

Advice to NHMRC applicants on how to write statistical support in their applications

How much statistical support should I budget for in my application?

That depends on the complexity of the design and analysis problem, and the amount of guidance the researcher(s) will need. Below are some example options, intended as a guide only.

No formal arrangement: minimal time

Simple design and researcher doing own analysis. Suitable if using techniques familiar to the researcher from previous work. But consider a casual appointment in the design and write-up stages for a specialist in design/analysis to check protocols to be used. (This could be included in the budget as 4-5 hours at \$200/hour.)

Consultant assistance: 5% time (about one day per month)

Consultant to assist with analysis but not lead it. Suitable if using design and analysis techniques that are quite standard in the field, and which the researcher wants to take the lead with, but which are unfamiliar to them and require expert guidance and basic training in the design, analysis and write-up phases of the project. A co-authorship role may be appropriate, depending on the extent of the contribution made to the project.

Stats collaborator: 10% time (about one day per fortnight)

Consultant to act in a collaborative role and lead the analysis. Suitable if the design/analysis problem is a relatively standard one but the researcher lacks the technical expertise or resources to lead it. The consultant will be active in design decisions, and lead the analysis and aspects of the write-up relating to the analysis. A co-authorship role on research outputs would be appropriate for this level of involvement.

Specialised stats collaborator: 20+% time (one day or more per week)

Consultant to act in a collaborative role and lead the analysis in a non-standard problem. Suitable if the design/analysis problem is an unusual one that demands high-level statistical expertise and potentially novel methodology. The consultant will be active in design decisions, and lead the analysis and aspects of the write-up relating to the analysis. (Note though you will need to identify a consultant with the relevant skills and availability at the proposal stage, Stats Central can help with this.) A co-authorship role on research outputs would be appropriate for this level of involvement. It may also be worth considering planning a statistics paper on novel aspects of the methodology used.

Some advantages of a formal arrangement as above are:

- It can strengthen a grant application to write in access to statistical expertise, particularly in cases where using advanced design/analysis techniques with which the research team can't demonstrate previous experience.
- An appropriate consultant would assist with your project for its duration, attending planned meetings at key stages of the project.
- This project would be factored into their workload allocation to free time to invest in it, and it would be prioritised when managing requests for assistance.

How do I include statistical support in my budget?

For the NHMRC program we suggest including this as a PSP3 under A-RT: Research Team and Commitment. Rather than budgeting for a constant amount of support each year, consider adding more time towards the end of the project during analysis and write-up stages. If you have an existing relationship with a Stats Central Consultant you would like to put on the application you can

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check with them about their salary scale. Otherwise, assume a consultant is Level A/6 on a contract of 2 or more years (multiplied by the appropriate fraction).

What to write for budget justification?

Below is some suggested text:

The UNSW Research Division recently established a university-wide statistical consulting unit called Stats Central, to provide assistance to UNSW researchers in the design and analysis phases. The service is staffed by at least five professionally accredited statisticians and includes specialists in medical research who will be the primary statistics contacts for this project, taking an active role in statistical aspects of the project at all stages - including the proposal stage, where this application was reviewed by a Stats Central consultant.

[please include this last part about the proposal stage ONLY IF you made use of Stats Central's free statistical review service!]

If you have further questions concerning statistics support for grant applications, contact Stats Central at Stats.Central@unsw.edu.au