

ABEL Lab Guidelines for Authorship and Acknowledgement

Version 2.1 (16 April 2019)

Authorship on scientific works confers credit and has important academic, professional, personal, and financial implications. Authorship also entails responsibility and accountability for published works. Individuals that satisfy the criteria outlined in the *General Standards for Inclusion as an Author on Scientific Work* (below) must be considered as authors of the relevant publication(s). Authors should conduct themselves in a manner consistent with our *Statement of Values* and execute the responsibilities as laid out in this document.

Statement of Values

Decisions about the inclusion of authors on any written materials, both print and online, will be made in consideration of the following values: (1) respect for the contributions of all participants; (2) respect for the ethical standards of our profession, the editorial practices of the publication outlet(s), and the personal standards of potential authors; (3) inclusiveness; (4) consistency with legal requirements established by copyright law and the practices of Michigan State University; and (5) transparency.

General Standards for Inclusion as an Author on Scientific Work

The following practices are intended to ensure that contributors who have made substantive intellectual contributions to a paper are given credit as authors, but also that contributors credited as authors understand their role in taking responsibility and being accountable for what is published.

To be considered for authorship on original scientific work individuals must meet at least two of the following criteria. Examples of activities that meet or fail to meet each criteria are given. We recognize that other activities may represent sufficient contribution to warrant authorship. Under no circumstances will ‘gift’ (aka ‘honorary’ or ‘guest’) authorship be allowed on manuscripts produced in our laboratory. A gift authorship is defined as the inclusion of an individual as an author who fails to meet the criteria below.

1. Significant contribution to conception and design of the study.
 - a. Examples of significant contributions include: (1) conceiving the research question, hypotheses and predictions; (2) performing substantial evaluation of the published literature, or preliminary data collection and analysis, to establish the validity of the research question; (3) conceiving the study design to address the research question; and (4) drafting and/or revising significant portions of the research proposal.
 - b. Activities less likely to result in authorship include: (1) the ‘bouncing’ of ideas off lab mates during early stages of project conception, (2) the identification of potential funding sources, providing introductions to potential collaborators, etc.
2. (a) Substantial participation in the collection, analysis, and interpretation of data, **or**, (b) the provision of privately held data for subsequent analysis with prior agreement that authorship would attach to the transaction, **or**, (c) access to substantial expertise and highly-specialized equipment to achieve data collection not otherwise available (not to include the purchase of commercial services from outside vendors).

- a. Examples of substantial contributions include: (1) the design of equipment deployments as necessary to implement a study design; (2) the development of new protocols for data collection or analysis; (3) the selection and implementation of data analysis with subsequent interpretation of findings; (4) specialized training and supervision of staff to achieve data collection/analysis and to ensure data quality objectives are met.
 - b. Activities less likely to merit authorship include the implementation of standard protocols to collect data where significant technical expertise is not required, the performance of administrative activities to monitor progress under contractual agreements, the input of data into existing statistical tools and models to address new questions, etc.
3. Significant contribution to the drafting and/or editing of the manuscript.
- a. Examples of significant contributions include: (1) writing significant portions of the manuscript; (2) providing discussion of the interpretation of key findings; (3) identifying critical flaws in data analysis and/or interpretation of results and participation in corrective actions.
 - b. Examples of activities less likely to merit authorship include: (1) making minor editorial or typographical corrections to the text, (2) constructing standard graphs and/or images in typically used software at the direction of an author, (3) formatting the manuscript to meet the requirements of the publication outlet.

In addition, each author must do the following:

1. Provide a written statement of approval of the final version of the manuscript prior to submission after a reasonable period for review has passed (typically 7 and no more than 14 days after receipt).
2. Agree to be accountable for all aspects of the work and ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Author Classifications

First Author: The First Author shall be the person deemed to have: (a) made the most substantial intellectual contributions to the published work, (b) been principally responsible for executing the work, and (c) made the greatest contribution to writing and editing the manuscript, or who's contribution, through the combination of any of these activities, out-weigh that of all other authors.

Co-Author: A co-author is any person other than the First Author who has contributed sufficiently for inclusion as an author per the *General Standards for Inclusion as an Author on Scientific Work* as detailed above.

Corresponding Author: The corresponding author is the one individual who takes primary responsibility for communication with the journal during the manuscript submission, peer review, and publication process. Typically, this position is held by the First Author or the Last Author, and may be negotiated with Dr. Wagner. It is our intention that students and post-doctoral research associates be afforded every opportunity to serve as the Corresponding Author when also designated the First Author, with supervision by Dr. Wagner.

Last Author: In keeping with the historical practice of the natural sciences, the Last Author is the head of the lab that hosted most of the research, and the person principally responsible for establishing the conceptual direction of the research and for leading the garnering of research funds and resources. When not the First Author, the Last Author position is reserved for Dr. Wagner or the Principal Investigator of the study (when different).

Author Responsibilities

It is the responsibility of the **First Author** to:

1. Determine the order of authorship following discussion with each co-author, and ascertain agreement with that order among all co-authors, in consultation with the Last Author.
 - a. The nominal order should be: (1) First Author, (2) additional co-authors in order of descending intellectual contribution in the judgement of the First Author and the Principal Investigator, (3) Last Author.
2. Establish a reasonable timeframe for the completion of a publication.
 - a. Because of the variable nature of publications and their content, a firm timeline for completion of various tasks is not prudent. Therefore, we encourage the establishment of mutually agreed upon, reasonable timeframes for each publication at the outset. The following guidelines should be followed as closely as possible:
 - i. Draft manuscripts derived from funded research should be prepared for submission within 6 months of completion of the data analysis and interpretation.
 - ii. Co-authors should be given at least 14 days and typically not more than 21 days to respond to requests to review/revise draft manuscripts. This includes revisions of manuscripts that have been peer-reviewed and returned by the publication outlet.
 - iii. Co-authors should return their acceptance of the final version of the manuscript at least 7 days and typically not more than 14 days after receipt.
 - b. If a mutually agreed upon timeframe for contributions to a publication cannot be established with any Co-Author, it is the responsibility of the First Author of the publication to determine the appropriate course of action, in consultation with the Last Author. All authors must be notified of this process and given a reasonable timeframe to respond.
3. Designate appropriate writing tasks and schedules to Co-Authors, with their agreement, and in keeping with their position in the authorship string and their direct responsibilities for the underlying work.
4. Prepare final publication files (text, tables, figures, supplementary data, etc.) for submission in accordance with the requirements of the publication outlet.

It is the responsibility of each **Co-Author** to:

1. Complete writing responsibilities within the agreed upon timeframe.
2. Notify the First and Last Authors of any extended period of unavailability that may cause a substantial delay in timely publication of the manuscript.
3. Notify the First Author of any circumstances that may alter the timeline for publication or the content of the manuscript (e.g. learning of similar research being completed in another lab).

It is the responsibility of the **Corresponding Author** to:

1. Ensure that each of the journal's administrative requirements, such as providing details of authorship, ethics requirements, and gathering conflict of interest forms and statements, are properly completed according to the schedule set by the journal.
2. Draft all correspondence with the journal editor(s).
3. Allow each Co-Author the opportunity to review and comment on correspondence with the journal when said correspondence addresses, changes, or defends the non-trivial content of the manuscript.

It is the responsibility of the **Last Author** to:

1. Evaluate and approve the materials developed for submission, and ensure the validity of the data and analyses included in the manuscript.
2. Defend the outcomes and conclusions included in the manuscript, and the process by which those outcomes accrued, to any inquisitor.
3. Ensure the processes included in this document, and the rules and regulations of Michigan State University, are followed by all participants in the creation of scientific works in the lab.
4. Ensure sympathetic and timely resolution of any conflicts, in accordance with the values, rights, and rules governing such processes at Michigan State University.

General Standards for Inclusion in the Acknowledgements

Reference by name to individuals or organizations in the acknowledgements section of a manuscript is at the discretion of the authors and should adhere to the following standards:

1. Acknowledgement of funding sources, including the use of contractually required language.
2. Acknowledgement of those individuals whose participation in the project involved substantial paid or volunteer effort that did not rise to the standard of authorship.
3. Acknowledgement of access to land or equipment necessary to complete the project.
4. Acknowledgement of internal or 'friendly' reviews of the manuscript prior to submission for publication.
5. Acknowledgement of anonymous referees.
6. Consistency with publication outlet requirements.

7. Acknowledgment of (1) non-participants with whom an author has a personal relationship (e.g., family) or (2) commercial vendors, where such mention may be construed as advertisement, is generally deemed not appropriate.

Resolution of Conflicts

We recognize that the decision to include, or exclude, an author on original scientific work is not always an easy and straightforward process. When conflicts arise due to substantial uncertainty about either the magnitude or nature of a contribution, or unusual circumstances arise that are not addressed by these standards, attempts will be made to resolve the uncertainty via consensus among the affected parties. If a consensus is not evident, a resolution will be proposed by Dr. Wagner, in consultation with the First Author (if not a party to the dispute), and a rationale for the proposal will be transmitted to all affected parties. If a satisfactory solution cannot be derived by discussion and consensus, any party in the dispute may request the process move to a third-party discussion with the MSU Research Integrity Officer (RIO). At any time, a party to the dispute is free to discuss (confidentially) the circumstances with the MSU RIO.