



IWiN

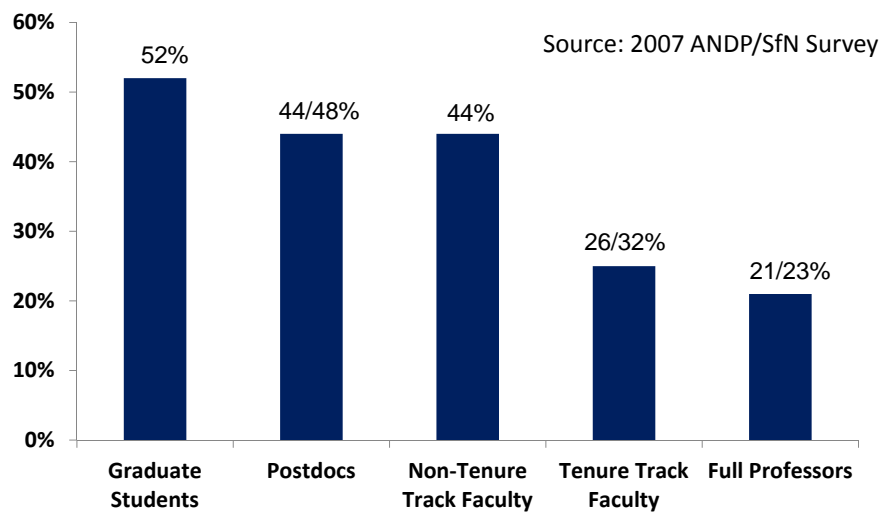


Society for Neuroscience Professional Development Committee

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The Leaky Pipeline: Women drop out at every transition In particular the transition to Tenure Track Faculty:



**GROWTH IN THE REPRESENTATION OF WOMEN IN
NEUROSCIENCE IS FAIRLY STAGNANT (% total)**

| Year | Grad Student | Postdoc | Non-Tenure Track | Tenure Track | Asst. Prof. | Assoc. Prof. | Full Prof. |
|------|--------------|---------|------------------|--------------|-------------|--------------|------------|
| 1986 | | | | 15 | 23 | 20 | 9 |
| 1991 | | | | | 27 | 22 | 13 |
| 1998 | | | | 24 | 32 | 27 | 19 |
| 2000 | 47 | 40 | 43 | 21 | 30 | 26 | 14 |
| 2003 | 50 | 42 | 43 | 25 | 33 | 28 | 21 |
| 2005 | 52 | 41 | 38 | 25 | 32 | 27 | 21 |
| 2007 | 52 | 44 | 44 | 26 | 36 | 28 | 21 |
| 2009 | 54 | 37 | 44 | 29 | 34 | 31 | 26 |

Source: ANDP Surveys

**LOWER REPRESENTATION OF WOMEN AT DIFFERENT CAREER LEVELS IS
NOT UNIQUE TO NEUROSCIENCE (% total)**

| Discipline/Field | Ph.D. | Post-Doc | Total Faculty |
|-------------------|-------|----------|---------------|
| Neuroscience (1) | 52 | 44 | 26/32 |
| Physiology (2) | 48 | 44 | 23 |
| Chemistry (3) | - | - | 14 |
| Life Sciences (4) | 49 | 40 | 32 |
| Doctoral Univ (5) | - | - | 30 |

(1) = ANDP/SFN Data

(2) = Association of Chairs of Departments of Physiology 2007 Survey (The Physiologist 51:87, 2008)

(3) = Chemical and Engineering News 2006 Survey (C&EN 84:58, 2006)

(4) = NSF Survey of Earned Doctorates 1998-2005; Survey of Doctoral Recipients 1973-2006

(5) = American Association of University Professors Faculty Equity Indicators 2006

- Why has the representation of women in the professorate remained low at 25% tenure track female faculty and 21% female full professors?
- Not due to a failure to recruit at the graduate student level.
- A disproportionate number of women graduates fail to secure tenure track positions.
- Fewer women are promoted from Asst. Prof to Assoc. and Full Professor.
- The IWIN (Increasing Women in Neuroscience) Workshops designed to enhance recruitment, retention and promotion of women faculty and underrepresented minorities.

Status of Minorities in Neuroscience (% US Citizens/Residents; ANDP)

| | Predoctoral | | | | | Postdoctoral | | | | | Faculty | | | | |
|------------------|-------------|----|----|----|----|--------------|----|----|----|----|---------|----|----|----|----|
| Survey Year | 91 | 98 | 03 | 07 | 09 | 91 | 98 | 03 | 07 | 09 | 91 | 98 | 03 | 07 | 09 |
| Asian American | 38 | 42 | 41 | 44 | 38 | 53 | 50 | 50 | 51 | 45 | 64 | 61 | 66 | 63 | 64 |
| Hispanic | 32 | 25 | 30 | 27 | 32 | 25 | 10 | 18 | 18 | 22 | 22 | 20 | 17 | 20 | 22 |
| African American | 22 | 20 | 18 | 18 | 21 | 12 | 32 | 21 | 14 | 16 | 11 | 7 | 8 | 8 | 7 |
| Native American | - | 8 | 1 | 4 | 2 | - | 4 | 0 | 6 | 3 | - | 5 | 0 | 2 | 1 |
| Other | 8 | 5 | 10 | 7 | 7 | 10 | 4 | 4 | 11 | 18 | 3 | 7 | 9 | 7 | 6 |
| Percent Total US | 11 | 22 | 20 | 25 | 23 | 10 | 21 | 20 | 27 | 18 | 6 | 7 | 9 | 11 | 13 |

Further Analysis of the 2009 CNDP Survey Data

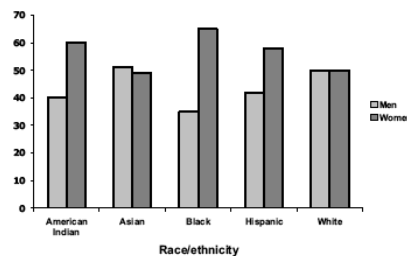
“...the U.S. federal government places special emphasis on African-Americans, Hispanic Americans, Native Americans, and Pacific Islanders among members of U.S. racial and ethnic minorities because they are under-represented in academia. Thus, it should be noted that when just these groups are considered (i.e., Asian-Americans are excluded), **their representation in the 2009 survey is reduced to only 5% of tenure-stream faculty members who are U.S. citizens (4% of all tenure-stream faculty members).**”

NUMBER OF FEMALE UNDERREPRESENTED MINORITY FACULTY AT “TOP 50” SCIENCE AND ENGINEERING DEPARTMENTS (FY2002)

| Physical Sciences & Engineering | Black Females | Hispanic Females | Native American Females |
|---------------------------------|------------------|------------------|-------------------------|
| Chemistry (FY2003) | 2 | 5 ¹ | 1 |
| Engineering | 14 | 8 ² | 0 |
| Total | 16 | 33 | 1 |
| *URM female “full” professor | 0 | 10 | 0 |
| Social Sciences & Life Sciences | | | |
| Social Sciences | 63 ^{1b} | 25 ⁵ | 0 |
| Psychology | 22 ³ | 26 ⁵ | 3 |
| Biological Sciences | 9 ¹ | 13 ² | 0 |
| Total | 94 | 53 | 3 |
| *URM female “full” professor | 19 | 12 | 0 |

Superscript indicates number of URM female “full” professors within a discipline. Source – (Nelson, 2005)

FIGURE 1. SEX DISTRIBUTION OF DOCTORATES EARNED BY U.S. CITIZENS, BY RACE/ETHNICITY, 2005



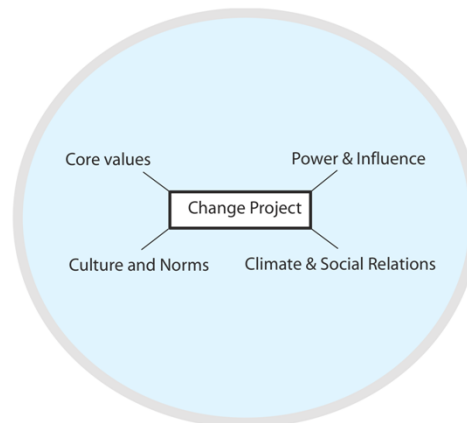
From 2009 CNDP Survey Conclusions

“At the most recent rate of increase (i.e., only 5% in the past 11 years), it will take four decades before women comprise 50% of the tenure-stream faculty members in neuroscience unless graduate programs become even more committed than they now are to a policy of gender equality in their faculty. A similar statement can be made regarding members of underrepresented U.S. racial and ethnic minorities among faculty in graduate neuroscience programs.”

ORGANIZATIONAL CHANGE

- CORE VALUES
- POWER & INFLUENCE
- CULTURE & NORMS
- CLIMATE/SOCIAL RELATIONS
- BOUNDARIES & CONTEXT

Boundaries with the rest of college/university/community



Boundaries with the rest of college/university/community

Core Values: what activities count? How are priorities organized?

Curriculum – how determined? How is teaching assigned? What is valued?

Are members of major sub-disciplinary divisions all equally valued, respected, and interacted with?

How effective are mentoring programs for junior faculty? Who does the mentoring? Who mentors women faculty and faculty of color?

Are some kinds of scholarly work seen as more important than others? Theoretical vs. Applied, Funded vs. Unfunded work

How equitable are departmental resources shared among faculty of different ranks, gender, race/ethnicity?

How is service valued? Is there agreement on the value of different types of service? E.g., to discipline, department, university, outreach, etc.

Power and Influence: whose voice counts? How are decisions made?

Who has the power? Formal and informal leadership in the department Chair, ex-chairs, section leaders, others?

How is power exercised?

Open/covert loud/soft

Who feels entitled who holds back?

How is opposition expressed? Productive? Unproductive?

What is power based on? Position? Wisdom? Trust? Reputation? Grants?

Culture and Norms:

What rules and expectations matter?

How is behavior assessed?

What are expectations for appropriate behavior with peers?

Is it OK to be aggressive and contentious?

Are racist and sexist innuendos or jokes OK - public or in private? with graduate students? With staff?

What are the informal rules of the game?

What kind of research (or teaching, or service) is seen as central and what is peripheral?

What do people get rewarded for?

What is sacred? (truth, objectivity individual merit?)

Climate and Social Relations: What interactions matter? Who is included? Who is left out?

Who talks with whom and in what settings?

Who is included and who is excluded from informal social gatherings?

How do faculty members talk with one another? Does it vary with rank and/or gender?

What is the level of trust among departmental members?

Can people openly criticize departmental practices and policies? How is criticism expressed? Are their guidelines for how disagreements are pursued?

Are there well-known 'difficult personalities'?

Boundaries: what other parts of the larger organization matter?

How much discretion regarding the above factors (1-4) does the department have?

What departmental resources can be used? On what basis might additional resources flow into the department to address factors of concern?

To what extent is intradepartmental work valued? Rewarded at promotion/tenure?

Is it possible to link and work collaboratively with other departmental teams?

Are there good contacts in the Dean's Office? Provost's Office?

How bound is the department and faculty members by the larger university's mission?

How are alumni, parental, community and/or state concerns dealt with?