

Midwest Association of Graduate Schools meeting  
March 30-April 1, 2011

**CIRTL**—NSF-funded Center for the Integration of Research, Teaching and Learning  
-coordinated and started in 2003 at Univ of WI-Madison—The Delta Program in  
research, teaching and learning.

-Mission is to develop a national STEM faculty committed to implementing  
and advancing effective teaching practices for diverse student audiences as  
part of their professional careers.

-6 CIRTL national network members: Vanderbilt, Howard, MSU, U WI-Madison,  
Univ Colorado-Boulder, Texas A&M Univ.

-Core Ideas: Teaching-as-Research-assessing student performance; research  
assistantships in teaching  
Learning Community  
Learning-Through-Diversity

- Impact on the institution-

- legacy of enhanced learning on campus

- growth of teaching and learning community

- enhanced research mentoring and undergrad education

- [Pfund et al. Science 11, 473 (2006)]

- expanded impact of graduate education

- enhanced recruitment of grad students and post-docs

Proposal now open to recruit 19 additional schools into a new cross-network learning community. NSF proposal for 2012 funding—to establish local CIRTl programs.

New schools will have access to developed program resources and evaluation instruments, communities of peers. **Need to develop at least 1 DL course to join!!**

- April 22, 2011 Letter of Intent deadline

- May 20, 2011 Video/telcon for Q&A

- May 27, 2011 Application deadline

Visit [www.cirtl.net/expansion](http://www.cirtl.net/expansion) or contact Bob Mathieu at [mathieu@astro.wisc.edu](mailto:mathieu@astro.wisc.edu)

## Professional science masters: quality assurance and approval processes

Sally Francis, CGS; Bill Wiener, CGS

- 1995 CGS and Sloane Foundation funding established PSM program; CGS gives affiliation to PSM programs.
- PSM aligns to the Path Forward report. PSM goal is to prepare students for careers (business, industry, government, not just for PhD etc). “Science Plus”
- \*\*\*Approval will be an [internal](#) CGS function. PSM programs must show or have
  - Regional accreditation (HLC-NCA)
  - Goals and structure; student learning outcomes (what he/she will be able to do when complete the program); a balance of curricular content between research and professional skills plus expected curriculum for masters degree at that school; connection with community, and internal and external review process.
  - An Advisory Board (6-12 members)-industry and non-profit community, faculty
  - Program should be majority science with ~20% professional skills; capstone or internship essential (\*\*integration of science and professional skills)
  - Program quality assurance: program approved by institution and has ongoing program review.
    - Collection of annual data: enrollment, # degrees granted, completion rate, student demographics, employment record of graduates. \*\*Tracking over time by University.
- Emphasize written and verbal communication skills, leadership and team building in professional settings.
- Multiple PSMs/campus can share ethics/management courses, advisory board

## Approval process for PSM programs

- Submission: [www.sciencemasters.com](http://www.sciencemasters.com) for application form (“apply for affiliation”)
    - Process:
      - 2 CGS deans and 1 staff will review
      - Will contact University for clarifications
      - Team will confer on findings; external consultant, if needed
      - Final determination made and sent to University
      - Affiliation confers the PSM branding (logo) on degree
- For questions, contact: [sfrancis@cgs.nche.edu](mailto:sfrancis@cgs.nche.edu)