

Questionnaire on research strengths and emerging areas of research focus in preparation for the INU Research Workshop

Name of university: James Madison University

1 General information on university

- Harrisonburg, VA, USA
- <http://www.jmu.edu>
- Public institution
- Organization chart:
<http://www.jmu.edu/jmuweb/jmuorgchart0905.pdf>
- Programs (main programs, profile)
 - College of Arts and Letters: <http://caal.jmu.edu>
 - College of Business: <http://www.jmu.edu/cob>
 - College of Education: <http://coe.jmu.edu>
 - College of Integrated Science and Technology: <http://isat.jmu.edu>
 - College of Science and Mathematics <http://csm.jmu.edu>
 - College of Visual and Performing Arts: <http://cvpa.jmu.edu>
 - College of Graduate and Professional Programs: <http://www.jmu.edu/cgapp>
 - General Education <http://www.jmu.edu/gened>
- Staff (FY 2005)
 - Number of full time equivalents (general, academic)
 - Full time faculty: 2,163
 - Instructional Faculty: 795
 - Administrative and Professional Faculty: 345
 - Classified Staff: 1,069
 - Part-Time
 - Instructional Faculty: 293
 - Number of individuals (general, academic)
 - 2004-2005: 4,602

2 General information – research

Students (FY 2005)

Number of Full Time Equivalents (PhD & Master's by Research & by Course Work)		
by Areas of Study		
Areas of Study	Master's	PhD's
Accounting	16	
Adult Education/Human Resource Development	13	
Art	1	

Assessment & Measurement		19
Biology	5	
Business Administration	42	
College Student Personnel Administration	30	
Combined/Integrated Psychology		20
Communication Sciences & Disorders PhD's		30
Communication Sciences & disorders (AuD)		5
Computer Science	86	
Counseling Psychology	62	
Education	100	
English	9	
Health Education	30	
Hearing Disorders	1	
History	12	
Integrated Science & Technology	30	
Kinesiology	66	
Music	11	
Nursing	26	
Physicians Assistant	39	
Psychological Sciences	23	
Public Administration	10	
School Psychology	28	
Special Education	37	
Speech Pathology	60	
Technical & Scientific Communication	10	

Total Enrollment: 15,809

- Undergraduate: 14,676
- Graduate: 867
- Non-Degree Seeking: 266
- Full-Time: 14,895
- Part-Time: 914
- Annual research income
 - Internal: research and public service expenditures per fulltime faculty – FY2003: \$20,264
 - External: approximately \$22 million annually from external funding sources
- Summary of annual research report quantifying research output in terms of
 - Books published by faculty 52
 - Referred journal articles 439
 - Referred conference papers 1063
 - Research reports 18
 - Consultancy reports (all consultancy reports have been counted in the above categories)
- Does your university have any specific research institutes? If so, please list them with brief descriptions of the activities.
 - Adult Health and Development Program (AHRD) <http://coe.jmu.edu/ahrd>

- Alvin V. Baird Attention and Learning Disabilities Center <http://chp.cisat.jmu.edu/>
 - Applied Spatial Research Center <http://www.jmu.edu/catalog/03/cisat/ISATC/>
 - Blue Ridge Area Health Education Center (AHEC) www.brahec.jmu.edu
 - Center for Aerospace Systems and Sensors (CASAS) <http://www.jmu.edu/cisat/>
 - Center for Application and Research in Telecommunications (CART) <http://cob.jmu.edu/cdirm/>
 - Center for Economic Education <http://cob.jmu.edu/econed/>
 - Center for Energy and Environmental Sustainability www.cisat.jmu.edu/cees/
 - Center for Entrepreneurship <http://www.jmu.edu/cfe/>
 - Center for Environment, Health, and Safety <http://www.jmu.edu/cehs/>
 - Center on Health Policy <http://www.iihhs.jmu.edu/>
 - Center for High Performance Manufacturing <http://www.chpm.jmu.edu/>
 - Center for Instructional Technology (CIT) <http://cit.jmu.edu/cit/>
 - Center for Learning Strategies <http://chp.cisat.jmu.edu/cls.html>
 - Center for Liberal and Applied Social Sciences <http://caal.jmu.edu/CLASS/>
 - Center for Materials Science <http://csm.jmu.edu/materialsscience/>
 - Center for Pre-Health Resources <http://www.jmu.edu/catalog/03/interdisc/Centers/IIHHS/index.shtml>
 - Center for Promotion of Physical Activity for Girls and Women <http://www.jmu.edu/kinesiology.cppagw/>
 - Center for Valley and Regional Studies http://webjmu.edu/history/public_valley.html
 - Critical Infrastructure Protection Project (CIPP) <http://cipp.gmu.edu/>
 - Electron Microscopy Center <http://www.jmu.edu/catalog/05/scmath.htm>
 - Furious Flower Poetry Center <http://www.jmu.edu/furiousflower/>
 - Gandhi Center for Global Nonviolence www.jmu.edu/gandhicenter
 - Insititute for Innovation in Health and Human Services (IIHHS) <http://www.iihss.jmu.edu>
 - Institute for infrastructure and Information Assurance (IIIA) <http://www.jmu.edu.iiia/about.html>
 - Institute of Certified Professional Managers <http://cob.jmu.edu/icpm/>
 - Institute for Visual Studies <http://www.jmu.edu/ivs>
 - International Beliefs and Values Institute (IBAVI) <http://www.jmu.edu/ibavi/>
 - James Madison Center <http://www.jmu.edu/madison/center/>
 - Lifelong Learning Institute <http://www.jmu.edu/socwork/lli/>
 - Mine Action Information Center <http://maic.jmu.edu>
 - Promotoras de Salud <http://www.brahec.jmu.edu/promotoras.html>
 - ShenAIR Institute <http://www.isat.jmu.edu.shenair/>
 - Shenandoah Valley Child Development Clinic <http://www.jmu.edu.cisat.copp.html>
 - Shenandoah Valley Migrant Education Program <http://www.svmep.jmu.edu/homepage.html>
 - Shenandoah Valley Partnership <http://www.svp-va.org/>
 - Shenandoah Valley Small Business Development Center <http://www.jmu.edu/sbdcenter/>
 - Shenandoah Valley Techonology Council <http://www.svtc-va.org/>
 - Virginia Center for Health Outreach (VCHO) <http://www.vcho.cisat.jmu.edu/funding.htm>
 - Virginia Earth Science Collaborative <http://www.virginiaearthscience.info/>
 - Virginia's Manufacturing Innovation Center (VMIC) <http://www.jmu.edu/vmic/>
 - Visualization in Science and Mathematics Program <http://www.isat.jmu.edu/common.projects/vism/>
 - William R. Nelson Institute of Public Affairs <http://www.jmu.edu/nelsoninstitute/origins.htm>
- Does your university have a research park? If so, please give a brief description of the facilities. JMU does not have a research park.

- Does your university offer research training support, e.g. providing facilities for postgraduate students, scholarships and conference assistance?
 - JMU provides assistance to graduate and postgraduate students in a variety of ways. For example, JMU may provide assistantships (stipend and tuition) for current graduate students, assistance with conference registration and travel expenses (through departments, colleges, the Office of International programs), the location of living quarters, the provision of office space (shared in some instances), etc. Moreover, visiting international scholars and students may wish to participate in a wide range of programs sponsored by the Office of social and cultural International Programs and other units on campus.
- Please provide a summary of the university's research plan and organizational set up, including separate responsibilities.
 - Strategic plan for the university: http://www.jmu.edu/ie/StrategicPlan_0408.pdf
 - Relevant objectives:
 - To be the new American university, a hybrid of the best qualities of research and liberal arts institutions (that is, the reduction of pure research to practice)
 - The university, to enhance and support its programs, will expand its strategic alliance with external partners
 - The university will provide technologies and laboratories that are widely accessible to the entire campus community
 - Organizational chart for the university: <http://www.jmu.edu/jmuweb/jmuorgchart0905.pdf>
- Does your university provide assistance for visiting scholars and post-doctoral scholars? If so, please briefly describe the nature of this assistance
 - James Madison University hosts many visiting scholars that contribute to the education and scholarship of students in all areas of learning. JMU supports two efficiency apartments for visiting scholars, and depending upon the nature and timing of visits, may be able to assist with housing, local travel, and other expenses. Moreover, the Office of International Programs (OIP) can assist in developing an itinerary for visiting scholars to include social and cultural events and other forms of programming. Finally, the OIP can also assist with visas to enter the United States. For more information please refer to the International Programs website: <http://www.jmu.edu/international/iss/46.shtml>.

3 Self identified research strengths and areas

In advancing the pursuit of knowledge in all academic disciplines, James Madison University is committed to research endeavors in five broad categories. These categories, ones in which JMU is highly experienced, include Health and Life Sciences/Biotechnology; Homeland Security/Critical Infrastructure Protection; Education Reform in Science, Technology, Engineering, and Math (STEM); Alternative Energy/Environmental Science; and Nanotechnology/Materials Sciences. JMU has been recognized for its integration of undergraduate education and research, a practice that permeates all research activities. By structuring research activities around these five categories, the university has leveraged unique resources and capabilities, created a well-defined niche within higher education, and strengthened efforts in the scholarship of discovery.

Alternative Energy/Environmental Science

With the growing recognition of pressing environmental concerns, the Integrated Science and Technology department has engaged in a multitude of projects focusing upon energy conservation and the impact of technology upon the environment and ecology. Thus, the Fuels Diversification Program and Shenandoah Valley Pure Water 2000 Forum both exemplify university initiatives that direct research activities within this category.

Health and Life Sciences/Biotechnology

JMU possesses a rich history in the fields of Health and Life Sciences/Biotechnology. Consequently, this area is a central focus for future research activity. Centers within the university, such as the Institute for Innovation in Health and Human Services and the Biomanufacturing Center, and academic departments such as Communication Sciences and Disorders, Biology, Chemistry, and Physics, will receive increased support in the pursuit of grant funding in 2006.

Homeland Security/Critical Infrastructure Protection

In recent years, the university has successfully engaged in numerous research endeavors in fields relating to the area of homeland security. In particular, the Institute for Infrastructure and Information Assurance, and the departments of Computer Science and Integrated Science and Technology have obtained multi-million dollar grants and completed many fruitful projects. The College of Business has research expertise in financial systems and markets, forensic accounting, and data security. In the coming year, homeland security research will be centered within these campus units.

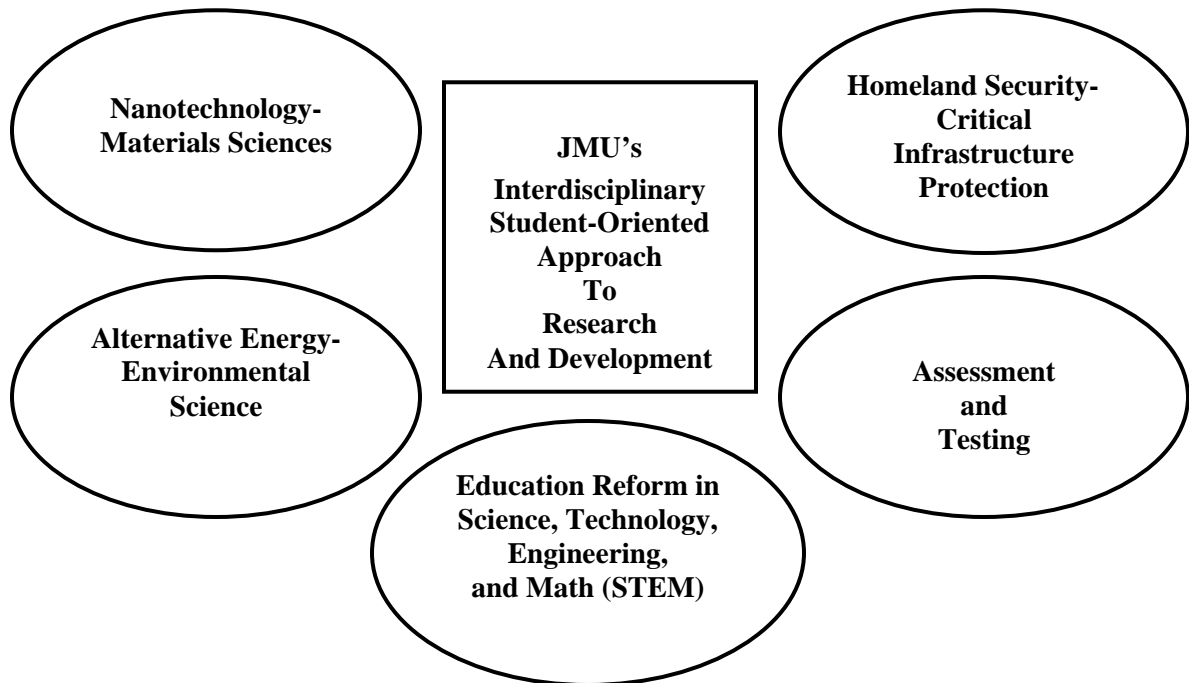
Education Reform in Science, Technology, Engineering, and Math (STEM)

Since its inception in 1993, the College of Integrated Science and Technology has supported many talented faculty members who have obtained millions of dollars in grant funding for research efforts. Due to the current push for education reform and increased innovation within American higher education, CISAT, along with the Colleges of Education and Science and Math, will continue to serve as the centerpiece for efforts within this field. The College of Education has research expertise in E-learning, intelligences, and instructional design.

Nanotechnology/Materials Sciences

Nanotechnology represents a technology sector that possesses enormous potential in areas such as public health and product manufacturing. Because the Center for Materials Sciences and the departments of Physics, Chemistry, and Integrated Science and Technology are currently conducting meaningful research projects within this field, increased support will be provided during the coming year. One example includes research in the field of biodegradable plastics.





The University also has demonstrated research expertise and interest in the following additional areas:

- Student Performance Assessment/Higher Education Accountability
- Art & Art History – Image Databases/Technology
- Ethnomusicology
- Business Practices and Behavior: financial and equity markets – complex and non-linear dynamics; econometrics; consumer behavior
- Communication Sciences and Disorders: hearing loss, behavior, language development stuttering

4 Areas of emerging interest

- Public Policy/Health Policy with emphasis on underserved, culturally diverse and/or rural populations
- Allied Values and Ethics
- Critical Thinking
- Modeling, Simulation, and Visualization

5 Funding sources

- Please comment on possible national and international funding sources your university has applied for, is planning to apply for or is aware of.
 - Adolph Coors
 - Bank of America
 - Centers for Disease Control and Prevention
 - Coca Cola- North America
 - Department of Health and Human Services

- Forest Service
- Graphic Arts Education and Research Foundation
- IREX International Research and Exchange Board
- J. Willard and Alice S. Marriott Foundation
- Jessie Ball DuPont Foundation
- Johnson Lambert & Company
- Keck Foundation
- Lettie Pate Whitehead Foundation
- Marriott Corporation
- Merck
- Microsoft Corporation
- NASA
- National Institutes of Health
- National Science Foundation
- National Institute of Standards and Technology
- Ruth Camp Campbell Foundation (Franklin, VA)
- SunTrust MidAtlantic Foundation
- The TOWN Foundation
- US Department of Agriculture
- US Department of Education
- US Department of State
- Universal Corporation
- Verizon
- Wal Mart Corporation

6 Contact information

- Vice-President/Vice-Rector (or equivalent) with responsibility for research management
John B. Noftsinger, Jr., ED.D.
Associate Vice President for Research and Public Service
noftsijb@jmu.edu
- Manager of Research Office
John Hulvey
Director, Office of Sponsored Programs
hulveyjd@jmu.edu

7 Comments on program for research work shop

- Please comment on any specific areas you consider important to be covered at the INU Research work shop. Also note if there are any specific speakers you would like to see invited and/or which areas they should cover (e.g. funding possibilities, research management etc).
 - Sharing successful examples of international collaborative research
 - Collaborative uses of technology

8 Name, date and email for further information

Name: Lee G. Sternberger

Date: 8/01/06

Email address: sternblg@jmu.edu

9 Other

Benchmarking:

<http://oirsacs.jmu.edu/PerfMeasures/Index.asp>

Financial data – peer institutions:

<http://oirsacs.jmu.edu/PerfMeasures/PctInstSupt.asp>

Research expenditures – go to # 13 at the following URL

<http://oirsacs.jmu.edu/PerfMeasures/ROIE2004.PDF>

State Council for Higher Education for Virginia

Reports on Institutional Effectiveness- James Madison University

http://roie.schev.edu/four_year/JMU/