# Diversity and inclusion in peer review and beyond 

Michael Markie, F1000 (@mmmarksman)
10 September 2018

## WOR peer review selection model

Authors control the selection of reviewers suggested for peer review


# How we collected the data (and its limitations) 

## Gender API

Returns the probability of whether a first name belongs to someone who is male or female.

To prevent coding more gender-neutral names to one gender or another, we chose a cut-off of $70 \%$ certainty that a name was male or female.

For the unknown $30 \%$, where possible, we identified gender through looking for pronouns (he/she) on biography pages.


Three months after a paper has completed peer review, if a suggested/invited referee doesn't provide a review, then identifying information (name, affiliation, email address) is deleted.

WOR is a young publication and so the size of the dataset is relatively small compared to similar studies by other publishers.

## Gender diversity in peer review on WOR

## Key findings:

- Author selected peer review provides comparable gender balance to other publisher studies ( $\sim 25-35 \%$ female reviewers).
- There is little difference in gender balance when comparing author suggestions, editorial suggestions and algorithmic suggestions.
- Male authors suggest a higher \% of male reviewers, while female authors suggest a higher \% of female reviewers - comparable to other publisher studies.


## Overall gender balance on WOR

## Gender of submitting authors



Total submitting authors: 258

Gender of referees


## Gender balance of authorsuggested referees

## Gender of author-suggested referees



Total referees suggested by authors: 1545

Gender of referees suggested by a female author


Total referees suggested
by female authors: 749

Gender of referees suggested by a male author


## Gender balance of Al and editor suggested referees

Gender of editor-suggested referees


Total referees suggested by editors: 183

Gender of referees suggested by the algorithm


Total referees suggested by the tool: 329

## Gender balance of invited and published referees

Gender of invited referees


Gender of published referees


Total referees published: 599

## Improving our diversity and inclusion in peer review

- Be more explicit about diversity and inclusion on our finding referee guidelines and My Referee pages.
- Be more proactive in diversifying our reviewer pool.
- Collect information on gender and ethnicity on My Pages.


$$
\begin{aligned}
& \text { Happy to hear more ideas on how we can improve! } \\
& \text { Let us know/get in touch - } \\
& \text { info@wellcomeopenresearch.org. }
\end{aligned}
$$

## Diversity \& inclusion at Wellcome

Gemma Tracey, Wellcome 10 September 2018


## $\mathbf{7 6 . 9} \%$ of UK professors were men

23.1 \% of UK professors were women

In science, engineering and technology (SET) subjects, $80.7 \%$ of professors were men. In non-SET subjects, $71.0 \%$ of professors were men.
\#ECUstats

## Wellcome grant funding

Wellcome grants 2016-17: gender profile


## Diversity and inclusion at Wellcome



We are missing out on talented people with great ideas. We want to change this because it's the right thing to do, and vital to meeting our mission to improve health for everyone

- Diversity and inclusion is one of Wellcome's strategic priorities
- The work isn't entirely new, but the strategic focus is
- We can't deliver on our ambition to improve health for everyone by helping great ideas to thrive if we don't take D\&l seriously
- We have a responsibility to use our influence to speed up progress


## Our approach



- More than a focus on women in science
- No silver bullet
- Removing barriers \& incentivising leadership
- 3 programmes: Wellcome, Society \& Science and Research


## What have we done so far?



- Commissioned \& published research into diversity challenges
- Established a steering group to advise on our work
- Funded minority researcher networks and events
- Partnered with the Brilliant Club
- Launched Research Enrichment Scheme


## Research Enrichment Scheme

Aim: To provide additional funding to help Wellcome grant holders to trial new approaches to diversity and inclusion

## Examples of what we expect to fund:

- Considering diversity at the planning stage
- Supporting underrepresented groups in specific fields
- Organising accessible conferences



## What's next for D\&l at Wellcome?

## Thank you

g.tracey@wellcome.ac.uk<br>michael.markie@f1000.com

