Reporting post-graduation outcomes of doctoral students using NCSES/NSF data

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Statement by AAU Chief Academic Officers on Doctoral Education Data Transparency

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"Numerous high-level reports over the past two decades have identified ways to improve PhD education. One frequently identified barrier to improvement is the lack of transparent data on PhD programs. The Chief Academic Officers of the Association of American Universities call on all PhD granting universities and their respective PhD granting colleges, schools, and departments, to make a commitment to providing prospective and current students with easily accessible information. This should include data on matters such as student demographics, time to degree, financial support, and career paths and outcomes within and outside of academia. AAU institutions should commit to developing the infrastructure and institutional policies required to uniformly capture and make public such data."

Why focus on PhD doctoral students with these data?

Agenda

 What are National Science Foundation's restricted-use microdata files?

How do I get a license to access the restricted-use data?

 What kinds of research questions on PhD doctoral students can I answer with these data?

• Example – time to degree



National Center for Science and Engineering Statistics (NCSES)

www.nsf.gov/statistics/

NSF/NCSES available surveys

- Survey of Earned Doctorates (SED)
 - All individuals receiving a research doctorate
- Survey of Doctorate Recipients (SDR)
 - Research doctorate in science, engineering, social sciences, or health field
- National Survey of College Graduates (NSCG)
 - College graduates with at least a bachelor's degree
- National Survey of Recent College Graduates (NSRCG) (1973-2010)
 - Bachelor's or master's degree in science, engineering, or health field

Getting that restricted-use data!

Applying for a license

Steps to receive a license

- 1. Data Requirements and Research Plan
- 2. Security Plan
- 3. Signatures
- 4. Approval

You have the license. Now what?

NORC DATA = NCLAVE

Possible research topics

- PhD Doctoral student experience
 - Sources of financial support
 - Undergraduate and graduate educational debt
 - Time to degree
- Post-graduation outcomes
 - Work, other study or training within and outside of academia
 - Geographic location of employment or living
 - Primary and secondary work activities
 - Job satisfaction
 - Source and type of financial support for postdoctoral study or research
- Comparisons
 - Demographics, field of study, other institutions

Example: Time to degree

Median TTD by campus and discipline: All fields

UCB	UCD	UCI	UCLA	UCM	UCR	UCSB	UCSC	UCSD	UCSF	UC	AAU Public	AAU Private
5.7	5.7	5.7	5.7	5.7		5.8	5.8	5.7	6.0	5.7	5.7	5.7
5.7	5.7	5.7	3.7	5.7	5.2			3.7		3.7	5.7	5.7

Median TTD by campus and discipline: Engineering/CS

UCB	UCD	UCI	UCLA	UCM	UCR	UCSB	UCSC	UCSD	UCSF	UC	AAU Public	AAU Private
				5.7			6.0					5.5
5.3	5.2	5.2	5.2		4.9	5.4		5.4	5.3	5.3	5.3	5.5

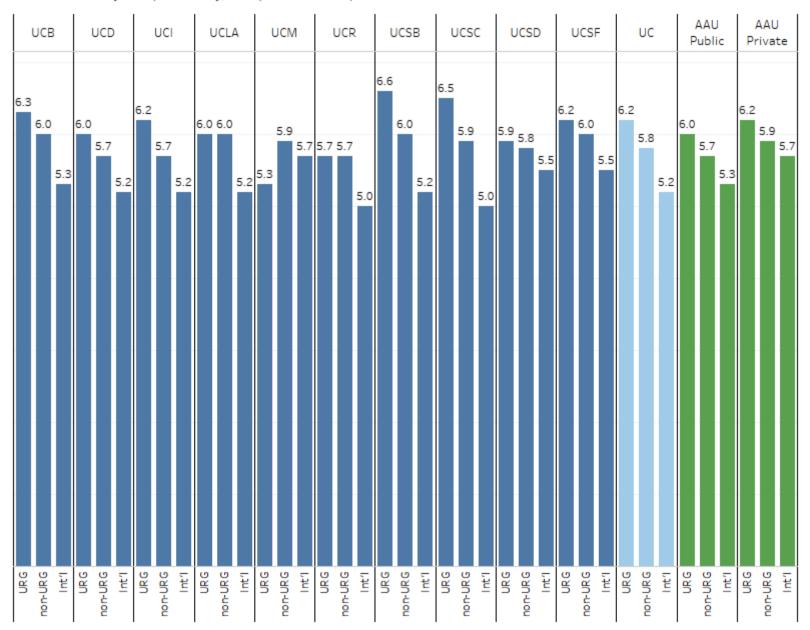
Median TTD by gender, campus, and discipline: All fields

UCB	UCD	UCD UCI UCLA		UCM		UCR		UCSB		UCSC		UCSD		UCSF		UC		AAU Public			AU vate			
6.3											6.0		6.2				6.0						5.9	
5.7	5.7 5	5.7	5.7	5.5		5.7	5.3	5.7		5.2		5.7		5.7	5.8	5.7		5.7	5.8	5.7	5.7	5.7	3.5	5.7
F M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M

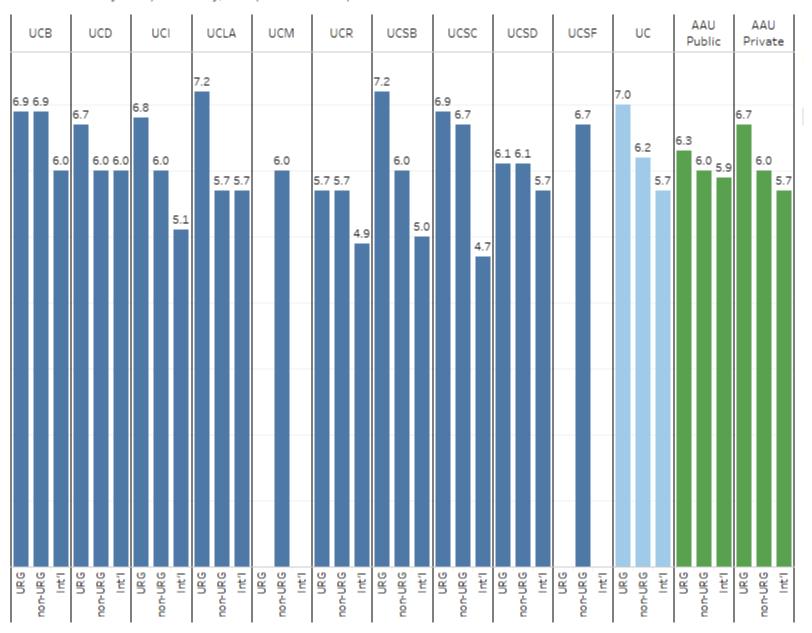
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UCB	UCD)	U	JCI UCLA		UCLA		M	U	UCR		UCSB		UCSC		UCSD		SF	UC		AAU Public			AU vate
5.7	5.2 5	5.2	5.2	5.2	5.2	5.2		5.7			5.5	5.2	6.0	5.9	5.5	5.4	5.6	5.2	5.3	5.3	5.3	5.3	5.5	5.5
									4.7	4.9														
F M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M

Median TTD by race/ethnicity, campus and discipline: All fields



Median TTD by race/ethnicity, campus and discipline: Social sciences



Highlights

- Gaining access may take time
- It's free!
- Survey of Earned Doctorates and Survey of Doctorate Recipients are great sources for learning about who receives research doctoral degrees and post-graduation outcomes.
- Allows for comparisons based on demographics or with other institutions

What are some research topics that interest you?