

Graduate Fellowships Workshop



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Fellowships

- ❑ NDSEG – National Defense Science and Engineering Graduate Fellowship
- ❑ All branches of engineering, sciences, mathematics (Deadline, 1/8/08)
 - ❑ \$30,500 Stipend & Full Tuition
 - ❑ Full Tuition
 - ❑ Renewable for a total fellowship of 3 years.
- ❑ <http://www.asee.org/ndseg/preface.cfm>

Fellowships

- ❑ NASA – All branches of engineering, sciences, mathematics (Deadline, 2/1/08)
 - ❑ \$18,000 Stipend
 - ❑ \$6,000 for Tuition
 - ❑ Renewable for a total fellowship of 3 years.
 - ❑ Opportunity to perform research at NASA Centers
 - ❑ JPL, KSC, GRC, MSFC
 - ❑ <http://fellowships.hq.nasa.gov/gsrp/nav/>
- ❑ Moogega Cooper (MEM), Mary Sullivan (CBE)

Fellowships

- ❑ GEM – All branches of engineering, sciences, mathematics (Deadline, 11/1/07)
- ❑ Available for under-represented minority students
 - ❑ \$15,000 Stipend
 - ❑ \$2,500 for Tuition
 - ❑ Fellowship is for one year.
 - ❑ Opportunity to perform research at sponsoring company
 - ❑ DuPont, GM, Boeing, etc.
- ❑ Jade Blackwood (CAEE), Patricia Valenzuela (MSE)

Fellowships

- ❑ GAANN-Graduate Assistantships in the Areas of National Need
- ❑ Grants to institutions through the Dept. of Education
- ❑ Open to US Citizens and Permanent Residents
- ❑ Stipends of up to \$30,000 and \$10,500 for tuition
- ❑ Stipends are determined based on financial need
- ❑ You must fill out a FAFSA in order to be eligible (www.fafsa.gov)
- ❑ Drexel has 5 GAANN Fellowship Programs
- ❑ www.drexel.edu/coe/gaann

Fellowships

- ❑ IGERT-Integrated Graduate Education and Research Traineeship in Nanoscale Science & Engineering
- ❑ NSF fellowships for talented students interested in the field of nanotechnology
- ❑ Stipend of \$30,000 and full tuition and fees
- ❑ 2 Colleges with 1 Campus approach to partnership between Drexel & UPenn
- ❑ <http://nano.materials.drexel.edu/IGERT.htm>

Fellowships

- ❑ Bridges to the Doctorate Fellowship
- ❑ NSF Fellowship for Underrepresented Minority Students
- ❑ \$30,000 Stipend and \$10,500 for tuition
- ❑ Financial support for participants during the first two (2) years of graduate study
- ❑ <http://www.drexel.edu/provost/amp/program.html>

Fellowships

- ❑ GK-12 Fellowship
- ❑ NSF Fellowship that integrates K-12 Education
- ❑ \$30,000 Stipend and \$10,500 for tuition
- ❑ Spend 10 hours per week in a K-12 classroom
- ❑ www.coe.drexel.edu/gk12

NSF Fellowships

- ❑ \$30,000 in stipend
- ❑ \$10,500 in university allowance (tuition)
- ❑ Deadlines are:
 - ❑ November 9, 2007 (Engineering)
 - ❑ November 8, 2007 (Life Sciences)
 - ❑ November 6, 2007 (Psych, Soc Sciences)
 - ❑ November 13, 2007 (Chem, Phys, Astro)
 - ❑ November 9, 2007 (CS, Math, and IST)
- ❑ Recipients selected in March, 2008.
- ❑ http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=6201

NSF Fellowships

❑ Competition is very tough

| | 2000 | | 2001 | | 2002 | | 2003 | |
|--------------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|
| Fields | App | Award | App | Award | App | Award | App | Award |
| <u>Engineering</u> | <u>1031</u> | <u>243</u> | <u>1189</u> | <u>253</u> | <u>1613</u> | <u>279</u> | <u>1974</u> | <u>284</u> |
| Math Sciences* | 469 | 87 | 501 | 86 | 694 | 96 | 930 | 107 |
| Physical Sciences | 847 | 139 | 975 | 142 | 1083 | 134 | 1255 | 131 |
| Life Sciences | 1410 | 235 | 1798 | 262 | 1898 | 234 | 2205 | 230 |
| Psychology | 311 | 52 | 389 | 57 | 418 | 52 | 506 | 53 |
| Social Sciences | 564 | 94 | 708 | 103 | 850 | 105 | 918 | 95 |
| Total | 4,632 | 850 | 5,560 | 903 | 6,556 | 900 | 7,788 | 900 |

NSF Fellowships

- ❑ For graduate study leading to research-based master's or doctoral degrees in the fields of science, mathematics, social sciences and engineering.
- ❑ Contribute significantly to research, teaching, and industrial applications in science, mathematics, and engineering.
- ❑ Strongly encourages women, minorities, and persons with disabilities to compete fully in this program.

Eligibility

- ❑ Most fellowships are available only to U.S. Citizens and Permanent Residents of U.S.
- ❑ Time to Apply:
 - ❑ Senior year of undergraduate studies
 - ❑ During the first year of graduate school
 - ❑ Second year of graduate school. Individuals who have completed no more than 12 months of graduate study.
 - ❑ Applicants in joint BS/MS programs: Applicants may apply in the fourth and fifth years of the program
- ❑ Time to Consider? NOW!

Applying

- ❑ All application must be filled out in FASTLANE (www.nsf.gov)
- ❑ Supporting documents (transcripts, etc.) must be submitted by mail
 - ❑ Mailing address:
NSF Graduate Research Fellowship Program
Oak Ridge Associated Universities
P.O. Box 3010
Oak Ridge, TN 37831-3010
- ❑ REFERENCES (3 required)

GRE Exam

**GRE General Exam must
be taken by 12/1/07**

References

- ❑ **Scientists or faculty members** who have current knowledge of your academic and/or professional experience and ability should be selected as references, since they will be able to give **meaningful answers to the questions asked**.
- ❑ NSF suggests that at least two of the three should be persons with whom you have worked in your present (or most recent) department, including the thesis adviser if applicable.

Personal Essays (2 pages)

- ❑ Describe your motivations for graduate studies
 - ❑ Intellectual Merit
 - ❑ Broader Impact
- ❑ Describe your career aspirations and how the NSF GRFP can further your goals

Previous Research (2 pages)

- ❑ Research activities such as experience in UG research, or experience gained through employment
- ❑ Explain the purpose of the research and your specific role in the research, including the extent to which you worked independently and/or as part of a team, and what you learned from your research.
- ❑ Describe any activities that you believe have prepared you to undertake research.
- ❑ List any publications and/or presentations made at national and/or regional professional meetings.
- ❑ Describe how you worked as part of a team.

Proposed Research (2 pages)

- ❑ This section should reflect your own thinking and work, demonstrate your understanding of research principles necessary to pursue these interests
- ❑ Present your plan with a clear hypothesis or questions to be posed by the research
- ❑ Demonstrate understanding of the foundation of research that you'll be applying through the program
- ❑ Work closely with a faculty advisor
- ❑ Be original and be excited about the proposed work

Intellectual Merit

Intellectual Merit Criterion

- ❑ How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields?
- ❑ How well qualified is the proposer to conduct the project (prior work)?
- ❑ To what extent does the proposed activity suggest and explore creative and original concepts?
- ❑ How well conceived and organized is the proposed activity?
- ❑ Is there sufficient access to resources (equipment, expertise)?

Broader Impact

Broader Impact Criterion

- ❑ How well does the activity advance discovery and understanding while promoting teaching, training, and learning?
- ❑ How well does the activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)
- ❑ Will the results be disseminated broadly to enhance scientific and technological understanding?
- ❑ What may be the benefits of the proposed activity to society?

Evaluations

Panelists are instructed to consider:

- ❑ Strength of the academic record,
- ❑ Proposed plan of research,
- ❑ Description of previous research experience,
- ❑ Appropriateness of the choice of references and the extent to which they indicate merit,
- ❑ Graduate Record Examinations (GRE) scores
- ❑ Appropriateness of the choice of institution for fellowship

More Fellowship Info...

❑ External Fellowships

❑ <http://www.drexel.edu/coe/graduate/external-fellowships.asp>

❑ Internal Drexel Fellowships

❑ <http://www.drexel.edu/coe/graduate/internal-fellowships.asp>

Last Tips

- ❑ Know the deadlines
- ❑ Ask for recommendations early & follow up
- ❑ Don't reinvent the wheel for each fellowship application, repurpose what you can but don't forget to change any pertinent details from one fellowship to the next
- ❑ Read the entire document before applying
- ❑ Start early
- ❑ Follow up on transcripts...they will forget to send them!
- ❑ Talk to professors and other graduate students a lot, they will be your best advisors and resources
- ❑ Spell Check is your best friend
- ❑ If you are unsure call...don't guess!