



How to Submit Grants at Cornell – A Primer for Postdocs

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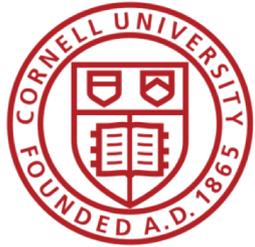




Overview

- **Searching for Funding Opportunities**
- **What to look for in a fellowship**
- **Contents of a Proposal**
- **NIH Pathway to Independence Award (Parent K99/R00)**
- **How to get started**
- **Cornell Processes**





Searching for Funding Opportunities

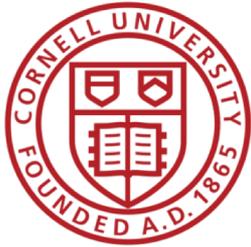
- Databases
 - Grant Forward
 - Foundation Directory
- Websites
 - Cornell Office of Sponsored Programs postdoctoral fellowship web page: https://www.osp.cornell.edu/Funding/funding_opps.html
 - Other Universities web pages (e.g. Stanford, Harvard, UCSD, Rockefeller)
 - National Postdoc Association
 - Specific lists for non-US postdocs (e.g. Oregon State, U Maryland, UConn)
 - NSF website: https://nsf.gov/funding/education.jsp?fund_type=3
- Search engines
 - Sometimes it's the easiest thing to do a simple search for that in which you are interested
- Mann Library
 - Have specialist librarians for each college to help researcher search for funding opportunities

<https://www.osp.cornell.edu/>

<https://www.grantforward.com/index>

<https://fconline.foundationcenter.org/search/member-index>





Funding Opportunities

- Federal Funding
- Foundation Funding
- New York State Funding
- Early Career Faculty
- Equipment Grants
- Graduate Students
- Internal Funding
- Limited Submissions
- Postdoctoral Fellowships
- Select Recurring and Prestigious Competitions
- Women and Minorities Grants
- OSP Main



Search for Funding Opportunities

Use the menu to the left to find funding opportunities targeted to a specific audience, or with special submission circumstances. Use the links below to find funding agency sites, subscription services, and foundation support opportunities.

[Federal Government](#) (or go directly to [Grants.Gov](#))

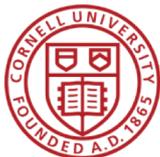
[NY Government](#) (or go directly to [NYS Grants Gateway](#))

[Foundations](#) (or go directly to [the Foundation Directory](#))

GrantForward: Compilation of federal and some state, foundation, and corporate funding opportunities. Cornell subscribes to this service. You may create an institutional account at no fee. The database is updated daily and contains funding opportunities in the life and physical sciences, social sciences, arts, and humanities. GrantForward has developed [QuickTips](#), [CaseStudies](#), and a [Researcher Welcome Guide](#). A Cornell-specific "cheat sheet" is available [here](#).

Faculty and research staff are strongly encouraged to subscribe to the CU-RES-ADMIN-L [listserv](#). The listserv is used to disseminate information such as limited submission competitions, updates to sponsor applications, rate changes, and training opportunities.

If you would like assistance using any of these resources, please contact [Kim Holloway](#). In addition, you can also use the [Faculty Resources page](#) for assistance with writing proposals.



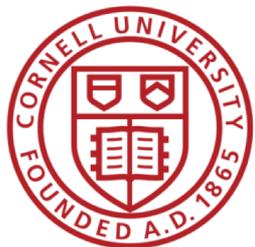
Office of Sponsored Programs (OSP)

[OSP Main](#) > [Funding Opportunities](#) > [Postdoctoral Fellowships](#)

Postdoctoral Fellowships

Listed below are a selection of funding opportunities available for Postdoctoral Fellowships, from various sponsor agencies and foundations, in alphabetical order according to the agency. There is a short summary of the program included here, but please click on the links to each program to access the sponsor's program page, where you will find more detailed instructions. This list is not an exhaustive list of all funding opportunities available.

Sponsor ↕	Deadline↕	Subject Area ↕	Program ↕	Amount	Summary
ALS Association	January	ALS	Post Doctoral Fellowship	\$50,000 per year for 2 years.	The ALS Association Research Investigator-Initiated Research Grant Program supports innovative research of high scientific merit and relevance to amyotrophic lateral sclerosis (ALS).
Alzheimer's Association	April	Alzheimer's Research	Alzheimer's Association Research Fellowship (AARF) Program	\$150,000 for 2-3 years.	The Alzheimer's Association Research Fellowship Award Program is up to three years, minimum 2 years intended to support exceptional researchers who are engaged in their post-graduate work (i.e. postdoctoral fellows) and before they have their first independent faculty positions (i.e. Assistant Professor).
American Antiquarian Society	October or January	Humanities	Fellowship	Various, see guidelines.	The American Antiquarian Society offers three broad categories of visiting research fellowships, with tenures ranging from one to twelve months. All of the fellowships are designed to enable academic and independent scholars and advanced graduate students to spend an uninterrupted block of time doing research in the AAS library.
American Brain Tumor Association	January	Brain Tumor Research	Basic Research Fellowship Program	\$100,000 over 2 years.	The Basic Research Fellowship Grants are two-year, \$100,000 grants supporting postdoctoral fellows conducting brain tumor research. Fellows must include a Lead Mentor who currently conducts brain tumor research at the same academic



What to look for in a postdoctoral fellowship

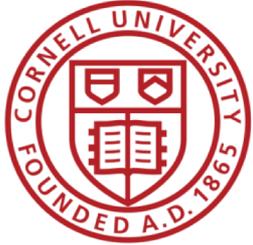
- **Deadline**
- **Eligibility**
 - Time since terminal degree
 - Citizenship
 - Diversity- gender, racial background etc.
- **Application guidelines**
- **Research focus**





Guidelines can be complex: Ruth L. Kirschstein
National Research Service Award (NRSA) Individual
Postdoctoral Fellowship (Parent F32)

- <http://grants.nih.gov/grants/guide/pa-files/PA-16-307.html>
- <https://grants.nih.gov/grants/how-to-apply-application-guide.html>



Contents of an NIH postdoctoral fellowship proposal

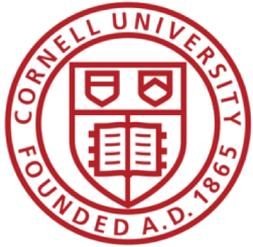
Contents of an American Heart Association proposal

- Research Plan
 - Biographical Sketch/Bibliography
 - Academic Record
 - Literature Cited
 - Publications or Abstracts
 - Vertebrate Animal Subjects
 - Resubmission Modifications
- Cover Letter
 - **Abstract**
 - Narrative
 - **References**
 - Facilities and Other Resources
 - Equipment
 - Biographical sketches (Postdoc and Mentors/Sponsors*)
 - Budget*
 - Budget Justification
 - Applicant's background and goals for training
 - Specific Aims
 - **Research Strategy**
 - Respective contributions
 - Selection of Sponsor and Institution
 - Training in Responsible Conduct of Research
 - Sponsor/co-Sponsor statements*
 - Letters from Collaborators*
 - Institutional Environment And Commitment To Training*
 - Other Research Training Plan
 - IACUC approval**
 - IRB approval**
 - Select Agents Research
 - Resource Sharing Plan
 - Authentication of Key Biological and/or Chemical Resources
 - Appendix



Guidelines can be complex: NIH Pathway to Independence Award (Parent K99/R00 - Independent Clinical Trial Not Allowed)

- <https://grants.nih.gov/grants/guide/pa-files/PA-18-398.html>
- <https://grants.nih.gov/grants/how-to-apply-application-guide.html>
- http://grants.nih.gov/grants/guide/contracts/parent_K99_R00.html



Writing the K99/R00 grant: Candidate Information and Goals for Career Development

Candidate's Background

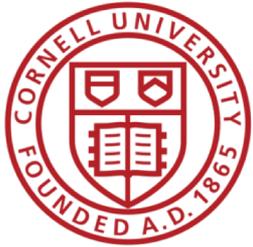
- Describe the candidate's commitment to a career in a biomedical, behavioral, or clinical research field relevant to the mission of one of the participating NIH ICs.
- Describe the candidate's potential to develop into a successful, independent investigator.

Career Goals and Objectives

- Describe the candidate's current and long-term research and career objectives.
- Present a scientific history that: (1) shows a logical progression from the candidate's prior research and training experiences to the training and research experiences proposed for the mentored phase of the award (K99) and subsequently to the independent phase of the award (R00); and (2) justifies the need for further mentored career development to become an independent research investigator.
- If currently supported by an institutional or individual Ruth L. Kirschstein NRSA, describe the candidate's current research training or fellowship program.
- Describe how the candidate plans to separate scientifically from his/her mentor and advance to research independence.

Candidate's Plan for Career Development/Training Activities During Award Period

- A systematic plan should be presented for obtaining the biomedical, behavioral, or clinical science background, research experience, and career development activities necessary to launch the stated independent research career. Describe current activities and how they relate to the candidate's career development plans and career goals. Describe proposed activities, e.g., those that will lead to new and/or enhanced research skills and knowledge, as well as related skills such as grant-writing, communication, leadership, and laboratory management. The career development plan must be specifically tailored to meet the needs of the candidate and the goal of achieving independence as a researcher.
- Describe how the skills and knowledge obtained during the mentored phase will enhance research productivity and facilitate the development of new approaches and directions for investigation. Describe how the career development plan will promote the candidate's success and transition to scientific independence. Candidates must justify the need for the award, particularly the mentored (K99) phase, and must provide a convincing case that the proposed period of support (1-2 years as a mentored candidate followed by up to 3 years as an independent scientist) will substantially enhance his/her career and/or will allow the pursuit of a novel or promising approach to a particular research problem. Candidates should make clear why additional mentored research training and career development are critical before transitioning to research independence and pursuit of the proposed independent phase research.
- The candidate must describe a plan, including a timeline with milestones, for evaluation of his/her progress during the mentored phase and for the transition to the independent phase.
- The candidate and K99-phase mentor must describe a specific plan for the transition to the independent phase.



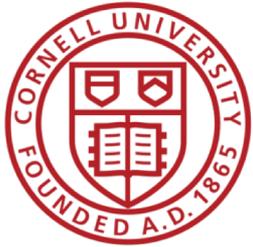
Writing the K99/R00 grant: Research Plan Section

Research Strategy

- The research plan must span both phases of the K99/R00 award. The candidate should clearly indicate the research planned for each phase. This narrative should describe what the candidate will accomplish during the mentored phase research that will enable him/her to launch an independent research program (i.e., what does the candidate still need to accomplish during the mentored phase in order to compete successfully once independence is achieved).
- The research plan should state the significance, innovation and approach of the proposed research during the K99 and R00 phases of the award. The research plan should provide a detailed rationale, experimental approach, and expected/alternative outcomes for the proposed studies. Although it is anticipated that candidates will be best able to describe their current and past research, the research plan for the R00 phase of the award should be described in sufficient detail for reviewers to evaluate the merit of this component of the application.
- Describe the relationship between the mentor's research and the candidate's proposed research. Describe how the candidate will gain independence from his/her mentors and separate his/her scientific research program from that of the mentor(s).
- If the applicant is proposing to gain experience in a clinical trial, ancillary study to a clinical trial or a clinical trial feasibility study as part of his or her research career development, describe the relationship of the proposed research project to the clinical trial.

Training in the Responsible Conduct of Research

- All applications must include a plan to fulfill NIH requirements for instruction in the Responsible Conduct of Research (RCR). See SF424 (R&R) Application Guide for instructions.



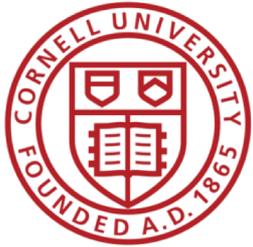
Writing the K99/R00 grant: Environmental and Institutional Commitment to the Candidate

Description of Institutional Environment

- The sponsoring institution must document a strong, well-established research and career development program related to the candidate's area of interest, including a high-quality research environment with key faculty members and other investigators capable of productive collaboration with the candidate.
- Describe how the institutional research environment is particularly suited for the development of the candidate's research career and the pursuit of the proposed research plan.

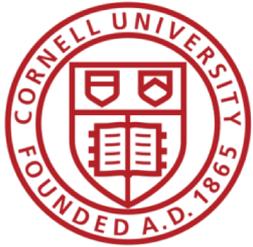
Institutional Commitment to the Candidate's Research Career Development

- The sponsoring institution must provide a statement of commitment to the candidate's development into a productive, independent investigator, i.e. conducting the proposed mentored research and career development during the K99 phase and competing for, and transitioning to, a tenure-track assistant professor position at an academic institution. While the K99 phase sponsoring institution is not responsible for sponsoring the applicant during the R00 phase, it should be supportive of the candidate prior to initiation of the R00 phase.
- Provide assurance that the candidate will be able to devote a minimum of 9 person-months (75% of full-time professional effort) to the development of his/her research program. The remaining effort should be devoted to activities related to the development of the candidate's career as an independent scientist.
- Provide assurance that the research facilities, resources, and training opportunities, including faculty capable of productive collaboration with the candidate, will be available for the candidate's planned career development and research programs during the K99 award period.
- Provide assurance that appropriate time and support for any proposed mentor(s) and/or other staff consistent with the career development plan will be available during the K99 award period.
- For individuals in postdoctoral positions with other titles although still in non-independent, mentored training positions, provide evidence of eligibility for the K99/R00 program.
- If the candidate is not a U.S. Citizen or permanent resident, the sponsoring institution must include information about the candidate's visa status, an assurance that the candidate's visa provides sufficient time to complete the K99 phase of the award at a U.S. institution, and assurance that there are no known obstacles (e.g. home country requirement) to the candidate obtaining a visa at the time of the R00 transition.



Writing the K99/R00 grant: Responding to Review Criteria

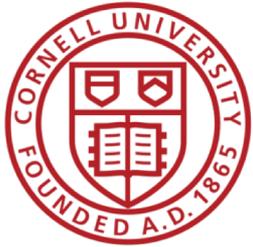
For this particular announcement, note the following: Reviewers should evaluate the candidate's **potential** for obtaining a tenure-track or equivalent faculty position and **developing an independent research program** that will make important contributions to the field. Reviewers should consider in their evaluation the likely **value of the proposed K99 phase research and career development in facilitating transition to research independence**, and the feasibility of the proposed research project as a vehicle for developing a successful, independent research program after transition to the R00 award phase.



Writing the K99/R00 grant: Responding to Review Criteria

Overall Impact

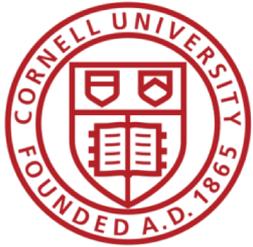
Reviewers should provide their assessment of the likelihood that the **proposed career development and research plan will enhance the candidate's potential for a productive, independent scientific research career** in a health-related field, taking into consideration the criteria in determining the overall impact score.



Writing the K99/R00 grant: Responding to Review Criteria

Candidate

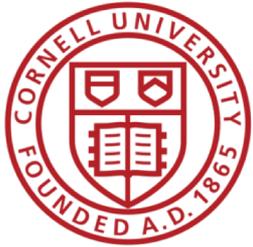
- Based on the candidate's prior research and training experience, track record, referee's evaluations, and the quality and originality of prior research and the current application, what is the candidate's **potential to become a highly successful, independent investigator** who will contribute significantly to his/her chosen field of biomedical, behavioral, or clinical related research?
- Considering the years of postdoctoral research experience to date, what is the candidate's record of **research productivity, including the quality of peer-reviewed scientific publications**?
- What is the quality of the **candidate's pre- and postdoctoral research training, with respect to development of appropriate scientific and technical expertise**?
- Given the candidate's **prior training, proposed career development plan, and the referees' evaluations**, is it reasonable to expect that the candidate will be able to achieve an independent, tenure-track or equivalent faculty position within the time period requested for the K99 phase of this award?



Writing the K99/R00 grant: Responding to Review Criteria

Career Development Plan/Career Goals and Objectives

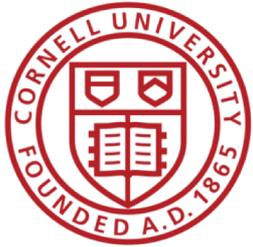
- Are the content and duration of the proposed components of the career development plan appropriate and well-justified for the candidate's current stage of scientific and professional development and proposed research career goals?
- To what extent does the proposed career development plan enhance or augment the applicant's research training and skills acquisition to date?
- Is the proposed career development plan likely to contribute substantially to the scientific and professional development of the candidate, and facilitate his/her successful transition to independence?
- To what extent are the plans for evaluating the K99 awardee's progress adequate and appropriate for guiding the applicant towards a successful transition to the independent phase of the award?
- Is the timeline planned for transition to the independent phase of the award appropriate for the candidate's current stage of scientific and professional development, anticipated productivity, and the career development proposed for the K99 phase of the award?
- If proposed, will the clinical trial experience contribute to the applicant's research career development?



Writing the K99/R00 grant: Responding to Review Criteria

Research Plan

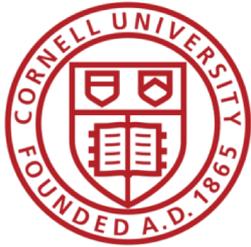
- Is the proposed K99 phase research **significant and scientifically sound**?
- Is there a **strong scientific premise** for the project?
- Has the candidate presented **strategies to ensure a robust and unbiased approach**, as appropriate for the work proposed?
- Has the candidate presented adequate plans to address relevant biological variables, such as sex, for studies in vertebrate animals or human subjects?
- **Are the scientific and technical merits of the K99 research appropriate for developing the research skills described in the career development plan, and appropriate for developing a highly successful R00 research program?**
- Is the proposed R00 phase research significant, scientifically sound, and a logical extension of the K99 phase research? Is there evidence of long-term viability of the proposed R00 phase research plan?
- Does the R00 phase project address an innovative hypothesis or challenge existing paradigms? Does the project develop or employ novel concepts, approaches, methodologies, tools, or technologies?
- To what extent is the proposed R00 phase research likely to foster the career of the candidate as a successful, independent investigator in biomedical, behavioral, or clinical research?
- If proposed, will the clinical trial experience contribute to the proposed research project?



Writing the K99/R00 grant: Responding to Review Criteria

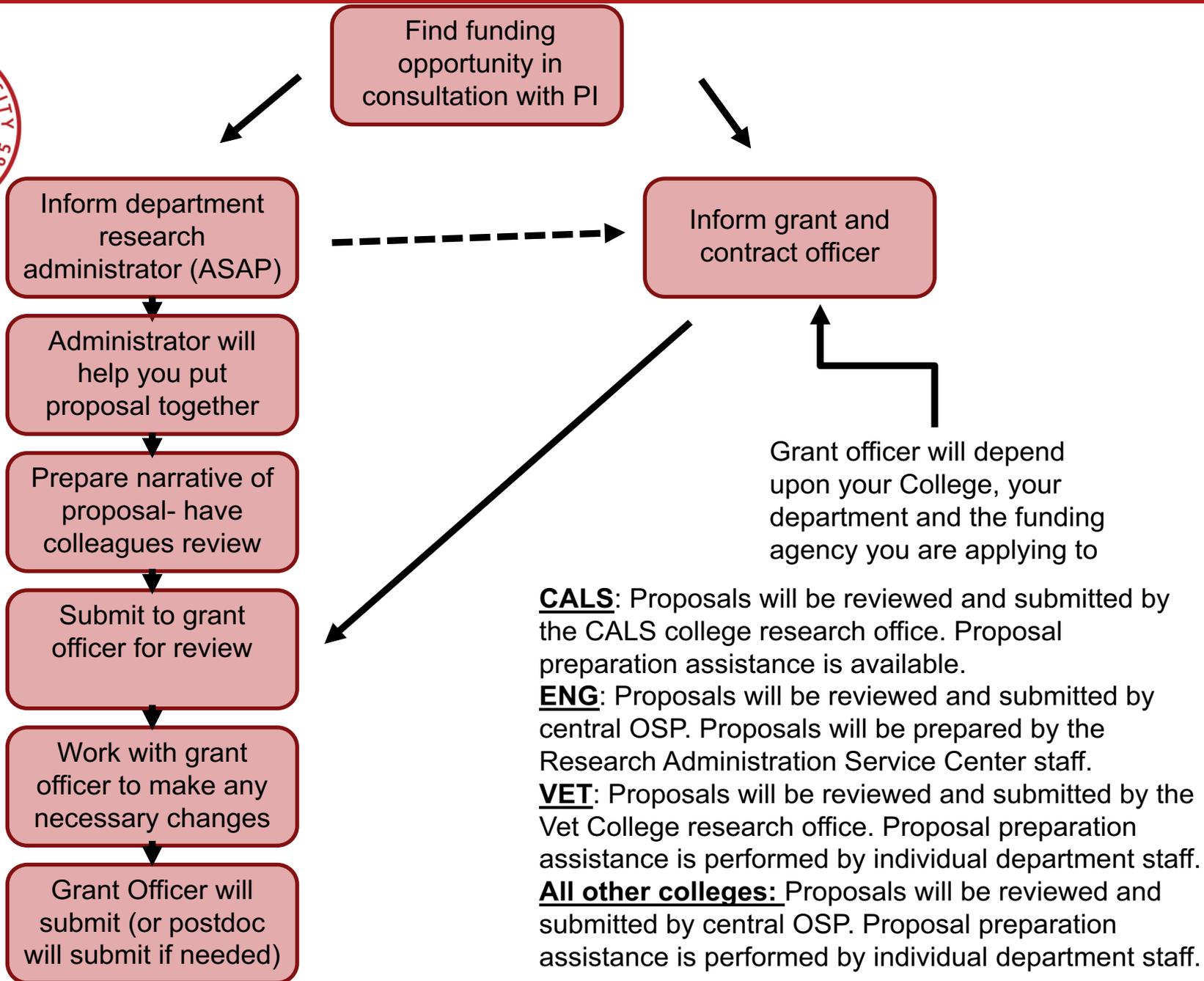
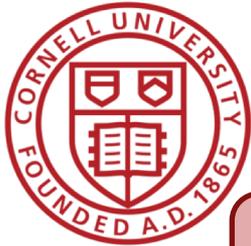
Mentor(s), Co-Mentor(s), Consultant(s), Collaborator(s)

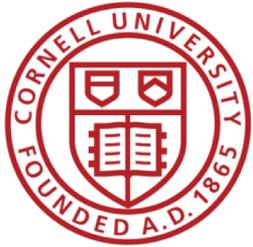
- To what extent does the mentor(s) have a **strong track record in training future independent researchers?**
- **To what extent are the mentor's research qualifications and experience, scientific stature, and mentoring track record appropriate for the applicant's career development needs?**
- Is the supervision proposed for the mentored phase of support adequate, and is the commitment of the mentor(s) to the applicant's career development appropriate and sufficient?
- Does the mentor provide an appropriate plan that addresses the candidate's training needs, and that is likely to foster the candidate's continued development and transition to independence?
- Does the mentor describe an acceptable plan for clear separation of the candidate's research and research career from the mentor's research, including identifying the components of the research plan that the K99 candidate may take to an independent research position?
- Are the consultants'/collaborators' research and/or mentoring qualifications appropriate for their roles in the proposed K99 phase of the award? Do they provide letters of support that affirm their commitment? If applicable, are the Advisory Committee members' qualifications appropriate for their roles in the proposed K99 phase of the award? Do they provide letters of support that affirm their commitment?
- If the applicant is proposing to gain experience in a clinical trial as part of his or her research career development, is there evidence of the appropriate expertise, experience, and ability on the part of the mentor(s) to guide the applicant during participation in the clinical trial?



How to get started:

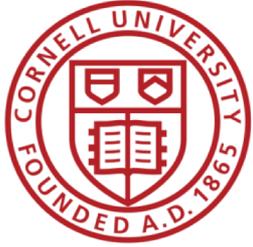
1. START EARLY!!!!!!
2. Contact program official at funding agency
3. Contact the relevant folks in your department and college research office/OSP- have them go through the guidelines with you
4. Who is my GCO website:
<https://www.osp.cornell.edu/Contacts/whoismygco.html>
5. Make a checklist of items required for the proposal
6. Do the administrative components first- it always takes longer than you think
7. Have your mentor and other colleagues read your proposal- this needs to be done in advance of the deadline so there's time to make the necessary edits- graduate students in your lab or collaborating labs are great critics





Before you submit a proposal you should:

- Complete financial conflict of interest disclosure and training (if applicable) (don't forget to click "submit") at <https://www.oria.cornell.edu/COI/>
- Complete Form 10 and have signed by PI and Department Chair (this can take a while) found here: https://www.osp.cornell.edu/Forms/form10/Form10_2017_05_24.pdf
- NSF- be registered as an individual researcher
- NIH- be registered with eRAcommons <https://www.osp.cornell.edu/NIH/>



Contact

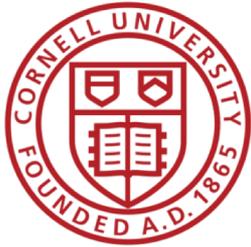
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Links

https://www.osp.cornell.edu/Funding/funding_opps.html

<https://www.osp.cornell.edu/Contacts/whoismygco.html>

<https://www.grantforward.com/index>

<http://foundationcenter.org/>

http://med.stanford.edu/rmg/funding/postdoc_funding.html

http://research.fas.harvard.edu/postdoc_opportunities

<http://www.rockefeller.edu/sr-pd/index.php?page=PostdocPrograms>

http://international.oregonstate.edu/sites/international.oregonstate.edu/files/atosu/Selected_FundingSourcesOpenToNon-US-Citizens.pdf

<http://www.onsf.uconn.edu/find-scholarships/opportunities-for-non-us-citizens/>

https://www.nsf.gov/funding/education.jsp?fund_type=3

<http://grants.nih.gov/grants/guide/pa-files/PA-16-307.html>

<http://grants.nih.gov/grants/how-to-apply-application-guide/forms-d/fellowship-forms-d.pdf>

<https://grants.nih.gov/grants/how-to-apply-application-guide/resources/contacting-nih-staff.htm>

https://grants.nih.gov/grants/planning_application.htm