

Thriving in Graduate School and Paying for it

EL Alliance Webinar

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Mary Ann Leung, Ph.D.

Krell Institute

Overview

- Choosing a graduate school
- Funding graduate school
- A winning application





Choosing a Graduate School

- Why go to graduate school?
- What is graduate school all about (masters/Ph.D)?
- What are your goals after graduate school?
- What is the most important relationship in your graduate school career?
- Identify YOUR most important attributes for picking a graduate school



My criteria & reasons

- Research adviser
- Research project
- School recognition/standing
- Campus/local culture-environment



Funding Graduate School

- Schools
 - Departmental
 - Research adviser (from grants)
 - Other institutional funding
- Government
- Private/foundations



Why apply for your own funding?

- Security
- Independence
- **Prestige**
- Programmatic benefits (DOE CSGF!)



Some Available Funding

Fellowship	Stipend	Tuition & Fees	Tenure	Awards	Notes
Department of Energy Computational Science Graduate Fellowship (DOE – CSGF)	\$36,000	Full	4 Years	21 in 2010	\$5,000 academic allowance 1st yr, \$1,000 every renewed year; 12 wk Practicum & Annual Conference
National Science Foundation (NSF)	\$30,000	\$10,500 cost of educ.	3 Years over 5 years	2000 for 2010	\$1,000 one time travel; International research & professional development opportunities; TeraGrid Supercomputer Access
National Defense Science and Engineering (NDSEG)	Yr1: \$30,500 Yr2: \$31,000 Yr3: \$31,500	Full	3 Years	Approx. 200	Up to \$1,000 for health insurance through the institution
Hertz (Five year Option 1)	\$31,000 (9 mo.)	Full tuition equiv.	Renewable for 5 years		Bi-Annual Symposium; \$5,000 per year additional stipend for fellows with dependent children; Tenable list of schools
Hertz (Five Year Coordinated -Option 2)	2 Years: \$36,000 (9 mo.)	Full equiv. for first 2 years	2 Years		Coordinated with another fellowship award, Bi-Annual Symposium; \$5,000 per year additional stipend for fellows with dependent children
Hertz (Other Fellowship Period)	\$3,500/Year supplemental stipend				Bi-Annual Symposium; When awardee accept another 3yr fellowship



Available Funding

Fellowship	Stipend	Tuition & Fees	Tenure	Awards	Notes
DOE Stewardship Science Graduate Fellowship (DOE - SSGF)	\$36,000	Full	4 Years	5 in 2010	\$1,000/yr - Practicum & Annual Conference
NASA Graduate Student Researchers Program (GSRP)	\$20,000		3 yrs funding for PhD	140	\$6,000 student travel; \$3,000 university allowance; \$1,000 student health insurance; 10-week HQ or center research experience
DOE Office of Science Graduate Fellowship (DOE SCGF)	\$35,000	\$10,500	Up to 3 Years	150 in 2010	\$5,000 Research allowance; Did not offer in 2010-11



Available Funding – Diversity Focus

Fellowship	Stipend	Tuition & Fees	Tenure	Awards	Notes
NASA Harriet Jenkins Predoctoral Fellowship (women, minorities and disabilities)	\$22,000 PhD	\$8,500	3 Years funding	Up to 20	\$7,000 stipend for 10-week research experience; Annual symposium; Leadership Development Training
Ford Foundation Predoctoral Fellowship for Minority (college/university teaching)	\$20,000	In lieu of tuition & fees \$2,000 to institution	3 Years over 5 years	Approx 40	At least one Ford conference paid; Access to Ford Fellows Liasons (alumni of program)
National Physical Science Consortium (NPSC)	\$20,000/yr	NPSC universities - waived tuition and fees	Initial 2-3 yrs, can be up to 6 full yrs	Varies yearly	Employers sponsor student support; one or two summer internship at sponsored employer
National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc (GEM)	\$14,000 yr 1; equiv to other funded PhD students yrs 2-5	waived tuition and fees at a GEM university	5 yrs		A minimum of one paid internship with a GEM employer member



DOE CSGF Benefits

- \$36,000 yearly stipend
- Full tuition and required fees
- Renewable up to 4 years
- \$5,000 academic allowance year 1, \$1,000 each renewed year
- Annual conference
- Practicum at DOE Lab





DOE CSGF Requirements

- Good academic standing
- Continued progress towards Ph.D.
- Program of Study (POS) showing graduate coursework in:
 - scientific/engineering discipline
 - applied mathematics, and
 - computer science
- Completion of practicum at DOE laboratory



How is DOE CSGF different?

- Not just a paycheck....
 - Community building
 - High Performance computing support, training, access
 - Careers/Jobs
 - Networking
 - Awards/Contests
 - Life long connections



Community Building

- Annual conference
- Regional events
- Alumni network
- Online resources
- Connections with DOE lab staff
- Professional society meetings
 - SCxy conferences
 - SIAM
 - etc.



Application components

- Completed application form
- Transcripts
- GRE scores
- Program of Study showing breadth in:
 - Scientific or engineering field
 - Mathematics
 - Computer science
- Essays
 - Field of study
 - Program of study
 - High performance computing
- Reference letters



Application review process

- External review committees
- All applications are reviewed by at least 2 people
- Applications are NOT rejected solely on the numbers
- The committee tries to “get to know” the applicants and fellows



But, can I win one of these?

- What makes a good application?
- Compelling story evidenced through:
 - interesting research and interest in research
 - experience (extra-curricular/research)
 - potential
 - essays
 - letters of recommendation





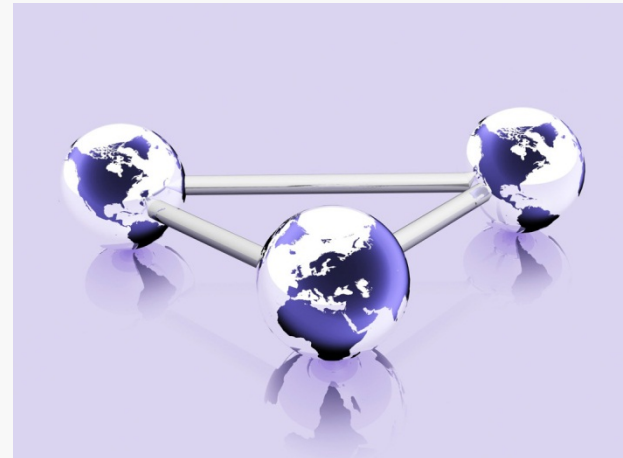
Helpful Tips

- David Keyes – Requesting Ref Letters
 - http://www.siam.org/news/news.php?id=1777&goback=.gde_904137_member_27806860David Keyes – Requesting Ref Letters
- Rebecca Brannon
 - <http://www.mech.utah.edu/~brannon/public/StudentResources>
 - Tips for students who are building a resume for a dream job (or fellowship)
 - Requesting letter of recommendation



Links

- Krell Institute
 - <http://www.krellinst.org/>
- DOE CSGF
 - <http://www.krellinst.org/csgf>





Contacts

Mary Ann Leung, Ph.D.
Program Manager
Krell Institute
leung@krellinst.org
515-956-3696

Jeanne Gingery
Program Coordinator
Krell Institute
gingery@krellinst.org
515-956-3696