Dr. Jackie Eller
Interim Dean, College of Graduate Studies
Vice Provost for Research
Carnegie Doctoral Research Intensive University

22,000+ students, ~2,500 graduate students

TN’s largest UG institution, one of the South’s fastest growing universities re: enrollment and facilities

MTSU is committed to diversity and excellence in teaching, research, and public service.

Nine colleges, 38 academic departments provide baccalaureate instruction in the liberal arts, fine arts, sciences, social sciences, education, business, media and entertainment, behavioral health, and more ...

~100 graduate programs at Master’s, Specialist, and Doctoral (9) levels
Our mission requires ongoing processes to develop and sustain programs that are relevant and add value to society

*New* programs such as Molecular Biosciences, Computational Sciences, Math & Science Education, Assessment & Learning, Literacy Studies, MALA, MLS, Finance, MFA, CIM-MBA, Exec MBA, as well as athletic training and physicians assistant. Added JIDS.

As a regional public institution, MTSU continues a legacy as a service provider to the regional population for job placement and career advancement

Middle Tennessee continues above-average growth in health care, advanced manufacturing, information technology

Business and industry has unmet demand for hard and soft skills in mid- to high-level technical positions and entry-level management

One part of MTSU’s response:
The Professional Science Master’s (PSM) is a ground-breaking graduate degree that combines advanced training in Science, Technology, Engineering, and Mathematics (STEM), and high-value business skills.
CGS and the Sloan Foundation invited several universities like MTSU to apply for support to create the PSM [http://sciencemasters.com/](http://sciencemasters.com/).

Goal: combine practical and scientific knowledge in a two-year master's degree in STEM disciplines to equip students for work in public and private business and in academia.

- $7,500 planning grant, 2002
- $105,000 implementation grant, 2003-04
PSM partners:

- College of Basic and Applied Sciences
- College of Behavioral and Health Sciences
- College of Liberal Arts
- Jennings A. Jones College of Business

- Note that we negotiated with the TN Board of Regents so that the degree is listed as *Master of Science in Professional Science* rather than a PSM

- Framework of concentrations protected us from the “hassles” of a new degree production and “low-producing” criteria
Began with three interdisciplinary concentrations: Biostatistics, Healthcare Informatics, and Biotechnology

Added Actuarial Sciences, Engineering Management, and Geosciences

36-hour program, 15-hour core: Accounting and Legal Issues for Managers, Managerial Communication, Leadership and Motivation, Probabilistic and Statistical Reasoning, and an Internship
- 250-hour internship with industry partner
- Complete industry-related assignments
- Develop a portfolio of internship experience
- Students give a professional presentation of internship experience
- 75% of interns secure job with internship host
Growing Pains …

- Administrative and professional effort to find and administer meaningful internships
- HCI break from Nursing Informatics
- Workload as interdisciplinary
Keys to Success

- Find a campus champion and a Dedicated internship coordinator
- Demonstrated success
  - MS-PS program received the highest scores in all categories in its 2009 5-year program review. Student retention rate in all concentrations = 90%.
  - Tennessee Board of Regents 2010 Academic Excellence Award
  - NPSMA - President’s Award 2015 to Dr. Foroudastan
  - President’s support: new position to coordinate MS-PS
  - Graduates increased 500% between 2005 and 2009
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What’s next

- Spinoff/Start-up Business... e.g., Biotechnology
- New concentrations?
- PSSM?

Full information on our six concentrations can be found at: http://www.mtsu.edu/msps/about.php
Thank you!

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