RMU Authorship and Acknowledgment Guidelines

Introduction
The Tri-Agency Framework:\(^1\): “Responsible Conduct of Research” sets out responsibilities and corresponding policies for researchers, Institutions and the Agencies, that together help promote a positive research environment. The framework specifically states that:

‘Researchers shall strive to follow the best research practices honestly, accountably, openly and fairly in the search for and in the dissemination of knowledge. At a minimum, researchers are responsible for the following: Including as authors, with their consent, all those and only those who have materially or conceptually contributed to, and share responsibility for, the contents of the publication or document, in a manner consistent with their respective contributions, and authorship policies of relevant publications.’

The Research Methods Unit (RMU) supports excellence in research and research practice. RMU provides consulting support to assist researchers with study design, data analysis, statistical graphics, health economics, database development and management and other multidisciplinary analytical services, such as qualitative research design and analysis. RMU consultants provide essential services for their users, and it is important to recognize their contributions to the scientific advancement of a project. The question of authorship is independent of payment for consulting services provided. The basis of financial support should be the time and effort spent on a project, and the basis for authorship should be whether a consultant has made a scientific or an intellectual contribution to the research project. The type of recognition that is most appropriate may be different for individual projects, depending on the contribution that RMU consultants provide. The following outlines RMU’s authorship guidelines in consideration of the Tri-Agency Framework: “Responsible Conduct of Research”, the Nova Scotia Health Authority’s Responsible Conduct of Research policy\(^2\) and Dalhousie University’s Scholarly Misconduct Policy\(^3\).

Determining Authorship Criteria
In determining whether scientific/intellectual contributions are sufficient to warrant co-authorship, RMU adheres to the guidelines set forth by the International Committee of Medical Journal Editors (ICMJE) and the World Association of Medical Editors (WAME).

Authorship credits should be based on:
1) Substantial contribution to the conception and design or acquisition of data or analysis and interpretation of the data; and
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.

Activities for which authorship are recommended
RMU consultant(s) may play a fundamental role in the creation and execution of the research project to be published, such as

- Conception, design of a research project, critical input, or original ideas
- Acquisition of data, analysis and interpretation beyond routine practices
- Drafting the manuscript or revising it critically for intellectual content
- Writing a portion of the paper, reviewing and editing of manuscript prior to submission and responding to referee comments
- Intellectual contribution (e.g., development of new statistical methods or database applications to meet project’s needs, etc.)

When RMU consultants have made a significant contribution to a research project, they should be given the opportunity to share responsibility for the content of the publication (i.e., manuscript, abstract and/or poster) in a manner consistent with their respective contributions.

Examples to explain authorship criteria
1. If an investigator requires a specific statistical comparison and the RMU consultant provides a specific summary measure(s) and/or p-value(s), authorship is not warranted. In this case, the consultant acts as a statistical resource and is recognized in the acknowledgements section. However, if the investigator has a specific research question in mind, but is not clear on the statistical tools necessary to answer that question and the consultant helps develop the analysis plan and conducts the analysis, co-authorship is recommended.

2. If the methodology is written clearly by the investigator and no further changes to the analytic plans are made by the consultant (e.g., investigator has provided all tables to fill in, data structures to follow, a full description of all figures to conduct, and detailed analytic plans associated with those methods without any need for additions or revisions to this structure), authorship is not warranted, and the consultant is recognized in the acknowledgements section. However, if a consultant is involved in the research design, methodology, analysis, and results write-up and is required to explain and justify in detail the methods used, co-authorship is recommended.

Acknowledgements
Contributions by RMU consultant(s) that do not meet criteria for co-authorship should be listed in an acknowledgments section of the manuscript or poster, with their written permission where consistent with journal guidelines. Consultant(s) must give permission to be acknowledged because readers may infer their endorsement of the data and conclusion by acknowledged individuals.

In summary, we recommend that the question of co-authorship should be discussed in the beginning stages of collaboration between the RMU consultant(s) and the project investigator(s).