

Panel 3: Academic Data & The Labor Market

1

MICHAEL TEITELBAUM
LABOR AND WORKLIFE PROGRAM
HARVARD LAW SCHOOL

FUTURE OF RESEARCH CONFERENCE
BOSTON, OCTOBER 2015

MICHAEL S. TEITELBAUM
TEITELBAUM@SLOAN.ORG

Four experiments

2

1. UCSF Graduate Student Internships for Career Exploration Program (GSICE)
2. BEST program, NIH
3. Professional Science Masters (PSM)
4. Stanford PhD Alumni Study

Experiment #1: UCSF Graduate Student Internships for Career Exploration Program (GSICE)

3

- Advanced grad students do internships outside of academe
- All basic and biomedical science graduate programs
- Internships full-time, 3 months
- Typically during one academic quarter

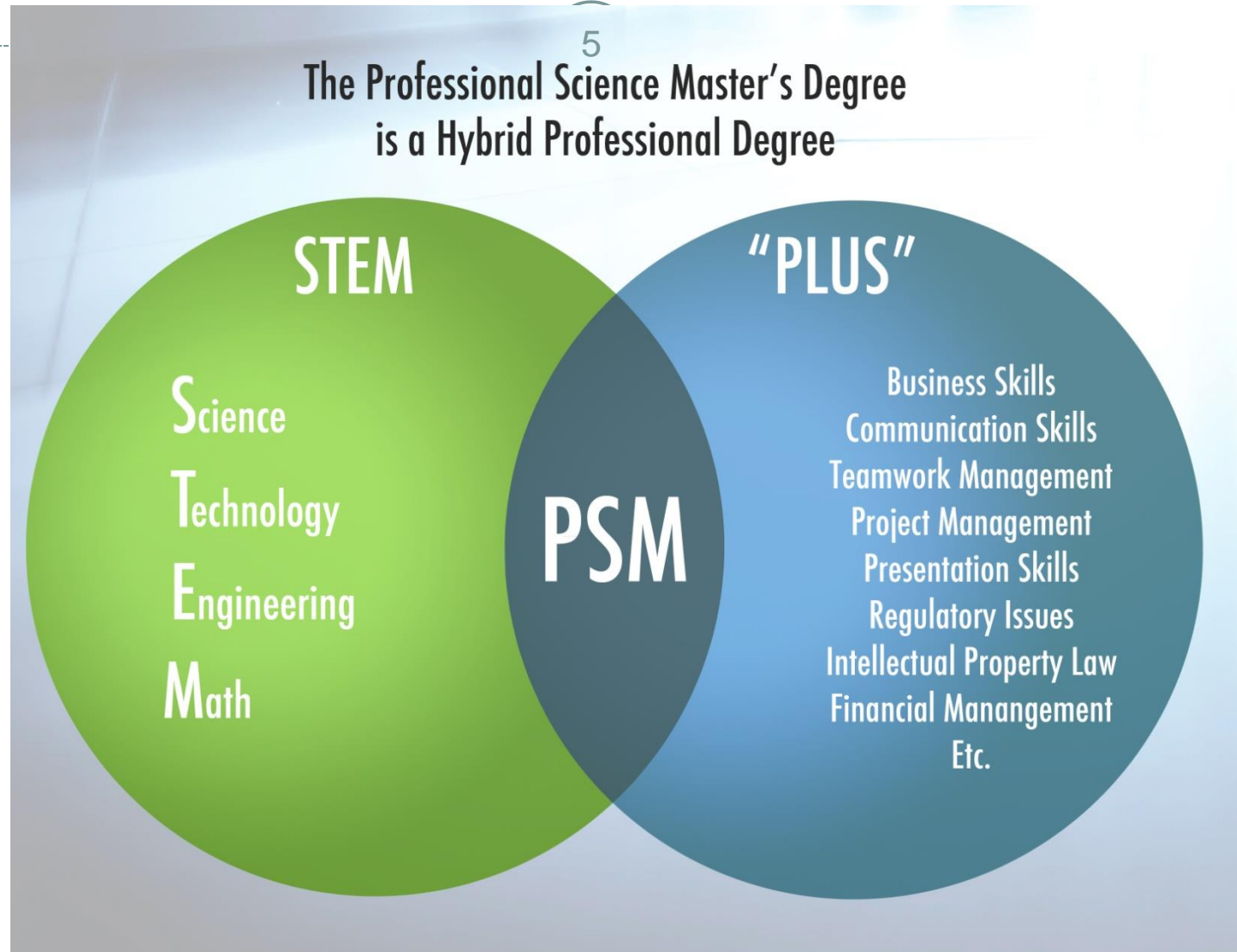
Experiment #2: BEST program, NIH

4

- Broaden graduate and postdoctoral training to reflect wider range of career options
- Collaborations with non-academic partners
 - contribute to coursework, rotations, internships, etc.
- Establish a new paradigm for graduate and postdoctoral training

Experiment #3:

PSM: combine science & professional skills

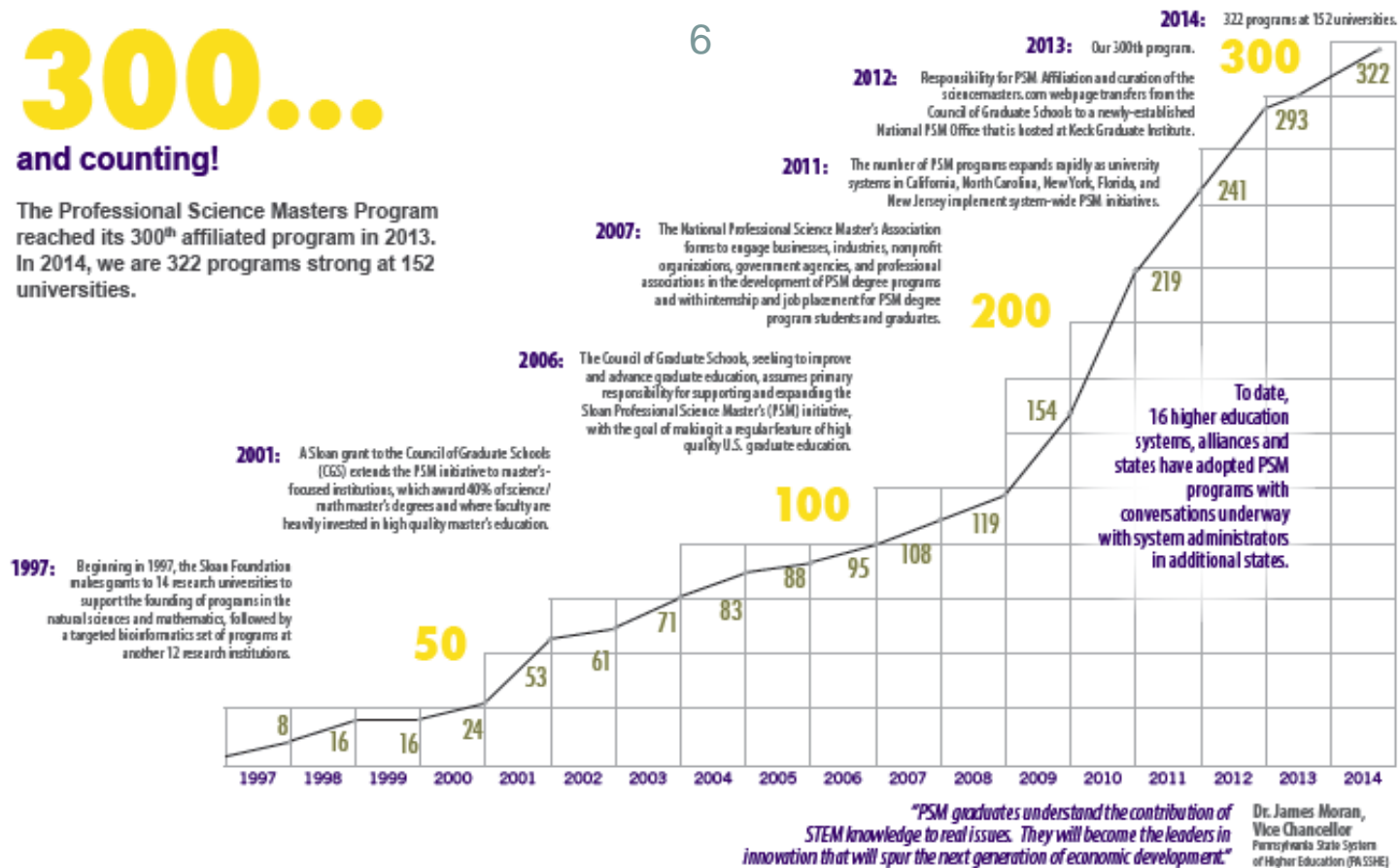


Sustained growth, take-off 2008

300...

and counting!

The Professional Science Masters Program reached its 300th affiliated program in 2013. In 2014, we are 322 programs strong at 152 universities.



The PSM degree is designed to train the next generation of STEM professionals for integrator and leadership roles in science-intensive industries. By helping translate research into commercialization, PSM graduates are able to fuel innovation and economic growth.

PSM
PROFESSIONAL
SCIENCE MASTER'S

Still expanding strongly

7

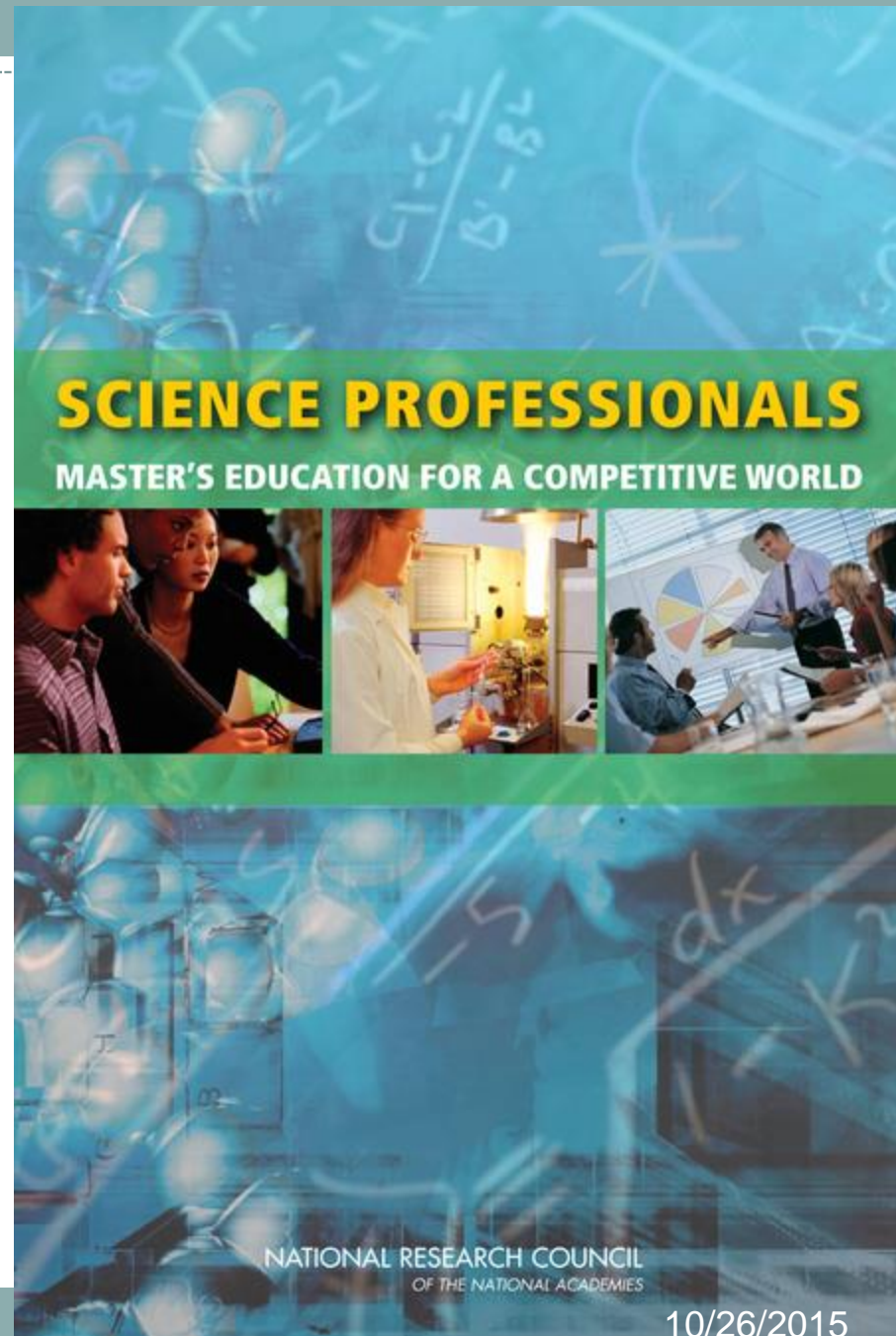
- Now up to **342** active PSM programs
- In **159** universities US/Canada
 - PSMs now being developed in S. Korea, Australia, UK, Netherlands, Sweden, etc.

PROMISING

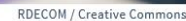
- US graduate schools responding
- Up from zero PSMs and univ's 18 years ago
 - VERY difficult period for higher ed

National Research Council, National Academies, 2008

Michael S. Teitelbaum



 | Comments (2)



Data on PSM alumni careers?

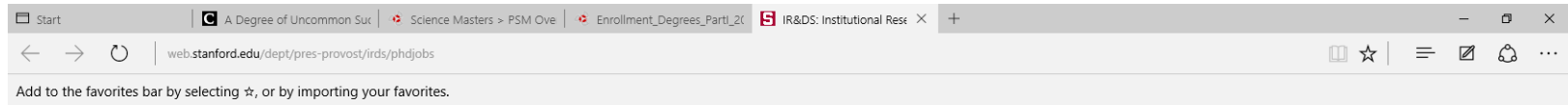
10

- **Can we locate via social media?** (Tobias/Richards)
- **70 “oldest” PSM programs, begun 1997-2005**
 - 44 campuses, 3,619 alumni
- **Surprise: found 78% of these early alumni**
- **Can identify employers, job titles, resumés**
- **Employers: Large co’s (31%), small co’s (14%)**
 - Education (16%)--need disaggregate: PhD? Postdoc? Staff?

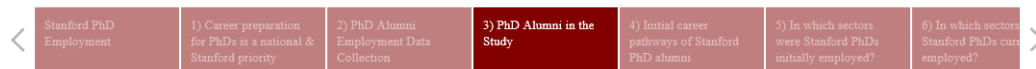
Experiment #4: Stanford PhD Alumni Study

web.stanford.edu/dept/pres-provost/irds/phdjobs

11



Stanford PhD Alumni Employment



PhD Alumni in the Study

Click here to see a breakdown of PhD alumni by department (opens a new browser tab)

	10-Year		5-Year		Total PhDs	Located: Initial Position	Located: Current Position
	2002- 2003	2003- 2004	2007- 2008	2008- 2009			
Engineering	223	229	229	241	922	69%	76%
Biosciences*	66	73	95	74	308	78%	83%
Natural Sciences*	82	63	77	84	306	76%	82%
Humanities	58	70	74	71	273	71%	87%
Social Sciences	57	73	67	64	261	80%	84%
Education	36	37	33	30	136	85%	85%
Earth Sciences	27	23	31	35	116	72%	83%
Business	15	19	22	17	73	96%	96%
Law	7	4	8	6	25	92%	88%
Total	571	591	636	622	2,420	74%	81%

* Biology and Biophysics included in Biosciences

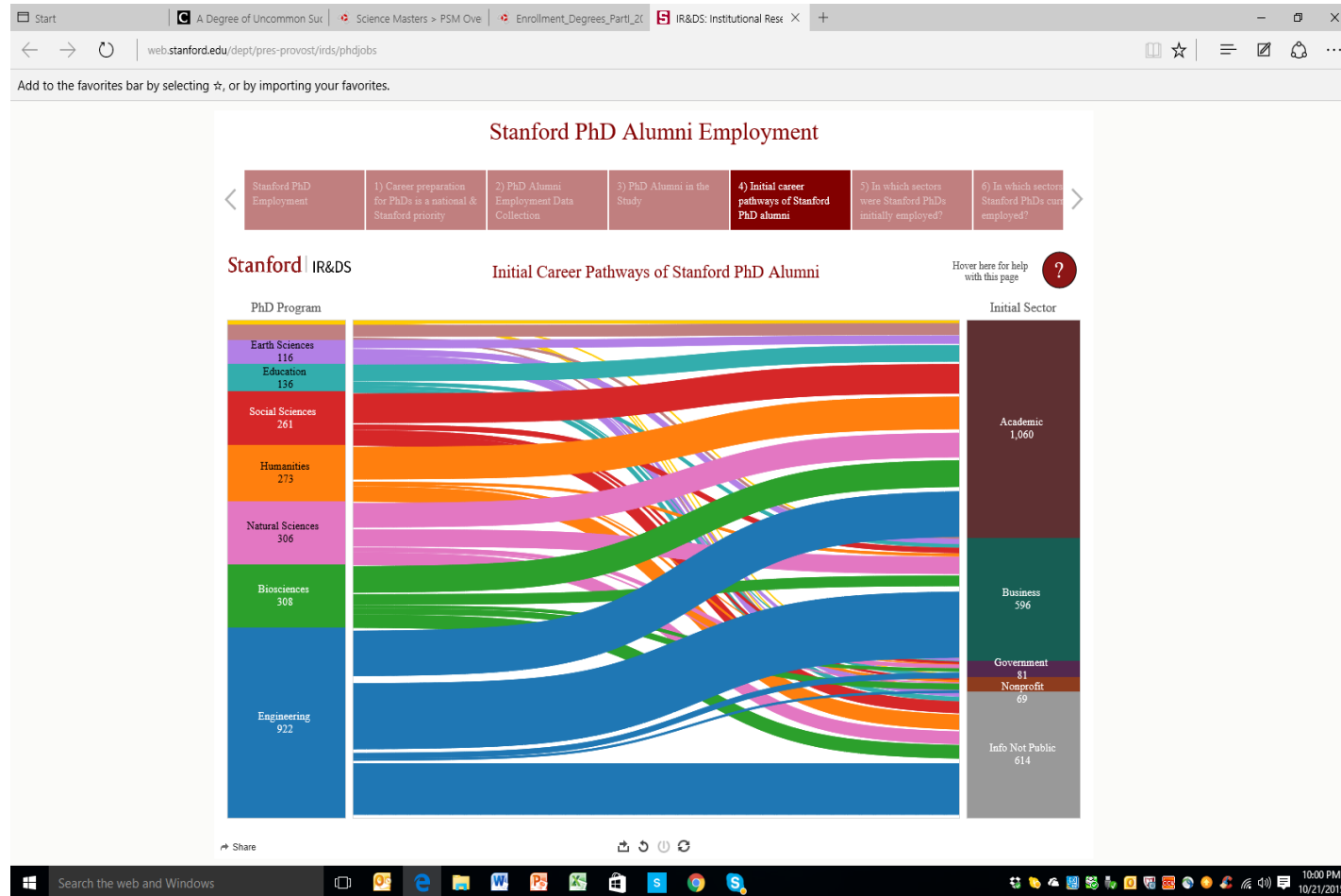
Stanford | IR&DS

Share



Interesting data on career pathways (but confounded by postdocs in “academic”?)

12



Thank you!

13

MICHAEL S. TEITELBAUM

TEITELBAUM@SLOAN.ORG

ONLINE RESOURCES ON PSM DEGREE:

[HTTP://WWW.SCIENCEMASTERS.COM](http://www.sciencemasters.com)

[HTTP://WWW.NPSMA.ORG](http://www.npsma.org)

[HTTP://WWW.NASH-PSM.ORG](http://www.nash-psm.org)

