



# FUNDING SOURCES for PSM PROGRAMS

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**PSM** PROFESSIONAL  
SCIENCE MASTER'S





# External Funding Agencies

One-time Start-up Sources

**PSM**

PROFESSIONAL  
SCIENCE MASTER'S





# NSF, Graduate Education Division, Science Master's Program (09-607)

- Features
  - Employer-university partnership—must meet workforce needs
  - Hands-on research experience
  - Support for full-time U.S. students
  - Programs must already be approved
- Due November 20, 2009
- 21 awards of about \$700K for 3 yrs

[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=503428](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503428)





# NSF, Directorate for Education & Human Resources, Division of Undergraduate Education (09-567)

Scholarships for academically talented, financially needy domestic students enabling them to enter workforce upon completion of...graduate degree in science & engineering.

[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=5257&org=DUE&from=home](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5257&org=DUE&from=home)





# NSF, Division of Social and Economic Sciences (08-530)

- Ethics Education in Science and Engineering (EESE)
- To improve ethics education for graduate students in science & engineering fields that NSF supports
- Contribute to resources to use in complying with requirement to provide RCR training.





# NSF, Office of International Science & Engineering (08-603)

- East Asia & Pacific Institutes for U.S. Graduate Students (EAPSI)
- 8 weeks between June-August working collaboratively with host researchers

<http://www.nsf.gov/pubs/2008/nsf08603/nsf08603.htm#summary>





# NSF, Education and Human Resources (10-505)

- Federal Cyber Service: Scholarship for Service (SFS)
  - Scholarship track
  - Capacity Building track
- CAE/IAE or CAE-R designation

[http://www.nsf.gov/pubs/2010/nsf10505/nsf10505.htm?WT.mc\\_id=USNSF\\_25](http://www.nsf.gov/pubs/2010/nsf10505/nsf10505.htm?WT.mc_id=USNSF_25)





# Department of Labor, Employment and Training Administration (SGA/DFA PY 09-01)

- Promote economic recovery through training, education, and job placement assistance for **health care sector and other high growth** (e.g. IT, adv manufacturing, wireless & broadband deployment, transportation & warehousing, biotechnology) and emerging industries.
- Public or nonprofit entities eligible to apply including local **Workforce Investment Boards**, Tribal organizations, education/training providers, labor organizations, faith/community organizations

<http://www.doleta.gov/grants/pdf/SGA-DFA-PY-09-01.pdf>





# Department of Labor, Employment and Training Administration (SGA/DFA PY 08-17)

- State Labor Market Market Information Improvement Grants for State Workforce Agencies
- Collect, analyze, disseminate labor market information...for careers within the energy efficiency & renewable energy industries....

<http://frwebgate6.access.gpo.gov/cgi-bin/PDFgate.cgi?WAISdocID=19706380859+0+2+0&WAISaction=retrieve>





# Department of Energy, Workforce Training for the Electric Power Sector (81.122)

## Strategic Training & Education in Power Systems (STEPS)

- To develop cross-disciplinary training programs at university level that lead to degrees or certificates

<https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000152&agency=DOE>





## Department of Education, FIPSE (84.116V)

- Supports “...innovative efforts to expand graduate-level academic offerings at colleges that enroll a significant number of Hispanic American students.”
- <http://www.ed.gov/programs/fipsesf/applicant.html>





## Department of Education, FIPSE (84.382G—Formula)

- Master's Degree Programs at Historically Black Colleges and Universities
- \$500K/year up to 6 years
- 10% of annual grant may support *development of new master's* degree program.
- <http://www.ed.gov/programs/hbcumasters/index.html>





## Department of Education, FIPSE (84.116)

- Rutgers University—statewide initiative
- University of Maryland University College—  
online mentoring program

<http://www.ed.gov/programs/fipsecomp/index.html>





## Department of Education, FIPSE (84.116M)

- US-Brazil Higher Education consortia Program, US-Brazil Student Exchange Program
- Rutgers, Universidade Estadual do Norte Fluminense Darcy Ribeiro, & Universidade de São Paulo
- <http://www.ed.gov/programs/fipsebrazil/index.html>





# Department of Veterans' Affairs, Post 9/11 GI Bill

- Supports veterans with 90 days to 36 months active duty since 9/10/01.
- Cost of tuition & fees ranging from 40-90% depending on length of qualifying service
- Housing allowance
- Books/supplies up to \$1000/yr
  
- [www.gibill.va.gov](http://www.gibill.va.gov)
- <http://www.todaysgibill.org/>





# Internal/Local Arrangements

Recurring Sources of Funding





# Internal/Local Funding Strategies

- Differential tuition
- Fee for privilege(s)
- % tuition return
- Self-sustaining model
- Local/regional opportunities





# For more information: contact the CGS PSM Project Team

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[www.sciencemasters.com](http://www.sciencemasters.com) and [www.cgsnet.org](http://www.cgsnet.org)

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**ANNUAL MEETING PSM WORKSHOP**  
**Creative Funding Sources**

SOURCE	PROGRAM	QUALIFIERS	DUE DATE	NOTES
<b>EXTERNAL FUNDING AGENCIES—One-Time Start Up Sources</b>				
NSF, Graduate Education Division	Science Master's Program (09-607)  <a href="http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503428">http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503428</a>	<ul style="list-style-type: none"> <li>• Must feature industry partnership</li> <li>• Must include “hands-on” research experience</li> <li>• Timeliness—program must already be approved on campus (ARRA funds)</li> <li>• Provides support for full-time students</li> </ul>	11/20/09	Prepare students for STEM careers in business, industry, gov agencies, nonprofit organizations. <ul style="list-style-type: none"> <li>• Catalyze creation of institution-based efforts that can be sustained without additional Federal \$.</li> <li>• Encourage diversity in student participation to contribute to inclusive, well-trained science &amp; engineering workforce.</li> <li>• 21 awards of about \$700K for 3 yrs</li> </ul>

SOURCE	PROGRAM	QUALIFIERS	DUE DATE	NOTES
NSF S-STEM	<p>Directorate for Education &amp; Human Resources, Division of Undergraduate Education (09-567)</p> <p>Scholarships in Science, Technology, Engineering &amp; Math</p> <p><a href="http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5257&amp;org=DUE&amp;from=home">http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5257&amp;org=DUE&amp;from=home</a></p>	Scholarships for academically talented, financially needy domestic students enabling them to enter workforce upon completion of associate, bachelor's, or graduate degree in science & engineering.	<p>LOI (optional) 7/14/10 &amp; 7/13/11</p> <p>Full proposals 8/12/10 &amp; 8/11/11</p>	<p>Up to 5 year funding period Up to \$10K/student/year, 4 year max \$225,000 max annual budget (\$600K total) About 80-100 awards per year</p> <p>“Preparing Promising Students for the 21<sup>st</sup> Century Scientific Workforce,” University of Connecticut. \$5000/semester based on need.</p> <p>Middle Tenn State Univ Masters Scholarship Program, \$599,850 Scholarships for science, technology, &amp; math students pursuing Mstr of Science in Biology, Chemistry, or Professional Science (with concentrations in Biostatistics or Biotechnology).</p>
National Science Foundation	<p>Division of Social and Economic Sciences (08-530)</p> <p>Ethics Education in Science and Engineering (EESE)</p> <p><a href="http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13338">http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13338</a></p>	<ul style="list-style-type: none"> <li>• Improve ethics education for graduate students in science &amp; engineering fields.</li> <li>• Results of the EESE program will contribute to resources that institutions may utilize in complying with Sec 7009 of the AmericaCOMPETES Act (H.R. 2272), which requires institutions to "provide appropriate training oversight in the responsible and ethical conduct of research."</li> </ul>	3/1/10	<p>6-12 awards \$2.4M Encourages university-industry collaborations. 1 proposal per institution</p> <p>San Diego State Univ--“Ethics Education for PSM Programs.” \$300,000 3-yr grant to create ethics education materials in...PSM...programs in comp, bio, and environ sciences.</p>

SOURCE	PROGRAM	QUALIFIERS	DUE DATE	NOTES
National Science Foundation	Office of International Science and Engineering (08-603)  East Asia & Pacific Institutes for U.S. Graduate Students (EAPSI)  <a href="http://www.nsf.gov/pubs/2008/nsf08603/nsf08603.htm#summary">http://www.nsf.gov/pubs/2008/nsf08603/nsf08603.htm#summary</a>	<ul style="list-style-type: none"> <li>8-10 week summer research experience in Australia, China, Japan, Korea, New Zealand, Singapore or Taiwan</li> <li>Enrolled in research-oriented graduate program</li> </ul>	2 <sup>nd</sup> Tues in Dec annually	195 awards annually \$1,950,000  \$5000 stipend, airfare, orientation in D.C. Foreign organizations provide living expenses abroad.
National Science Foundation	Education & Human Resources, Division of Undergraduate Education (10-505)  Federal Cyber Service: Scholarship for Service (SFS)  <a href="http://www.nsf.gov/pubs/2010/nsf10505/nsf10505.htm?WT.mc_id=USNSF_25">http://www.nsf.gov/pubs/2010/nsf10505/nsf10505.htm?WT.mc_id=USNSF_25</a>	<ul style="list-style-type: none"> <li>Increase number of qualified students entering fields of information assurance and computer security &amp; to increase capacity of US education to produce professionals to meet society needs <ul style="list-style-type: none"> <li>Scholarship track</li> <li>Capacity Building track</li> </ul> </li> </ul>	2/2/10	6-8 Scholarship awards 7-9 Capacity Building awards \$11,330,000 FY10  CAE/IAE or CAE-R designation  2 proposals per institution
Department of Labor	Employment & Training Administration (SGA/DFA PY 09-01)  <a href="http://www.doleta.gov/grants/pdf/SGA-DFA-PY-09-01.pdf">http://www.doleta.gov/grants/pdf/SGA-DFA-PY-09-01.pdf</a>	<ul style="list-style-type: none"> <li>Worker training for unemployed, dislocated workers, incumbent workers including low-wage workers</li> <li>One category is health information technology (mgt of health information)</li> <li>Public entities or nonprofit entities</li> <li>Must involve strategic partnership (see list)</li> <li>Result in certificate or degree</li> <li>Integrate occupational training with basic skills training</li> </ul>	10/5/09	Health Care & Other High Growth & Emerging Industries (e.g. info tech, advanced manuf, wireless & broadband deployment, transportation & warehousing, biotechnology)  45-65 grants of \$2-5 M \$25 M to auto-related restructuring  SUNY one of several regional collaborators in \$4M project: Recovery Act-Health Care Sector & Other High Growth & Emerging Industries (SGA-DFA-PY-09-01). Lead organization is Syracuse Chamber of Commerce.

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Department of Labor	Employment & Training Administration (SGA/DFA PY 08-17)  <a href="http://frwebgate6.access.gpo.gov/cgi-bin/PDFgate.cgi?WAISdocID=19706380859+0+2+0&amp;WAIAction=retrieve">http://frwebgate6.access.gpo.gov/cgi-bin/PDFgate.cgi?WAISdocID=19706380859+0+2+0&amp;WAIAction=retrieve</a>	“...to collect, analyze, and disseminate labor market information, and to enhance the labor exchange infrastructure for careers within the energy efficiency and renewable energy industries.”	8/14/09	\$50M for the Workforce Investment agencies in states Grants \$750K-\$1.25M to indiv states \$2-4M to collaborations
Department of Energy	Office of Science Graduate Fellowship Program	“...support outstanding students to pursue graduate training in basic research in areas of physics, biology, chemistry, mathematics, engineering, computational sciences, and environmental sciences relevant to the Office of Science....”		<b><u>PSM students not eligible.</u></b>
Department of Energy	Workforce Training for the Electric Power Sector (DOE-FOA-0000152)  <a href="https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000152&amp;agency=DOE">https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000152&amp;agency=DOE</a>	Topic A, Developing and Enhancing Workforce Training Programs for the Electric Power Sector \$20M for STEPS 8-10 STEPS awards up to \$2.5M/award Awards up to 3 yrs	11/30/09	Topic A Strategic Training & Education in Power Systems (STEPS): Applications sought that develop cross-disciplinary electric power systems training programs at the <b>university and college-level, that lead to degrees or certificates</b> that span the breadth of science, engin, soc sci, econ, and other topics needed by scientists, engineers, innovators, entrepreneurs, and industry leaders as the traditional power system transforms into a national, clean-energy smart grid. Applications may also include development of certificate programs for training technicians and teachers in STEM subjects, with a focus on electric power systems.

SOURCE	PROGRAM	QUALIFIERS	DUE DATE	NOTES
Department of Education	Fund for Improvement of PostSecondary Education (FIPSE) Comprehensive Program (CFDA 84.116 V)  <a href="http://www.ed.gov/programs/fipsecomp/index.html">http://www.ed.gov/programs/fipsecomp/index.html</a>	Projects that propose innovative efforts to expand graduate offerings at colleges that enroll a significant number of Hispanic American students.	6/18/09	40 awards \$300,000 2-yr \$150,000 1-yr  Sistema Universitario Ana G. Mendez, Inc. DBA Universidad del Turabo, PR. Devel PSM in biopharmaceutical manufacturing, \$299,652  San Diego State University, PSM Bioinformatics & medical Informatics, \$299,584
Department of Education	Fund for Improvement of PostSecondary Education (FIPSE) Master's Degree Programs at Historically Black Colleges and Universities (CDFA 84.382G)  <a href="http://www.ed.gov/programs/hbcumasters/index.html">http://www.ed.gov/programs/hbcumasters/index.html</a>	Supports master's degree programs in math, engineering, physical/natural sci, computer sci, info technology, nursing, allied health, or other scientific disciplines in which African Americans are underrepresented.  Program must have students enrolled at time of application. Institution may use not more than 10% of institution's grant for development of new qualified master's degree program.	Formula	\$500K/year—partly to support the PSM  Elizabeth City State University \$3M (6 yrs) to start PSM in applied mathematics.
Department of Education	Fund for Improvement of PostSecondary Education (FIPSE) Comprehensive Program (CFDA 84.116)  <a href="http://www.ed.gov/programs/fipsecomp/index.html">http://www.ed.gov/programs/fipsecomp/index.html</a>	The program supports and disseminates innovative reform projects that promise to be models for improving the quality of postsecondary education and increasing student access.  <ul style="list-style-type: none"> <li>• Inclusive</li> <li>• Action oriented</li> <li>• Bold thinking; innovation</li> <li>• Responsive to practitioners</li> </ul>	NA	UMUC—"Web-Based Mentoring Program Creating Industry-Academe Synergy." \$600K, 4-yr grant. To support development of online mentoring program for Biotechnology Studies PSM.  Rutgers—"Developing Leaders for New Jersey's Science-Based Industries: Creating a Statewide System of PSM Degrees"

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Department of Veterans Affairs	Post-9/11 GI Bill <a href="http://www.gibill.va.gov">www.gibill.va.gov</a>	Supports veterans with 90 days to 36 months active duty since 9/10/01. <ul style="list-style-type: none"> <li>• Cost of tuition &amp; fees ranging from 40-90% depending on length of qualifying service</li> <li>• Housing allowance</li> <li>• Books/supplies up to \$1000/yr</li> </ul>		Yellow Ribbon provides VA matching to institutional contribution for tuition costs above limit.  ACE <a href="http://www.todaysgibill.org/">http://www.todaysgibill.org/</a>  Cal State system veterans initiative to leverage VA support program.
<b>INTERNAL/ LOCAL FUNDING STRATEGIES</b>				
STRATEGY		COMMENTS		
Differential tuition Georgia Tech	<ul style="list-style-type: none"> <li>• Charged as % of student's ordinary bill</li> <li>• Is <i>never</i> waived</li> <li>• \$ returned directly to program</li> <li>• Subject to rules governing use of state funds</li> </ul> Bioinformatics program uses \$ to support student research with faculty member No decline in enrollment as result of tuition differential Prosthetics and Orthotics mandatory \$2,275 flat fee for clinical equipment			
Fee for privilege(s)	<ul style="list-style-type: none"> <li>• For access to hosting interns</li> <li>• Advisory board membership</li> </ul>			
University of Connecticut Tuition revenue sharing	<ul style="list-style-type: none"> <li>• Standard tuition rate but a % is returned directly to the PSM</li> <li>• \$ returned used to cover the "plus" courses</li> </ul>			
Self-sustaining model University of Utah	<ul style="list-style-type: none"> <li>• Tuition revenue generated by <i>plus</i> courses returned to program</li> <li>• University block grant to match tuition revenue generated by <i>science</i> courses</li> <li>• <i>Proposed</i> PSM program fee \$500/semester, \$1000/year</li> </ul>			
California Institute for Regenerative Medicine <a href="http://www.cirm.ca.gov/">http://www.cirm.ca.gov/</a>	CSU Channel Islands, Biotechnology and Bioinformatics PSM "Curriculum Development and Implementation of Stem Cell Technology and Laboratory management Emphasis in an Established MS Biotechnology and Bioinformatics Program." 1) Assist in developing 4 new graduate courses, and (2) Provide support for 30 one-year internships and an intensive Stem Cell Training course at Scripps Research Institute. Also develop a general education course on stem cell technology with 3 local community colleges.			