MEMORANDUM FOR THE PMB FACULTY, STUDENTS AND STAFF

April 20, 2005

SUBJECT: Guideline on Authorship

I. Background

The topic of authorship is one that is being actively considered (1-27)\(^1\). Until the mid-1950's, the vast majority of written scientific reports involved studies conceived and largely carried out by one person. Heretofore such an individual had been called the author, a term that was used for and applied equally well to the writer of a novel. This gave the term "author" great specificity and, given its place in science in determining priority and promotion, strong emotional connotations. Since about 1955, however, most scientific articles have had more than one person's name in the byline. Rennie and Yank (23) cite a 1997 Nature article (28) in which there were 151 listed authors from 46 institutions. This is clear evidence that a system has gone amuck. There have been a range of suggestions regarding how to make it better, including listing authors in alphabetical order or not listing them at all. However, in the competitive system of an academic institution, the reputation of a faculty member is used as a crucial criterion in determining appointments, promotions, tenure, salaries, and receipt of research funds. One of the elements in establishing this reputation is publishing. Thus, authorship in the traditional sense, at USUHS anyway, seems necessary, important, and a part of the creative function.

A special word is in order about credit and accountability\(^2\) (14,22,23). Beginning in the 1950's, with an increase in the number of members of a laboratory taking part in a study, the name of the head of the laboratory or other organization in which the study was done usually came last in the list of authors. This usually defined the individual who had overall responsibility. With increasing numbers of participants in multiple laboratories/organizations, this has changed. With the greater numbers of participants, less and less is known about what the others do----but everyone still takes credit. And unfortunately, there seems to be the growing feeling that each author is not much concerned about what the others do. This, of course, should not be the case. In the last analysis, all authors are responsible for the content of a paper.

It is evident that this issue of authorship is no simple matter. In a Nature editorial the statement was made outright that attempts to produce even quite simple rules about deployment of authors' names are doomed to fail (9). Despite this warning, the following are offered as principles in addressing authorship.

II. Principles Guiding Authorship Selection

There are different ways to divide the dilemma. A natural one, for the Department of Preventive Medicine & Biometrics is a work that (a) is, or is derived from a student thesis, dissertation, or project\(^3\) and (b) that which is not part of (a).

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\(^1\) Most of these publications were acquired by Margaret T. Lapham, Division of Environmental & Occupational Health, Department of Preventive Medicine & Biometrics, USUHS

\(^2\) Accountability and responsibility are used here interchangeably.

\(^3\) For the purposes of the Department, graduate student encompasses those, including residents, who are working on a student research project leading to a dissertation, thesis, independent research project or related student-type research work
In either case a collaborative research agreement should be written as early in the research process as possible. Within the principles specified below, individuals are to decide what each’s contribution is to be and the order of the authors listed in the byline. This is subject to revision later if changes in contribution occur.

A. Work that Is Derived from Student Research

This may be the simpler of the two. The American Counseling Association in its Code of Ethics and Standards of Practice (1) states clearly how student credit based on research from a thesis or dissertation should be handled. For an article that is substantially based on a student’s dissertation or thesis, the student is listed as the primary author. This is the first author. This does not mean, however, that in publications which may arise from the thesis or dissertation work others are to be excluded as authors. To qualify after the first author, the requirements of IIB below are to met. Neither does it mean that a graduate student is excluded from being an author on publications that are a part of work related to but not directly a part of the student’s dissertation/thesis/project. In this latter case, the rules specified at IIB below are applicable.

A member of the department may serve in the role of faculty advisor and/or mentor. If a mentor is the person who is most closely involved in the directing, analyzing, writing, drawing conclusions and writing in the student’s dissertation/thesis work, that mentor is serving as principal scientific leader. Conversely, a mentor may not be included as an author at all. For author sequence and position after the student “first author” on thesis or dissertation derived materials see item IIB4(b)&(c) below.

The following guidelines are to be followed:

1. Base WHO is to be an author on a publication by considering four tasks: (a) concept and design, (b) research and resources, (c) analysis and interpretation, (d) writing and editing. To qualify as “author” one must participate in (a)+(d) or (c)+(d). Combinations that do not include (d), i.e., writing or editing, do not qualify for authorship.

In unusual cases the authors as determined above may extend authorship to others. For example, if a technician does much more than technical work and is involved in the planning and data interpretation, the authors may deem the individual an author. Two disciplines which may fall into the “unusual case” are statistics and pathology. They are often "overlooked." If individuals working in either of these disciplines play a significant role in planning the

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The terms academic advisor and project mentor are used here as defined in the CLINICAL AND GRADUATE PROGRAMS INFORMATION HANDBOOK, DEPARTMENT OF PREVENTIVE MEDICINE AND BIOMETRICS under Independent Project Guidelines. That is, an academic advisor is a faculty member who is responsible for overall guidance on matters pertaining to the successful completion of the degree program. A project mentor is a public health professional with the subject-matter expertise to supervise the student’s research work. The academic advisor may also act as a project mentor.

B. A Work Which Is Not Derived from a Student’s Research

The guidelines are derived largely from references 13, 14 & 19.

Research and resources---technical procedures and supplies, including funds, required to carry out the investigation.
experimentation, analyzing data and writing their section of their work, they should be considered as author.

2. Place individuals who participate in only one of the four tasks specified above in the "acknowledged" category. Likewise, place those who participate in more than one task but other than (d) in the "acknowledged" classification.

3. Do not award "honorary authorship." It is dishonest and dilutes credit. A variety of reasons exist why it occurs elsewhere. Investigators extend authorship to an established, well-known colleague in an attempt to ensure acceptance of an article for publication. Also, as a "cost" to them for being allowed to do the work, investigators may be required to include certain individuals as authors by someone in authority, e.g., project head, Division Director, Chairperson. Even awarding authorship to a "principal investigator" at times may be inappropriate. For example, when a program or laboratory director does little more than provide programmatic support or fund and provide only distant oversight, being an author on a publication is not proper.

4. Assign the AUTHOR SEQUENCE on a publication as follows:  

   (a) The first listed author is the person who has a key role in conducting most of the study including initially analyzing the data and creating the first draft of the paper for other authors' consideration.

   (b) The last listed author is the individual who is considered to be the scientific leader in the endeavor. For example, that person may be the director of the laboratory in which the work of the first author has been done or it may be the principal investigator of a grant under which that first author does the investigation. (In the case of graduate work, if a mentor is serving as the principal scientific leader that mentor should be listed as the last author. In such a case, the laboratory director in whose laboratory the work was done will be considered the "co-senior author" and will be listed as the next to last author.)

   (c) Other authors are assigned their sequence based upon decreasing contribution to the paper, beginning after the first author.  

There are times when two or more authors have made essentially identical contributions to the creation of a paper. In those instances, if one of these individuals is in a tenure track but does not have tenure, the favored author position available on the publication is to be assigned to that tenure track person.

III Submission of Publications for Clearance

At the time that a publication is submitted for clearance to the Chair, Department of Preventive Medicine & Biometrics, the contributions first addressed at item II above should be addressed. Unless the journal to which the article is to be submitted requires it, this enumeration of contributions by each individual should be attached as a separate document to the "package" that is forwarded to the Chair.

7It has been noted "I haven 't heard of a duel being fought over the order of listing of authors, but I know of instances in which otherwise reasonable, rational colleagues, have become bitter enemies solely because they could not agree on whose names should be listed or in what order." (13) It can indeed be a sensitive issue. There are no generally accepted rules that exist to categorically delineate the "correct" sequence.
IV EFFECTIVE DATE

This guideline is effective immediately.

GERALD QUINNAN, JR. MD, CAPT, USPHS
Professor and Chair
Department of Preventive Medicine and Biometrics

Enclosure: References

8 There may some disciplines in which the sequence is somewhat different than that specified here. In such cases the sequence should be as determined by those writing in that discipline. However, in any case that sequence should be determined very early and included in the written collaborative research agreement as specified on page 2.
References