

## BIOMEDICAL GRADUATE STUDIES (BGS) AUTHORSHIP POLICY

The authorship policy for the Biomedical Graduate Studies (BGS) at the University of Pennsylvania is based on a parent document from the Perelman School of Medicine dated December 2011. The parent document has been modified to account for the needs of BGS students and faculty and the recommendations of the BGS advisory committee.

The policy on authorship for BGS students and their faculty mentors is as follows:

### 1. Qualifications for Authorship

All persons designated as authors should qualify for authorship.

- Each BGS-affiliated author should have participated sufficiently in the work to take public responsibility for the content.
- All BGS-affiliated authors should meet the following three criteria, and all those who meet the criteria should be authors:
  - Substantial contributions to conception and design, or analysis or interpretation of data
  - Participate in drafting the publication, reviewing, and/or revising the publication for intellectual content
  - Provide final approval of the version to be published

Collaborating laboratories may qualify for authorship on papers from BGS-affiliated authors by providing a critically important technology, reagent or sample that is not generally available to the scientific community. However, the collaborating authors must be given the opportunity to comment on and edit the manuscript for scientific and/or intellectual content prior to submission for publication. Conversely, BGS-affiliated authors may qualify for authorship on consortium studies by providing an essential technology, reagent, or sample providing they are given the opportunity to comment on and edit manuscripts before submission.

- Any part of an article critical to its main conclusions must be the responsibility of at least one author. If that author is a trainee, then the faculty mentor shares the responsibility.
- Participation solely in the acquisition of funding, the collection of data, or the editing/assembly of the text or illustrations does not justify authorship.
- General supervision of a research group or administrative entity is not sufficient for authorship.
- Appropriate credit for the contributions of other individuals who do not qualify as authors of the work should be made as an acknowledgment.

### 2. The Authors and Responsibilities

- The lead author(s), also commonly referred to within BGS as the lab PI or senior author.
  - ⇒ The lead author(s) is that person(s) who assumes overall responsibility for the publication including: publication preparation, data review and editing, authorship assignment, certification of author participation and responsibility, and submission/communication of the publication.
  - ⇒ The lead author(s) must have contributed substantially to the overall effort, and will typically have conceived of the project outline, assembled the study team and, where relevant, supervised the conduct of the study.
  - ⇒ The lead author(s) is responsible for the integrity and originality of the publication as a whole. This responsibility includes: ensuring that reasonable care and effort have been taken to determine that all data are complete, accurate, reasonably interpreted and honestly presented; ensuring that appropriate credit is given for any quoted or paraphrased material; documenting all components of support and related sponsors of the research project; and identifying and communicating any potential conflicts of interest.
  - ⇒ The lead author is responsible for ensuring that all of the co-authors have had an opportunity to review the final version of the publication and have consented for inclusion in authorship.

- The co-author(s):
  - ⇒ Each co-author must meet the requirements for authorship noted above in section 1 in full.
  - ⇒ Each co-author must take responsibility in full for the appropriate portions of the content related to their specific contribution including the integrity of any applicable research.
  - ⇒ Each co-author must provide written consent of authorship to the lead author(s), thereby acknowledging that they have disclosed potential conflicts, and reviewed and approved the final version of the publication.
- Authorship inclusion and order:
  - ⇒ Decisions about authors and the order in which their names appear is a collective decision made by group consensus, under the guidance of the lead author(s). However, the sequence of author listing is generally determined by relative contributions to the work and/or the traditions and conventions of individual fields.
  - ⇒ In the instance that equal credit for authorship is due, this should be footnoted (by asterisk) and equally contributing authors should be listed by consensus or alphabetically.
  - ⇒ Decisions about authors and the order should be discussed as early as possible, and as noted above, should reasonably reflect contributions to the publication. However, it may be necessary to modify the originally anticipated order of authors during the submission and revision process if more work is required to make the study publishable.
  - ⇒ The potential submission of related studies, whether among authors on the initial publication or with other investigators, should also be discussed as early as possible under the guidance of the lead author(s).

### 3. Unacceptable Authorship

Guest, gift and ghost authorship/writing are all inconsistent with the definition of authorship, and are an unacceptable violation of this policy.

- Guest (honorary, courtesy or prestige) authorship is defined as granting authorship in the belief that inclusion of the guest will advantage the author(s), such as increasing the likelihood of publication, credibility or status of the work, or of other career benefits.
- Gift authorship is defined as credit, offered from a sense of obligation, tribute or dependence to extend an anticipated benefit to an individual who has not contributed substantially to the work.
- Ghost authorship/writing<sup>3</sup> is defined as the failure to identify as an author someone who made a substantial contribution to the research, evaluation, or writing of a manuscript or professional presentation that merited their authorship. Ghost authorship is also defined as the listing of an author(s) in the place of the true author. Ghost authorship/writing may range from authors for hire with the understanding that they will not be credited, to major contributors not named as authors, to commercial entities or contractors writing a manuscript or presentation submitted by another individual.
- Significant contributors to the preparation of a publication that meet the full authorship criteria (section 1) must be included as authors whether or not such services were provided on a fee-for-service basis.
- Other contributors who do not meet the authorship criteria, but nevertheless make a substantial contribution to a publication must be acknowledged, along with any potential conflicts of interests, in the proper section of the publication whether or not such services were provided on a fee-for-service basis.
- Preparation of drafts of publications by employees of an extramural sponsor who are not listed as either authors or in an acknowledgement as befits their contributions to the publication is expressly prohibited.

### 4. Disclosure of Funding and Potential Conflicts of Interest

All authors are responsible for recognizing and disclosing, prior to submission, any financial arrangements that might be reasonably judged to constitute a potential conflict of interest.

- This includes any extramural support provided to an author from either a not-for-profit or for-profit entity to support any component of the research or project conduct.
- This includes any private income, such as consulting or equity, with an entity whose product figures in the submitted publication or with an entity that may have a competing product.
- All such potential conflicts should be communicated in writing by the lead author(s) to the appropriate editor or publisher of the publication before review and distribution.
- All such interests must also be reported internally as a component of the *PSOM Annual Faculty Extramural Activity* form.

## 5. Other General Rules

- The data presented in the publication must be generated under the approval of, and in full compliance with, the animal and human subject codes and regulations at the University of Pennsylvania, and any relevant federal and/or state agencies. These evaluations are overseen by the Institutional Animal Care and Use Committee (IACUC) and Institutional Review Board (IRB) respectively.
- The data presented in the publication must preserve full protection of patients' rights to privacy as specified in the Informed Consent and under compliance with full HIPAA regulations.
- Decisions of the suitability of a manuscript for a particular journal should be made by group consensus and under the guidance of the lead author(s).
- Publications containing original research must be submitted to the journal of choice on an exclusive basis.
- All items presented in the publication must be original (inclusive of other submitted publications), unless otherwise specifically stated in the publication upon its initial submission.
- Submission of a parallel publication that is not yet openly available to the public, but that contains distinct data which may nevertheless significantly influence the understanding, analysis or interpretation of another publication should be acknowledged, or ideally, sent in complement to the editor/publisher.
- Secondary publication of manuscripts, either in full or in part, in review form, in another language and/or in another country, is justifiable provided that the authors have received approval from the editors and publishers of both journals, that the secondary manuscript includes a footnote to this effect, and that the secondary version faithfully reflects the data and interpretations of the primary version.
- In the instance of review articles, which may include previously published and/or unpublished data, appropriate consent must be obtained and acknowledgements made; however, generation of such data does not necessarily warrant authorship.

## 5. Dispute Resolution

It is recognized that, even when the above guidelines are followed, conflicts of opinion may arise and/or persist. The process for handling disagreements regarding authorship is as follows:

- Dispute resolution should begin with the graduate group chair(s). The relevant department chairs may join the discussion as needed or requested by the faculty member(s).
- If these discussions fail to resolve matters, the Director of BGS should be consulted. If necessary, the BGS Director will work with the Vice Dean for Faculty Affairs, or other relevant senior members of the administration, to convene an advisory committee of up to three standing faculty members, and one BGS student, chosen in consultation with the authors for arbitration to resolve the dispute in a timely manner. The committee will consider the opinions of all parties before reaching a recommendation.

## 6. Violations of this Policy

Failure to adhere to these guidelines, such as knowing, intentional or reckless violations of this policy, may represent a violation of University policies and consequently be defined as research misconduct. Accordingly, if a complaint alleges research misconduct by the faculty member, the investigation and adjudication of the complaint will be conducted in accordance with the University's *Procedures Regarding Misconduct in Research*, provided in the *Faculty Handbook* (<http://www.upenn.edu/almanac/v49/n32/OR-misconduct.html>). If the complaint alleges research misconduct by a trainee or staff member, the investigation and adjudication of the complaint will be conducted in accordance with the University's *Procedures Regarding Misconduct in Research for Nonfaculty members of the Research Community*, described in the *Almanac, Vol 51, July 13, 2004* (<http://www.upenn.edu/almanac/volumes/v51/n01/OR-research.html>).