Fellowships & Internships

Summer Atkins

GMA Talk

9/12/2018

Reasons to Apply for Fellowships

- Monetary benefits/Job Opportunities
- No longer have to be GTA
- Looks good on CV
- Access to resources
- Preparation for applying to other opportunities

Fellowship Databases

- **GRAPES**, UCLA's Graduate and Postdoctoral Support Database
 - Search filters such as field of study, academic level, citizen requirements, award type.
 - Some of their listing of awards haven't been updated so be careful.
- University of Illinois, Champaign Urbana <u>Fellowship Finder</u>
 - Search filters similar to GRAPES
 - Has an "add to folder" option to save fellowships of interest.
- MSU Libraries: Has lists of databases, articles, and professional blogs

Don't use Fastweb.com



Staple Application Requirements

- CV
- Personal Statement
- Research Statement
- Letter of Recommendations
- Transcripts/GRE Test scores

NSF GRFP (due Oct. 28)

- Offers a stipend of \$34k/year for 3 years plus tuition
- Opportunities for international research & internships (GROW & GRIP)
- Access to XSEDE

Eligibility Requirements

- 1. US citizen/US permanent resident
- 2. Must not have completed more than 12 months of full-time graduate study or its equivalent by August of the application due date year.
- 3. An undergrad senior, or student in their final year of a joint baccalaureate-master's program.

2018 NSF GRFP Math fellows

- 2112 Applicants received a fellowship or honorable mention title
- 109 of those Applicants were in the Mathematical Science Field of Study

4 winners

•	Algebra, Number Theory, 8	& Combinatorics:	38 winners

- Analysis:
- Applied Math/Computational Math:
 23 winners
- Statistics/Biostat/Computational Data Enabled Science/Computational Stats:
 21 winners
- Geometric Analysis/Symplectic &Contact Geometry/ Dynamics/Geometry: 6 winners
- Logic or Foundations of Mathematics:
 3 winners
- Mathematical Biology:
 8 winners
- Probability 2 winners
- Topology 4 winners

Resources for applying to NSF-GRFP

- Solicitations —should read this before applying.
- NSF GRFP Outreach Power point
- NSF GRFP Essay Insights
- UF workshop: how to write personal statements for the NSF GRFP
 - Wednesday October 3 (4 pm -5 pm) DeWeese Auditorium LG101-A at the McKnight Brain Institute
 - Register through GIMS
- EGN 490/6937: Dr. David Mazych has a course dedicated to applying for the NSF fellowship on Tuesdays (7:20pm-8:10pm) in CHE 0237

Professional Blogs and Articles

- <u>Alex Lang's blog</u>: Has archives of Personal Statements and Research Statements from past NSF GRFP winners.
- Philip J. Gou's Webpage : Advice for applying to NSF, NSDEG, Hertz fellowships.
- <u>GradCafeForum</u>: basically a professional reddit/stackexchange website

NDSEG (due Dec. 7)

- \$38,400 per year for four years + insurance and tuition coverage.
- Give about 200 awards per year (about 12% of their awards go to math PhD students).

Eligibility Requirements

- US citizens
- Last year of undergrad or Graduate student (1st or 2nd year)

SMART fellowship (due Dec 1)

- Covers full tuition along with a stipend of \$25k \$38k, up to \$1,200 for health insurance, up to \$1,000 for books, a paid summer internship.
- After graduation, fellows are required to work one year with DoD for each year that the scholarship that the scholarship is received.
- Need to be a US citizen and must be currently enrolled as an undergraduate or graduate student.

Ford Fellowship Programs (Dec. 13)

- Award 126 students per year
- \$24k/year for 3 years plus tuition
- They also offer fellowships for post-doc (due dec. 6)

Eligibility Requirements

- US citizen, permanent resident, students with current status under DACA Program.
- Student who as of fall 2019 have a minimum of 3 years to complete their PhD.
- Priority on Minority Students committed to teaching and diversifying STEM based fields.

Fellowships for non-US Citizens

- National Institute of Justice <u>GRF-STEM</u> (Nov 21)
- Microsoft Research PhD Program- (Oct 9)
- <u>Chateubriand</u> (Jan 16) work in French national labs for 4-9 months.
- Los Alamos (post-doc fellowship)
- American Association for University Women International
- Christine Mirzayan Science & Technology Policy Graduate Fellowship Program (Sept 7) (Michelle Schwalbe mschwalbe@nas.edu)
- List of non-US Citizen fellowships

Reasons to apply for Internships

- Monetary benefits/Job Opportunities
- Looks good on CV
- Interested in a non-academic route
- Access to resources
- Work on projects directly or indirectly related to area of research

General Advice

- Attend conferences that have career fairs/career panels
- Ask your advisor if he/she knows of any company recruiters
- Create a personal website containing CV and links to papers

Resources pertaining to internships

- **GRAPES**, UCLA's Graduate and Postdoctoral Support Database
 - Search filters such as field of study, academic level, citizen requirements, award type.
 - Some of their listing of awards haven't been updated so be careful.
- Pathway to Science
- Harvard list
- Federal Government Intelligence Agencies Listing

NSF-MSGI (Feb. 1)

- opportunity for math PhD students to participate in 10 week long internships at federal national laboratories, industry and other approved facilities.
- No US citizenship required (but may limit internship assignment)

Hosting Sites

Argonne National Laboratory, Fermi National Accelerator Laboratory, Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, Los Alamos National Laboratory, National Renewable Energy Laboratory, Nevada National Security Site, Oak Ridge National Laboratory, Pacific Northwest National Laboratory, Sandia National Laboratories, Scripps Institution of Oceanography.

SPORT at the NSA

- Work closely with full-time Operations Research, Modeling and Simulation analysts applying technical skills you learned in the classroom.
- 12 week long internship during the summer
- US citizenship is required
- Usually leads to a job offer afterwards

<u>ISTernship Summer Program</u> (Feb 2019)

- 8-12 week internship at IST Austria for bachelors and masters students.
- No US citizenship requirements
- The program looks fairly interdisciplinary.
- Assign you to a supervisor to work on a project.
- They also offer year long scientific internships to work with a faculty member there also.

AMS-AAAS Mass Media Fellowship (due Jan 15)

- Selects about 15 -20 fellows each summer to work 10 weeks in the summer for media organizations (Los Angeles Times, NPR, The Washington Post, WIRED, and Scientific American).
- Paid \$500 per week as well as travel expenses (housing not included).
- Open to international students
- More information on the application process and tips found <u>here</u> and here.

q-bio Summer School (due march 2019)

- Spend 3 weeks in June to either Rice University, University of New Mexico, or Colorado State University to learn about various topics in quantitative biology.
- Topics stochastic cell regulation, cancer dynamics, cell signaling, rule-based modeling, membrane biology, and quantitative microscopy.
- Funding usually covers housing and travel.
- They take international students.