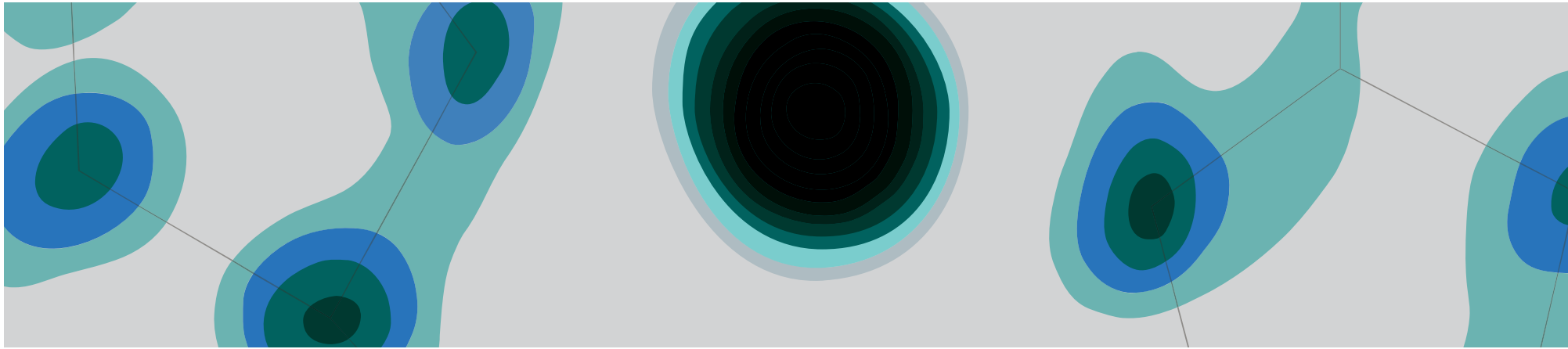


Part of **SPRINGER NATURE**



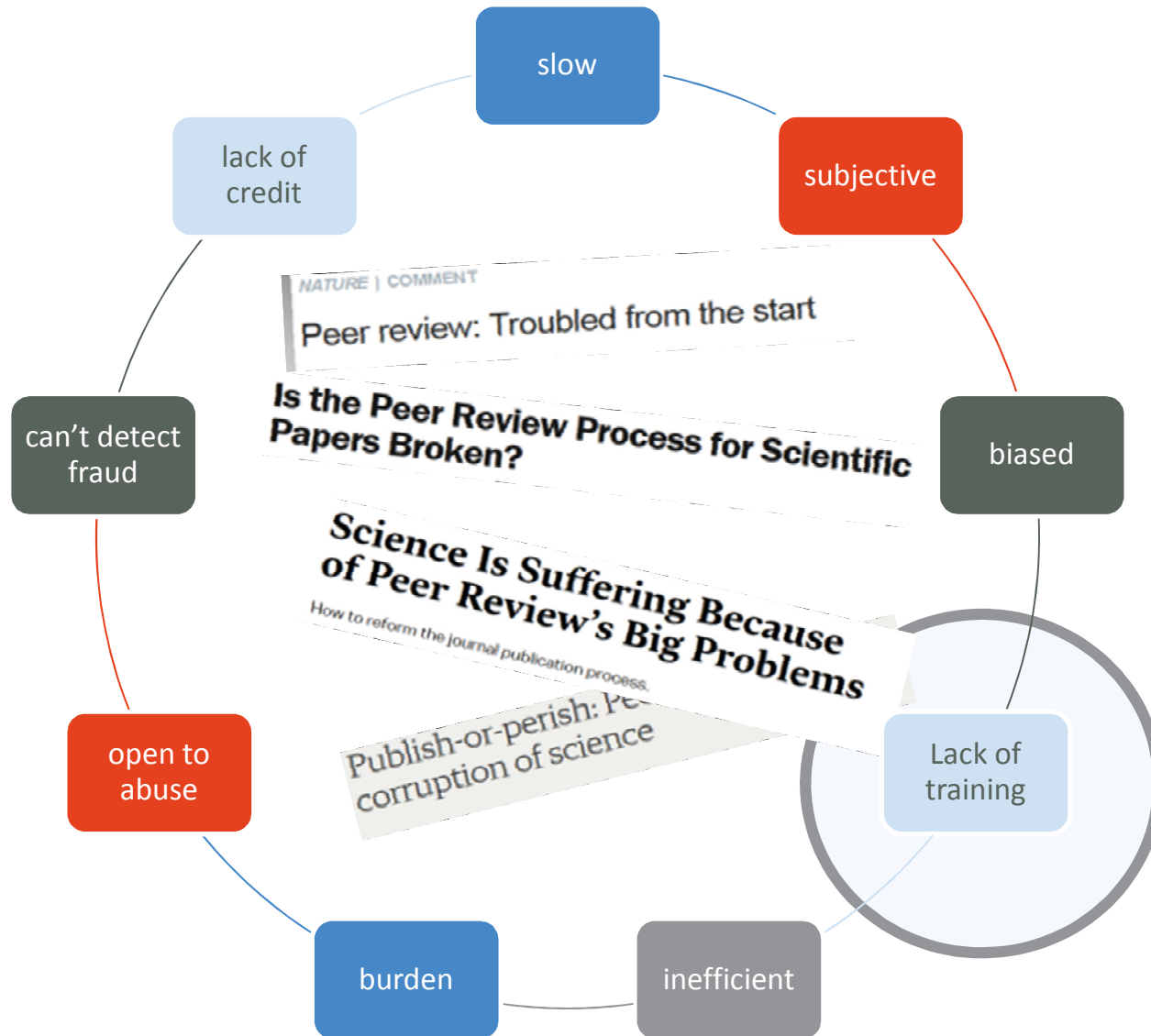
## Peer-review training: Does structured feedback from a mentor improve the quality of peer-review reports produced by a mentee?

CSE 2017 Annual Meeting

Liz Bal, Associate Publisher, BMC

May 23, 2017

# What's wrong with peer review?



# Peer review mentoring pilot at *BMC Medicine*

## Aim:

To determine whether structured feedback from a mentor improves the **quality of peer review reports** produced by researchers with little or no experience of peer review.

## The participants:

- Junior researchers (**mentees**), defined as those with less than 10 publications (none as senior author).
- Senior researchers (**mentors**), from the editorial board of *BMC Medicine* who have experience of providing editorial advice or making editorial decisions on manuscripts.

# The peer-review mentoring process

## Key points:

- No interference with usual peer-review process
- Same manuscript undergoes usual peer review
- Mentors do not inadvertently peer review manuscripts themselves
- Possible to compare usual peer review reports to mentee's peer review reports before and after mentor feedback



## The scope of the pilot

- 10 manuscripts
- 10 mentees
- 5 mentors (each handled 2 mentees)
- Noted time taken at all stages
- Noted levels of revisions required

## Editorial observations – **the mentees**

Mentees generally provided **comprehensive** and **timely** reviews

Mentees mainly needed :

- guidance on **tone** and **recommendations**
- encouragement to comment more on **Figures**
- guidance on resources available to help with the reports
- chasing to return their revisions

## Editorial observations – the mentors

- Mentors were able to provide feedback without ‘reviewing’ the manuscript themselves
- Mentors often needed to point out the appropriate way to structure a review
- Approximately **1 hour** was needed to assess the mentee report (range from 15 mins - 2 hours)
- Mentors need 1-2 weeks to return their comments

## Analysis of reviewer report quality

The quality of reports was assessed-using a validated review quality instrument for assessing peer review of manuscripts

|                            | Control 1       | Control 2    | Pre-mentor     | Post-mentor    |
|----------------------------|-----------------|--------------|----------------|----------------|
| Rater 1<br>Median<br>(IQR) | 21.5 (17.2, 22) | 24 (22,24.8) | 25 (21.5,26)   | 26 (25.5,28.8) |
| Rater 2<br>Median<br>(IQR) | 24.5 (20.3, 28) | 29 (28,29.3) | 28.5 (26.3,30) | 31 (30.5,31.8) |



**mentees produced reports of the same quality as the journal's regular reviewers**



# Conclusions

**This was a pilot study, so:**

- Small sample size
- Split across different topics/methodologies
- Small number of mentees meant matching topic/methods to mentee expertise was challenging, possibly impacting quality of reviews

**However, we now know that it is feasible to run a mentoring scheme alongside normal journal processes, with promising results to indicate a larger-scale trial is worthwhile.**

# Acknowledgments - mentoring pilot team

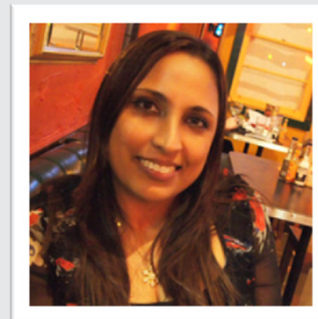
**Jigisha Patel**



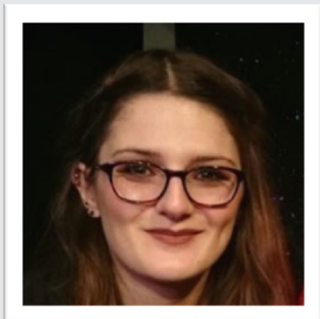
**Jo Appleford-Cook**



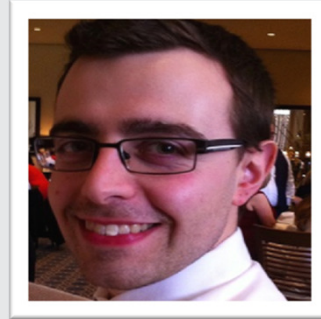
**Sabina Alam**



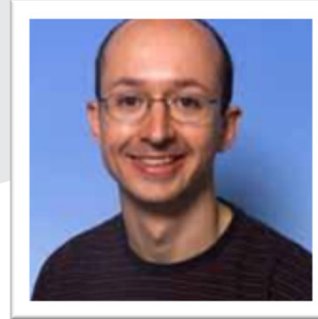
**Ashleigh Couchman**



**Alessandro Recchioni**



**Darren Greenwood**

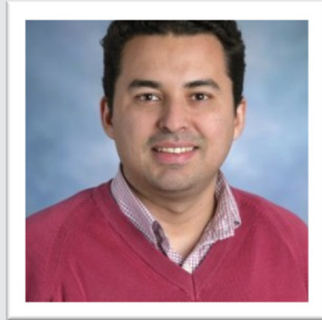


# Acknowledgments – the mentors (and editorial board members!)

James Beeson



Gerardo Chowell



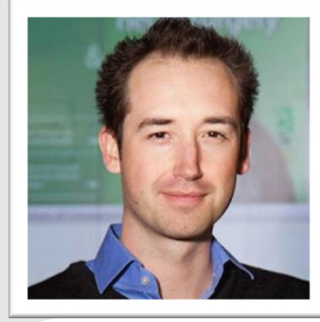
Chris Del Mar



David Moher



Paul Wicks



# Thank you

Liz Bal

Associate Publisher, BMC

[liz.bal@biomedcentral.com](mailto:liz.bal@biomedcentral.com)

[@liz\\_bal](#)