

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 groundbreaking 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/>

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
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- 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

MSPS Program									
	Fall 07	Fall 08	Fall 09	Fall 10	Fall 11	Fall 12	Fall 13	Fall 14	Fall 15
# Enrolled	51	59	57	73	76	105	140	114	110
# Part-time	31	34	26	39	50	57	91	68	64
# Full-time	20	25	31	34	26	48	49	46	46
Male	20	22	23	25	32	57	66	51	56
Female	31	37	34	48	44	48	74	63	54
Caucasian	21	26	27	37	41	53	72	63	59
African American	15	17	11	15	15	20	29	18	14
Other	15	16	19	21	20	32	39	33	37

MSPS Program	
Academic Year	Degrees Awarded
2006-07	4
2007-08	19
2008-09	21
2009-10	20
2010-11	22
2011-12	29
2012-13	34
2013-14	44
2014-15	52

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>

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Thank you!