

TPGG Authorship Philosophy

This document describes TPGG's philosophy regarding authorship. It is required that all core TPGG members¹ read, reflect on, discuss and edit with the group as necessary, and agree to the philosophy outlined in this document. This document can also be shared with students completing projects with TPGG.

Executive Summary

From March 2019 onwards, for publications that result from TPGG team projects (TPGG team projects are defined as all projects that are included for input, discussion and support at team meetings. These include projects that originate with the team leader as PI, student projects using data from a team project, and trainee, clinic, or other independent investigator projects²):

- Authorship will be **offered** in an inclusive manner, to:
 - a) all current TPGG members, and
 - b) all former TPGG members who indicated in their exit interview that 1) they felt they contributed substantively to the project from which the manuscript originated and 2) they would like to be offered authorship on future TPGG publications that arise from that project.
- Authorship will be offered by the team leader/first author/primary supervisor/PI, who will also circulate the authorship philosophy containing the ICMJE criteria. Each team member will decide for themselves - after careful reflection – whether they feel they meet the requirements for authorship.
- Offering of authorship is accompanied by no expectations (that it should be accepted or declined) or judgment, and that each individual's decision will be respected.
- Major manuscript revisions by each author are not necessary to meet ICMJE criterion 2. We decided that to meet criterion 2, each team member who accepts authorship will hold themselves accountable to review the manuscript with a critical mindset.
- Primary contributors to each manuscript will be discussed with the team leader/PI for that project to agree on appropriate acknowledgement – e.g., through use of joint first, second, corresponding authorships (for examples and norms observed by TPGG, see Background section). Sequence of other authors will also be agreed on with the team leader/PI for that project.

¹ TPGG membership is contingent on commitment to, and capacity to contribute to, the TPGG mission and vision, including participation in TPGG meetings. TPGG membership may be extended to coop students on a case by case basis, but will not include students completing rotations or projects with TPGG. Any ambiguity with respect to TPGG membership should be discussed with the team leader.

² Any projects involving the acquisition of new participants or data, that were **not** presented for input, discussion or support at team meetings, will not be considered a TPGG team project and an offer of authorship to all TPGG members is not expected.

- A team member who violates the TPGG values or culture statement in a profound and irreparable manner loses the privilege of receiving the offer of authorship on future TPGG publications. Under this circumstance, this will be explicitly discussed with the team leader during the exit interview.

Background

TPGG held a special meeting in March 2015 to discuss our approach to authorship. Specifically, we considered two questions:

- **Who should be listed as authors on publications arising from our work?** and
- **In what sequence should authors be listed?**

We framed our discussion around the ICMJE guidelines for authorship, which recommend that authorship should be based on the following 4 criteria:

- 1) Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work;
- 2) Drafting the work or revising it critically for important intellectual content; AND
- 3) Final approval of the version to be published; AND
- 4) Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Though helpful, we recognized that **these criteria leave considerable scope for subjective interpretation**. For example: How do we operationalize "substantial contributions"? How do we define "design" and "data acquisition/analysis/interpretation?" What does "revising it critically for important intellectual content" look like?

Discussion

We determined that **reaching a unanimous consensus about the definitions of terms like "substantial contribution" was not possible**, and that we could not predict all of the possible authorship scenarios that might arise to determine a course of action in each unique situation.

Therefore, in considering who might be considered for inclusion as an author on TPGG publications that result from team projects (as defined above) we decided to weigh two potential harms against each other:

The harm associated with team members feeling that their contributions are devalued because they were not included as an author when they feel that they should have been,

Against:

The harm associated with authors who played key roles in a particular project feeling that their contributions are devalued by the inclusion of additional authors who they feel made less substantive contributions.

We reflected on these potential harms in light of TPGG culture, which is founded on trust and mutual respect. One of the ways in which respect is embodied is through each individual team member perceiving that their contributions have been appropriately acknowledged in publications (e.g., in authorship). Further, we decided that through modifications to authorship sequence and usage of joint first, second, and senior authorships, we felt that we could mitigate some of the issues raised in the second potential harm scenario. Therefore, **we prioritized the first potential harm over the second.**

We decided that our values as a team – including trust, mutual respect, and valuing each member’s capacity for critical reflection - could be embodied by the **offering** of authorship in an inclusive manner that requires each individual team member to decide for themselves - based on careful reflection on the ICMJE guidelines - whether at each step of the process they feel it is appropriate to accept the responsibility that the authorship role entails. This acknowledges the subjective nature of the definitions of phrases such as “substantive contributions” and allows each individual team member to interpret for themselves whether they meet each criterion. We decided that the **offering of authorship within TPGG should be accompanied by no expectations (that it should be accepted or declined) or judgment, and that each individual’s decision should be respected.**

With respect to criterion 2 of the ICMJE guidelines, **we decided that it doesn’t matter if an individual team member made substantive changes to manuscript, as long as they reviewed it with critical mindset.** We sought to avoid potentially unnecessary delays to manuscripts that could result from team members feeling that had to substantively edit (when not necessary).

We decided that going forward, **if/when a team member leaves TPGG, the exit interview should include discussion of which projects the leaving member felt that they contributed substantively to and would therefore like to be included in the offer of authorship on related manuscripts, so that they can be contacted for authorship of future publications.**

We decided that we would **apply these ideas as we move forward, not retroactively,** and that **should a team member violate the TPGG values or culture statement in a profound and irreparable manner, they would not be offered the option of authorship on any publications going forward.** If the violation of values or culture statement occurs during active membership of the team, the exit interview with the team leader will be explicit in addressing the consequences of this behaviour on future authorship.

Authorship order and title norms

TPGG observes many of the authorship conventions generally used in the field of academic medicine.

Last author: usually the PI, signals intellectual ownership and ultimate responsibility for the work, usually corresponding author

Corresponding author: author inviting academic correspondence related to the work, usually the last author. In academic promotion/tenure processes, investigators are penalized if they are last author and not corresponding author. A way of acknowledging shared intellectual ownership of the work is co-corresponding authorship. The corresponding author usually is the individual who is the long term custodian of the data from the project.

First author: Typically writes the first draft of the manuscript, leads the writing and publication process. Joint first authorship may be offered in the situation where one author takes on the writing leadership role, but another author played a pivotal role in the overall life of the project. Joint first authorship signals an equal level of contribution to the work (that took different forms). Typically, an effort is made to order the rest of the authors after the first author(s) in the order of their relative contribution to the work. Second to last authorship is often (but not always) given to an expert that was involved in a relatively narrow aspect of the work, e.g., a biostatistician whose contribution is restricted to the data analysis parts of the work.

Case example:

This was not a TPGG project, but illustrates the use of both co-corresponding authorship and joint first authorship.

Inglis, A.[^], Lohn, Z.[^], Austin, J. C.^{*}, & Hippman, C.^{*} A "cure" for Down syndrome: What do parents want? *Clinical Genetics*. 2014. **86**(4). 310-7.

[^] - joint first authors

^{*} - co-corresponding authors

This manuscript arose from Angela Inglis' genetic counselling directed studies project. The idea for the project initially came from Catriona Hippman, and was supported by Jehannine Austin. Jehannine and Catriona co-supervised Angela, who led all aspects of the execution of the project design, management, and data collection. Zoe Lohn (who happens to also be a genetic counsellor) was in a Research Analyst role at the WHRI when Catriona brought up doing the data analysis for this part of the project (two other manuscripts already published from the project). Catriona and Zoe did the qualitative analysis for this manuscript. Zoe Lohn took the lead on writing the first draft of the manuscript.