

# DISSECTING THE PEER REVIEW SYSTEM: THEORY AND PRACTICE

Duration: to be agreed with the institution. The program below is spread over an indicative time of 6 hours.

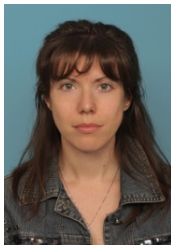
Target: graduate students (postdocs welcome)

Pre-requirements: none

Language: English or Italian

Adequate number of participants: min 6 – max 25

## Lecturer: Dr. Federica Bressan (Stony Brook University)



Federica Bressan (1981) is a researcher and science communicator. She holds two MDs in Music and Musicology and a PhD in Computer Science. The vision underlying her research concerns the co-evolution of technology and culture. Fulbright and Marie Curie alumna, she has published 30+ peer-reviewed articles, chaired international events, and guest edited a special issue of the Journal of New Music Research. She hosts the podcast Technoculture and writes about science and society. Technoculture (<http://technoculture-podcast.com/>). Publications: <http://research.federicabressan.com>

## Motivation

Peer review is the main gatekeeper for quality in today's academia. However, researchers rarely receive formal training on how the system works. A good understanding of peer review is important to give useful feedback, as reviewers, but also to make the most of other people's reviews, as authors. This course aims to give an exhaustive explanation of how peer review works, the different types of peer review, the weak spots of peer review, and how to structure a good review.

## Summary of contents

### DAY 1 (3 hours)

#### Part 1. Lecture

Introduction

Getting to know the audience: background, expertise with peer review, etc.

What is peer review

Standard publishing process

Rationale behind peer review

Historical considerations on peer review in science

Benefits of being a reviewer

Types of peer review

Emotions around peer review: reviewer's anxiety and author's anxiety

Alternatives to peer review

#### Part 2. Guided discussion

Some questions to start the discussion:

Should reviewers be rewarded?

Should reviewers be able to see other reviewers' comments?

Should the reviews be published with the article?

Do we live in a high-trust or low-trust society? What are the consequences for peer review?

Can or should peer review detect plagiarism?

Etc.

### Part 3. Workshop

Guidelines to be a good reviewer.

Standard structure of a review.

What to look for in an article: title, abstract, bibliography, match with journal/conference, etc.

Practical considerations: How much time should I spend on an article? How many times should I read it? Etc.

Explanation of homework.

Homework: review an article. Two-three (published or not) articles per discipline will be selected, in order to cover the participants fields of expertise. A few standard templates for the review will be provided, taken from real world reputed journals.

### DAY 2 (3 hours)

#### Part 1. Discussion on homework

Participants present and compare their review, as if they were the reviewers of a paper. One is appointed to act as the editor or meta-reviewer, and a discussion follows. Were the reviews conducted in a satisfactory manner? Were they consistent? Is a second review round necessary? Is the final decision easy or another opinion is needed?

What problems/doubts did you encounter?

#### Part 2. Lecture

Peer review in the public eye:

Science communication and peer review systems outside academia

#### Part 3. Final discussion

What is your opinion on peer review after this course? Are you pro peer review or a skeptic?

Questions and comments from the participants.

### References

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2. "Quality, trust & peer review: researchers' perspectives 10 years on"  
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3. "Peer review. The nuts and bolts", Standing up for Science, 2014 (digital version updated in 2017)  
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