Gatekeepers in Recruiting
AND
Organizational Solutions

Brian Rubineau
Cornell University
“investigating gender differences in the transition from an S/E bachelor’s degree to further participation in S/E [labor force] is particularly important.” (2005, p. 98)
Organizational Opportunities
Engineering Internships During College → Engineering Jobs?

Source: Rubineau et al. 2013. NSF Award # 1123905
Recruiting

Photo credit: Cornell University College of Engineering.
Photo credit: Cornell University College of Engineering.
Solutions!
1) *Mirror.*

*Birds of a feather...*
2) **What?**

- **Bias reduction:** Remove decision separation
- **Better info:** Internship → Working interview
3) In Groups.

- **Diversity**: Sequential versus cluster
- **Performance**: Stars vs. Lift-Outs (Groysberg)
- **Retention**: Social Ties (Rubineau & Fernandez)
4) **New Why? Goals.**
Informal?
MOST common way STEM workers find their jobs

- 55%, All STEM workers, GSS 1991
- 27%, 2007 Engineering Seniors Career office: 24%, Internships: 20%, Recruiters: 13%

Source: Silbey et al. NSF Award # 0240817
Lessons
Apply
STEM Referring

Source: 2012 GSS (2013). NORC/ICPSR.
Get underrepresented groups to refer more.

Rubineau & Fernandez (In Press)
The School of Applied and Engineering Physics at Cornell University is seeking applications for a tenure-track, assistant professor position

The School of Applied and Engineering Physics at Cornell University is seeking applications for a tenure-track, assistant professor position. Consideration of applications for an associate or full professor level position may be given to exceptionally well-qualified individuals. Candidates must be able to demonstrate the ability to develop a highly successful independent research program and to participate effectively in the teaching of the applied physics curriculum at both the undergraduate and graduate levels. Research areas of interest include biophysics and biotechnology, optics and photonics, nanotechnology, science and technology, novel instrumentation methods, computational physics, renewable energy, and materials physics. However, exceptional candidates in all areas of applied physics will be given serious consideration.

Prospective candidates who wish to pursue interdisciplinary research efforts are strongly encouraged to apply. The successful applicant can expect a highly competitive level of support for the start-up of his/her research program. Considerable institutional resources are available at Cornell that can strengthen this research program and support interdisciplinary and collaborative research ventures. The successful candidate can expect to benefit from association with one or more of Cornell’s interdisciplinary research centers, national facilities, and national resources, listed at http://www.engineering.cornell.edu/research/facilities.cfm.

How to Apply

Interested applicants should go to the following link to submit their curriculum vitae, a statement of teaching philosophy, a brief (3-page limit) statement of research interests, and the names and complete contact information for at least three references: https://academicjobsonline.org/ajo/jobs/3997. An automated message will be sent monthly for those who apply to the position. All applications must be received by December 2, 2013.

The School seeks candidates who will create a climate that attracts students of all races, nationalities, and genders. Cornell University is an affirmative action/equal opportunity employer; qualified women and minority candidates are particularly encouraged to apply.

Cornell University seeks to meet the needs of dual career couples, has a Dual Career program, and is a member of the Upstate New York Higher Education Recruitment Consortium to assist with dual career searches.

Visit http://www.unyhere.org to see positions available in higher education in the upstate New York area.
Research-Based Radical?

- Mirrored recruiters (formal & informal)
- Empowered recruiters
- Leverage social ties
- Re-imagined internships & interviews
Recruiting
Gatekeepers
Thank You!
brubineau@cornell.edu
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☞ Job fair photos from engineering.cornell.edu
☞ Network image from: http://www.greatgraduate.co.uk/networking-skills/
Figure 2-14
Women’s share of S&E bachelor’s degrees, by field: 2000–09

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NOTE: Physical sciences include earth, atmospheric, and ocean sciences.


Science and Engineering Indicators 2012
The Pipeline Is Leaking Women All the Way Along

Joe Alper


WHY DO WOMEN LEAVE SCIENCE AND ENGINEERING?

Jennifer Hunt

Working Paper 15853
http://www.nber.org/papers/w15853

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
March 2010

I use the 1993 and 2003 National Surveys of College Graduates to examine the higher exit rate of women compared to men from science and engineering relative to other fields. I find that the higher relative exit rate is driven by engineering rather than science, and show that 60% of the gap can be explained by the relatively greater exit rate from engineering of women dissatisfied with pay and promotion opportunities. Contrary to the existing literature, I find that family–related constraints and dissatisfaction with working conditions are only secondary factors. My results differ due to my use of non–science and engineering fields as a comparison group. The relative exit rate by gender from engineering does not differ from that of other fields once women's relatively high exit rates from male fields generally is taken into account.
Interviewers: prefer similar others, distant hiring managers can increase apparent biases., and interviewers’ decisions are not based primarily on quality:


Group selection yields greater diversity than sequential. (Valerie Purdie-Vaughns and colleagues).


Performance of individually-recruited “stars” declines, while team-level “lift-outs” have lower relocation performance penalties. (Boris Groysberg).


Social ties via referring affect expected turnover rates.


Managing referrer behavior can reduce job segregation. (Rubineau and colleagues).


Finding a Job

- **Personal contacts** are the *single most common method for finding* actual *jobs*.


- **Personal contacts** are also the *single most common recruiting method*.


