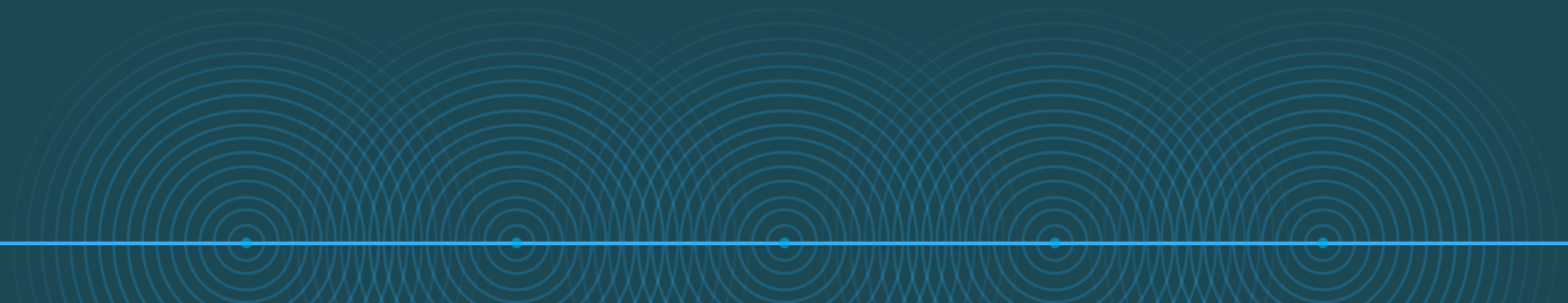


Diversity in peer review

Shirin Heidari

Sanjana Balu

12 September 2018



Advancing Sex and Gender Equity in Research: Role of peer-reviewers

Shirin Heidari, Ph.D.

Senior Fellow in Residence, Global Health Center, Graduate Institute of International and Development Studies, Geneva

Founding Chair, EASE Gender Policy Committee

Founder, GENDRO

13 September 2018
Elsevier Webinar

SAGE guideline

SEX AND GENDER EQUITY
IN RESEARCH



PREPARED BY
THE GENDER POLICY COMMITTEE
OF THE
EUROPEAN ASSOCIATION
OF SCIENCE EDITORS

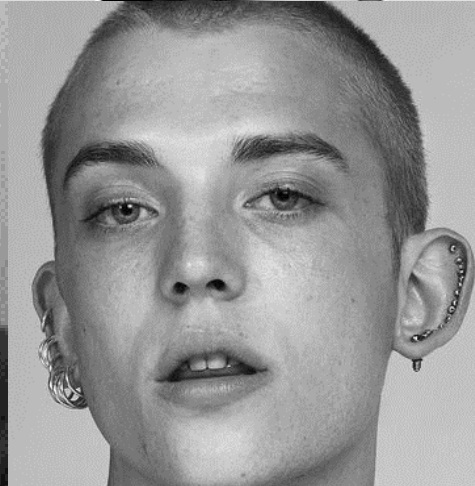
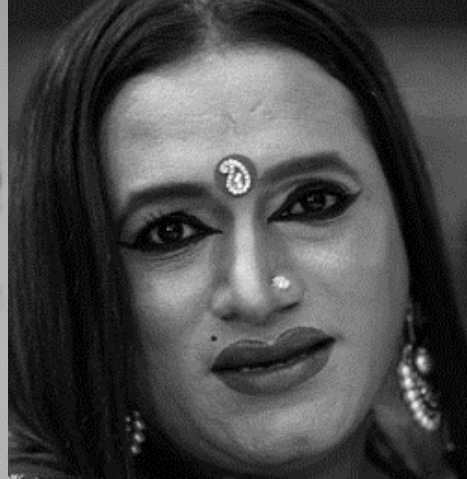


Talk about...

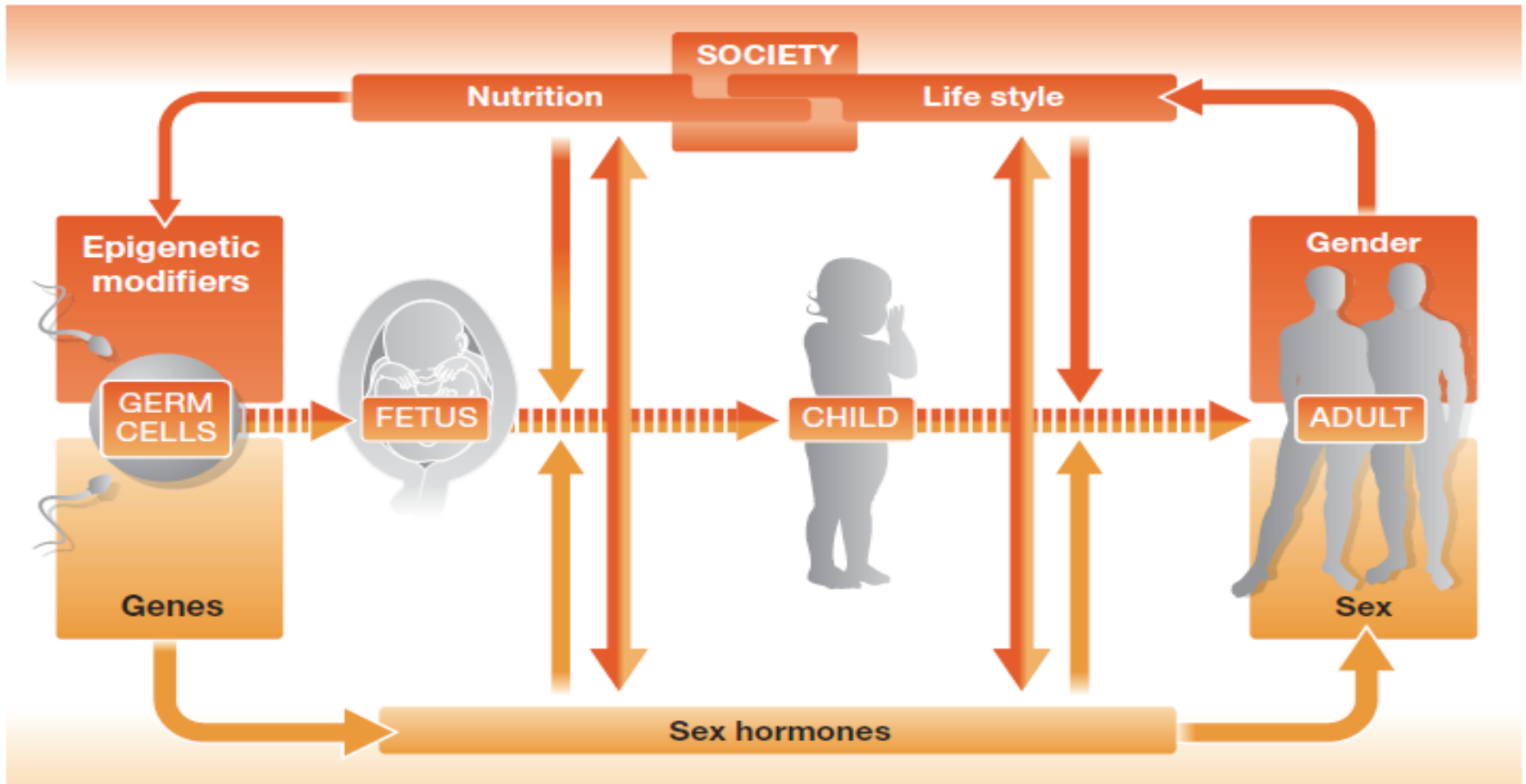
1 *Why **SEX** and **GENDER** matter*

2 *How the **SAGER** guidelines can help to address the gender bias in research*

3 *Role of peer-reviewers to improve sex and gender reporting*



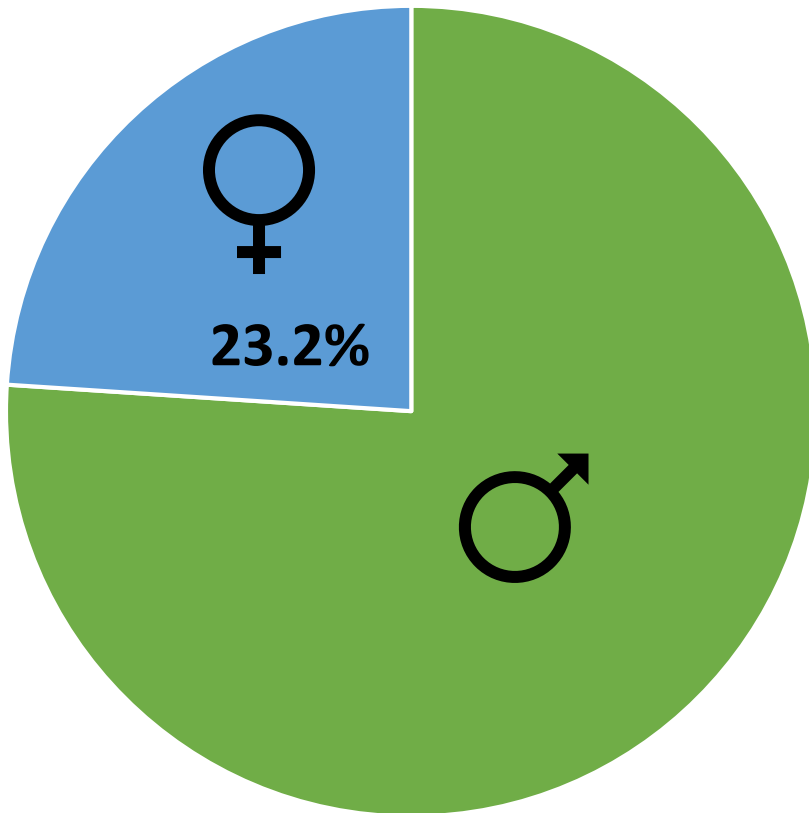
COMPLEX INTERDEPENDENCY OF SEX AND GENDER



Source: Vera Regitz-Zagrosek; Sex and gender differences in health EMBO reports 2012

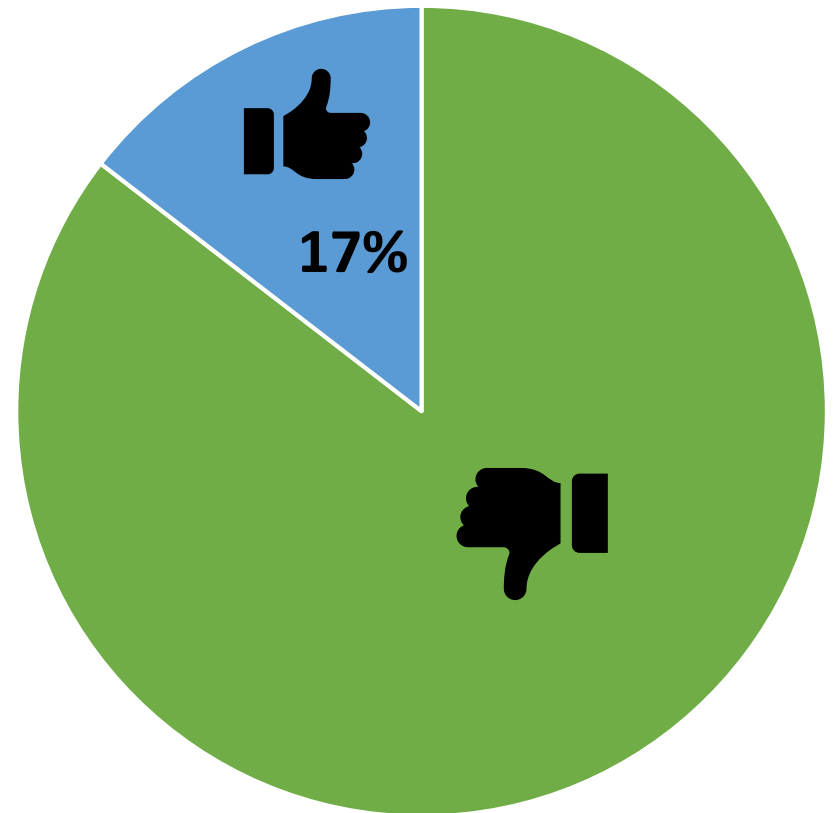
Sex/Gender bias in reporting of clinical studies with antiretrovirals (1994-2011)

ARV Clinical Trial Participants



Curno et al. J Acquir Immune Defic Syndr, 2016

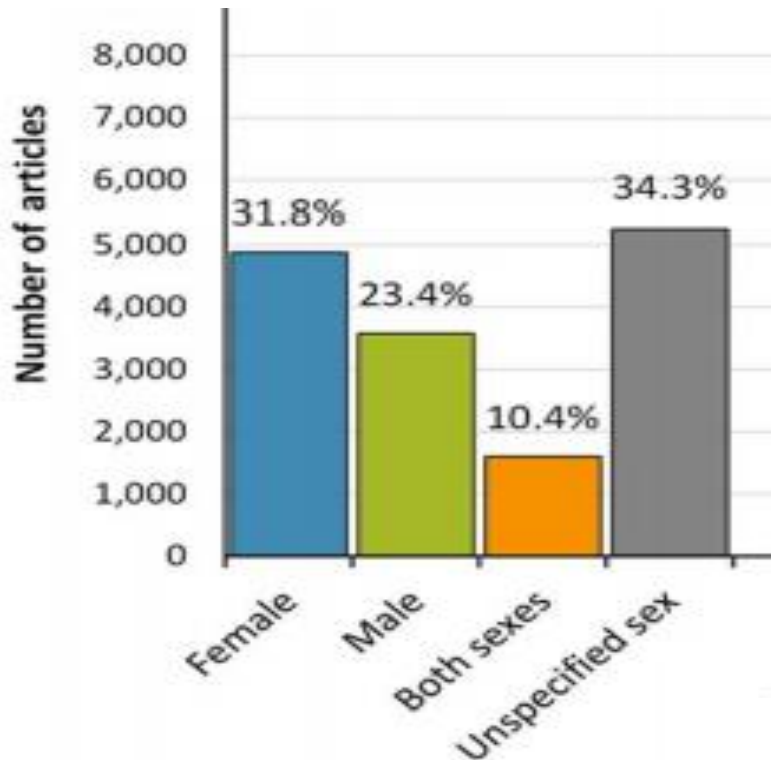
Articles (476) with SGBA



Heidari et al unpublished data

Gender blind reporting

Mouse Models

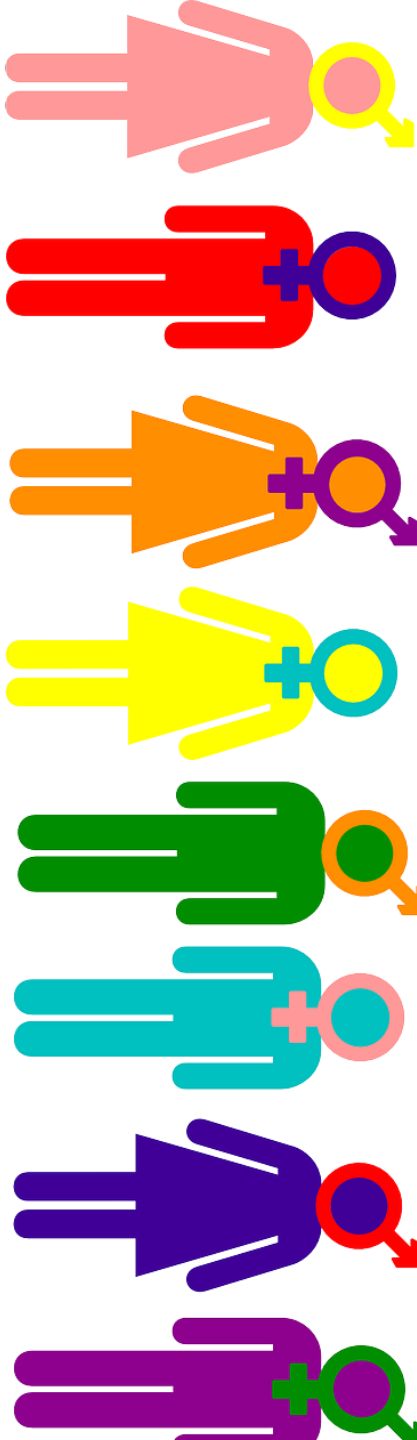


Clinical Trials

Of 56 articles published in nine prominent medical journals in 2009 reporting results from RCTs supported by US federal funding, **only 25%** provided analysis by sex or included sex in model.

Gender blind reporting is common!

- ✓ Sex or gender of subjects are **not reported**
- ✓ Data are **not disaggregated by sex**
- ✓ **Analysis ignores** any potential sex and gender differences: *Overgeneralization*



Reasons for concern

Lack of reporting of sex and gender aspects of research can cause **harm**. It **reduces reproducibility** and **rigour**, is **costly** and a **waste** of resources. It is also missed opportunity for **innovation**.

Harm!



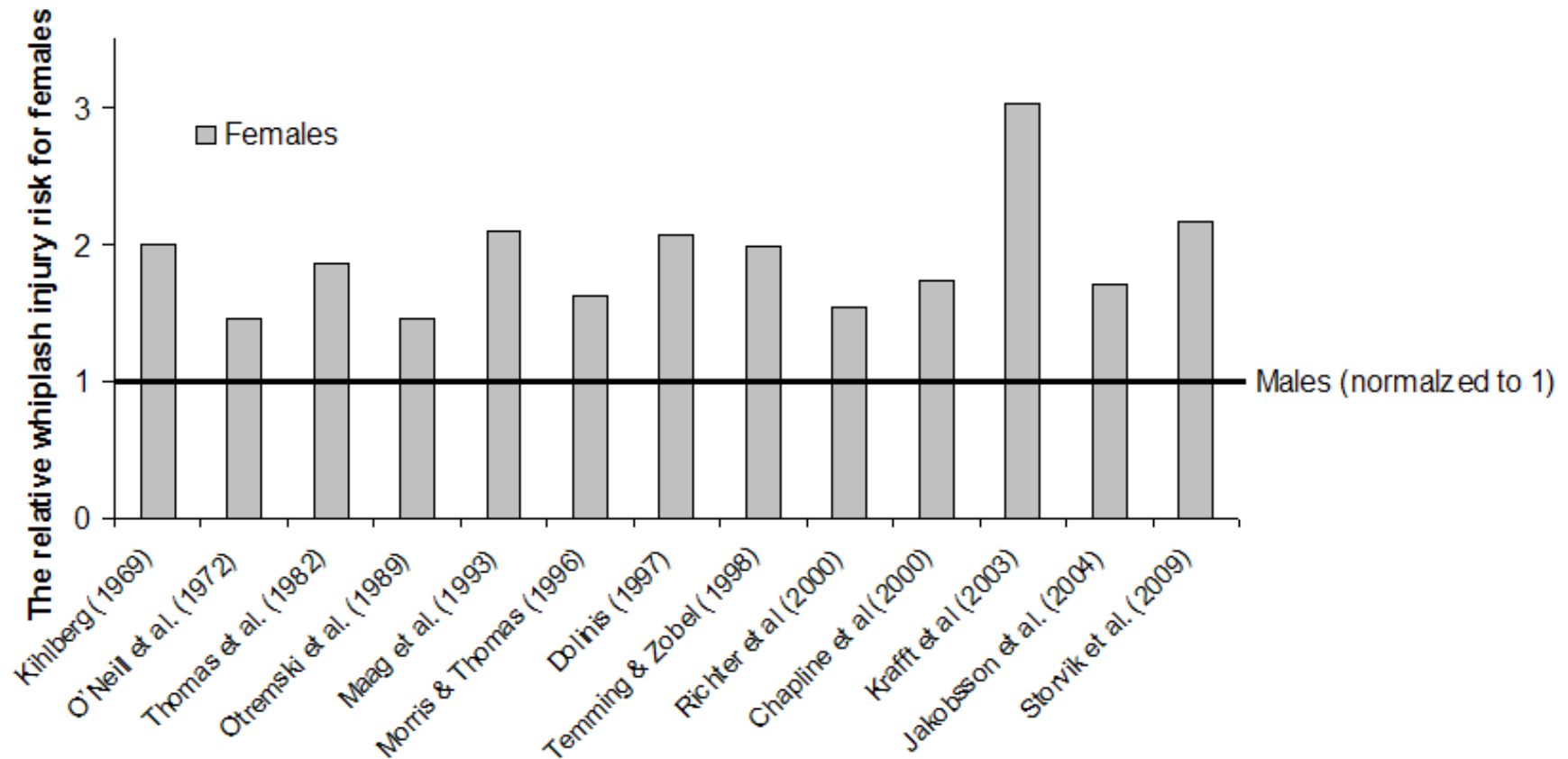
U.S. Food and Drug Administration
Protecting and Promoting Your Health

Drug Safety Communications

“Women appear to be more susceptible to this risk because they eliminate zolpidem from their bodies more slowly than men. ... FDA has informed the manufacturers that the recommended dose of zolpidem for women should be lowered from 10 mg to 5 mg for immediate-release products (Ambien, Edluar, and Zolpimist) and from 12.5 mg to 6.25 mg for extended-release products (Ambien CR).”

<http://www.fda.gov/downloads/Drugs/DrugSafety/UCM335007.pdf>

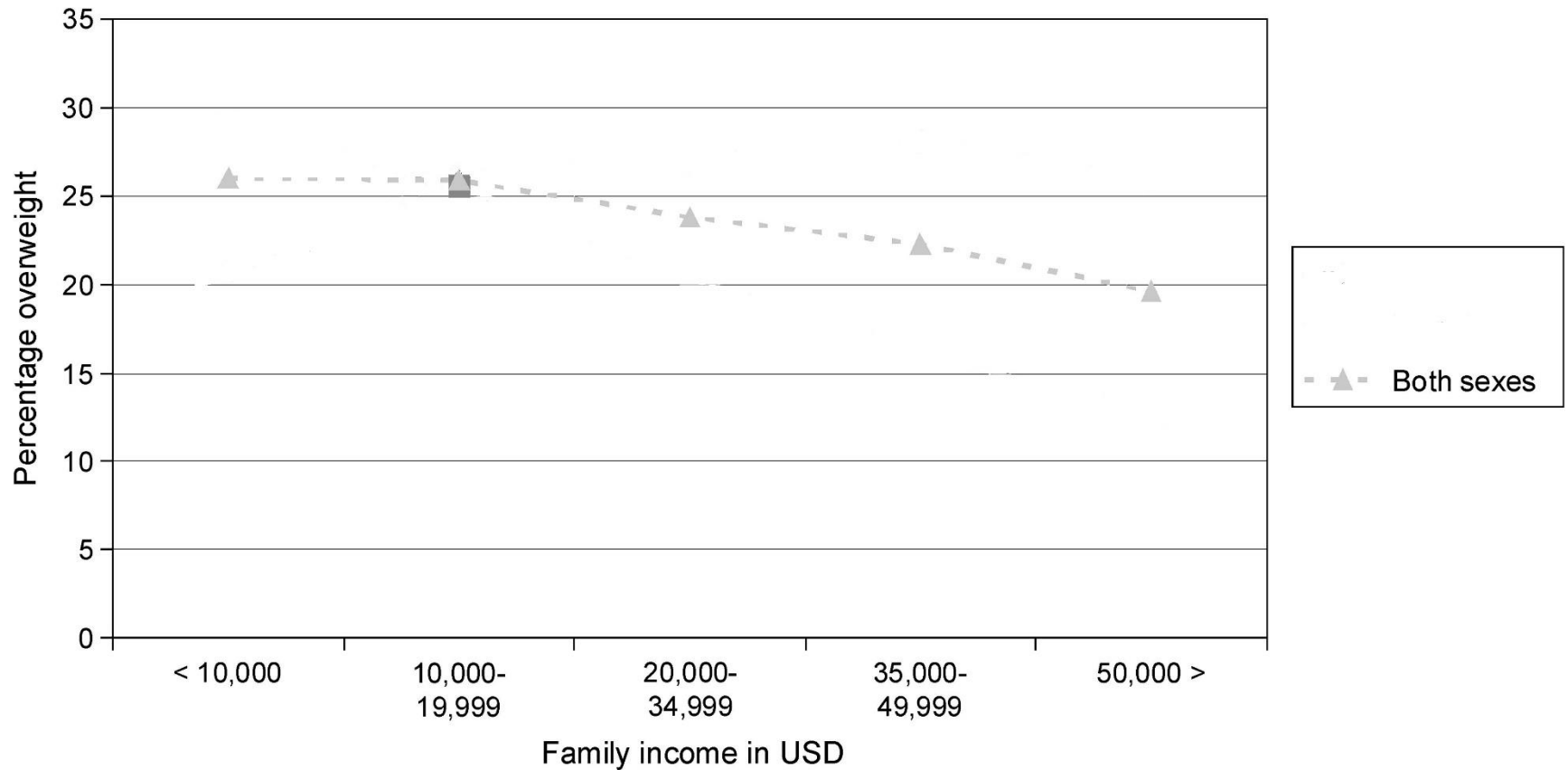
Whiplash – Risk of injuries



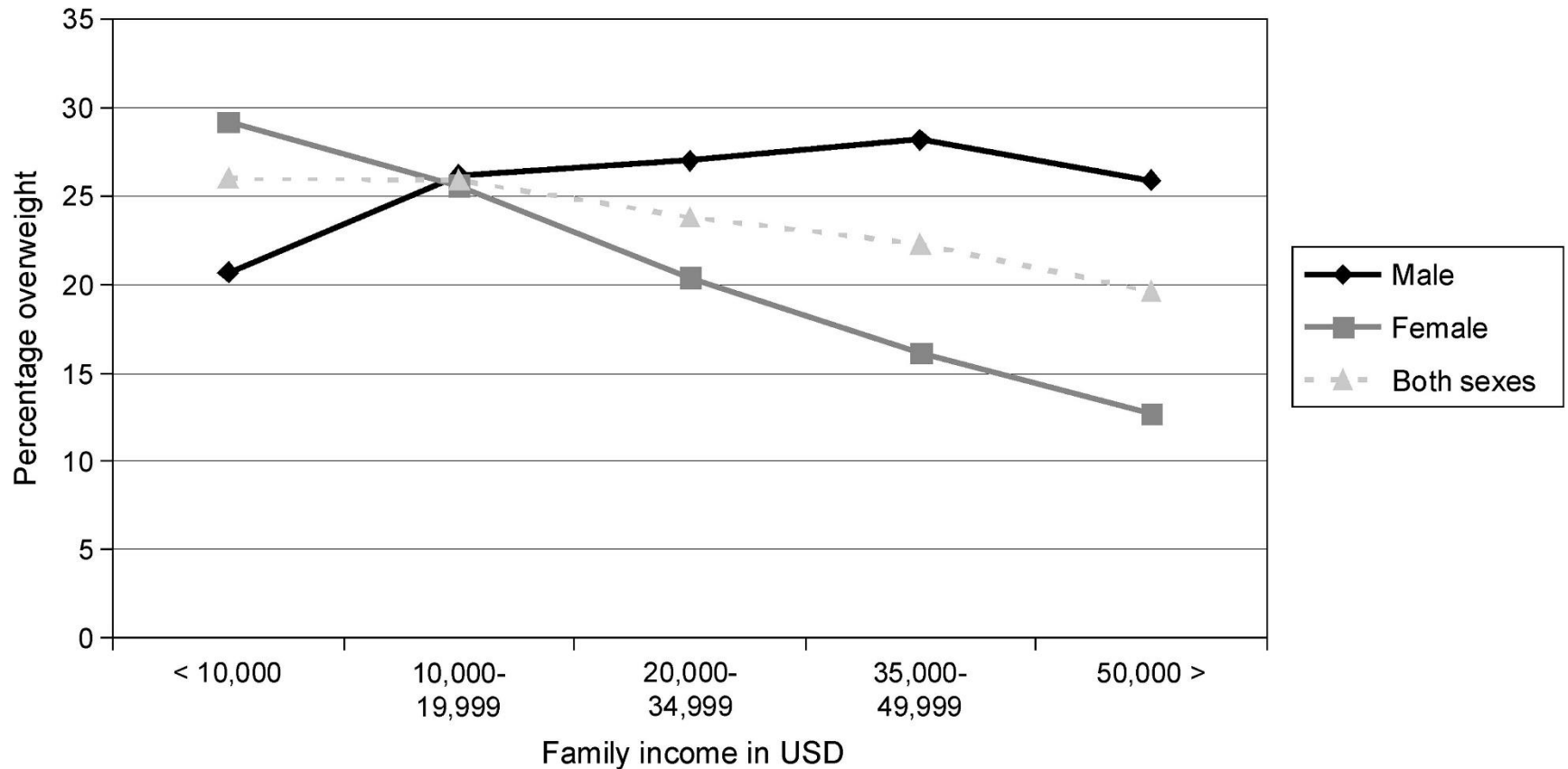


Courtesy of Dr Astrid Linder, Research Director, Traffic Safety, The Swedish National Road and Transport Research Institute - presented at SAGERIC 2013

Gender Blind Reporting



Gender Blind Reporting



Nieuwenhoven and Klinge, AbstractScientific Excellence in Applying Sex- and Gender-Sensitive Methods in Biomedical and Health Research Journal of Women's Health 2010

"If working with only one sex or gender, then specify that, and explain why."

Despite improvements, female scientists continue to face discrimination, unequal pay and funding disparities.

22 | NATURE | VOL 495 | 7 MARCH 2013

BY HELEN SHEN

The Gender Gaps

in scientific research & scientific publishing

Sex bias in trials and treatment must end

Gender inequalities in biomedical research are undermining patient care. In the first of three related pieces, **Alison M. Kim**, **Candace M. Tingen** and **Teresa K. Woodruff** call on journals, funding agencies and researchers to give women parity with men, in studies and in the clinic.

NATURE | Vol 465 | 10 June 2010

www.nature.com/nature

Vol 465 | Issue no. 7299 | 10 June 2010

Putting gender on the agenda

EMBO reports VOL 13 | NO 7 | 2012

Biomedical research continues to use many more male subjects than females in both animal studies and human clinical trials. The unintended effect is to short-change women's health care.

COMMENTARY

Open Access

Gender-sensitive reporting in medical research

Heidari et al. *Journal of the International AIDS Society* 2012

<http://www.jiasociety.org/content/15/1/11>

Nature's sexism

The editors of this publication need to improve how we reflect women's contributions to science. For this, we must inject an extra loop into our thinking.

THE LANCET

Issue 31 | November 2010 | Pages 1012-1013 | November 2010 | November 2010

"The Lancet encourages researchers...to plan to analyse data by sex, not only when known to be scientifically appropriate, but also as a matter of routine."

See Editorial page 1012

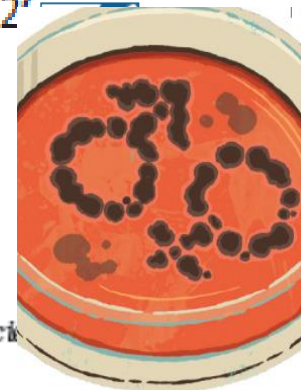
nature

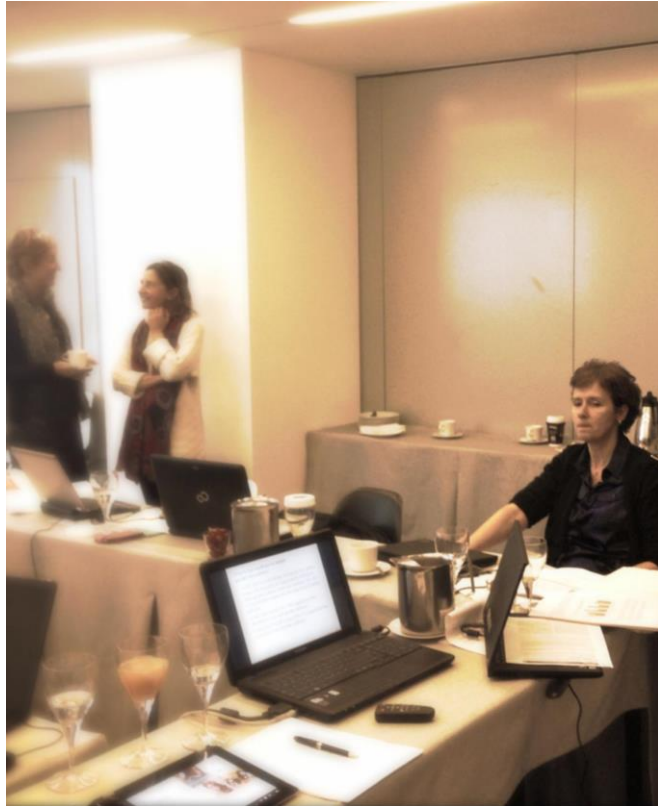
Male and female cells can behave differently — it is time that researchers, journals and funders | jeth Pollitzer.

Cell sex matters

1 AUGUST 2013 | VOL 500 | NATURE | 23

15





Greater gender balance in science and publishing practices for enhanced quality, diversity and transparency for science to remain at the forefront of innovation.

Sex and Gender Equity in Research: rationale for the SAGER guidelines and recommended use

Heidari *et al.* *Research Integrity and Peer Review* (2016) 1:2

DOI 10.1186/s41073-016-0007-6



SAGER

Guidelines

SAGER guidelines



Table 1 Sex and Gender Equity in Research (SAGER) guidelines

General principles

- Authors should use the terms *sex* and *gender* carefully in order to avoid confusing both terms.
- Where the subjects of research comprise organisms capable of differentiation by sex, the research should be designed and conducted in a way that can reveal sex-related differences in the results, even if these were not initially expected.
- Where subjects can also be differentiated by gender (shaped by social and cultural circumstances), the research should be conducted similarly at this additional level of distinction.

SAGER guidelines



1. Title and abstract

- ✓ If only **one sex/gender** is included in the study, or if the results of the study are to be applied to only one sex /gender, is the title clearly stating that?
- ✓ Does the abstract **specify the sex** of animals or any cells, tissues and other material derived from these and the **sex and gender of human** participants?

2. Introduction

- ✓ Have the authors looked at possible sex and/or gender differences reported previously in the literature?

3. Methods

- ✓ Have sex and gender been taken into account in the design of the study?
- ✓ Are **adequate representation** of males and females (and transgender is applicable) been ensured?
- ✓ If not, have exclusion of one sex/gender have been **justified**?

SAGER guidelines

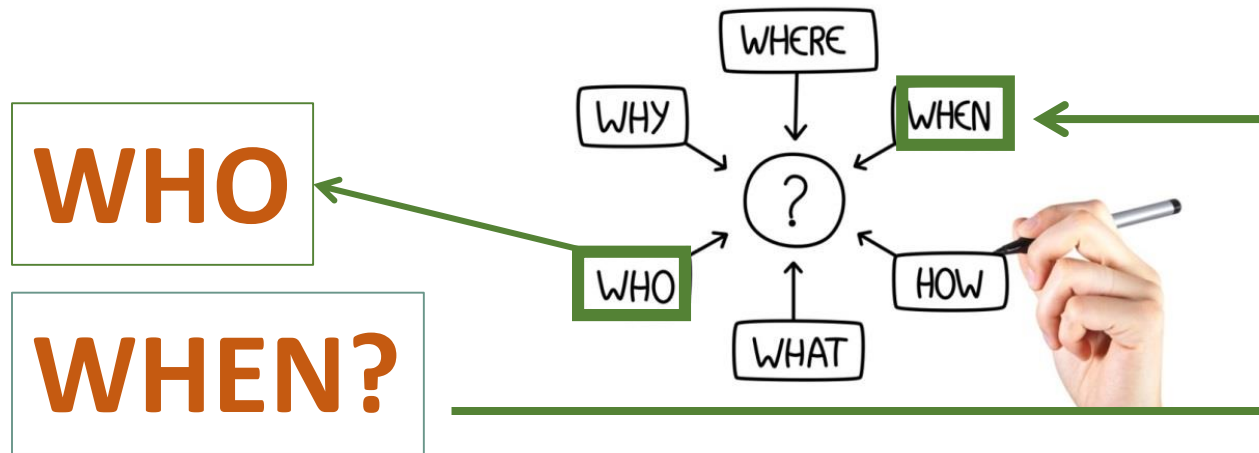


4. Results

- ✓ Are data **disaggregated** by sex and/or gender?
- ✓ Are sex- and gender-based **analyses** reported? If not, is lack of SGBA justified?
- ✓ Are **correct terms** and indicators used in the analyses?

5. Discussion

- ✓ Are the implications of sex/gender on the study results and analyses discussed?
- ✓ Is there a **rationale** for **lack** of it?
- ✓ Are the **implications** of sex/gender analyses, or lack thereof, discussed?



AUTHORS, PEER REVIEWERS AND EDITORS

Organizations that fund and conduct research, as policymakers and regulatory agencies.

AT ALL STAGES OF RESEARCH

Study design, data collection, and analysis, reporting, real-life application

- ✓ Apply to all research with humans, animals or any material originating from humans and animals
- ✓ Apply to all disciplines whose results will be applied to humans

Recommended Actions for Editors to Implement Reporting Policies

1. Adopt the guidelines as a formal policy in **Instructions to Authors**.
2. Screen **initial submissions** to determine if sex/gender is relevant to the topic; if so, has it been addressed adequately?
3. Ensure **regular training** of editorial staff.
4. Invite **peer reviewers** to consider sex/gender in the evaluation of manuscripts.

SAGE Guidelines

SEX AND GENDER
IN RESEARCH



PREPARED BY
THE GENDER POLICY GROUP
OF THE
EUROPEAN ASSOCIATION
OF SCIENTISTS

PEER REVIEW



Reviewers should ask:

1. Are sex and gender relevant to the research in question?

2. Have authors adequately addressed sex and gender dimensions or justified absence of such analysis?

Check list for authors and reviewers



Research approaches ✓

- ✓ Are the concepts of gender and/or sex used in your research project?

Research questions and hypotheses

- ✓ Does your research question(s) or hypothesis/es make reference to gender and/or sex, or relevant groups or phenomena?

Research methods

- ✓ Is your sample appropriate to capture gender and/or sex-based factors?
- ✓ Is it possible to collect data that are disaggregated by sex and/or gender?



NEW VIDEO: SEX AND GENDER IN PEER REVIEW

• WWW.SGREVIEW.CA

Why sex and gender matter in research

https://youtu.be/sS4_dYHrX4I



TEDx

The SAGER guidelines

Standardised reporting guidelines can help to **prevent errors and omissions**, and improve **accuracy, transparency**, and **completeness** of research published, and **reduce waste** in research!

Absence of evidence is not evidence of absence



EASE GENDER POLICY COMMITTEE

ENDORSE
the SAGER
Guidelines



<http://www.ease.org.uk/about-us/gender-policy-committee/>

THANK YOU



ECRs: diversity & inclusion in peer review

Sanjana Balu, Sense about Science



Diversity

noun. A range of many people or things that are very different from each other



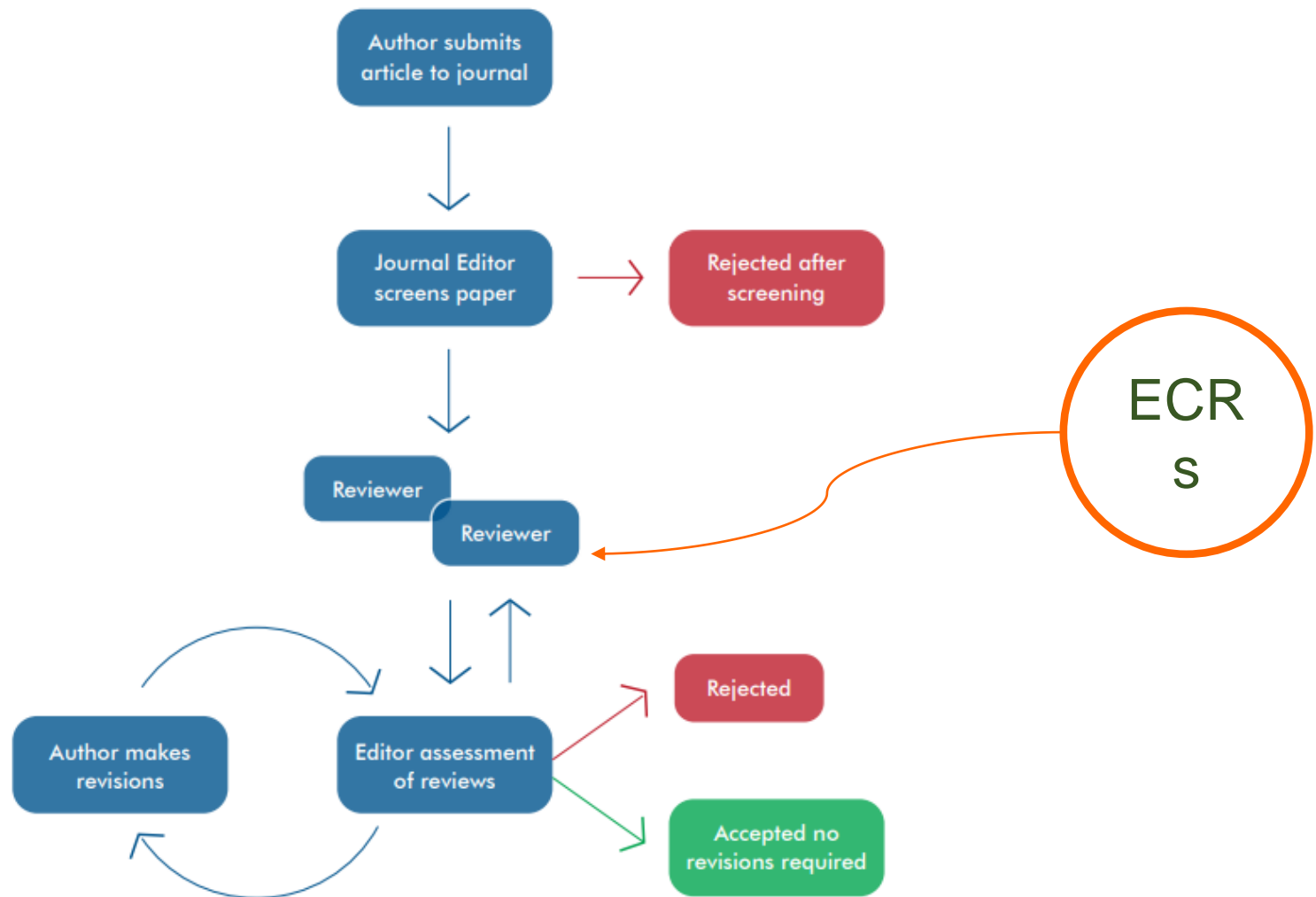
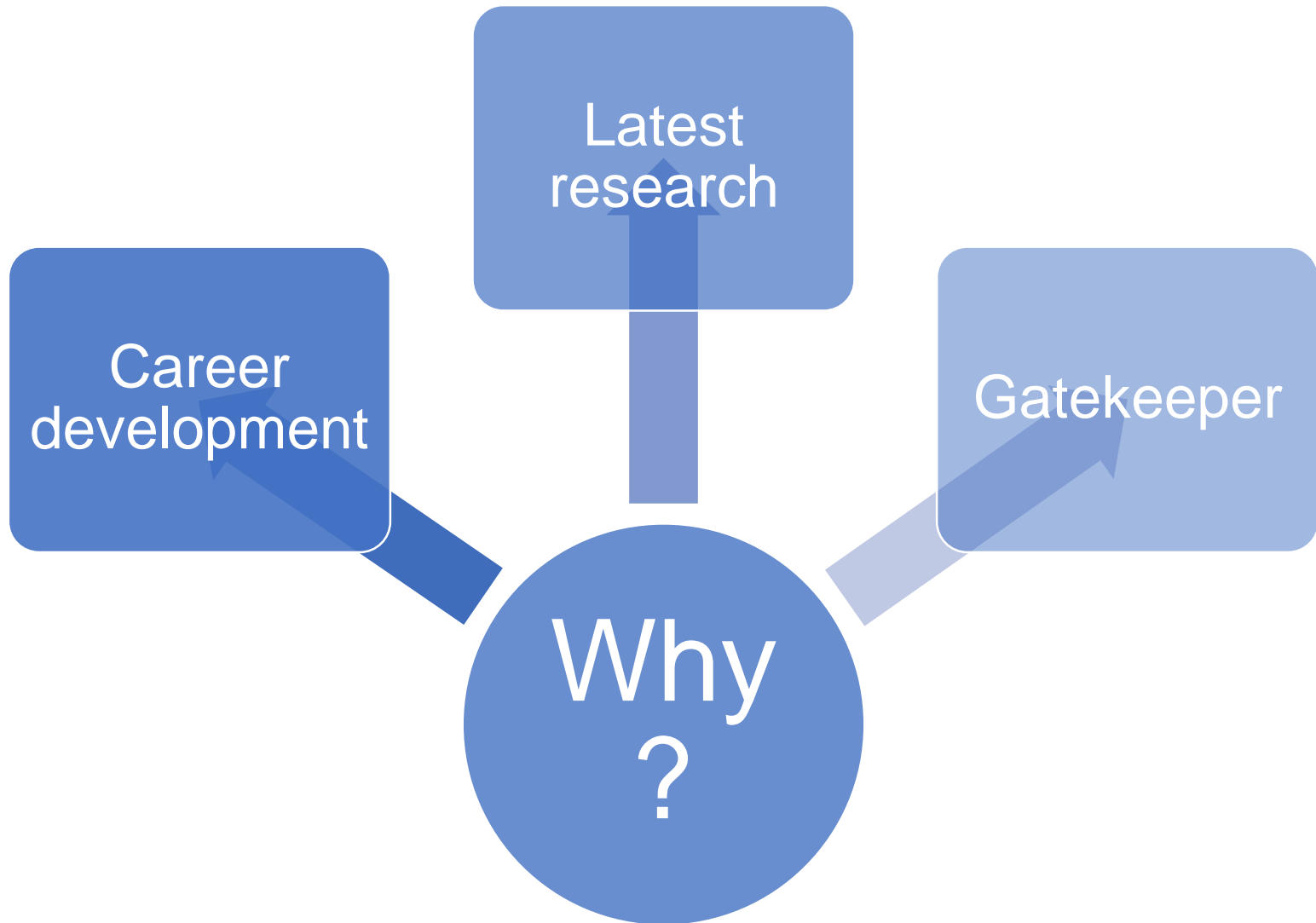


Figure 1: Diagram of a "typical" peer review process (there are many varieties)





F1000Research
F1000Workspace



WILEY



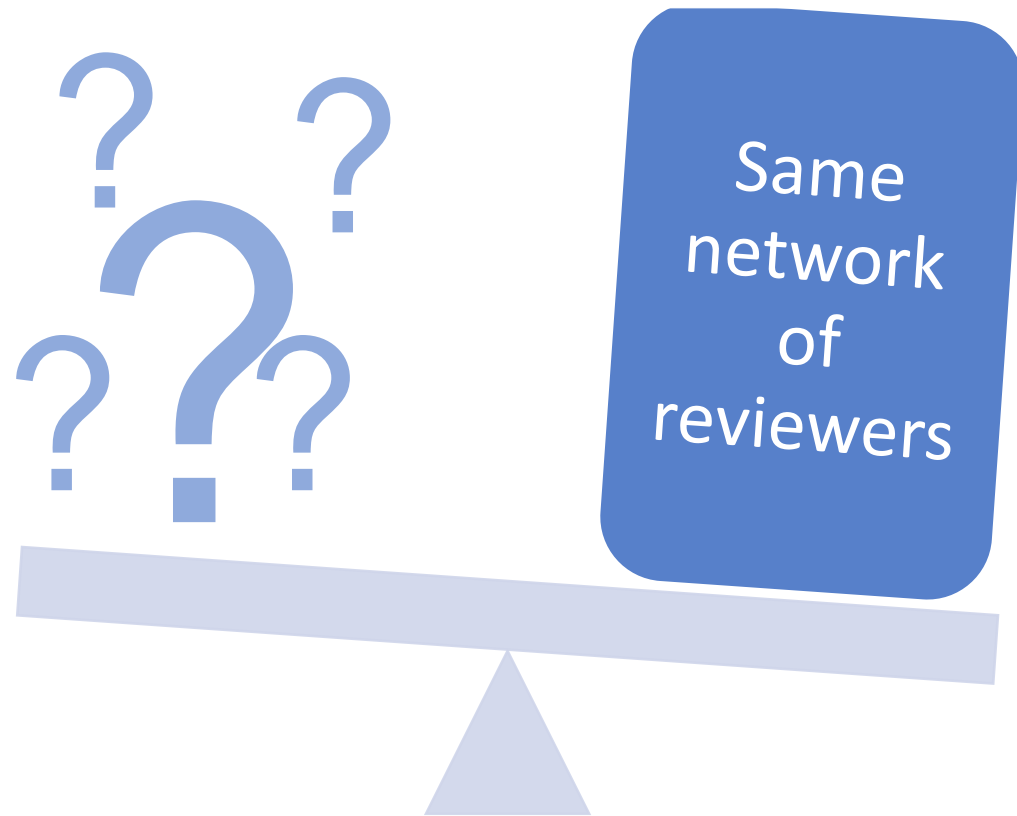
ELSEVIER

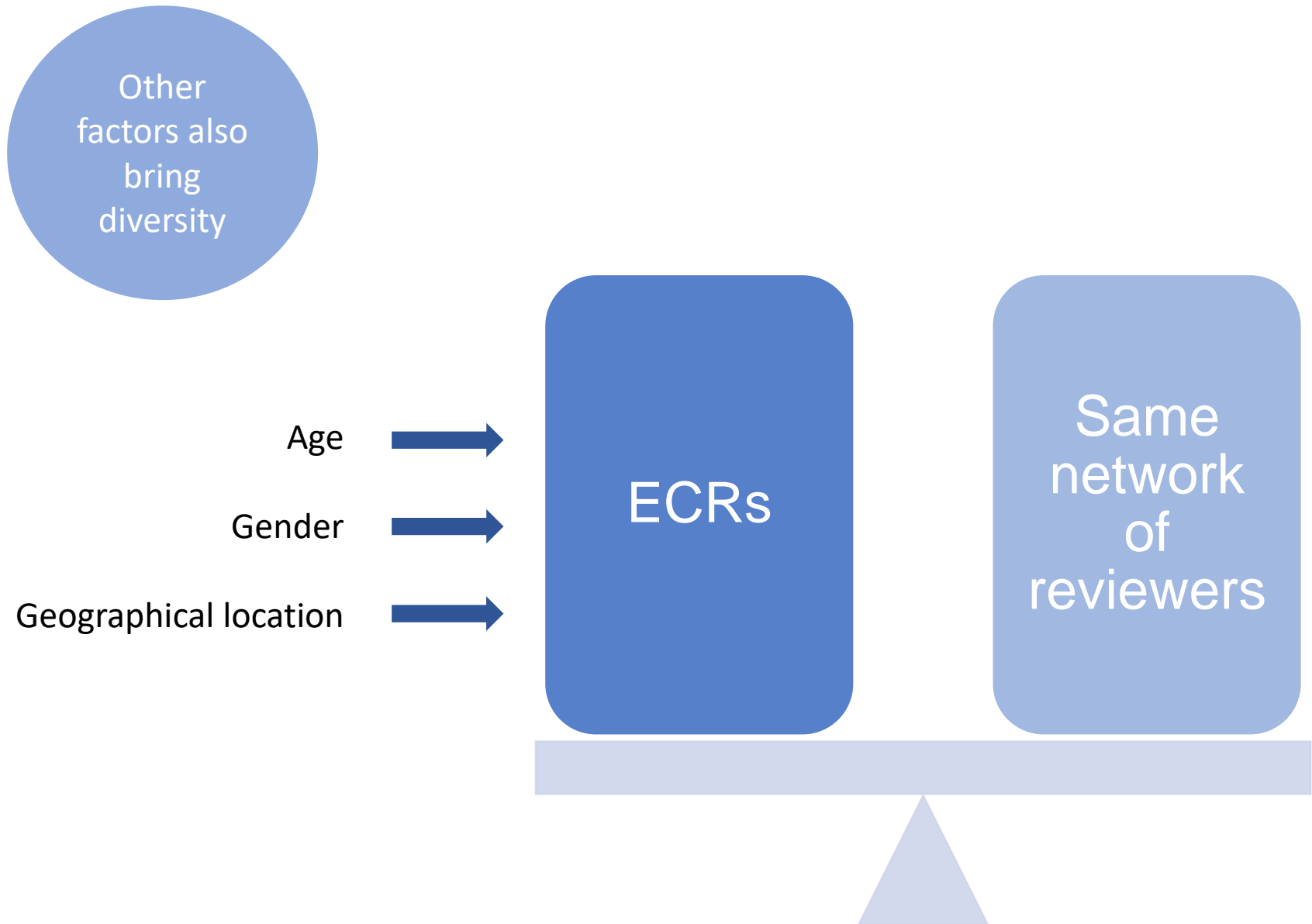


PEER REVIEW: THE NUTS & BOLTS

October 26 | 1:30pm to 4:
Glasgow Caledonian Univ





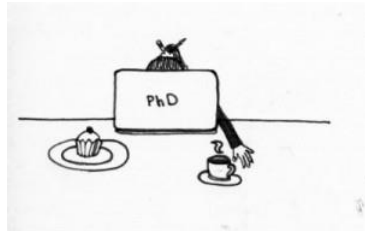




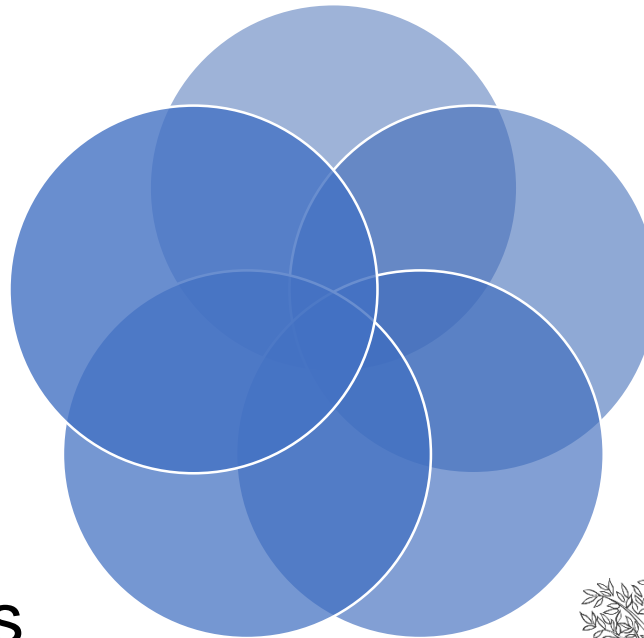
THE LANCET Journals



Early
career
researchers



Editors



Academics

Publishers



ELSEVIER

WILEY



Taylor & Francis
Taylor & Francis Group



October 26 | 1:30pm to 4:30pm
Glasgow Caledonian University

Standing up for Science 3

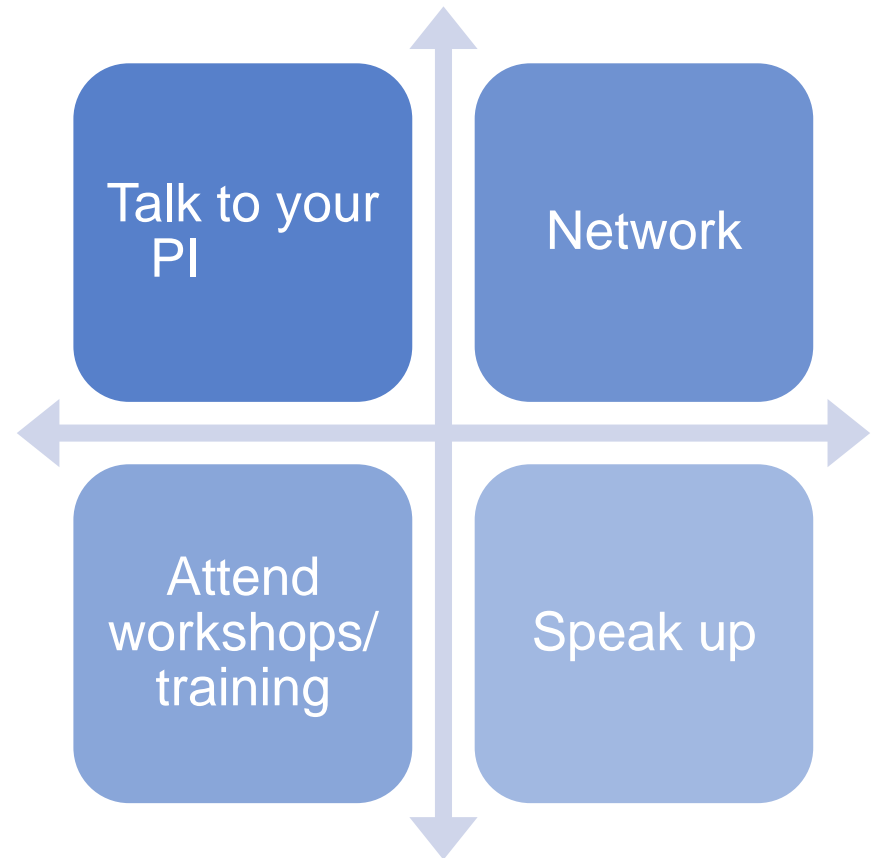
PEER REVIEW

The nuts and bolts

A guide for early career researchers

Peer review is the system used to assess the quality of scientific research before it is published. Independent researchers in the same field scrutinise research papers for validity, significance and originality to help editors assess whether research papers should be published in their journal.

What can early career researchers do?



Peer Review Survey 2009

[contents page](#)

Introduction

In 2008 1.3 million learned articles were published in peer reviewed journals. Although playing a pivotal role, it is only since the second world war that peer review has been formalised across the scholarly literature. Peer review today is fundamental to the integration of new research findings, enabling other researchers to analyse or use findings and, in turn, society at large to sift research claims.

Peer review
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and its in
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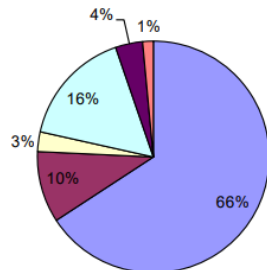
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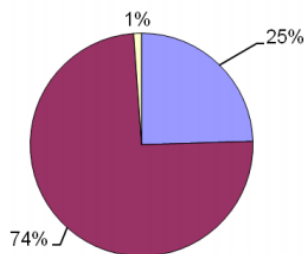
Demography

[contents page](#)

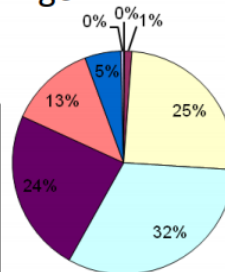
Organisation



Gender

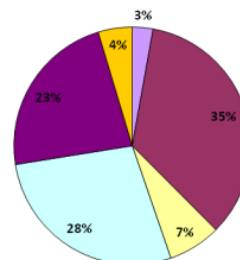


Age



n=4037

Region



There is a need
for more data

Monday 10th September

What: 2018 Entre Pares conference "Scientific evaluation and review"
When: 10 and September 11, 2018, University Cultural Complex; A Mexico
Who: Dr. Theodora Bloom, BMJ. And Dr. Bahar Mehmani, Elsevier.
Further Details: During this session speakers will talk about trends transparency, recognition and diversity and inclusion in peer review

What: Panel discussion "The importance of Diversity and Inclusion"
 Director of Science at Wellcome. Organised by Wellcome in partnership
Where: Wellcome HQ, London
When: Monday 10 September 18:00-20:00 BST (17:00 – 18:00 UTC)
Who: Jim Smith, Jocalyn Clark (The Lancet), Kebede Deribe (University of Crick Institute)
Further details: Areas for discussion will include issues surrounding and country bias – both explicit and implicit, as well as more professional inclusion of early-career researchers in peer review and the gender including registration [here](#).

What: ORCID Peer Review Week Webinar (Americas/Europe/Middle East)
Where: <https://register.gotowebinar.com/register/7400410737743>
When: 10 September, 10.30-11.30am EDT, 3.30-4.30 BST
Who: Joris van Rossum (Digital Science) and Brigitte Shull (Cambrian Blockchain for Peer Review Initiative; Liz Allen (F1000); Stephanie Meadows (ORCID)
Further details: This is the first of two webinars we are hosting to learn about how ORCID is helping increase recognition for peer reviewers ways our members are using ORCID in peer review.

What: "Why should you be a peer reviewer?"
When: Monday, September 10, 2018 08:30 – 9:30 AM EDT (GMT -4)
Who: Dr. Philip Lindeman (M.D., Ph.D., Columbia University, USA)
Further Details: Dr. Philip Lindeman will help attendees enhance their understanding of the intricacies of the peer review process and also explain why researchers are reviewers. Full details and registration [here](#). Tuesday 11th September

What: Article – Why Use the Double-Blind Peer Review Process?
Where: IGI Global Newsroom
When: September 10, 2018
Who: IGI Global
Further details: Learn what IGI Global's peer review process looks like and how an academic publisher uses the double-blind peer review process for its newsroom to read more.

Peer Review Week

ABOUT PEER REVIEW WEEK 2018 GET INVOLVED BLOGS RESOURCES PREVIOUS EDITION

Peer Review Week 2018

What is going on during Peer Review Week?

[Monday 3](#) [Friday 7](#) [Sunday 9](#) [Monday 10](#) [Tuesday 11](#)
[Wednesday 12](#) [Thursday 13](#) [Friday 14](#) [Blogs](#)

Monday 3rd September

What: Peer Review Week Q&A with JNeurosci and eNeuro Editors-in-Chief
Diversity and Inclusion in Peer Review
When: September 3 – 15, 2018
Who: JNeurosci and eNeuro
Further details: The forum is open for questions from September 3 through September 15. The EICs will join the discussion during Peer Review Week on September 10-15. <https://community.sfn.org/t/2018-peer-review-week-q-a/9178>

Friday 7th September

What: Report "Global State of Peer Review"
Where: <https://publons.com/community/awards/peer-review-awards-2018#peer-review-report>
When: 7 September
Who: Publons
Further details: One of the largest peer review reports of its time combining years' of data from Clarivate Analytics, data-driven analysis from Publons' cross-publisher peer review platform, and survey responses from ~12,000 researchers globally.

Sunday 9th September



The rise of patient peer review

By Dalmeet Singh Chawla | Dec. 10, 2014 , 4:15 PM

When it comes to clinical research, the participation of the people being treated—the patients—usually ends by the time the study is submitted to a journal. A few U.K.-based publishers are now

thebmj

Research ▾

Education ▾

News & Views ▾

Campaigns ▾

Archive

Guidance for BMJ Patient and Public Reviewers

Patient and public review at *The BMJ*

If you're a patient living with disease or have experienced a significant illness or medical condition, a carer of a patient, a patient advocate acting on behalf of a patient group, or you play a leading part in advocating for patient participation and partnership in healthcare we'd like to invite you to take part in a unique initiative. *The BMJ* has committed to improving the relevance and patient centredness of its research, education, analysis, and editorial articles by asking patients to comment on them. We need your help to make these changes.

If you already review for *The BMJ* as a researcher or clinician, but you are also interested in reviewing as a patient, carer, or patient advocate, you can do this too.

Patient and Public review is a new initiative for *The BMJ*. We are taking the lead here, and we hope other publishers will follow. We are working hard to make our processes as straightforward and smooth as possible for patient and public reviewers and welcome suggestions for how we could do this better.

ublisher, **announced** that in
which will closely
ng peer review.

i-chief, with Sophie
ublic Involvement Research
orces with Richard
Kingdom, having survived
is to have joint peer review
one patient. "We wanted to
emics and patients] is a
More and more of us
ch."

Thank you.

Ask your questions on:

Researcher Academy Mendeley group

Follow us on Twitter

