- Current version: [23-1](#)
- Version to update January 2024: [24-1](#)
- All NSF proposals must follow the guidelines outlined in the PAPPG unless there is a specific deviation outlined in the RFP





## NSF Standard Formatting

- Fonts: Arial (not Arial Narrow), Courier New, or Palatino Linotype at a font size of 10 points or larger; Times New Roman at a font size of 11 points or larger; or Computer Modern family of fonts at a font size of 11 points or larger.
- No more than six lines of text within a vertical space of one inch.
- Margins: Margins, in all directions, must be at least an inch. No proposer-supplied information may appear in the margins.
- Paper size: Must be no larger than standard letter paper size (8 1/2 by 11")



## Standard NSF Proposal Documents

1. Project Summary (1 page max.)\*
  - a. Must include separate sections: Overview, Intellectual Merit, Broader Impacts
2. Project Description (15 pages max.) \*
3. Must include a separate section for Broader Impacts and Results from Prior NSF Support
4. References Cited (no page limit)
5. Data Management Plan (2 page max.)
6. Postdoctoral Mentoring Plan - if applicable (1 page max.)\*

\* documents should not contain URL links



## Helpful Guidance

- Broader impacts should describe the potential of the proposed activity to benefit society and contribute to the achievement of specific, desired societal outcomes.
  - Working with diverse or underrepresented groups, improved STEM education, increased public scientific literacy and public engagement, increased partnerships between academia
- Results from Prior NSF Support: The purpose of this section is to assist reviewers in assessing the quality of prior work conducted with prior or current NSF funding. If any PI or co-PI identified on the proposal has received prior NSF support including: an award with an end date in the past five years; or any current funding, including any no cost extensions (discuss specific formatting w/ your grant administrator).



## Standard NSF Proposal Documents (Cont.): Grant administrators can assist

1. Biographical Sketch (3 page max.) – Must use SciEncv\*
2. Current and Pending support - Must use SciEncv \*
3. Collaborators and Other Affiliations (COA) - NSF specific template\*
4. Budget
5. Budget Justification (5 page max)
6. Facilities, Equipment and Other Resources
7. Letters of collaboration from external partners

Your grant administrator can also collect all administrative components from subcontractors or partner institutions.

\*Speak with your grant administrator regarding the requirements for these documents



## SciENcv and ORCID

- SciENcv - Science Experts Network Curriculum Vitae: an electronic system available through NCBI. Researchers can use SciENcv to create and maintain biosketches that must be submitted with NIH and NSF grant applications and annual reports.  
(<https://www.ncbi.nlm.nih.gov/sciencv/>)
- ORCID - Open Researcher and Contributor ID: stores automatic links to all your research through a unique 16 digit identifier (<https://orcid.org/>)
- The NSF mandate to use SciENcv for preparation of the biographical Sketch/current and pending support that went into effect on October 23, 2023
- Getting started:

<https://researchdata.princeton.edu/research-lifecycle-guide/sciencv-biosketches-and-orcid-id>



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## Biographical Sketch

- Identifying Information
- Organization & Location
- Professional Preparation
- Appointments & Positions\*
- Products
  - 5 most closely related to project; 5 other significant products. Full citations required
- Synergistic Activities
  - Provide a list of up to five distinct examples that demonstrates the broader impact of the individual's professional and scholarly activities. Must be specific and must not include multiple examples to further describe activity

\*[https://www.nsf.gov/bfa/dias/policy/disclosures\\_table/jan2023.pdf](https://www.nsf.gov/bfa/dias/policy/disclosures_table/jan2023.pdf)



## Best Practices

- Maintain open communication with your grants administrator throughout proposal preparation - ensure they are aware of any changes in personnel, budget, or direction
- Once you provide the necessary technical documents, ensure you are available should we need to request any revisions or changes
- Technical documents should be provided to your grant administrator in Word format - if minor revisions are needed such as formatting, the grant administrator can adjust as needed
- Grants Administrators are here to make your life easier. We may request revisions that seem burdensome, but it is for a good reason.



# ORPA Shared Grants Management Services & National Endowment for the Humanities

Courtney Kohut, Training & Shared Services Manager ORPA





# Humanities & Social Sciences Proposal Submissions

- Submitted through ORPA's Shared Grants Management Services
- SGMS falls under the Office of Research and Project Administration (ORPA) umbrella and support departments *without* existing research administration personnel.
- Four Grants Managers covering 60+ departments (Division I and Division II)
- Each department is assigned to a specific Grants Manager as a main point-of-contact for sponsored research-related tasks
- Also provide Grants Management ad-hoc support to Engineering & Natural Sciences & assist with onboarding new Grants Managers on campus
- Two Office Locations: Fisher Hall & 619 Alexander Road, Suite 102



# Shared Grants Management Services

- Contact your assigned Grants Manager as soon as you are aware of a new proposal submission – 5-day advance notice rule!
- Provide the RFP/Solicitation, Deadline, Budget Details, Start/End Dates, and names of all parties participating in the submission (are there subs, other Princeton faculty PIs)
- Grants Manager will review details and provide an outline/checklist of all the required elements and who is responsible for each part – as well as formatting reminders (as applicable)



# Shared Grants Management Services

- Grants Manager will develop a budget based on the information provided, using the latest rates and salary costs.
- Grants Managers will upload the final documents for submission in the portals.
- ALL proposals are routed through an internal proposal system, Princeton ERA for review and approval. Waiting until the day of submission to notify or provide information to your GM may cause errors!
- There are required certifications and compliance questions from Principal Investigators prior to official proposal submission.
- Leave time to make edits or adjustments to proposal documents, especially the Current & Pending or Biographical Sketch.



# Shared Grants Management Services

- In addition to proposals - work with your Shared Grants Manager for all sponsored research activities such as:
  - Pre-proposals, white papers
  - Fellowship applications where you are the advisor/mentor
  - Pre-award spending requests
  - Rebudgeting approval requests
  - Award transfers (to or from Princeton)
  - Agreement routing for review and approval – Data Use Agreements, Non-disclosure Agreements, etc.
  - Other changes requiring **sponsor** prior approval!

# National Endowment for the Humanities

- Only Humanities departments apply to this particular Federal sponsor.
- Every submission is different! Plan ahead!
- You Grants Manager will submit through [Grants.gov/Workspace](https://www.grants.gov/Workspace) under their own login information - no PI login information required
- [Notice of Funding Opportunity](#) outlines specific sections required and page lengths for each section.
- Budget with budget justification is required for every submission - your Grants Manager will draft both of these documents for your review (salary information will be obtained by your Grants Manager within Labor Accounting)



NATIONAL ENDOWMENT  
FOR THE HUMANITIES



# NEH Proposal Guidelines

- Each Notice of Funding Opportunity (NOFO) varies with requested elements
- Narrative:
  - May indicate it should be limited to 10 pages, with one-inch margins and a font size of no smaller than eleven points.
  - Another one indicates it should be limited to 12 pages with one-inch margins and a font size must be Times New Roman eleven point.
  - Extremely important to read the requirements for every submission as there is limited consistency between applications.
- Required application sections vary
- Enter the information into Grants.gov/Workspace as requested – your Grants Manager will gather the final information for data entry into the system.
- Allowable cost elements within a proposal are based on the Code of Federal Regulations, or [2 CFR 200](#) – Uniform Guidance Cost Principles.



# National Endowment for the Humanities

- Identify all key personnel on the project
  - Post-docs and students do not have PI status and cannot be a Co-PI without approval
  - Individuals at Princeton listed as **Key Personnel** are integral to the project - and if they leave during an award, sponsor approval is required.
  
- Do you have subawards?
  - Your Grants Manager will coordinate obtaining all necessary documents with each party - so provide contact details when possible
  - Both proposal submission documents as well as Princeton internal documentation will be obtained. [commitment letters, budgets, etc.]



# National Endowment for the Humanities

- PI must ‘certify’ every proposal submitted via Princeton ERA [image on next slide]. This is attesting that you are responsible for the completeness of the information within the proposal record and that it is true and accurate - as lead PI you are responsible for the proposal in its entirety.
- You may also complete a [PI Assurance](#) which is the PDF form of the certification process.
- [Compliance questions](#) would be answered: this identifies human subjects, animals, biological agents, human stem cells, etc. information on this proposal - and provide information on protocols and approvals.
- What foreign parties are you collaborating with on this project? Will need names of individuals directly involved on this project for visual compliance check.
- NEH provides a full checklist of all components of a submission in the RFP.





## 5.1 Certify activity Lead PI or fellow

- When you are ready to certify your assurances, click on the “Certify” activity in the left navigation bar.

**Draft**

# Demo Proposal

**Lead PI view**

FP00002221 Funding Proposal

**Next Steps**

- Edit Funding Proposal
- Printer Version
- Submit For Department Review
- ✓ Certify** ←
- Withdraw Proposal
- Manage Ancillary Reviews
- Manage Relationships
- Manage Tags
- Create Agreement

**Proposal Information**

PD/PI:	Gilbert Ramsey (testpi10)
Department:	SPI-Sch Public & Intl Affairs
Specialist:	Angelina An
Sponsors:	NIH - National Institutes of Health
Internal Submission Deadline:	6/26/2023
Certified:	No
SF424 Link:	

**Budget Information**

Starting Date:	7/1/2023
Number of Periods:	5
Total Direct:	\$270,816
Total Indirect:	\$172,323
Total:	\$443,139
PeopleSoft Award ID:	

**Workflow Diagram:**

- Read the assurance statement.

Execute "Certify" on FP00002220 — Mozilla Firefox

https://mpdkpuprev.huronclick.com/Grants/sd/ResourceAdministration/Activity/form?ActivityType=com.webridge.entity.Entity[OID:8A7F4244A15511EBB]

**Certify**

I certify to the best of my knowledge:

- The comments and attachment boxes can be left blank. Scroll down and click on OK.



# National Endowment for the Humanities

- NEH, unlike other sponsors, the Research rate is not appropriate for these applications - Princeton established a formal “**Other Sponsored Activities**” rate - now set at 35%.

For applicants seeking reimbursement for indirect costs: carefully review your institution’s negotiated indirect cost rate(s) to make sure you are using the most appropriate rate in your application budget. Many institutions of higher education negotiate multiple rates—for example, “Research,” “Instruction,” and “Other Sponsored Activities.” With rare exceptions, your institution’s “Research” rate will **not** be the appropriate rate for inclusion in your NEH project budget, as the use of this rate is reserved for projects involving scientific research, not scholarly inquiry of the type most often supported by NEH.

- Your Grants Manager will facilitate the entire process - keep them informed and coordinate efforts!



## Questions and Discussion