How One Institution Collaborated Internally to Increase Success with the NSF Graduate Research Fellowship (GRFP)

Presenters:
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What is the GRFP? Goals and Key Elements

• To select, recognize, and financially support individuals early in their careers with the demonstrated potential to be high achieving scientists and engineers

• To broaden participation in science and engineering of underrepresented groups, including women, minorities, persons with disabilities, and veterans

Five Year Award to individual students – $138,000

• Three years of financial support
  – $34,000 Stipend per year
  – $12,000 Educational allowance to institution

• 2010 - 2015: 2,000 Fellowships each year
  – 2015: 16,000 Applications - ~12.5% success rate
Why Universities Should care about GRFP

- High quality graduate students (US citizens, nationals, perm. residents) selected by an independent national competitive process
- Fellows become knowledge experts who contribute significantly to research, teaching and innovations in science and engineering
- Fellowship support gives Fellows greater independence: time and freedom to do their own research (flexible, unrestrictive, portable)

GRFP Successes
- Higher Ph.D. completion rates
- Greater % of women and URM than national population of PhD completers

Since 1952
- 50,000 Fellows
- 42 Nobel Laureates
- 450 Members of the National Academy of Sciences
NSF FastLane
• Personal, Relevant Background and Future Goals Statement (3 pages)
• Graduate Research Statement (2 pages)
• Transcripts (uploaded electronically)
• Three letters of reference (received by X Nov 2015, 8 pm EST)

DEADLINES: October/November 2015 (received by 8 pm EST)

See GRFP Solicitation for application details and requirements
Promoting GRFP on Campus

• Establish “GRFP champions” at university admin level
• Publicize GRFP on campus: focus on domestic students, undergrads and beginning grad students
• Identify faculty willing to mentor applicants
  – Encourage faculty to register to serve as reviewers for GRFP
• Establish peer mentoring system
  – Formal courses, informal advisement
• Hold workshops
  – Find faculty advisors and Fellows willing to participate
• Utilize GRFP’s web resources
• Promote benefits of GRFP to undersubscribed departments
  – Juniors (REU), seniors, beg. grad students
• Partner/engage with Honors College, REU Site Coordinators
• Reach out to GRFP Resource People on www.nsfgrfp.org
• Engage local/campus GRFP Coordinating Officials (www.fastlane.nsf.gov/grfp/)
• Support courses on science communication, proposal writing, include peer review
GRFP Resources

- NSF GRFP Website (nsf.gov/grfp)
  - Solicitation and links
- NSF GRFP FastLane Website (fastlane.nsf.gov/grfp)
  - Application, guides, announcements
- GRFP Website (nsfgrfp.org)
- Current & former Fellows
- Phone & e-mail
  - 866-NSF-GRFP (673-4737)
  - info@nsfgrfp.org
History and Development of UNH program

• Partnership between UNH Graduate School, Office of National Fellowships and Research Office
• Before 2013, grad school was hosting info session with little follow up
• Research Office recognized that a single office did not have the capacity to run a comprehensive GRFP preparation program for students
• Bottom Line – in 3 years our program had helped create a cohort of 10+ NSF Graduate Research Fellows at UNH
Current Program

• Information Session
• Writing and Application Workshop
• Faculty Reference Letter Session
• Individual Conferences
• Drafting/ Editorial Assistance
• Writing Boot Camp
• Pizza Party
• Celebration of Winners/ Honorable Mentions
• Re-applicant Session
• Broader Impacts Session for Rising Sophomores and Juniors
Information Session

- Hosted by Grad School, Office of National Fellowships, and Research Office
- Typically ~70 students
- All grad students in eligible disciplines invited
- All seniors with 3.7+ GPA invited
- Other seniors with recognized potential invited
- Play GRFP webinar
- Panel of fellows current as well as a successful advisor
- Distribute brochures
Writing the Application

- Writing Workshops:
  - Hosted by Jeanne Sokolowski and myself
  - 2 sessions, about 20 students/ session
  - Talk about crafting a personal essay - writing tips
  - In depth explanation of IM/BI
  - Q&A dinner with current fellow

- Individual Conferences with Applicants:
  - Meet one-on-one at least once with each applicant
  - Ask questions about student’s background to help them shape personal essay
  - Can be a bit of a therapy session
  - Help students recognize previous BI activities
Writing the Application (cont.)

- Drafting Process:
  - Review multiple drafts of both essays
  - Work with RD Grad Interns
    - Have background in English
    - Help with personal essay

- Writing Boot Camp:
  - Get a group of students together on a Saturday to work together
  - Good, collaborative working time
  - Advisors available to answer questions
Faculty Resources

• Faculty Reference Letter Lunch:
  • Invite all advisors and potential reference letter writers
  • Not all faculty familiar with NSF - focus on IM and BI
  • Share letters from winning applications with letter writers
  • Bring in faculty who have served as GRFP reviewers
  • Encourage faculty to serve as GRFP reviewers

• Letter Review:
  • Provide edits on faculty letters
  • Ensure letters align with student applications – especially important for advisors
Post Submission

• Pizza Party:
  • After due dates, all applicants and advisors invited
  • Grad School Dean and VPR offer congratulatory remarks

• Celebration of Winners and Honorable Mentions:
  • Ice cream social
  • Press release

• Creating a cohort of UNH NSF Graduate Research Fellows
Graduate Students Win Prestigious Fellowships
Year Marks Best Showing Ever in NSF Fellowship Program
Thursday, May 9, 2013
Increase in Applicants/Winners/Hon Mentions

- 2010 - 1 awardee (UG) – no info on applicants
- 2011 - 1 awardee (UG) – no info on applicants
- 2012 - 0 awardees – no info on applicants
- 2013 - 20 applicants, 4 awardees (4 Grad), 1 HM
- 2014 - 34 applicants, 5 awardees (3 Grad, 2 UG - 1 now current UNH Grad), 3 HM
- 2015 - 29 applicants, 3 awardees (2 Grad, 1 UG), 3 HM
Overall goal to make students more competitive in general

- Finding funding for research
- With graduate school applications
- Broader Impacts - giving back to society
- Grant writing class for Grad Students
  - The GRFP shouldn’t be the only funding mechanism for which graduate students apply
Spring Coaching Sessions

• Broader Impacts Session for Rising Sophomores & Juniors
  • Inform them that the opportunity exists
  • Get students to start thinking about BI early
  • Panel of campus BI contacts attends for presentation / Q&A

• Re-applicant Session:
  • Bring potential re-applicants together
  • Discuss reviews/ strategies for next application
  • Talk about how potential BI activities before next application
Other funding mechanisms for GRFP applicants

- DOE CSGF
- NDSEG (through DoD)
- EPA STAR
- SMART
- Ford Foundation
- Switzer
- Hertz
- Nancy Foster
Discussion and Questions

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