Promoting gender equity in grant making: What can a funder do?
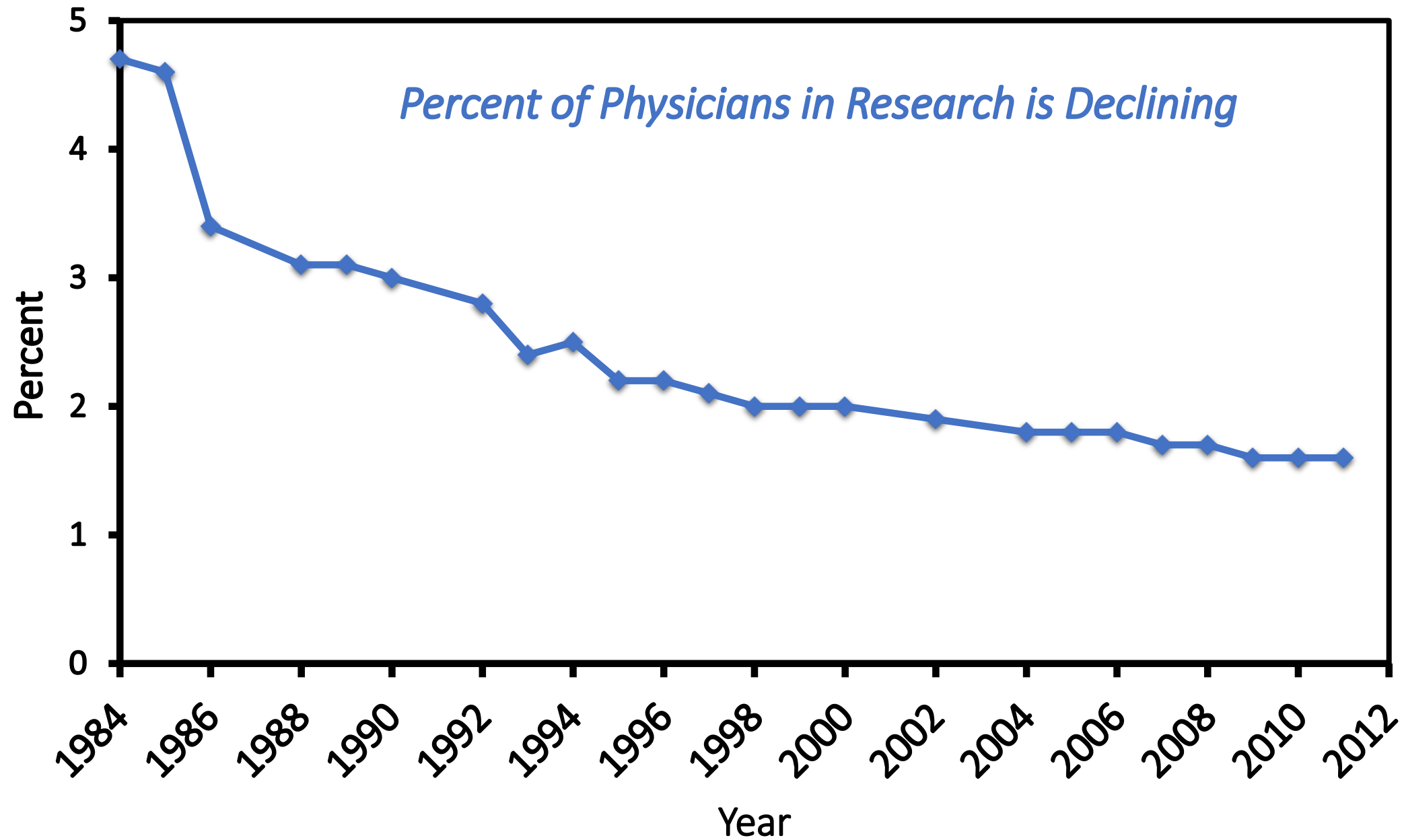
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Doris Duke Charitable Foundation

March 13, 2018, New York City

Health Research Alliance 2018 Spring Meeting

Support medical research designed to effectuate cures of major diseases provided that no animals are used to conduct such research.

Percent of Physicians in Research is Declining

Source: Garrison and Deschamps: *FASEB J. 2014 March*

The Clinical Scientist Development Award provides research grants to physician scientists at the assistant professor level to facilitate their transition to independent clinical research careers

Program outcomes

R01 grant attainment

    73% awardees

    52% unsuccessful applicants

Having received our award associates with R01 attainment

Disparities in the award process can perpetuate disadvantages that affect career advancement

Health Research Alliance

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New York 2016 Spring meeting

NYSCF
The New York
Stem Cell Foundation

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Women in Science

NYSCF's Initiative on Women in Science and Engineering (IWISE) seeks to promote gender equality in science and engineering.

- In-depth look at success rates by gender is needed to identify issues and solutions

- Funders can adopt actions to help raise awareness about gender inequities in women's career advancement

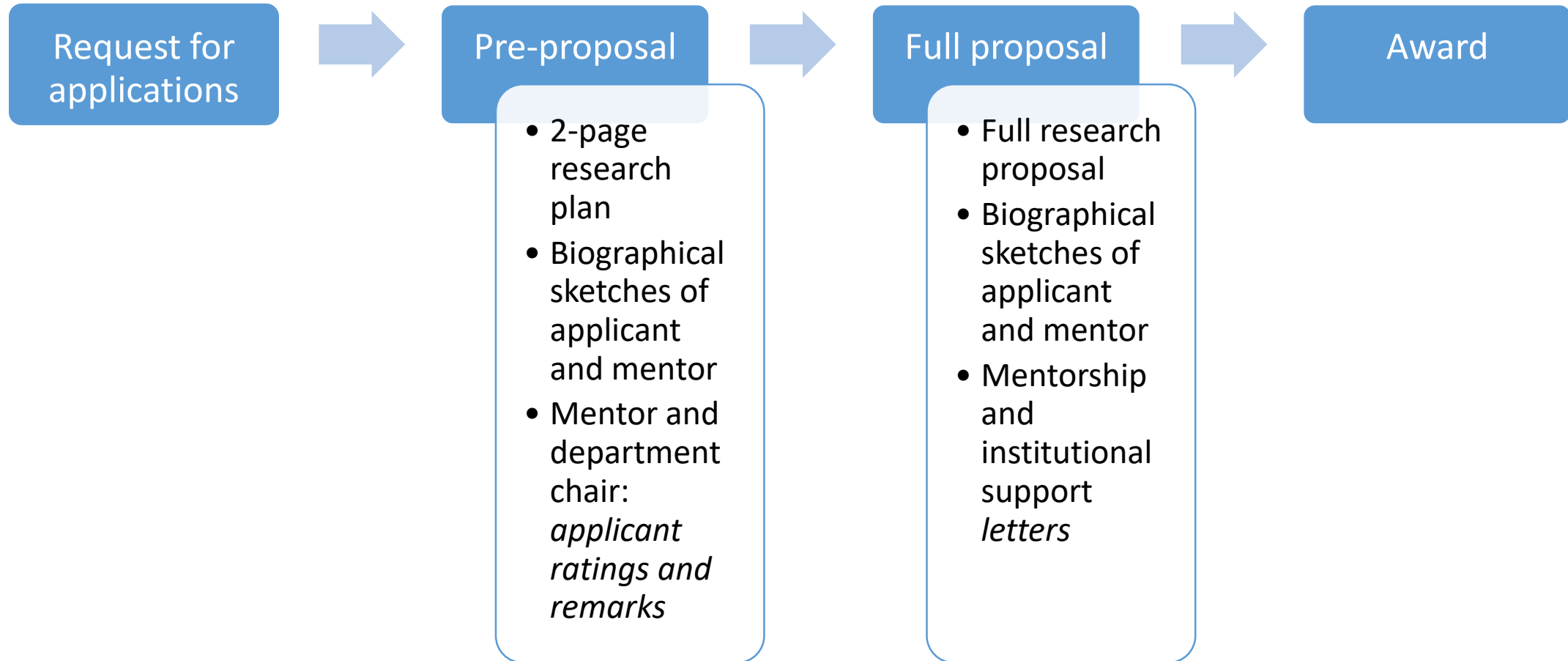# A look at our main program supporting career development, 2013-2016

Success rate
- 5% for women (16/312)
- 13% for men (52/413)

Is there bias in our peer review?

Award recipients are identified through peer review

Request for applications → **Pre-proposal** → **Full proposal** → **Award**

Pre-proposal
- 2-page research plan
- Biographical sketches of applicant and mentor
- Mentor and department chair: *applicant ratings and remarks*

Full proposal
- Full research proposal
- Biographical sketches of applicant and mentor
- Mentorship and institutional support *letters*

1. Are there other factors that could explain the differences in award attainment?

2. Are there components of our application and review that could be eliciting gender bias?

3. Are we discouraging application and selection of women?

# Factors that associate with success in our competition

- Degree (Having a PhD in addition to MD)*

- Institutional funding (being at an institution with NIH funding in the 90th percentile)

- Gender (being a woman)

- Number of publications (having more than 4)

- Effort allocation to research (50% or more)*

- Mentor funding (more than 4 active grants)

Being female had an adjusted O.R. = 0.55, 95% CI 0.29-1.0, p=0.056.

Recommender remarks and applicant ratings as a potential source of bias

How would you rate the applicant's

- Communication skills

- Creativity

- Initiative

- Knowledge to conduct the proposed project

- Leadership ability

- Potential for a research career*

- Potential for advancement as a physician scientist

- Potential and commitment for a career in research compared to other assistant professor * level in your department

- Qualifications to conduct research*

-						+
No information	Bottom 25%	Top 50%	Top 25%	Top 10%	Top 5%	Top 1%
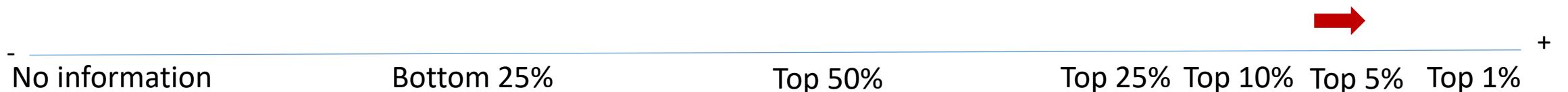
Components of application that could elicit bias: recommender remarks

- Funders lack the know-how and resources for these types of analyses

- Some words were used only for applicants of a specific gender (though infrequently, 4-13% of applicants of a given gender)
  - Men: scientific, creative, top, best, able*
  - Women: personal, active, remarkable, perfect, tremendous, protected

*but so were other words like basic, medical, current, molecular, human, etc.

Components of application that could elicit bias: recommender remarks

References to family, gender, and age were seen predominantly in remarks written for women (9 of 10 references)

She has successfully balanced an emerging academic career, a young family of three children with a very busy husband... She is an extraordinary young woman

Change: Provide guidance to recommenders

Please address:

- Why the applicant's record and accomplishments merit CSDA support
- Why you have taken a mentorship role for this applicant
- How you, and the mentorship team if applicable, will use your professional influence and scientific knowledge to promote research and career advancement of the applicant

Please AVOID referring to personal circumstances or attributes of the applicant, such as: marital status, age or gender (e.g. young, woman, man), juggling of work-life balance such as child care responsibilities or illness, and roles of the applicant outside of the professional setting (e.g. mother, husband, father).

http://advance.umich.edu/resources/Guidelines-for-Writing-Letters-of-Recommendation.pdf

Were we discouraging application and selection of women?

Expert recommendation to describe the ideal candidate in non-gendered ways in requests for proposals and reviewer guidelines.

- Leadership potential → Promise to make significant contributions
- Importance → Influence
- Innovation → Originality
- Creativity → Inventiveness

Use the application materials as a lever to encourage institutions to consider gender equity

- Ask the mentor:
  - How many individuals have you mentored to date?
  - How many individuals mentored to date are women?
- Ask the department chair:
  - Date of the last salary review for the applicant
  - The salary for this applicant falls within the following percentile range of the salary distribution curve for faculty at the same faculty level in my department (0-25th, 26th-50th, 51th-75th, 76th-100th)

Salaries of CSDA applicants relative to others in the department at the same faculty rank
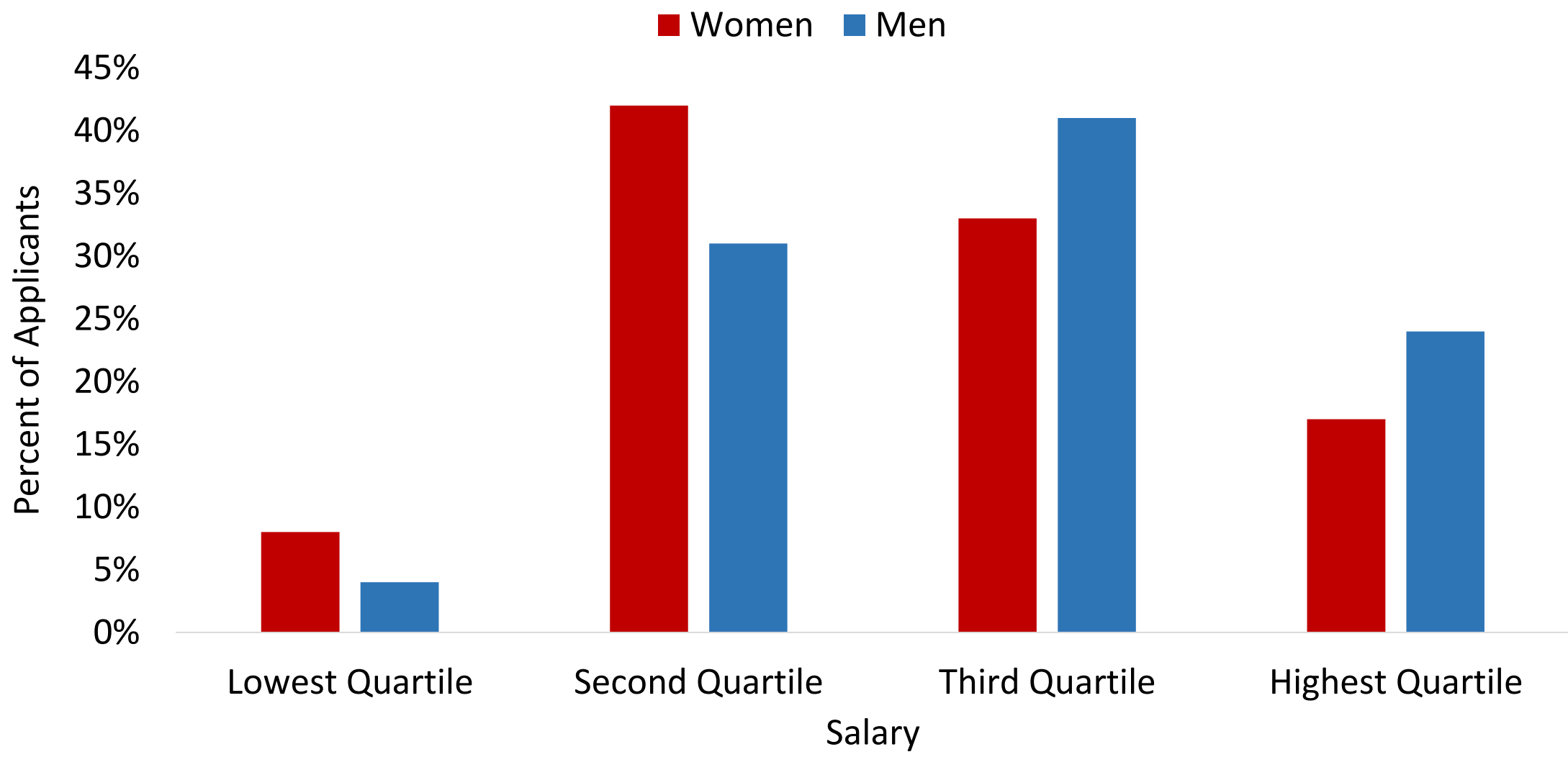
What happened after changes were implemented?

- Percent female applicants
  - 43% → 51% in 2017
- Success rate
  - 5% → 12% for women
  - 13% → 10% for men

Summary of recommendations for funders

- In requests for proposals and reviewer guidelines, describe the ideal candidate in non-gendered ways.

- Challenge institutions to take a close look at possible gender inequities—for example, in salaries

- Ask recommenders to address an applicant's objective research record, and avoid references to personal circumstances irrelevant to the award. When using ratings, be sensitive to evaluation criteria that may be vulnerable to bias.

Additional resources for funders: Application information use and sharing sample language

The Doris Duke Charitable Foundation (DDCF) may use the information submitted through this application form for several purposes, including but not limited to: 1) evaluating the application, and 2) informing DDCF's grant making strategies and policies. Information submitted through this application form will be kept on secure servers accessible to authorized DDCF personnel only.

Research proposals submitted are considered confidential property of the applicant. Research proposals will only be shared with DDCF staff, consultants, and reviewers and DDCF will require all to maintain the confidentiality.

By submitting an application form to DDCF, the applicant grants DDCF the right to use all application information submitted, outside of the research proposal, in aggregate and de-identified form, for any purpose.

Additional resources for funders: Sample language to include in review policies about data sharing of review information

DDCF is committed to the continued review and enhancement of its peer review activities. As such, de-identified reviewer characteristics (e.g. degree, gender, rank, research area, etc.), scores, and comments, may be used in analyses to guide future enhancements to our peer-review process. These de-identified analyses may be included in publications to share lessons learned.