

Will It Take A Crisis?

What Every Plant Scientist Should Know

Presented by

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Without Diversity,

We are Vulnerable

*Aiming Higher:
AAAS Taskforce on
Women in Agricultural Sciences*

APS Webinar

<http://www.apsnet.org/webcasts/APSAimingHigher/top.asp>

Thank You

- **AAAS Taskforce**

- Ellen Bergfeld
- Carolyn Brooks
- Mary Clutter
- Phyllis Johnson
- Ronald Phillips
- Neal Van Alfen
- Vicki Wilde
- Catherine Woteki

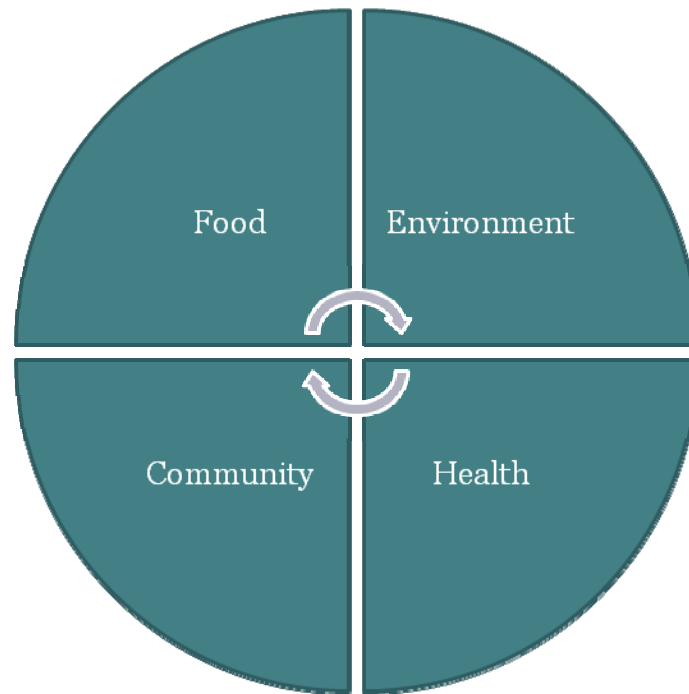
- **AAAS and APS**

- Jan Leach
- Shirley Malcom
- Yolanda George

Does Gender Matter?

- Gender is no longer an issue in the workplace
- We hire the best regardless of gender
- More women are needed in the agricultural science workforce
- Changes need to be made to increase the proportion of women, particularly in high level positions

Agricultural Scientists Address Societal Goals.



Women in Agricultural Sciences

The Academic Pipeline

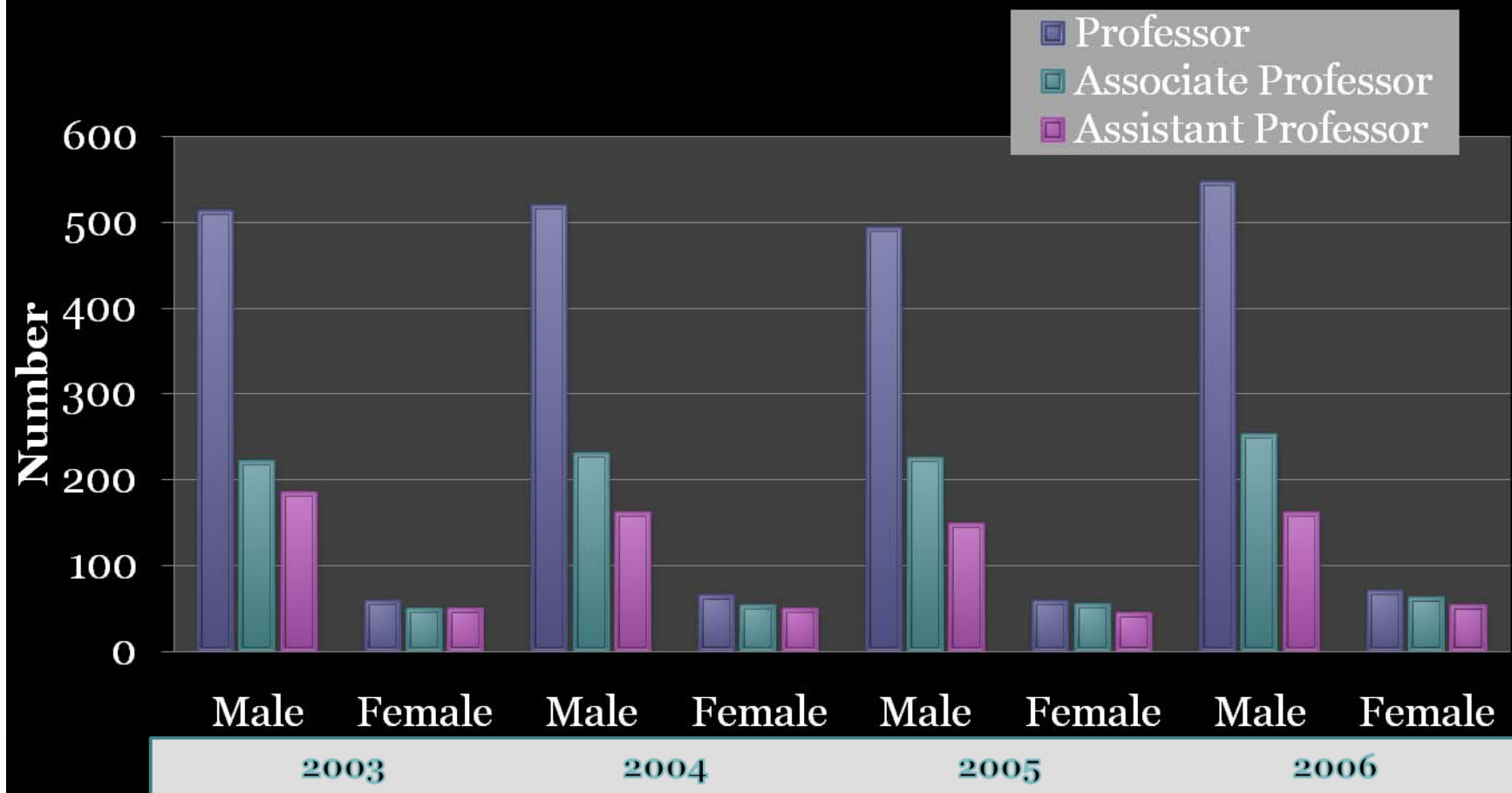


Doctorates Awarded to Women in Plant Science Fields

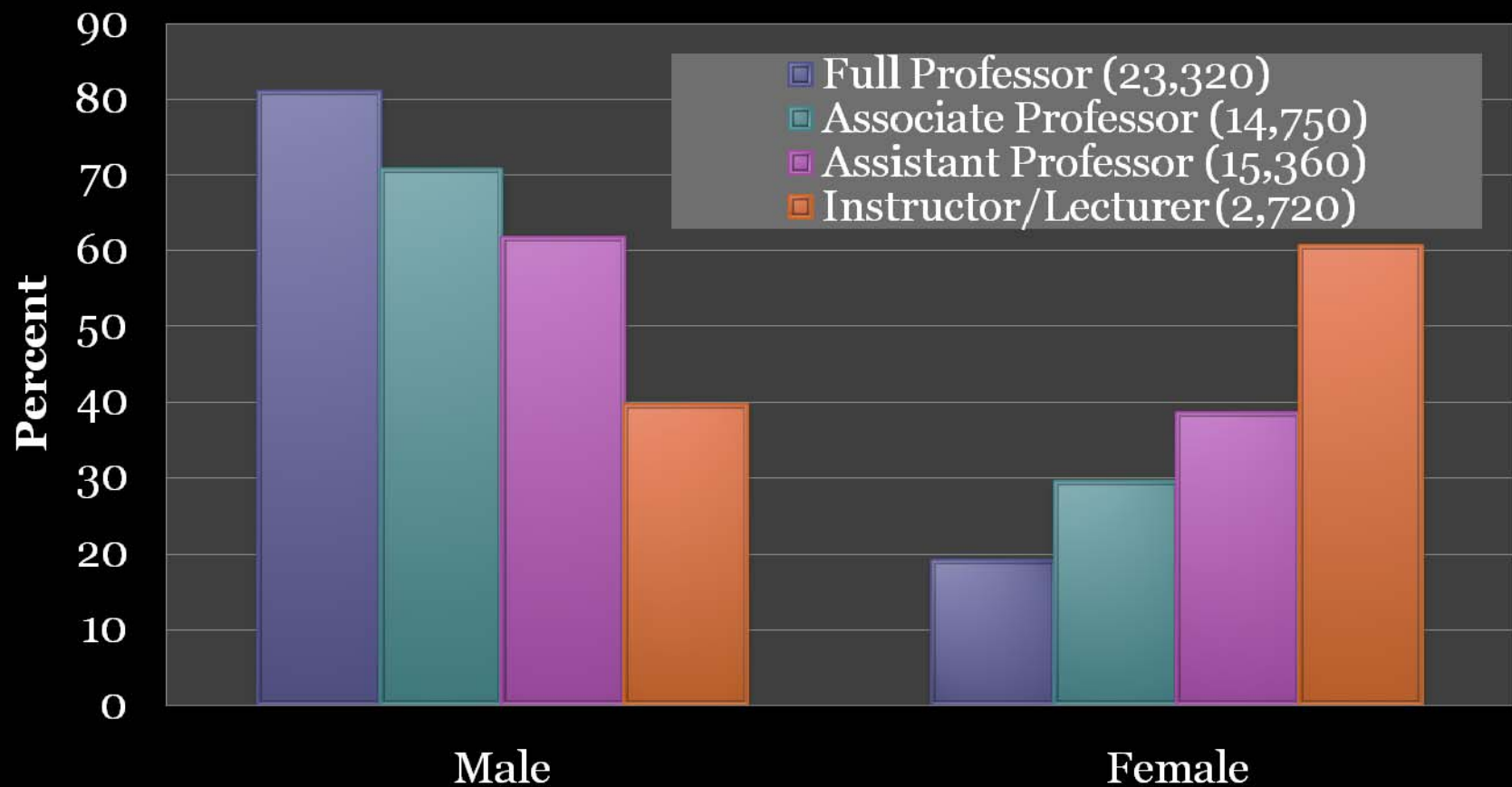
Field	1996	2005	1996(%)	2005(%)
Agricultural sciences , All	304	376	27%	36%
Agronomy/crop science	17	14	15%	17%
Horticulture Science	22	17	30%	34%
Plant Breeding/Genetics	13	7	21%	20%
Plant pathology	27	33	30%	46%
Plant sciences , other	3	16	14%	51%
Biological sciences , All	2,415	2,756	42%	49%
Botany , Other	44	42	42%	48%
Plant genetics	16	23	39%	46%
Plant Pathology	13	13	34%	42%
Plant Physiology	29	19	40%	50%

From: NSF: Survey of Earned Doctorates

Number of Faculty in Plant Sciences by Rank 2003-2006



Percent Male and Female by Faculty Rank Agricultural, Biological and Environmental Sciences 2006



NSF. Survey of Doctorates

Why So Few Women Faculty?

Potential Deterrents for Women

- Lack of Successful Role Models
- Image Conflict in Male-Dominated Field
- Lack of Women in Leadership Positions
- **Tenure Process!!**

Tenure Flexibility Not Just for Women

Create:

- opportunities for PhD's who have left or never entered academia to qualify for tenure-track positions.
- a flexible tenure timeline that does not compromise standards for tenure and promotion.
- a tenure policy that ensures a fair and non-discriminatory tenure process
- a professional climate that is supportive of personal goals and is family-friendly throughout the faculty member's career cycle.
- accessible and affordable quality childcare for faculty
- incentives and rewards for senior faculty to successfully mentor junior faculty.
- transparent tenure requirements that consider the context of the current mission of the university and academic unit.

Adapted from: American Council on Education, Office of Women in Higher Education. 2006.
An Agenda for Excellence: Creating Flexibility in Tenure-Track Faculty Careers.

In Conclusion

Agriculture and Academia:

- Should be viewed in the context of contemporary society.
- Are integral to and necessary for a better society.
- Should be proactive in meeting the needs for a sustainable and productive workforce

Women:

- Comprise half of society
- Are diverse but share common biological traits and life experiences unique to their gender.

In Conclusion

Status of Agricultural Science:

- The proportion of women in the pipeline for future scientists is slowly approaching parity but falls sharply in tenure track faculty positions
- The demand for quality scientists and educators exceeds supply
- In the future, women will be essential for a highly educated workforce in terms of number, education, skills, and diverse perspectives and talent.

In Conclusion

- The issues are complex, widespread, and long-term.
- There is no simple solution and past efforts have had limited success.
- Critical study and analysis of the current status of women in agriculture is urgently needed if we are to have a sustainable future.
- The problem cannot be resolved without understanding the issues from diverse perspectives.
- The problem cannot be resolved without implementing change.



To Learn More



Motherhood, The Elephant in the Laboratory

Women Scientists Speak Out

**Edited by Emily Monosson
Cornell University Press 2008**

“The personal stories that comprise *Motherhood, the Elephant in the Laboratory* not only show the many ways in which women can successfully combine motherhood and a career in science but also address and redefine what it means to be a successful scientist.

These valuable narratives encourage institutions of higher education and scientific research to accommodate the needs of scientists who decide to have children.”

Excerpt From: Book Cover



Class Project

Introduction to Urban Forestry

[YouTube - Intro to Urban Forestry - Science,
Technology & Real Life Experience](#)