NIH F31 Fellowships

Kate Ross, Senior Manager Complex Programs and Training
Sponsored Programs Administration
http://www.rockefeller.edu/sr-pd/?page=Training_Area
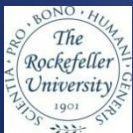
Emily Harms, Senior Associate Dean

CRC 206
October 17, 2016

Why Apply for Funding

- Prepare for a career as an independent investigator
- Contribute to the University mission
- Be an active member of the larger research community and participate in the discovery process
- Secure resources for training & research expenses
- Write up your findings (for future publications)
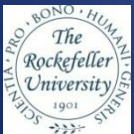
University Support for Grant-seeking

The process of seeking and applying external resources to support research is an integrated effort coordinated by several departments and offices:

- Office of Sponsored Programs Administration – OSPA (program development, pre-award, post-award and training)

- Finance (post-award)

- Compliance areas

- Infrastructure - Resource Centers
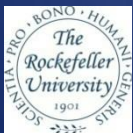
Types of Pre-Doctoral Funding

- Fellowships
- Training Grants
- Dissertation Grants
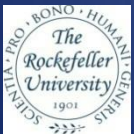
Where to Apply

- Federal
  - NIH
  - NSF
  - Department of Defense
  - Other federal sponsors as funding programs are made available
- Foundations
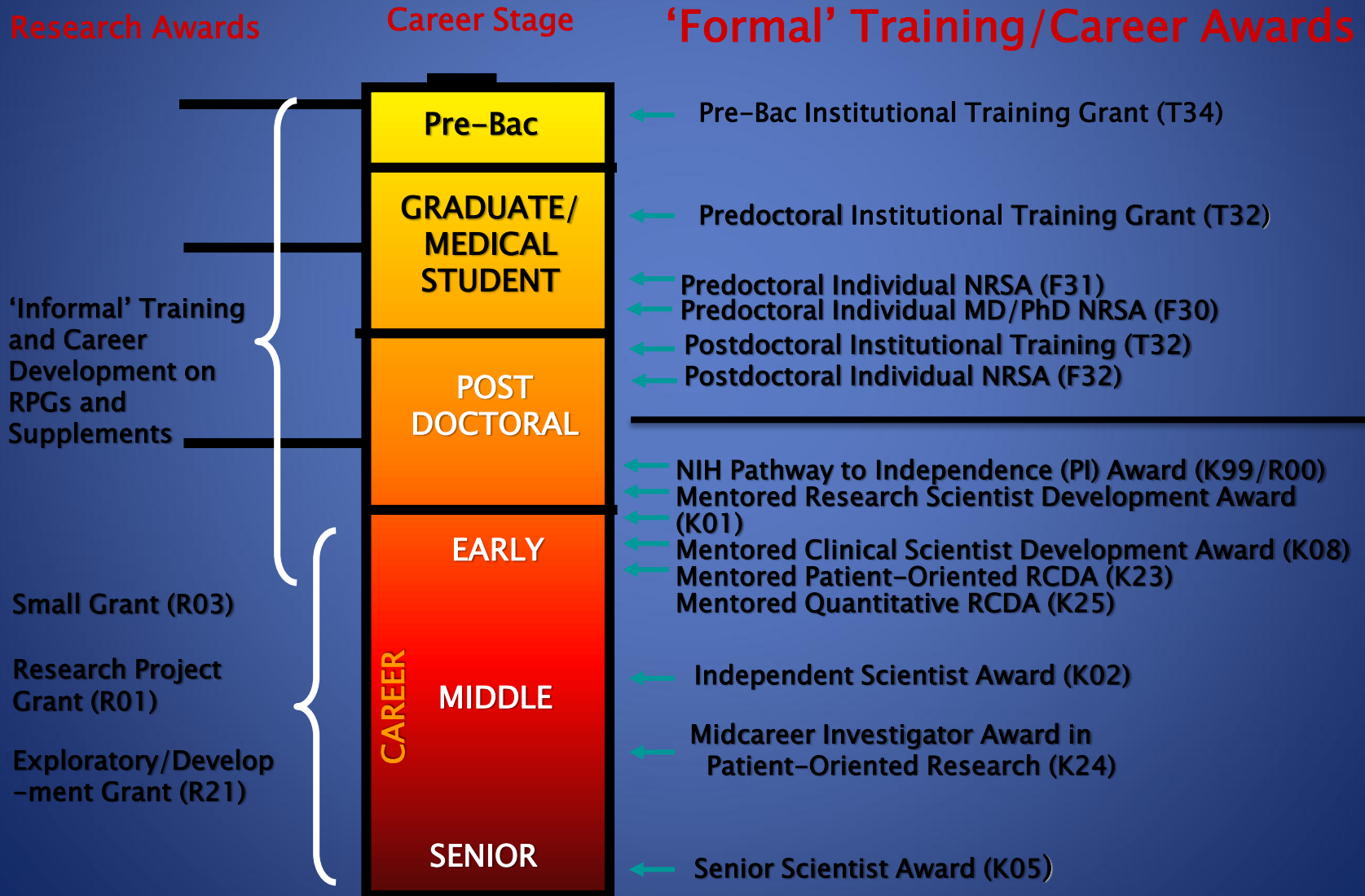- Internal (via Deans Office and Development)

Resources for Finding Funding Opportunities

- OSPA
  - [Predoc Fellowship Funding Sources](#)
  - [Funding Opps Database](#)
  - OSPA weekly Funding alerts
  - [Pivot Database](#)
  - Other [Online Resources](#) maintained by Program Development
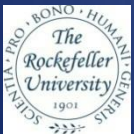- Mentor and peers

# Research Training and Career Development Timeframe

Research Awards

Career Stage

'Formal' Training/Career Awards

Pre-Bac ← Pre-Bac Institutional Training Grant (T34)

GRADUATE/ MEDICAL STUDENT ← Predoctoral Institutional Training Grant (T32)

← Predoctoral Individual NRSA (F31)
← Predoctoral Individual MD/PhD NRSA (F30)

'Informal' Training and Career Development on RPGs and Supplements

← Postdoctoral Institutional Training (T32)
← Postdoctoral Individual NRSA (F32)

POST DOCTORAL

← NIH Pathway to Independence (PI) Award (K99/R00)
← Mentored Research Scientist Development Award (K01)
← Mentored Clinical Scientist Development Award (K08)
← Mentored Patient-Oriented RCDA (K23)
Mentored Quantitative RCDA (K25)

EARLY

Small Grant (R03)

CAREER

MIDDLE ← Independent Scientist Award (K02)

Research Project Grant (R01)

← Midcareer Investigator Award in Patient-Oriented Research (K24)

Exploratory/Develop –ment Grant (R21)

SENIOR ← Senior Scientist Award (K05)

NIH Kirschstein National Research Service Awards (NRSA)

- F31 Predoctoral
  supports promising doctoral candidates who will be performing dissertation research and training in scientific health-related fields

- F32 Postdoctoral
  supports promising applicants with potential to become productive and successful independent research investigators in scientific health-related fields

- T32 Institutional Training Grant
  supports institutions with established programs of supervised research career development in the fields of biomedical and behavioral research
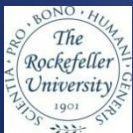
NIH Kirschstein National Research Service Awards (NRSA)

From http://grants.nih.gov/training/nrsa.htm, for individuals working on a research doctorate
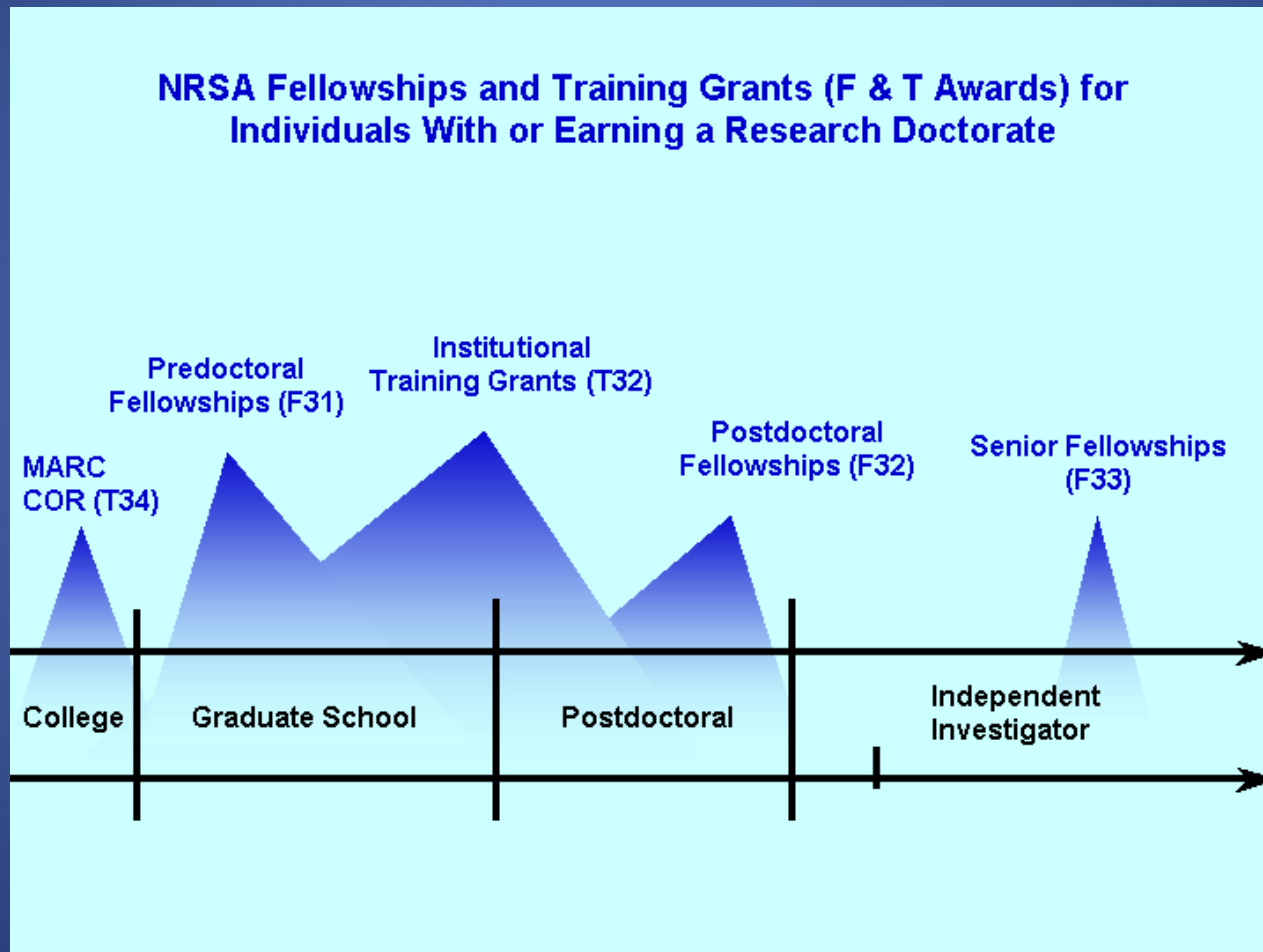
NIH Fellowships Awards Summarized

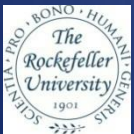|	F30	F31	F32
Citizenship Eligibility	USA or Permanent Resident	USA or Permanent Resident	USA or Permanent Resident
Length of Project Period	Up to 5 years mentored	Up to 5 years mentored	Up to 3 years mentored
Estimated Range of Annual Direct Costs	$27,576 plus partial tuition & fees	$27,576 plus partial tuition & fees	$52,542 - $66,354 (varies with years of postdoctoral experience)
Type of Training	MD/PhD students	PhD students (or equivalent)	Post-doctoral
Minimum effort committed to research training program	100%	100%	100%
Letters required	Mentor plus 3 referees	Mentor plus 3 referees	Mentor plus 3 referees
Participating NIH Institutes (check PA for listing as not all ICs participate)	PA-16-305	PA-16-309	PA-16-307

Tips for NIH Training Fellowships

- Require 100% commitment towards research training
- Recognized/experienced mentor(s) is advised
- Training plan must be clear, focused, as well as exciting and practical
- Biosketches should reflect the potential of the candidate and the qualifications of the mentor
- Highlight coursework and professional work directly related to your research topic
- Review relevant Guidelines for Reviewers

Timeframe of Grant-Seeking Process

The grant-seeking process is long and could take 12 months or even longer from initial planning, identifying relevant opportunities, writing applications, submitting, going through the review process, to award making and start date!

Grants Process at a Glance
Standard Due Dates for Competing Applications
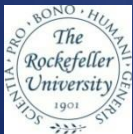
Steps To Beginning Your Proposal

- Start early, approx. 6-9 months before deadline
- Review the funding program you deem relevant
- When available, review recently [funded proposals](#)
- Find out [success rate](#) at target agency/institute
- Discuss your research/proposal with your mentor
- Contact the Program Official/Director
- Secure reference letters
- Register with sponsor
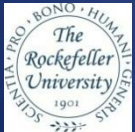- Work with [your Sponsored Programs Officer](#) (SPO)
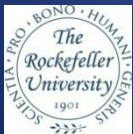
Summary of Key Resources

- Mentor
- Peers
- RU OSPA
  - Forms and format
  - Budget (e.g personnel effort & costs, indirect costs)
  - Boilerplates
  - Your Grants Management Specialist
  - Website
  - NIH Fellowship Checklist
- Sponsor's website
- NIH
  - RePORT
  - Program Official
  - Office of Extramural Research
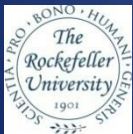
Preparing the Proposal

- Review scope of the funding opportunity announcement
- Make note of the deadline
- Verify eligibility with your Sponsored Projects Officer
- Get your Mentor's consent
- Read closely the guidelines/instructions – including special submission requirements
- Design your outline and research plan according to the sponsor's instructions
- Discuss training and research plan with your mentor
- Fully address the review criteria in the order presented by the sponsor

Application Resources

- NIH Guidelines for Fellowships: http://grants.nih.gov/grants/how-to-apply-application-guide/forms-d/fellowship-forms-d.pdf

- Page limits: http://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/table-of-page-limits.htm

- Sample applications from NIGMS: https://www.nigms.nih.gov/training/indivpredoc/pages/predoctoral-f31-sample-applications.aspx

Cover Letter

- Required
- Must include a list of Referees (including name, departmental affiliation, and institution)
  - At least 3, and no more than 5, referees are required
  - See NIH guidance on submitting reference letters
- See cover letter boilerplate

Project Summary/Abstract

- 30 lines Maximum

- State the broad, long-term objectives and specific aims, making reference to the health relatedness of the project. Describe concisely the research design and methods for achieving the stated goals. Avoid describing past accomplishments and the use of the first person.

Project Narrative/Health Relevance Statement

- 2-3 sentences

- Describe the relevance of this research to public health. For example, describe how, in the short or long term, the research would contribute to fundamental knowledge about the nature and behavior of living systems and/or the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.
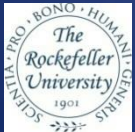
Biosketches

- Required for the applicant and mentors/senior key personnel

- 5 page limit per biosketch

- Biographical Sketch Format Page
  - A. Personal Statement
  - B. Positions and Honors
  - C. Contributions to Science
  - D. Research Support and/or Scholastic Performance

Applicant's Background and Goals for Fellowship Training

- 6 pages maximum

- A. Doctoral Dissertation and Research Experience

- B. Training Goals and Objectives

- C. Activities Planned Under This Award

Components of Your Thesis Research Proposal

- Specific Aims (~1 page)

- Background/Significance (~2 pages)

- Preliminary Results (~3 pages)

- Research Plan (~4 pages)

Specific Aims

- 1 page maximum

- State precisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved.

Research Strategy

- 6 pages maximum
  - A. Significance
  - B. Innovation
  - C. Approach

- For applications with multiple specific aims, you may address the 3 items above for each specific aim individually or collectively.

- For new applications, include information on preliminary studies (including data collected by others in the lab), if any.
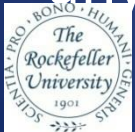
Respective Contributions

- 1 page

- Describe the collaborative process between you and your sponsor in the development, review, and editing of this research training plan. Discuss the respective roles in accomplishing the proposed research.

Selection of Sponsor and Institution

- 1 page

- Explain why the sponsor, co-sponsor (if any), and institution were selected to accomplish the research training goals.

Other Required Items

- Bibliography & References Cited

- Facilities & Other Resources – have [boilerplate](#)

- Training in RCR (1 page – see [boilerplate](#))

- Description of Institutional Environment and Commitment to Training (2 pages – see [boilerplate](#))

Sponsor and Co-Sponsor Statements

- 6 pages
  - A. Research Support Available
  - B. Previous Fellows/Trainees
  - C. Training Plan, Environment, Research Facilities
  - D. Number of Fellows/Trainees to be Supervised During Fellowship
  - E. Applicant's Qualifications and Potential for a Research Career

Other information to provide, if applicable

- Letters of Support from Collaborators, Contributors, and Consultants (if applicable – 6 pages)

- Human Subjects sections (if applicable)

- Vertebrate Animal section (if applicable)

- Resource Sharing Plan (if applicable – generation of model organisms?)

- Applications for Concurrent Support (if applicable)
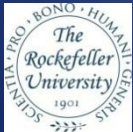
NIH Peer Review: Scored Criteria

1. Fellowship Applicant
2. Sponsors, Collaborators, Consultants
3. Research Training Plan
4. Training Potential
5. Institutional Environment and Commitment to Training

NIH Review: Compliance Areas

1. Protections for human subjects
2. Inclusion of women, minorities, and children
3. Vertebrate animals
4. Biohazards
5. Training in the Responsible Conduct of Research
6. Resource Sharing Plans
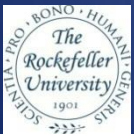
Compliance: Human Subjects

- Research protocol must be submitted and reviewed by the University Institutional Review Board (IRB) before research can start
- Individuals involved with human subjects must have Protection of Human Subjects Certification
- Applications must be reviewed by the IRB before an existing approved protocol can be applied in the proposal
- Address sponsor's requirements

Check Hospital Internal Home Page for more information
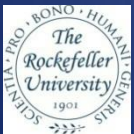
Compliance: Vertebrate Animals

- Research protocol must be submitted and reviewed by the University Institutional Animal Care and Use Committee (IACUC) before research can start
- Applications must be reviewed by the IACUC before an existing approved protocol can be applied in the proposal
- Individuals involved with animal subjects must have proper training
- Address sponsor's requirements

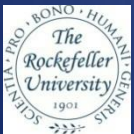Check IACUC Home Page for more information
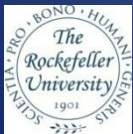
Compliance Resources

- Additional Compliance areas include
  - Conflict of Interest
  - Public Access Policy
  - Export Control
  - Recombinant DNA
- Visit OSPA's [Compliance Support](#)
  - A comprehensive list of Compliance Areas and links to the corresponding RU department
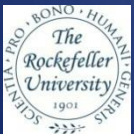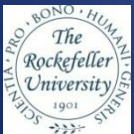
Additional Elements

- Easy to Read
- Format
  - Font type and size
    - Arial 11 recommended
 - Margins
    - 0.5" minimum
- Page limits

Submission Process

- Complete University [Routing Form](#)
- For full review and institutional sign-off, submit complete packet to OSPA at least 5 business days before sponsor's deadline
- Submitted via [InfoEd](#)
- Visit OSPA's [Application Review Requirements](#) for more information

Post-submission

- Receive confirmation of receipt and assignment
- Note sponsor's decision date
- Receive summary statement
- If fundable score: submit "Just-in-Time" information and address any pending issues on your application; resolve any overlap of science and effort
- If low score or unscored: evaluate the reviewers' comments; speak with your Program Official; prepare resubmission and work with your SPO
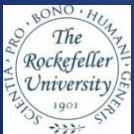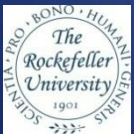
Post-Award Management

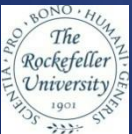Work with OSPA and Finance on post-award management of your grant:

- Review the award documents
- Note scientific reporting requirements and other terms and conditions
- Follow funding restrictions/requirements
- Work with [OSPA](#) and [Finance](#) if you need to revise your budget and if approval is required by sponsor
- Brief your mentor and lab administrator and keep them informed of your award and progress

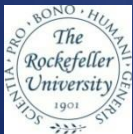All financial reporting is handled by [University Finance](#) department.

Award Management Contacts

For pre-award and post-award issues, [Contact Us](#)!

Questions and Suggestions