CfA Gender Equity Committee

Status and plans
Employee survey results
CGEC Membership

Nancy Adler
Pat Brennan
Pepi Fabbiano (Chair)
Josh Grindlay
Peg Herlihy
Muriel Hodges
Christine Jones
Andrew Szentgyorgyi
Donna Thompson

Consultants: Gerhard Sonnert, Wendy Roth
Status and Plans

• Completed confidential employee survey
  – Gerhard Sonnert will report the results
  – Results will be posted on the internal Web

• Next step
  – Anonymous and confidential interviews

• Interim CGEC report and recommendations

• HR data survey and analysis
  – Subset available now
  – The entire data set will be available in the fall

• Final CGEC report and recommendations
CfA Gender Survey

Gerhard Sonnert
# The Survey Sample

<table>
<thead>
<tr>
<th>Number of respondents</th>
<th>308</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response rate</td>
<td>32.4%</td>
</tr>
<tr>
<td>Gender</td>
<td>men: 59.8%</td>
</tr>
<tr>
<td>Race</td>
<td>white: 92.2%</td>
</tr>
<tr>
<td>Job type</td>
<td>scientists: 50.3%</td>
</tr>
<tr>
<td>Affiliation</td>
<td>Smithsonian: 86.9%</td>
</tr>
<tr>
<td>Year of hire</td>
<td>before 1990: 28.6%</td>
</tr>
<tr>
<td>Grade</td>
<td>Grade 13 or lower: 71.8%</td>
</tr>
</tbody>
</table>
• The sample of respondents (people who replied to the survey) is fairly representative of the CfA employee population.
Areas Covered

• Hiring Process
• Promotion Process
• Compensation
• Professional Activities
• Satisfaction with CfA
• CfA Programs and Resources
• Perceived Gender Biases
• Balancing Personal and Professional Life
• Spouse/Partner's Career
• Health
• Gender Issues at the CfA
Survey Approach

• Questions exploring the survey areas with grading scale or yes/no answer
  – Statistical analysis

• Open ended questions asking for employees comments
  – Used to complement and illustrate analysis results
  – Provide input on gender-unrelated issues
## Analysis Methods

- **4-point rating scales**
  - "disagree strongly" (1)
  - "disagree somewhat" (2)
  - "agree somewhat" (3)
  - "agree strongly" (4)
  - Midpoint: 2.5
  - Typical standard deviation: 1

- **Analysis of variance (ANOVA) with 4 groups:**

<table>
<thead>
<tr>
<th>Men scientists</th>
<th>Women scientists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men non-scientists</td>
<td>Women non-scientists</td>
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</table>

- Differences reported at the **95% (2 \( \sigma \) – standard error)** and **99% (2.5 \( \sigma \))** confidence/significance level.

- **Factor analysis**
Gender differences and differences between scientists and non-scientists

Percentage of variables showing significant differences (N=275)

- 5% (2 σ): Science 36.7%, Gender 18.9%
- 1% (2.5 σ): Science 24.7%, Gender 12.0%
- Interaction: Science 5.1%, Gender 1.5%
Interaction example

agree

disagree

- Men scientists
- Women scientists
- Men non-scientists
- Women non-scientists

agree
- Men S
- Women S
- Men NS
- Women NS
Response areas where no significant gender difference was detected (in bold)

- Hiring Process
- Promotion Process
- Compensation
- Professional Activities
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- Perceived Gender Biases
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- Gender Issues at the CfA

at 99% (2.5 σ) confidence level
Women (especially scientists) perceive gender bias

- No bias in career advancement (CfA)
- No bias in career advancement (Division/Dept.)
- No bias in performance evaluation (CfA)
- No bias in performance evaluation (Division/Dept.)
- No bias in work assignments (CfA)
- No bias in work assignments (Division/Dept.)

Disagree Agree

Men NS

Women NS
• Same pattern with HEA/non-HEA distinction

• One significant interaction with gender (at 95% level)
Other issues where perception varied by gender

- Leadership
- Promotion
- Balance of work and personal life
- Hidden rules
- Equipment maintenance
Leadership

Division/Dept has identified ways to move women into leadership positions.

Men NS  Women NS

Men S   Women S
Interest in becoming project scientist/program manager/technical team leader

Opportunity to take on leadership position

Leadership

Percent

Women S

Men NS

Women NS
Actual and desired work activities

Research versus other activities (11)
Promotion

1.0 1.5 2.0 2.5 3.0 3.5 4.0

Overall satisfaction with promotion process

- Women NS
- Men NS
- Women S
- Men S

Felt supported in advancement to promotion

- Women NS
- Men NS
- Women S
- Men S
Promotion: from employees’ comments

- more opportunities of advancement
- clear and objective criteria for promotion
Work and personal life

Often forgoes personal activities because of work

Women NS

Men NS

Women S

Men S
• More fatigue reported by women
• Women more likely to report hidden rules

Encounters
unwritten rules
concerning how
one is expected
to interact with
colleagues

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<td></td>
<td>Women NS</td>
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1.0 1.5 2.0 2.5 3.0 3.5 4.0
Communication/transparency: from employees’ comments

- policies, procedures, decisions
- general communication in community
Socialization/mentoring: from employee’s comments

- Assignment of mentors
- Reward system for mentoring
Equipment Maintenance

Receives regular maintenance/updates of equipment
• Overall the CfA population is satisfied with their jobs.

![Satisfaction with job graph]

Women NS
Women S
Men NS
Men S

Legend:
- Very dissatisfied
- Somewhat dissatisfied
- Somewhat satisfied
- Very satisfied
• Overall the CfA employees are satisfied with their career.
• Non-scientists, especially women, have larger % of dissatisfaction.
### The 10 strongest correlations of job satisfaction

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>R Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>q31f</td>
<td>No gender bias in career advancement (CfA)</td>
<td>0.66</td>
</tr>
<tr>
<td>q24a</td>
<td>Career satisfaction</td>
<td>0.65</td>
</tr>
<tr>
<td>q31c</td>
<td>No gender bias in performance eval (div)</td>
<td>0.61</td>
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<tr>
<td>q11a</td>
<td>Satisfaction with promotional process</td>
<td>0.57</td>
</tr>
<tr>
<td>q31d</td>
<td>No gender bias in performance eval (CfA)</td>
<td>0.57</td>
</tr>
<tr>
<td>q31e</td>
<td>No gender bias in career advancement (div)</td>
<td>0.51</td>
</tr>
<tr>
<td>q13gd</td>
<td>Would like to spend more time in management</td>
<td>-0.51</td>
</tr>
<tr>
<td>q21a</td>
<td>Treated with respect in Division</td>
<td>0.50</td>
</tr>
<tr>
<td>q22a</td>
<td>Feels like participant in problem-solving and decision-making</td>
<td>0.49</td>
</tr>
<tr>
<td>q12b</td>
<td>Fair salary</td>
<td>0.49</td>
</tr>
</tbody>
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<tr>
<td>q24a</td>
<td>Career satisfaction</td>
</tr>
<tr>
<td>q50d</td>
<td>Good climate for women in Division</td>
</tr>
<tr>
<td>q44a</td>
<td>Division supportive of balancing family and career</td>
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<td>q21f</td>
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<td>q11e</td>
<td>Received opportunities to build research program</td>
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<tr>
<td>q21n</td>
<td>Feels isolated in Division</td>
</tr>
<tr>
<td>q30cknow</td>
<td>Knows HU Ombuds program</td>
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<tr>
<td>q7d</td>
<td>Geographic location positively influenced decision to come to CfA</td>
</tr>
<tr>
<td>q21e</td>
<td>Treated with respect by Division head</td>
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<tr>
<td>q14h</td>
<td>Sufficient support for proposal preparation</td>
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<td>Career satisfaction</td>
</tr>
<tr>
<td>q11d</td>
<td>Felt supported in advancement to promotion</td>
</tr>
<tr>
<td>q12c</td>
<td>Own salary equitable within CfA</td>
</tr>
<tr>
<td>q21n</td>
<td>Feels isolated in Division</td>
</tr>
<tr>
<td>q21g</td>
<td>Feels excluded from informal network in Division</td>
</tr>
<tr>
<td>q11c</td>
<td>Received feedback on progress toward promotion</td>
</tr>
<tr>
<td>q21f</td>
<td>Treated with respect by supervisor</td>
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<td>q11e</td>
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<tr>
<td>q11a</td>
<td>Satisfaction with promotional process</td>
</tr>
<tr>
<td>q12d</td>
<td>Own salary equitable compared to similar institutions</td>
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<th>Women scientists (N=36)</th>
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<tr>
<td>q24a</td>
<td>Career satisfaction</td>
</tr>
<tr>
<td>q12a</td>
<td>Satisfied with overall compensation</td>
</tr>
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<td>q21f</td>
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Job Satisfaction Factors

• Overall
  - respect
  - promotion process
  - fairness

• Stronger for men
  - salary/compensation

• Stronger for women
  - gender equity
Sources of satisfaction and dissatisfaction

Satisfaction

- Science
- Job/career related
- General atmosphere

Dissatisfaction

- Bureaucracy
- Compensation
- Job/career related
- Gender issues
- Family issues
Other Issues of Concern and Improvement from employees’ comments

1. Structural
2. Decision making
3. Supervisors
1. Structural issues

- Harvard-Smithsonian interaction
- Scientists-non-scientists interaction
- Administrative processes and management
- Space
2. Decision making

- More involvement in decisions
- Committees to include wider range of people
3. Supervisors

- Training
- Accountability and evaluation by employees
Gender/diversity/family Comments

• More diverse hiring, especially at highest levels
• Flexible and at-home work schedules, on-site child care
Next Step

• Interview project
  – Professional interviewer (Wendy Roth)
  – 60 random selected employees in our 4 categories
  – Confidential and anonymous
Status and Plans

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  – Gerhard Sonnert will report the results
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  – Anyone wanting to talk to the CGEC, please let me know

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