Women in the Geosciences
Revealing our Status, Building a Network

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“Where are the Women Geoscience Professors?”
Leadership Award, 2001-2004

Building a Community of Women Geoscientists
PAID Award, 2007-2009

Goal:
To build a network of women geoscientists in the Northeast U.S.

Activities:
1) Writing Retreats
2) Professional Development Workshops
3) Workshops for Geoscience Department Chairs

Results
Time series analysis indicates the biggest loss is between PhD and first academic position.

<table>
<thead>
<tr>
<th>Year</th>
<th>Assistant Professor</th>
<th>Associate Professor</th>
<th>Full Professor</th>
<th>Chair, Head</th>
</tr>
</thead>
<tbody>
<tr>
<td>96-97</td>
<td>20*</td>
<td>14</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>00-01</td>
<td>21*</td>
<td>15</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>01-02</td>
<td>23</td>
<td>14</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>04-05</td>
<td>26</td>
<td>14</td>
<td>8</td>
<td>10*</td>
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</table>

There is a higher proportion of women at Bachelor’s-granting than at PhD-granting institutions.

- Bachelor’s: 12%* 16% 17%* 18%
- Master’s: 12% 14% 14% 17%
- Doctoral: 9%* 12% 12%* 13%

*significantly different, chi-squared test

There has been a slow increase in women in assistant professor positions.

- Assistant Professor: 5% 7% 14% 21%* 24%
- Associate Professor: 14 15 14 14
- Full Professor: 5 8 8 8
- Chair, Head: 7 8 10% 10%

Female PhD production in 2002: 32%

Focus Group Results
How Geoscientists Perceive Gender Equity

Geoscientists’ Explanations for Low Numbers of Women on the Faculty:
“female”: something about women themselves:
- they don’t like getting dirty
- they don’t want to be geoscientists
- women lack confidence, toughness

“pipeline”: low numbers of women are an historic artifact that the pipeline will fix

“We structure”: family issues, lack of female mentors, chilly climates


Why Does a Geoscientist Contemplate Leaving?

Women are more likely to contemplate leaving, academia even after achieving tenure.

<table>
<thead>
<tr>
<th>Male Responses</th>
<th>Female Responses</th>
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<tbody>
<tr>
<td>Uncertain job market (7)</td>
<td>Family issues (7)</td>
</tr>
<tr>
<td>May want kids (1)</td>
<td>Problems with graduate advisor (6)</td>
</tr>
<tr>
<td>Difficult classes (2)</td>
<td>Uncertain job market (3)</td>
</tr>
<tr>
<td>Wrong subdiscipline (2)</td>
<td>Wrong subdiscipline (2)</td>
</tr>
</tbody>
</table>

| Family issues and problems with graduate advisors looming large in women’s contemplation of leaving. |

Evaluations
Writing Retreat:
- Overall expectations met? 100%
  - Length of retreat appropriate? 95%
  - Would attend future retreat? 95%
  - Would pay a nominal fee to attend? 95%
- Most valuable activity? Writing Coach
- Communal meals provided great networking

Professional Development Workshops:
- 95% positive (except our room was cold!)
- Only negative comments: want more, longer

Lessons Learned: Publish, Publicize
Most STEM faculty have misconceptions about the actual numbers of women getting PhDs in their field and the proportions of women on the faculty in their field
- in sub disciplines of their field
- nationally
- in comparable institutions

STEM faculty need these data & strategies to recruit, promote and retain.

They need to know what ADVANCE has learned!

This is not easy:
1. Faculty already have a full-time job keeping up with their own literature. They will not read articles outside of their field.
2. Within field, disciplinary journals have low interest in the topic.

Publishing in disciplinary newsletters reaches STEM faculty, but hurts the author!