
Predoctoral Grant Information and Application Process for an NIH Predoctoral Grant

SUBMISSION PROCESS PRESENTED BY A
NIMH R36 DISSERTATION AWARD RECIPIENT

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Disclaimer




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Outline



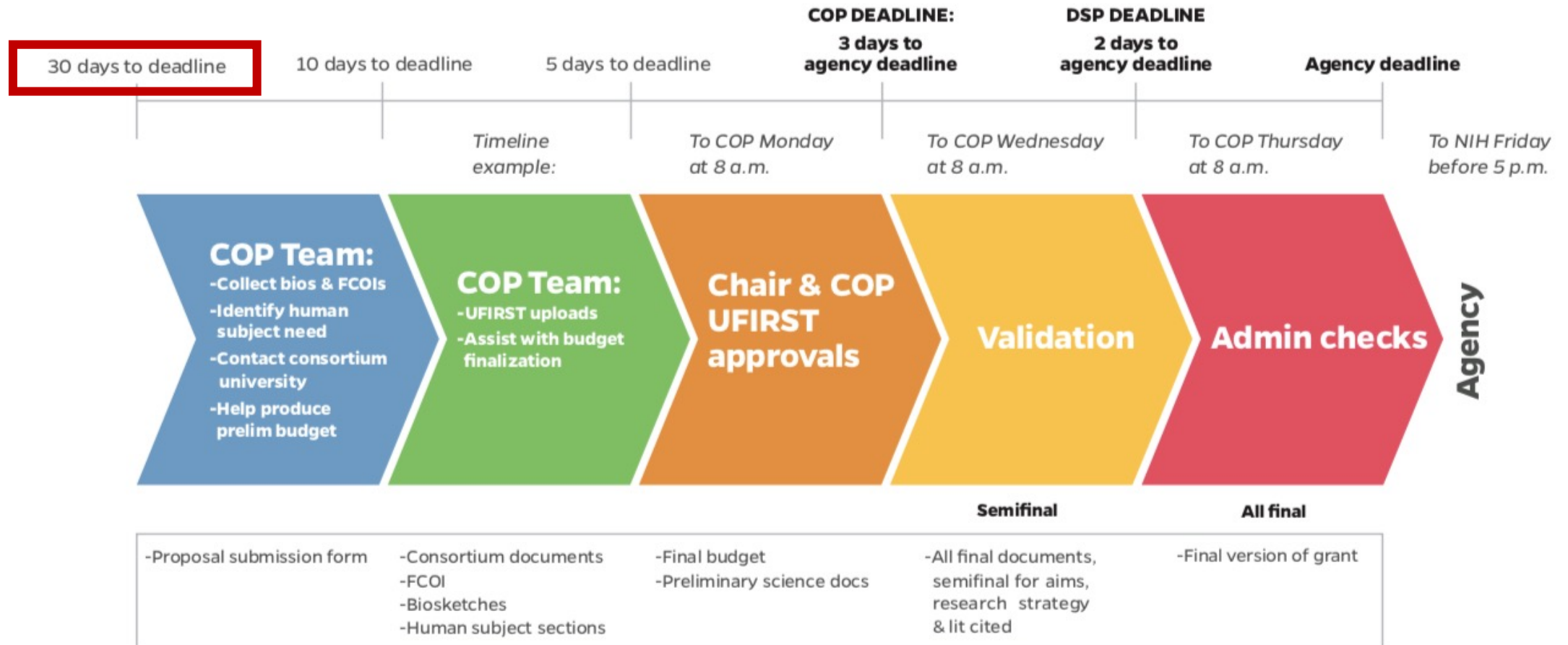
- **Overview of timeline**
 - **Identifying a grant mechanism: predoctoral options**
 - F31 vs. R36
 - PhRMA Foundation option for non-citizens
 - **Writing the grant: the components**
 - Contacting a program office
 - Shared components (F31 and R36)
 - Tips for key components
 - **Getting the grant: post-submission process**
 - Grant reviews
 - Scoring
 - Summary statement, JIT, and NOA
 - **Summary**
- 



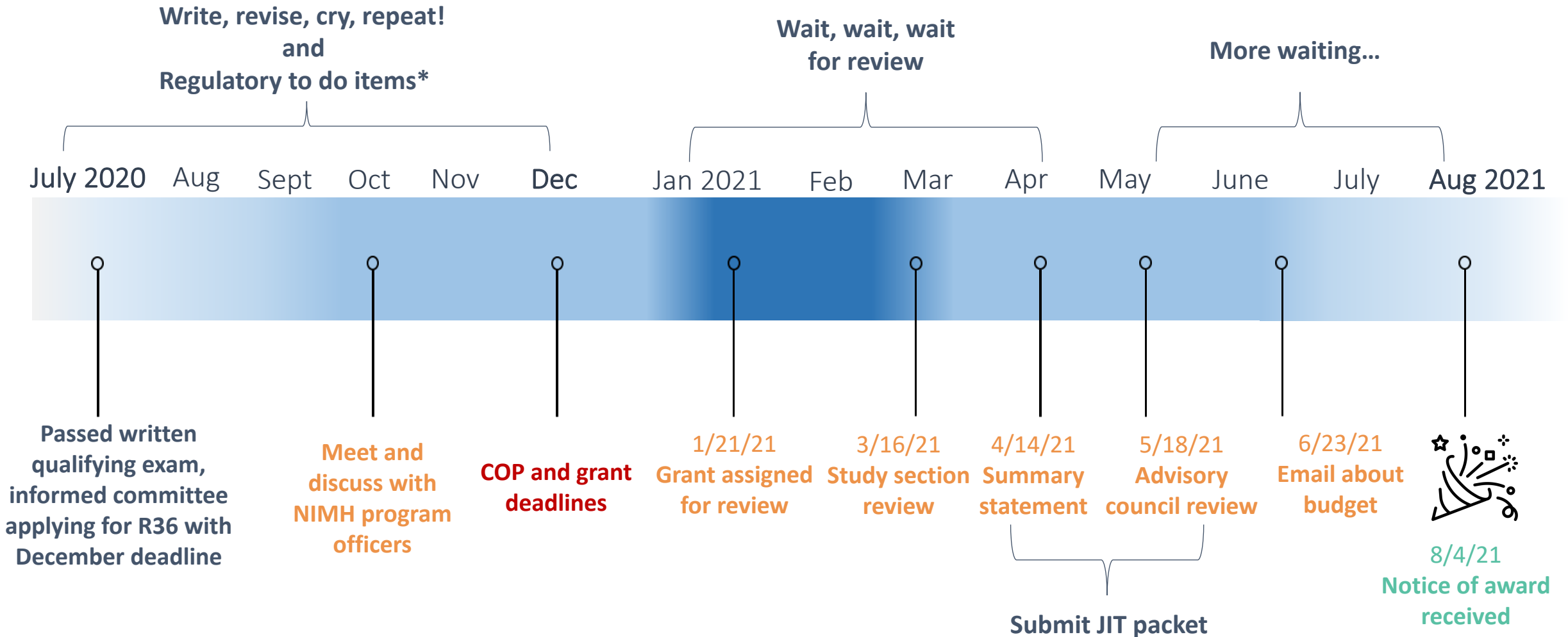
Timelines

College of Pharmacy (COP) Timeline

Grant Submission Timeline



My Timeline

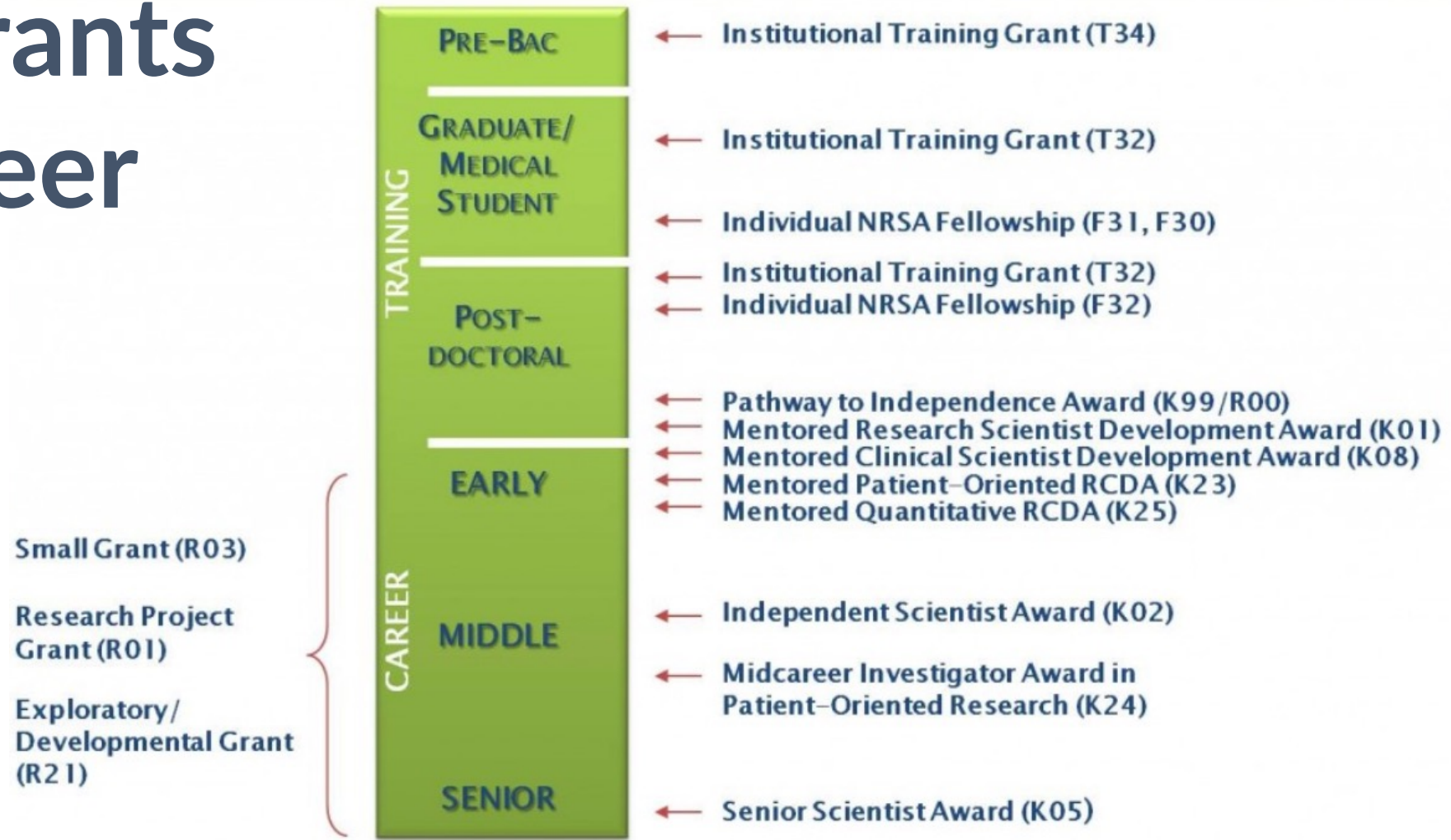


*Everything but Specific Aims/Research Strategy, e.g., biosketches, budget justification, Human Subjects Form, etc.



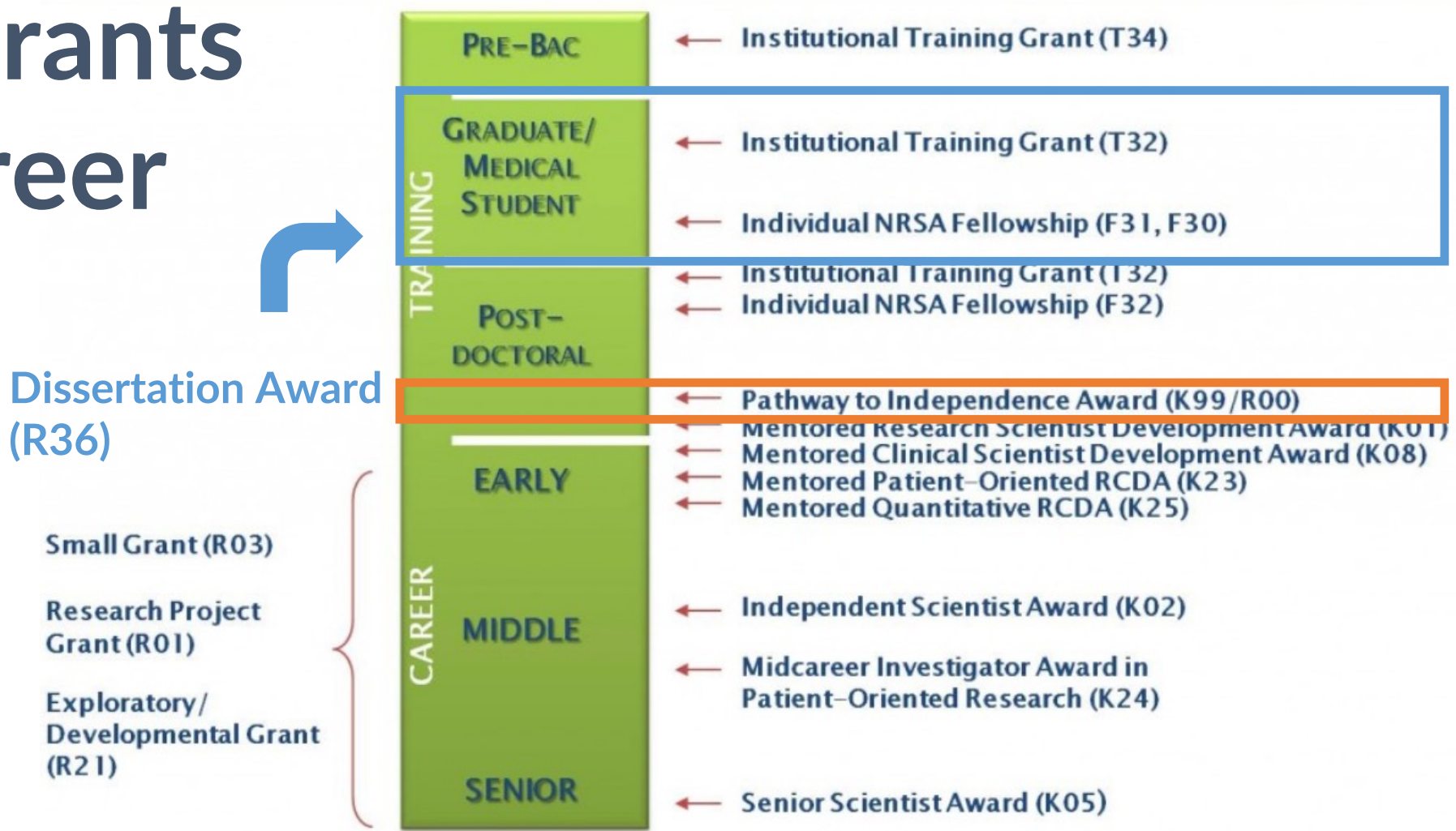
Identifying a grant mechanism

NIH grants by career stage



Graphic represents a small sample of NIH funding mechanisms available.

NIH grants by career stage



Graphic represents a small sample of NIH funding mechanisms available.

Predoctoral grants

- F31 and R36 available for U.S. citizens and permanent residents enrolled in a doctoral research program
- K99/R00 is not predoctoral but is available for non-citizens
 - If you are considering a post-doc and an academic career
 - Start in the final phases of the PhD program
- Predoctoral options available for those with non-U.S. citizenship, typically issued from foundations or industry
- Ask your advisor for help identifying the right mechanism

Suggestion: submit a grant if you are considering academia – going through the process will give you firsthand knowledge of whether a career involving frequent grant writing is a fit for you!

Predoctoral grant for non-citizens

- The PhRMA Foundation's predoctoral fellowship is open to non-U.S. citizens and U.S. citizens
- Application opens / deadline: December 1 / February 1 (annually)
- Provides up to \$25,000 per year in stipend support (12-24 months)
- **Application components similar to NIH grant:**
 - Biosketch (NIH or NSF format)
 - Extended Letter (cover letter)
 - Thesis Project Description – equivalent to Specific Aims page and Research Strategy (6 pages total)
 - Project Summary and Abstract
 - Reference Letters from: advisor, department chair, and 1-3 others
 - Transcripts (some NIH institutes may require, NIMH R36 did not)

F31 vs. R36

	F31	R36
Title	Predoctoral Individual National Research Service Award	Dissertation Award
Goal	To provide supervised training during research leading toward PhD degree	To support dissertation research costs
Institutes	Almost all	Only NIA, NIMH, NIDA, AHRQ
Timeline	Start during coursework phase Year 1 or 2, possibly year 3 Take grant writing course early on	More flexible, start during proposal development phase Year 3 or 4
Training Plan*	Important component (6 pages)	N/A 1-2 courses may improve application
\$\$\$	Stipend, tuition + fees, research expenses	Stipend, research expenses; tuition + fees may not be covered

*Applicant's Background and Goals for Fellowship Training



Writing the grant



Contacting a program officer (PO)




Once you've identified an NIH mechanism...

- Plan to reach out to a PO early in the writing stage
 - 2-3 months from deadline
- Specific Aims pages should be ready and reviewed by advisor upon requesting a meeting
- Be prepared to speak to more than one PO!
- Talk to your advisor about what questions are appropriate to ask the PO (and review NIH guidelines about this)



F31 and R36 shared components



- Cover Letter
 - Project Summary/Abstract
 - Project Narrative (2-3 sentences)
 - Specific Aims (1 page)
 - Research Strategy (6 pages)
 - Reference Letters
 - Facilities and Resources/Equipment
 - Biosketches
 - Budget
 - Training in the Responsible Conduct of Research
 - Resource Sharing Plan
- 



F31 and R36 specific components

F31

- Detailed training plan: goals, coursework, and how mentoring team will guide your doctoral training
- For most institutes, reference letters must be submitted by referee via eRA Commons system

R36

- Depending on institute or special emphasis, may need to submit an extra personal statement or letter
- Mentor statement and reference letters included in packet

Tips for key components

Title

- Consider PICO criteria and methods
- Use NIH RePORTER for inspiration
- **Grant title:** Applying Big Data to Improve Mental Health Outcomes with Restless Legs Syndrome Treatment
 - Effective – identify methods, population, exposure, outcomes, and relevance to institute
- **Dissertation title:** Epidemiology, Utilization and Safety of Pharmacological Treatments for Restless Legs Syndrome
 - Not effective! – this would not entice NIMH to read on....
- Title doesn't need to be finalized in early stages of writing

Tips for key components

Specific Aims

- Only 1 page but will likely require the most effort!
 - Expect to revise many times throughout the writing process
- Should be committee-approved before other grant components are underway
- Using citations in the Specific Aims pages is controversial – discuss with your advisor about formatting citations
 - Aims page is *separated* from the Research Strategy section in the submitted packet, so the idea is that the Aims page should be standalone
 - I started citations in my Specific Aims – *but this is how I accidentally went over the Research Strategy page limit!*



Tips for key components

Research Strategy

- Use figures/diagrams to break up text and provide visualization
 - Use strategically as vehicles for evidence communication that require less 'page space' than text alone
 - Avoid text-heavy tables!

Biosketch


- Justify diversity qualifications, if applicable
- Tell your story and don't be afraid to get personal



Tips for key components



Budget Justification

- **Key Personnel**
 - You for R36
 - May include your advisor and/or committee members for F31
 - **Other Personnel**
 - Likely N/A for POP students
 - **Tuition**
 - This is where I included the costs for planned coursework
 - **Materials and Supplies**
 - If using MarketScan data, there is a \$1,000 data use fee for dissertation research, which can be included here
 - Publication and Printing Costs
 - **Travel**
 - Expenses for conference registration and travel
- 

Tips for key components

Overall

- You will go through many iterations of drafts, don't give up
- Pay close attention to formatting requirements – **they are mandatory!**
 - e.g., required font sizes and margins are grounds for application dismissal if not formatted correctly
- Lastly, don't forget to thoroughly read the 'application guidance' document for your mechanism, there may be extra requirements
 - e.g., some may require letters of recommendation to be submitted from non-committee members, others may require transcripts or other supplemental information



Getting the grant

POST-SUBMISSION PROCESS

Review criteria

F31

- Overall impact
- Fellowship applicant
- Sponsors/collaborators
- Research training plan
- Training potential
- Environment
- Protections for human subjects or vertebrate animals if applicable
- Inclusion of women, minorities and children

R36

- Overall impact
- Significance
- Investigator(s)
- Innovation
- Approach
- Environment
- Responsiveness to institute priorities
- Inclusion of priority populations

Grant reviews

First level of review

SCIENTIFIC REVIEW GROUP

Study Section
Scientific Review Group: ZRG1 F18-G (20)
Council Meeting Date (YYYY/MM): 2021/05
Meeting Date: 03/16/2021
Meeting Time: 10:00
Study Roster: View Meeting Roster

- Fellowship Study Sections review R36s
- Use PHS Assignment Request Form to request study section assignment

Second level of review

ADVISORY COUNCIL OR BOARD REVIEW

Advisory Council (AC)
Meeting Date: 05/18/2021
Meeting Time: 12:00

- Reviews overall impact score, percentile ranking (if applicable), and summary statements considering the Institute/Center's priorities
- Considered a "lower hurdle"

Post-review

FUNDABLE SCORE DECISION



- Director of the Institute or Center makes final funding decision
- Not Funded decision is possible

Scoring

Degree of Impact	Impact Score	Descriptor	Additional Guidance on Strengths/Weaknesses
High	1	Exceptional	Exceptionally strong with essentially no weaknesses
	2	Outstanding	Extremely strong with negligible weaknesses
	3	Excellent	Very strong with only some minor weaknesses
Moderate	4	Very Good	Strong but with numerous minor weaknesses
	5	Good	Strong but with at least one moderate weakness
	6	Satisfactory	Some strengths but also some moderate weaknesses
Low	7	Fair	Some strengths but with at least one major weakness
	8	Marginal	A few strengths and a few major weaknesses
	9	Poor	Very few strengths and numerous major weaknesses
Definitions Minor: easily addressable weakness that does not substantially lessen the impact of the project. Moderate: weakness that lessens the impact of the project. Major: weakness that severely limits the impact of the project.			

My scoring

	Critique 1	Critique 2	Critique 3
Significance	1	2	1
Investigator(s)	4	2	1
Innovation	1	3	2
Approach	2	4	2
Environment	2	2	1

OVERALL IMPACT SCORE: 21

Summary statement

- Similar to peer reviewer comments on a manuscript

Key strengths

- Mentoring team provide complementary expertise
- Applying pharmacoepi methods is innovative
- Using proxy measures for impulsive behaviors is innovative
- SIPTW for baseline covariate adjustment
- Focus on individuals with mental health disorders make the research pertinent

Key weaknesses

- Biosketches from mentoring team are missing
- Facilitates and Resources form missing
- Resource Sharing Plan missing
- No explicit commitment from primary mentor
- Primary mentor is an ESI
- The project is very ambitious and the 12-month timeline may be too short

Just in time (JIT)

- Depending on impact score, JIT may automatically be issued
 - Play close attention to deadlines
 - You may reach out to your PO or they may email you
- For F31 and R36, JIT materials typically include:
 - 1-page summary statement response to critiques
 - Response to budget clarifications, if applicable (advisor and grant administrators will assist)
 - Proof of IRB approval, if applicable
- My packet
 - Summary statement response, budget update, missing items
 - My advisor and I met with the PO assigned to my grant for guidance on what to submit based on the summary statement



Notice of award (NOA)

- I received NOA approximately 3 months after the Advisory Council Review
- If in COP, the official NOA communication is sent to grant administrators office first (Division of Sponsored Programs [DSP])
 - DSP or your COP grant administrator will forward the notice to your advisor and you
- Following receipt of NOA, expect to complete HR trainings required for grant awardees (release of funds is contingent on training completion)

Summary

- Start early and plan for 12-15 months start to finish
- Choose a mechanism based on training goals, mentor alignment/funding history, and passion for the research area
- Make a detailed checklist
 - Priority: dates for COP deadlines and dates for committee members (drafts for review, letters if applicable)
 - Sufficient turnaround time
 - Plan for something unexpected to happen!
- Use NIH RePORTER and PO discussion to set realistic expectations
- Beware of imposter syndrome
- Do not give up!

Acknowledgements

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- Nicole Corwine
- Carl and Michael
- My family and friends
- POP family and friends

Mental health resources

Counseling and Wellness Center (CWC)

- Consultations, short-term individual counseling, crisis support, alcohol and other drug services, psychiatry
- Most services available for all enrolled, full-time students (health fee must be paid)

Talkspace

- Graduate assistants, their spouses & dependents 18+ years enrolled in GatorGradCare
- No cost, online mental health service
- Live video sessions with a dedicated therapist

UF Employee Assistance Program (EAP)

- GatorGradCare enrolled are eligible
- Speak with a professional 24/7

TIP: get established with a therapist *before* a crisis occurs! Ask about sliding scale rates.

Source: <https://benefits.hr.ufl.edu/wp-content/uploads/sites/3/2019/12/Behavioral-Health-Resources-Flyer-003.pdf>

Helpful links

- **NIH RePORTER:** <https://reporter.nih.gov/>
- **Study Sections information:** <https://public.csr.nih.gov/StudySections>
 - See Fellowship Study Sections
- **NIH application instructions:** <https://grants.nih.gov/grants/how-to-apply-application-guide.html>
- **Anatomy of Specific Aims page:** <https://www.biosciencewriters.com/NIH-Grant-Applications-The-Anatomy-of-a-Specific-Aims-Page.aspx>
- **Example of a Research Strategy for a funded AHRQ R36:**
<http://faculty.washington.edu/cb11/wordpress/wp-content/uploads/2017/12/bennette-AHRQ-R36-RESEARCH-STRATEGY.pdf>
- **Example of a full packet for a funded F31:**
<https://smhs.gwu.edu/ibs/sites/ibs/files/F31%20Sample%20Application%206.pdf>