

Introduction to Peer Review

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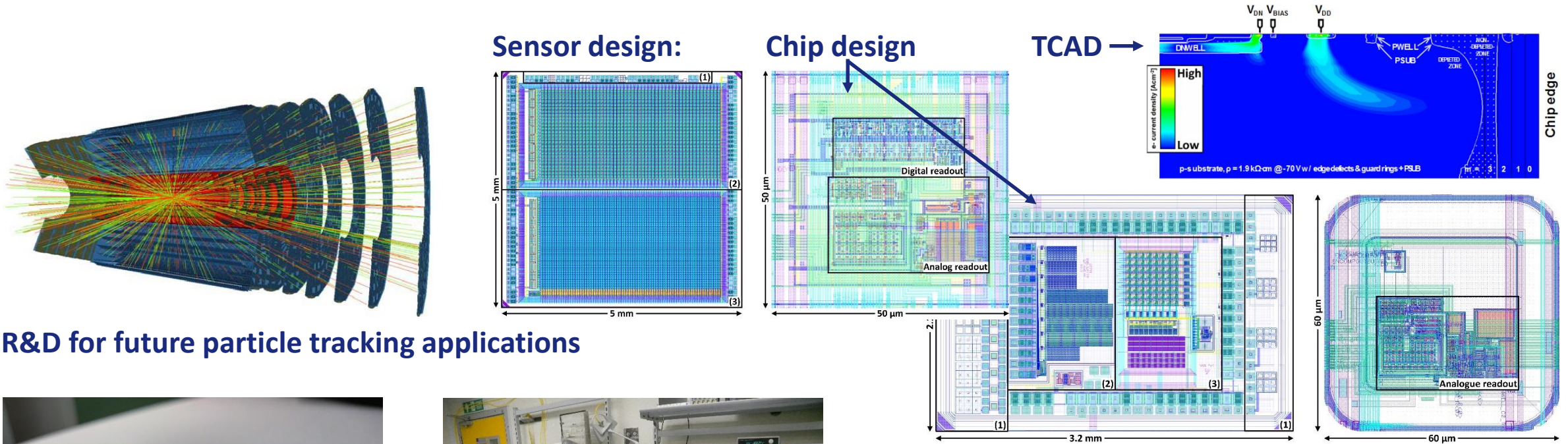
My career path

- 2009** ○ BSc Electronic Engineer @ Uni Barcelona
- 2010** ○ MSc Electronic Engineer @ Uni Barcelona
- 2013** ○ PhD Engineering and Advanced Technologies @ Uni Barcelona

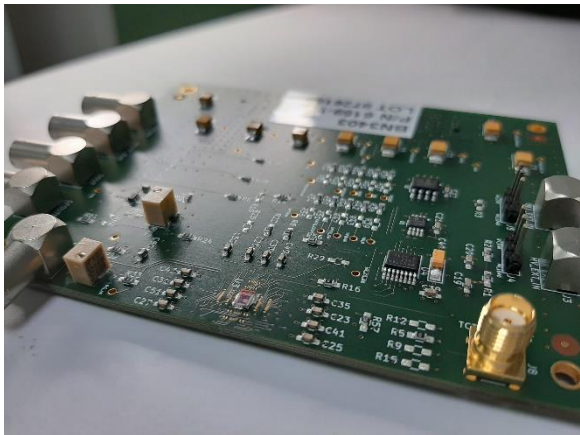
- 2014** ○ Postdoc – HV-CMOS sensors R&D for physics experiments
- 2016** ○ PhD students co-supervision
Member of international collaborations
- 2017** ○ Started and lead CMOS Working Group within CERN-RD50 collaboration
- 2019** ○ **UKRI Future Leaders Fellow** – HV-CMOS R&D Group Leader
R&D representative for Particle Physics cluster
Europractice representative for Uni Liverpool
- 2020** ○ LHCb MightyPix co-coordinator + LHCb-UK MightyPix sub-WP lead
PDRAs and Research Fellows representative for Department of Physics
Panel Member for UK funding agency for physics



HV-CMOS R&D Group at Liverpool



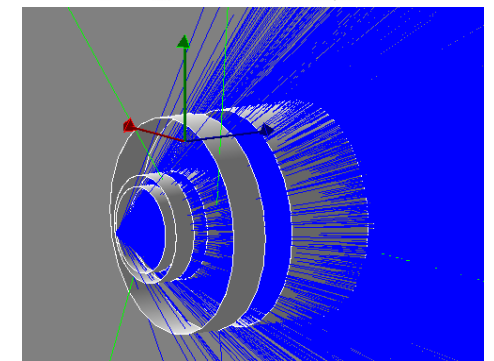
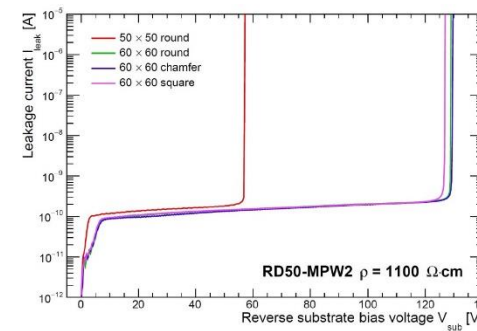
R&D for future particle tracking applications



DAQ development



Experimental evaluation



Geant4 simulations

Today's session

- Short presentation
- Peer reviewed paper I wrote as an example

Why do we publish?

To attract new funding



Because it is fun

Why do we publish?



To inform the world about the progress in research

To built researchers' CVs



To be compliant with grant rules

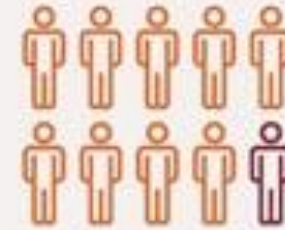
Principles of peer review

- Peer review consist in getting feedback from (anonymous) peers
- It is necessary...
 - To validate the quality and originality of a scientific manuscript before being accepted for publication
 - To help improve the quality of the published research

Peer review is the central pillar of trust for researchers

84%

of researchers believe that without peer review there would be no control in scientific communication.



Peer review means better research

9 out of 10 researchers feel that peer review improves the quality of their published paper.

Good reviewers attract good authors

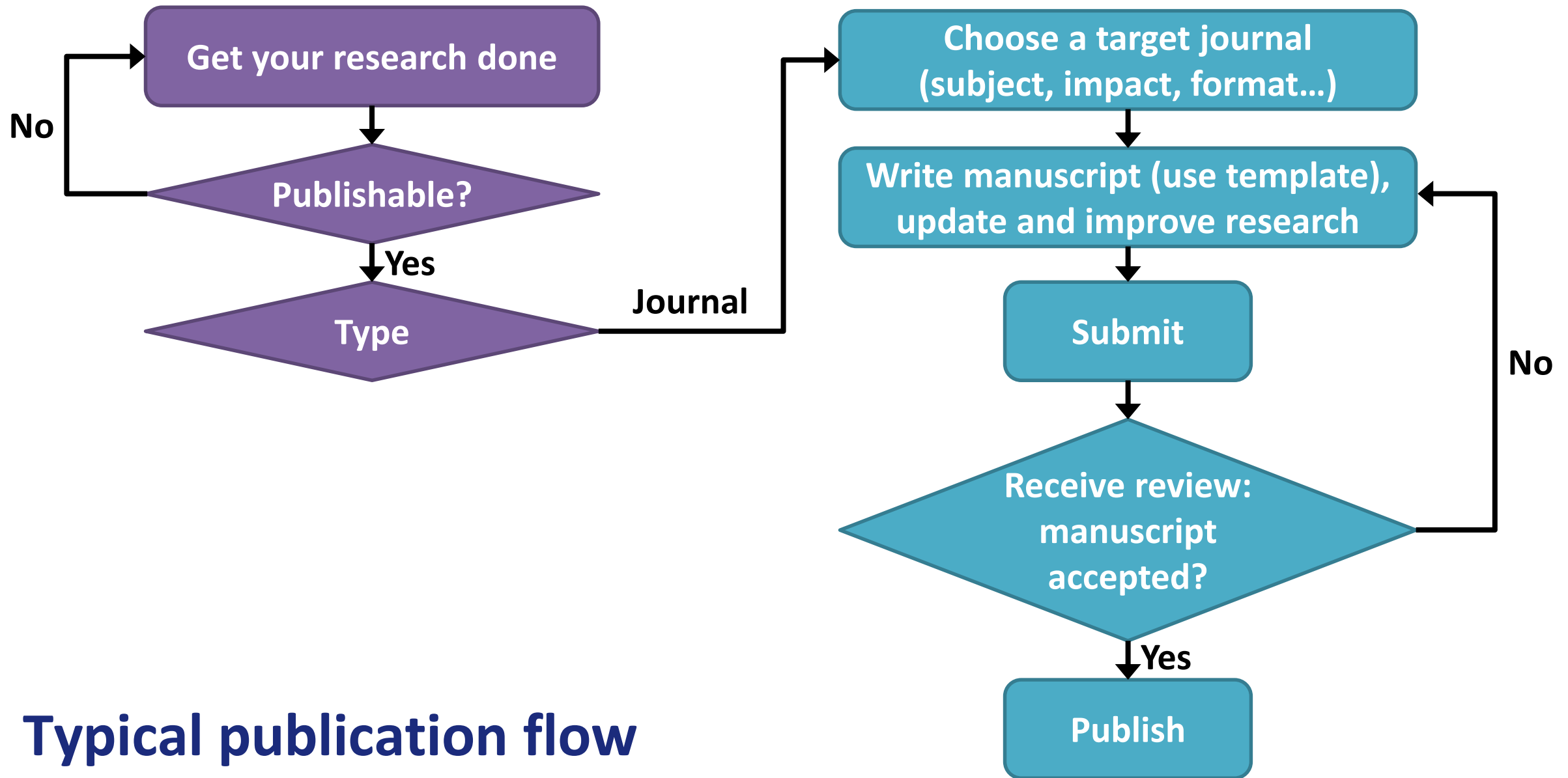
Reviewer quality and speed

are the top 2 contributing factors that lead to a pleasant publishing experience and attract authors to publish in a journal.

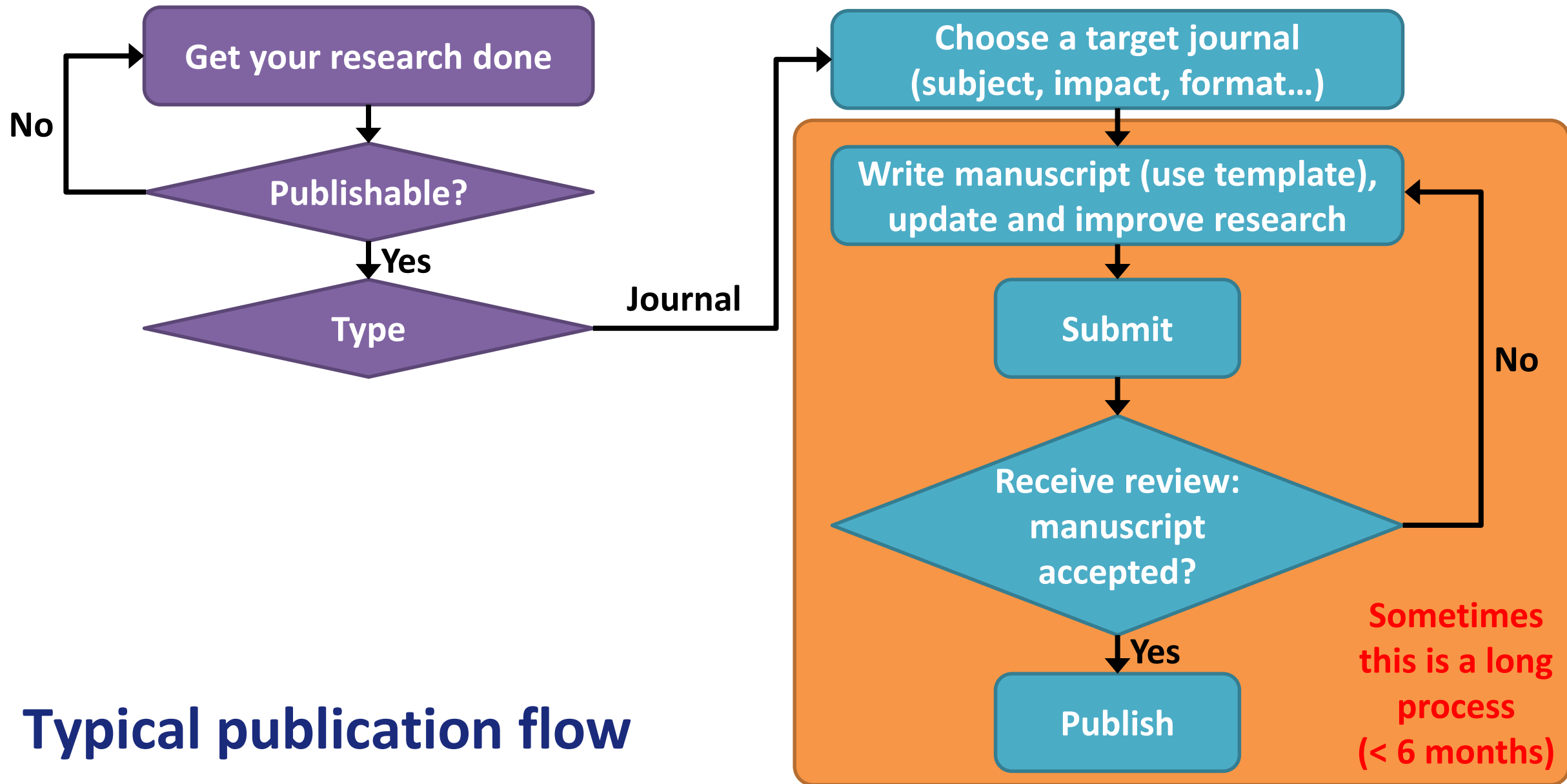


Publishers are key to good peer review

Researchers believe organizing and managing peer review is the crucial role of publishers.



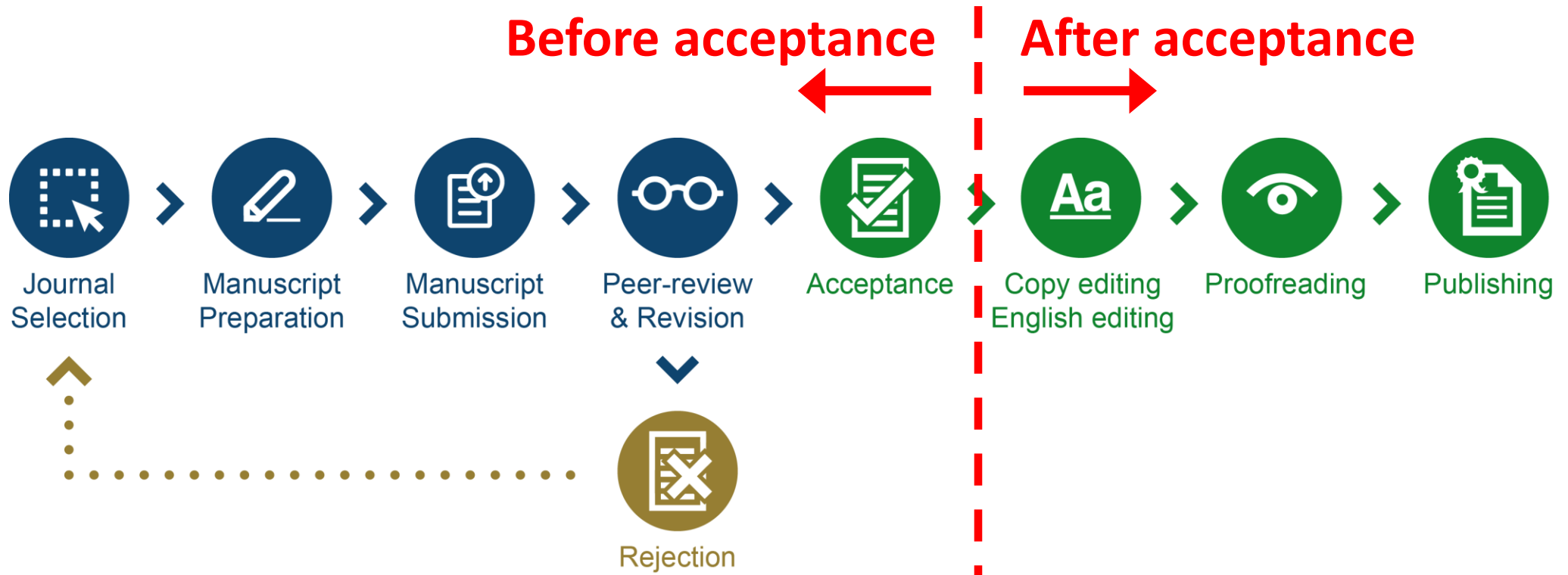
Typical publication flow



Peer review

- Blind (the names of the reviewers are not known)
- Usually $2 < \text{reviewers} < 3$:
 - They review independently (they don't know who the other reviewers are)
- Possible review outcomes are:
 - Rejected
 - Accepted with major revisions
 - Accepted with minor revisions
 - Accepted (vary rare after first submission, more common after improvements)
- The decision comes with a list of comments (e.g. requests for improving things) and sometimes also questions (e.g. reviewers can be genuinely curious)
- Sometimes the reviewers might disagree on their opinions (between them)
- **DO NOT BE DISCOURAGED** by the comments or request for revisions

Once the manuscript is accepted for publication



Peer reviewed paper as an example

- Peer reviewed paper I wrote as an example
 - Paper before the review (use journal's template from the beginning)
 - List of comments from reviewer(s)
 - Further explanations on something that is not clear enough
 - Additional or new plots to support research claims
 - Phrase things better, review the English and correct typos
 - Add more references
 - Some comments can suggest reviewers have misunderstood something
 - Some times reviewers make nasty comments
 - Letter of response to address the comments one by one
 - My style: comment, response and action (this is what I do)
 - Be kind to your reviewers
 - Redlined version with the improvements for reviewers convenience
 - Final published paper
 - They review independently (they don't know who the other reviewers are)

A few other things

- First author vs. one of the other authors
 - First author (or corresponding author) usually writes most part of the paper and takes care of the letter of response
 - Might seek help from other authors
 - My recommendation is to be the writing author of a few papers during your PhD time (you will learn a lot, you can use the papers to write your thesis)
- Regular paper submission vs. conference proceedings submission
 - Both are peer reviewed
 - Regular paper submission does not have a deadline
 - Conference proceedings have a (hard) submission deadline



Thank you for listening!