



Preregistration Posters

What are preregistration posters?

As part of our Credibility in Neuroscience programme, we introduced preregistration posters at BNA2019 Festival of Neuroscience in Dublin, Ireland.

A relatively new concept, the preregistration poster format builds on the commentary piece by Tibon, CBU Open Science Committee C and Henson (Trends Cogn Sci., 2018. Title TBA: Revising the Abstract Submission Process), and the existing study preregistration service offered by the Center for Open Science (<https://cos.io/prereg/>).

In essence, preregistration posters give the opportunity to submit plans for studies yet to be undertaken, rather than work that has already been completed.

In the context of BNA2019, a preregistration poster had to include the following elements:

- **Introduction** (background, context, and reasons for carrying out the study etc)
- **Methods** (how the hypothesis will be tested)
- **Approach for statistical analysis** (what are the primary outcomes, how the data be analysed, what statistical tests will be used etc)

Importantly, preregistration posters have little/no data (apart from any preliminary work that helped to generate the research question).

What is the purpose of preregistration posters?

This new poster format allows neuroscientists to obtain feedback from the international neuroscience community when it is most valuable (when there is still chance to revise the plan) and potentially form collaborations that could help with the proposed study.

Having preregistration posters also helps further the principle of preregistering research and avoiding biases in reporting results (PNAS, 2018. The preregistration revolution).



Tips for Organisers

Read around

We recommend reading Title TBA: Revising the Abstract Submission Process. The Center for Open Science (COS) is a treasure-trove of useful information about Open Science in general (<https://cos.io/>).

Prepare your fellow organisers, delegates, and potential preregistration poster submitters

Give your delegates and future presenters clear instructions on what to include in a preregistration poster. It's highly likely that they will be the first person in their lab group (or university) to submit a preregistration poster abstract, and so they won't be able to simply look at what someone has done before! If you are thinking to introduce preregistration posters at your conference, please feel free to use the explanatory text and/or abstract submission guidelines that we used at BNA2019 (in whole or part).

Make sure your reviewers are familiar with the concept of preregistration

Despite sending information to abstract reviewers beforehand, we still had quite a few reviewers rejecting preregistration abstracts on the basis that they lacked results. In future, we will spend more time making sure that reviewers know what's required of preregistration posters, and how to review them, and to allow time to answer any questions reviewers may have.

Pass on constructive feedback from reviewers - and give presenters the opportunity to improve their abstract before acceptance/publication

After all, one of the main aims of preregistration is to get useful input which will ultimately improve science! If you, as an organiser, receive comments from your abstract reviewers which will improve the abstract and/or presentation, then take the time to pass on to the submitter so that they can act on the feedback. Ideally give them the chance to incorporate improvements into their abstract before it is accepted and used in the meeting programme and /or published.

Be prepared to be flexible about what's actually presented

Preregistration posters are likely to vary widely in how much data they actually contain, from no data to a set or sets of results. Although the ideal is to present work that hasn't yet been carried out (so that plans can still be changed), the format of preregistration posters is still at a very early stage of development and it's likely you'll receive a wide range of posters.

Highlight preregistration posters at your event



They are a great way to prompt discussion about new ways of doing and sharing research. Find ways to highlight the preregistration posters on the stands themselves, in the programme, or in the abstract book.

Use Open Science stickers

The Open Science badges (<https://cos.io/our-services/open-science-badges/>) were introduced for journals to acknowledge papers which met criteria for open science practices of sharing data, sharing materials, or that were preregistered. You can do the same by having stickers ready to put on posters which have used these practices, further highlighting preregistration. (We found that getting Open Science stickers on your poster was very popular!)

Celebrate your preregistration posters - and your standard posters too!

If you run a poster competition, introduce separate categories for preregistration posters. It's important to celebrate those who are venturing into these new ways of doing research, but it's also important to recognise that they are different from 'traditional' posters which include results, and it wouldn't be fair to include both types in the same category. Celebrate the new and celebrate the not-new too!