

Perspectives on the Social and Behavioral Sciences



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APLU Council on Research (CoR)

Summer Meeting

June 29, 2015

Representation of Disciplines Here Today (Show of hands)

- Computer Science
- Environmental Sciences
- Life Sciences
- Mathematical Sciences
- Physical Sciences
- Social and Behavioral Science
- Engineering
- Non S&E (e.g., Business, Education, Humanities, Law)

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13)



FORM APPROVED
OMB No. 3145-0100
Expiration Date: 09/30/16

NATIONAL SCIENCE FOUNDATION
ARLINGTON, VA 22230
HIGHER EDUCATION RESEARCH AND DEVELOPMENT SURVEY
FY 2013

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) Quick Quiz (True/False)

1. Total university R&D expenditures (all sources) are greater for the social and behavioral sciences than for computer sciences.
 - True
 - False

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) Quick Quiz (True/False)

2. Total university R&D expenditures (all sources) are greater for chemistry than for the social and behavioral sciences.

- True
- False

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) Quick Quiz (True/False)

3. Federal R&D expenditures at universities are greater for physics than for the social and behavioral sciences.

True

False

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) Quick Quiz (True/False)

4. Federal R&D expenditures at universities are greater for environmental sciences than for the social and behavioral sciences.
- True
 - False

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) Quick Quiz (True/False)

5. Department of Defense (DOD) R&D expenditures at universities are greater for mathematical sciences than for social and behavioral sciences.
- True
- False

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) Quick Quiz (True/False)

6. Department of Defense (DOD) R&D expenditures at universities are greater for computer sciences than for social and behavioral sciences.

True

False

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) Quick Quiz (True/False)

7. Health and Human Services (HHS) R&D expenditures at universities are greater for medical sciences than for the social and behavioral sciences.

True

False

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) Quick Quiz (True/False)

8. Health and Human Services (HHS) R&D expenditures at universities are greater for the social and behavioral sciences than for environmental sciences.

- True
- False

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) Quick Quiz (True/False)

1. Total university R&D expenditures are greater for the social and behavioral sciences than for computer sciences.

True

2. Total university R&D expenditures are greater for chemistry than for the social and behavioral sciences.

False



Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) All R&D Expenditures (\$billions)

Medical sciences	\$20.426
Biological sciences	\$11.725
Engineering	\$10.729
Social/behavioral sciences	\$3.322
Environmental sciences	\$3.199
Physics	\$2.093
Computer sciences	\$2.068
Chemistry	\$1.706
Mathematical sciences	\$0.671

Source: http://ncesdata.nsf.gov/herd/2013/html/HERD2013_DST_08.html

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) Quick Quiz (True/False)

3. Federal R&D expenditures at universities are greater for physics than for the social and behavioral sciences.

False

4. Federal R&D expenditures at universities are greater for environmental sciences than for the social and behavioral sciences.

True



Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) All R&D Expenditures (\$billions)

Medical sciences	\$12.272
Biological sciences	\$7.640
Engineering	\$6.493
Environmental sciences	\$2.087
Social/behavioral sciences	\$1.686
Physics	\$1.563
Computer sciences	\$1.552
Chemistry	\$1.136
Mathematical sciences	\$0.465

Source: http://ncesdata.nsf.gov/herd/2013/html/HERD2013_DST_22.html

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) Quick Quiz (True/False)

5. Department of Defense (DOD) R&D expenditures at universities are greater for mathematical sciences than for social and behavioral sciences.

False

6. Department of Defense (DOD) R&D expenditures at universities are greater for computer sciences than for social and behavioral sciences.

True



Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) DOD R&D Expenditures (\$billions)

Engineering	\$2.457
Medical sciences	\$0.555
Computer sciences	\$0.547
Physics	\$0.320
Environmental sciences	\$0.208
Social/behavioral sciences	\$0.151
Chemistry	\$0.133
Mathematical sciences	\$0.094

Source: http://ncesdata.nsf.gov/herd/2013/html/HERD2013_DST_22.html

Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) Quick Quiz (True/False)

7. Health and Human Services (HHS) R&D expenditures at universities are greater for medical sciences than for the social and behavioral sciences.

True

8. Health and Human Services (HHS) R&D expenditures at universities are greater for the social and behavioral sciences than for environmental sciences.

True



Nation's Research Portfolio

Research Expenditures based on NSF HERD Survey (FY13) HHS-funded R&D Expenditures (\$billions)

Medical sciences	\$11.325
Social/behavioral sciences	\$.837
Engineering	\$.633
Chemistry	\$.439
Computer sciences	\$.080
Environmental sciences	\$.079
Physics	\$.054
Mathematical sciences	\$.047

Source: http://ncesdata.nsf.gov/herd/2013/html/HERD2013_DST_22.html

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Were you surprised? Why do you think that political representatives, university leadership, and even the faculty themselves do not know this?

? ? ? ? ?

Potential Problems with the HERD data

Definitions of fields

- Biostatistics in Biological sciences; Statistics in Mathematical Sciences
- “Other” categories

Basis of classifications

- Department of PI?
- PhD discipline of PI?
- Topic of research?

Multi-and Interdisciplinary team research

Relative Size of Fields as Measured by Doctorate Recipients

	1983	1993	2003	2013
Life Sciences	5,603	7,463	8,508	12,305
Physical Sciences (MPS)	4,375	6,428	5,831	9,290
SBE Sciences	6,259	6,759	7,004	8,401
Engineering	2,781	5,698	5,280	8,963
Education	7,174	6,689	6,651	4,944
Humanities	3,336	4,267	5,192	5,662
Other	1,752	2,496	2,300	3,195

Source: <http://www.nsf.gov/statistics/sed/2013/data-tables.cfm>. Table 13.

2013-2014 Faculty in Higher Education Salary Survey

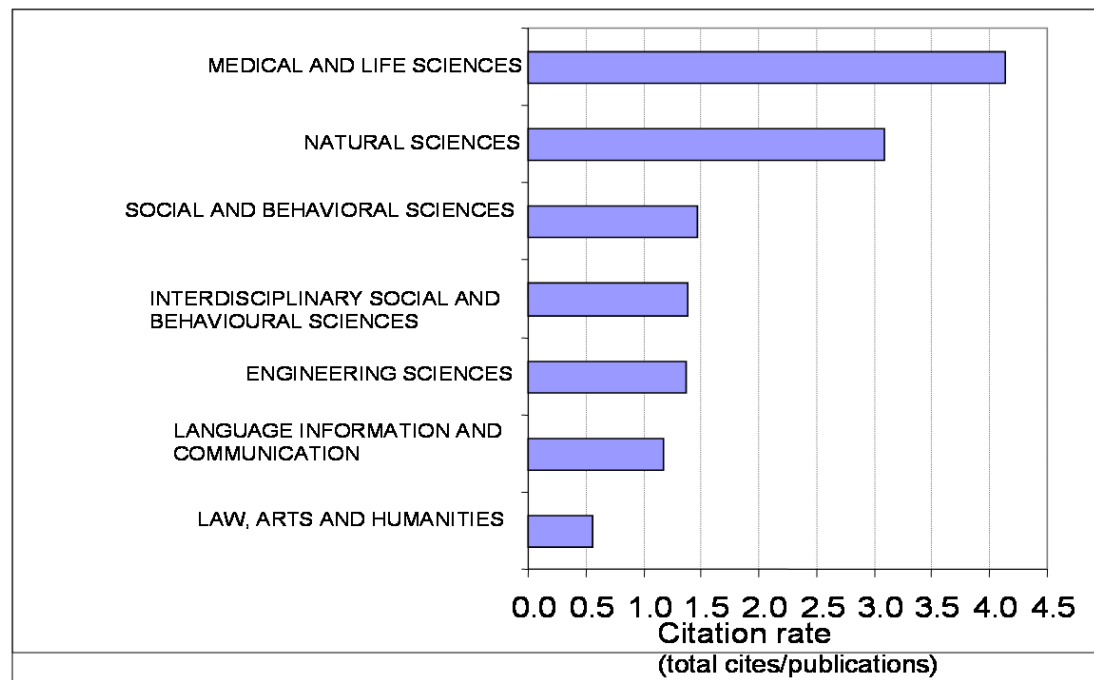
Tenured Full Professors at Research Institutions

Agriculture, Operations, and Related Sciences	\$85,582
Communication, Journalist and Related Programs	\$108,083
Computer and Information Sciences and Support Education	\$134,262
Engineering	\$104,675
English Language and Literature/Letters	\$134,560
Biological and Biomedical Sciences	\$100,552
Mathematics and Statistics	\$122,606
Physical Sciences	\$109,249
Social Sciences	\$116,011
	\$114,474

Source: <https://www.higheredjobs.com/salary/salaryDisplay.cfm?SurveyID=28>

Relative Prestige of Fields as Measured by Citation Patterns

Differences in the average aggregate citation rates between major groups of disciplines, (that is, total citations divided by number of publications) in 2006

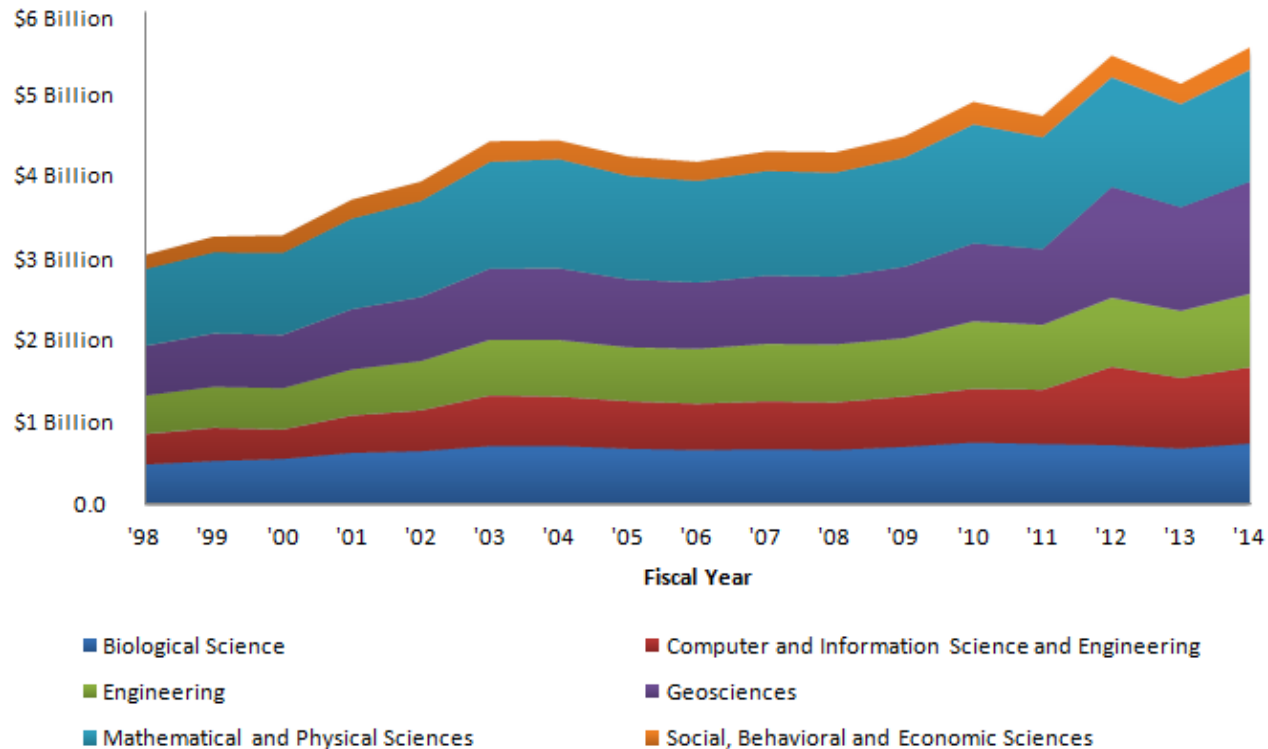


Source: <http://blogs.lse.ac.uk/impactofsocialsciences/2014/12/09/poor-citation-practices-humanities-and-social-sciences/>

Cultural Differences Between Fields in Publication Practices

- What counts as a publication in a peer review journal
- Norms of authorship (especially dissertations)
- Turnaround time for first and second-time submissions
- Citation practices

Perceptions based on NSF funding patterns



Source: <http://www.socialsciencespace.com/2014/03/how-much-nsf-funding-goes-to-social-science/>

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Why do political representatives,
university leadership, and even the
faculty themselves not hold the social
and behavioral sciences in higher
regard?

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? ? ? ? ?

What do the social and behavioral sciences uniquely offer? In general? At your university?


? ? ? ? ?

Thank you!




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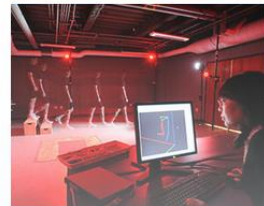
 

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Wanted: your submissions for the development of a mobile app that applies UNC research. [Read more...](#)



RESEARCH AT CAROLINA



People make discoveries in every corner of our campus — some that will change our entire state, and even our world. The minds and hands behind research at Carolina can belong to anyone — students, faculty, and staff all find opportunities to bring their ideas to life.

2011 RESEARCH HIGHLIGHTS

Whether they're trying to solve some of the world's most pressing problems or finding the answers to scholarly questions, Carolina faculty often engage in fascinating research. 2011 was no exception. Here are some of the biggest UNC Research stories and trends of the year.



LATEST NEWS AND EVENTS

UNC faculty receive Autism Centers of Excellence grants for new research

September 11, 2012

Heavy drinking rewires brain, increasing susceptibility to anxiety problems

September 9, 2012

Future jobs will require mix of education, training, experience, UNC researchers say

September 6, 2012

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QUICK LINKS

- Institutional Review Boards (IRB)
- Institutional Animal Care and Use Committee (IACUC)
- Sponsored Research
- Undergraduate Research
- Clinical Trials
- Funding Information Portal
- Discover/online research magazine
- Faculty.org

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