Using evidence to spark progress in gender diversity

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Women in science have played a vital part in pushing forth progress

Marie Curie

Lise Meitner

Rosalind Franklin

The “Harvard computers”

Pickering’s all-female team

Stars discovered by the “Harvard computers”

Source: Smithsonian Institute Archives; Wikipedia
Gender gaps continue to persist in the STEM community

The “Harvard computers”

Source: Smithsonian Institute Archives;
3 areas with particularly severe gender gaps

- Participation
- Productivity
- Recognition
Far fewer women participate in the STEM workforce than men

*Data from 2010; Source: WISAT National Assessments, (2012) ; She Figures: European Commission (2013)
“Leaky pipeline” leads to low proportion of women in the STEM workforce

*All data from 2010; Source: WISAT National Assessments (2012); She Figures: European Commission (2013); DiscovHer: L’Oreal Foundation (2014)
3 areas with particularly severe gender gaps

- Participation
- Productivity
- Recognition
Gender gaps in research productivity

Ratio of female to male authorships

Source: Nature (2013)
3 strategies to improve collaboration

- Participation
- Productivity
- Recognition
Gender gaps in awards for scholarly excellence

Source: Association of Women in Science Awards Data (2015)
The shifting dialogue around gender issues

- Making gender a central priority
- Integrating gender into research design

What Elsevier does to promote diversity

Creating more opportunities to recognize women in science

Implementing policies to strengthen researchers’ support network
Creating more opportunities to recognize women in science

Elsevier Foundation Awards for Early Career Women Scientists in the Developing World
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48% of women surveyed were unhappy with their jobs

39% of men surveyed were also unhappy with their jobs

Why?
- Low salaries
- Limited career development opportunities
- Lack of flexibility
- Not “family friendly”
Implementing policies to strengthen researchers’ support network

Elsevier Family Support Award

• Created as a response to *Equitable Solutions for Retaining a Robust STEM Workforce*

• Available to *all* researchers with young children attending *Cell Symposia*

• Provides up to $500 to cover *childcare costs*
Leveraging our own data to make a difference

In our new report, we hope to determine:

1. The effect of female co-authors on quality
2. The effect of female co-authors on how interdisciplinary it is
3. Differences in research topics between single gender research teams and teams with both men and women
Major progress must be made to achieve gender equality in the STEM community.

The “Harvard computers”

Source: Smithsonian Institute Archives;
Overcoming tradition for progress

Chien Shiung Wu, “First Lady of Physics”

The main stumbling block in the way of any progress has, and always will be, unimpeachable tradition

Thank you!