



Strategies for Applying for the NRSA and PRAT Fellowships

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My Experience

Graduate Student

- Predoctoral NRSA (F31) from NINDS
- Applied August 2001
- Reviewed in winter 2001/2002
- Grant awarded July 1, 2002–June 30, 2005
- University of Virginia

Postdoctoral Fellow

- PRAT Fellowship from NIGMS
- Lab of Dr. Robert Wenthold, NIDCD
- Arrived at NIH in Aug. 2005
- Applied for PRAT in Dec. 2005
- Received notice in spring 2006
- Fellowship awarded Oct. 2006 – Oct. 2009

Both provide stipend and yearly allowance for travel/supplies

Application for NRSA

- PHS 416-1

- <http://grants.nih.gov/grants/funding/416/phs416.htm>

- 4 sections:
 - 1. you
 - 2. your sponsor/co-sponsor
 - 3. three references (NOT your sponsor or co-sponsor)
 - 4. appendix



NRSA Applicant – Face Page

- Basic information about your grant: title, your name, address, sponsor, level of fellowship (predoctoral/postdoctoral), dates and length of desired award, signature of institute official
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- Tip: always ask for the maximum length of time
 - Tip: if co-mentors, list primary sponsor here and designate co-sponsor on the next page

NRSA Applicant – Form Page 2

- Sponsor and co-sponsors (if applicable)
 - Summary of research proposal (**cannot** exceed space provided!)
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- Tip: This paragraph must excite the reviewers!
- Tip: Example of sentence order:
 - current state of research
 - current problem/unknown in research
 - how your proposal will address this unknown
 - specific aims
 - brief mention of methods and model
 - end: 2-3 sentences about relevance to public health
(relate to mission of the NIH Institute/Center!)



NRSA Applicant – Form Page 3

- Your goals for training and career during fellowship
 - Tip: State your long-term career goal and list all the ways in which training during this fellowship will help you get there. Examples: techniques learned, scientific skills (presentations, writing, scientific communication)
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- Activities planned during award (research, course work, teaching, clinical)
 - Tip: Primary time during award should be spent doing research



NRSA Applicant – Biographical Sketch

- Education/Training
 - Positions
 - Honors
 - Publications (including Abstracts, reviews)
 - Scholastic Performance (grades, GRE if predoc)
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- Tip: NIH provides a sample biographical sketch on the application website

NRSA Applicant – Form Page 5

- Previous research experience

- Describe any previous research performed in any previous lab
- If early graduate student, can omit description of doctoral dissertation research
- Cannot exceed 2 pages

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- Tip: summarize main concepts/techniques in a clear, concise manner



NRSA Applicant – Research Training Plan

- No form page; use “continuation” pages
- Research plan:
 - Specific Aims
 - Background and Significance
 - Preliminary Studies
 - Research Design and Methods
 - Human Subjects Research
- First four sections cannot exceed 10 pages

Advice for Research Plan

- Before listing specific aims, write paragraph describing current state of research and unknown questions in field (i.e., expand paragraph from form page 2)
- Reviewers like hypothesis-driven research: include principal hypothesis in first paragraph; each specific aims should also have hypothesis (clear yes-or-no)
- 2-3 specific aims: don't be too ambitious!
- Specific aims **cannot** be dependent on each other
- Specific aims should not be “fishing expeditions”



More Advice on Research Plan...

- Relate significance to mission of NIH I/C
- At least for grad students, prelim data not critical
- If including prelim data, make sure it is clear and understandable
- For Research Design and Methods, each experiment should include rationale, protocol, data analysis, anticipated results and interpretation, and alternative strategies/future directions

Sponsor/Co-sponsor Section

- Biographical sketch
 - Research support, previous trainees
 - Training plan for applicant
 - # of fellows supervised during fellowship
 - Applicant's qualifications and potential
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- Tip: Sponsor's ideas of your training and career goals must match yours
 - Tip: experience of sponsor in training fellows is important
 - Tip: facilities, environment must be right for your research plan; if not, get co-sponsor



General Advice

- Make it readable!
- Follow *all* instructions
- Sell the significance of your research
- For training grants, reviewers are looking at you and your sponsor as a whole, not just your research plan
- Must provide short progress reports each year, but is okay if your research plan changes along the way

PRAT Application

- <http://www.nigms.nih.gov/Training/PRAT.htm>
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- Essentially a shortened version of NRSA
- Brief questions regarding your background, previous research experience, publications, honors
- Sponsor's biographical sketch
- 3 references (one of them can be Ph.D. mentor)

PRAT application (continued)

- Question 11 - “Type of career planned; research; academic objectives” = **research plan**
 - Cannot exceed 3 pages
 - Specific aims with inclusion of brief experimental descriptions and possible outcomes/alternative approaches
- Question 12 – “What special training or experience do you seek at NIH?/ How will this relate to pharmacology?”
 - Cannot exceed 1 page
 - Significance of research, how it relates to pharmacology, advantages of working in my lab’s environment



Advantages of PRAT Program

- Monthly seminars with research talks and career advice from outside speaker
- Networking lunches with previous PRAT fellows, NIH faculty & administration
- Annual research symposium
- Career advice from co-directors Dr. Richard Okita and Dr. Pamela Marino
- \$2400 yearly allowance for supplies, travel
- First year IRTA; second and third years FTE