

Responsible Authorship

Responsible Conduct of Research

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NIH RCR Topics

- Conflict of interest
- Policies regarding human subjects, live vertebrate animal subjects in research, and safe laboratory practices
- Mentor/mentee responsibilities and relationships
- Collaborative research including collaborations with industry
- Peer Review
- Data acquisition and laboratory tools; data management, sharing and ownership
- Research misconduct and policies for handling misconduct;
- **Responsible authorship and publication**
- Scientist as a responsible member of society
- Contemporary ethical issues in biomedical research
- Environmental and societal impacts of scientific research

Responsible Authorship - Overview

- International Committee of Medical Journal Editors
- HMS Integrity in Academic Medicine
 - Authorship definitions
 - Order of authorship
 - Implementation
- HMS Ombuds Office
- Cases for Discussion



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Meigs' Credentials to Give this Lecture

- > 300 original research articles, reviews, book chapters
 - Sole author >> senior author of >100s co-authors
- 5 years Associate Editor: *Obesity*
- 5 years Associate Editor: *Diabetes Care*
- 5 years Section Editor: *Current Cardiovascular Risk Reports*
- Current Editorial Board: *Diabetes, Primary Care Diabetes, Current Diabetes Reviews, Diabetes In America v.3*
- Peer reviewer for > dozen other journals
- K24 DK080140 *Epidemiology of Precursors to Type 2 Diabetes*



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<http://www.icmje.org>

Uniform Requirements for Manuscripts
Submitted to Biomedical Journals:

Ethical Considerations in the Conduct
and Reporting of Research:

Authorship and Contributorship



ICJME: Authorship

- An “author” is generally considered to be someone who has made substantive intellectual contributions to a published study
- An author:
 - Must take responsibility for at least one component of the work
 - Should be able to identify who is responsible for each other component
 - Should ideally be confident in their co-authors’ ability and integrity



ICJME: Authorship

- Biomedical authorship has important academic, social, and financial implications
- Old school: scant information about contributions to studies from persons listed as authors
- Many journals now request and publish information about the contributions of each person named as having participated in a submitted study
 - Same principles apply to all intellectual products
- How much and quantity and what quality of contribution qualifies for authorship?



ICJME: Authorship

- Authorship credit should be based on:
 - 1) Substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data
 - 2) Drafting the article or revising it critically for important intellectual content
 - 3) Final approval of the version to be published
- Authors should meet conditions 1, 2, and 3.



ICJME: Authorship

- Does not constitute authorship:
 - Acquisition of funding, collection of data, or general supervision of the research group alone
- All persons designated as authors should qualify for authorship
- All those who qualify should be listed
- Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content



ICJME: Authorship

- The group should jointly make decisions about contributors/authors before submitting the manuscript for publication
- The corresponding author/guarantor should be prepared to explain the presence and order of these individuals
- It is not the role of editors to make authorship/contributorship decisions or to arbitrate conflicts related to authorship.

Authorship: Large Groups

- E.g. clinical trials, international genetics consortia
- The whole group should identify the individuals who accept direct responsibility for the manuscript
 - These individuals should fully meet the criteria for authorship/ contributorship
 - May be “junior” authors with “senior” leadership
 - Often called the “writing group”
- The corresponding author should:
 - Clearly indicate the preferred citation order
 - Identify all individual authors
 - Identify the group name



ICMJE: Authorship: Acknowledgments

- Other members of the research group should be cited in the Acknowledgments
 - The NLM indexes the group name and the names of individuals the group has identified as being directly responsible for the manuscript
 - NLM lists the names of collaborators if they are listed in Acknowledgments.

Cell. 2011 Sep 30;147(1):81-94.

The Lin28/let-7 axis regulates glucose metabolism.

Zhu H, Shyh-Chang N, Segrè AV, Shinoda G, Shah SP, Einhorn WS, Takeuchi A, Engreitz JM, Hagan JP, Kharas MG, Urbach A, Thornton JE, Triboulet R, Gregory RI; DIAGRAM Consortium; MAGIC Investigators, Altshuler D, Daley GQ.

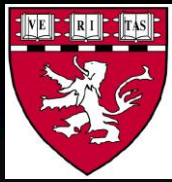
Collaborators (462)

Voight BF, Scott LJ, Steinthorsdottir V, Morris AP, Dina C, Welch RP, Zeggini E, Huth C, Aulchenko YS, Thorleifsson G, McCulloch LJ, Ferreira T, Grallert H, Amin N, Wu G, Willer CJ, Raychaudhuri S, McCarroll SA, Langenberg C, Hofmann OM, Dupuis J, Qi L, Segrè AV, van Hoek M, Navarro P, Ardlie K, Balkau B, Benediktsson R, Bennett AJ, Blagieva R, Boerwinkle E, Bonnycastle LL, Boström KB, Bravenboer B, Bumpstead S, Burt NP, Charpentier G, Chines PS, Cornelis M, Couper DJ, Crawford G, Doney AS, Elliott KS, Elliott AL, Erdos MR, Fox CS, Franklin CS, Ganser M, Gieger C, Grarup N, Green T, Griffin S, Groves CJ, Guiducci C, Hadjadj S, Hassanali N, Herder C, Isomaa B, Jackson AU, Johnson PR, Jørgensen T, Kao WH, Klopp N, Kong A, Kraft P, Kuusisto J, Lauritzen T, Li M, Lieveise A, Lindgren CM, Lyssenko V, Marre M, Meitinger T, Midtthell



ICMJE: Authorship: Acknowledgments

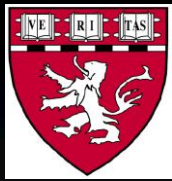
- All contributors who do not meet the criteria for authorship should be listed in Acknowledgments
- Individuals, for example:
 - Purely technical or analytic help
 - Writing assistance
 - Department chairperson providing only general support
- Groups of persons, for example:
 - “clinical investigators” or “participating investigators,”
 - “served as scientific advisors,” “critically reviewed the study proposal,” “collected data,” or “provided study patients”
- Acknowledged persons must give written permission as their endorsement of the data and conclusions may be inferred



HMS: Integrity in Academic Medicine - Authorship Guidelines

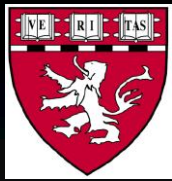
<http://hms.harvard.edu/public/coi/policy/authorship.html>

- Re-state and extend ICJME Authorship Criteria
- Also discusses:
 - Order of Authorship
 - Implementation
 - Dispute resolution



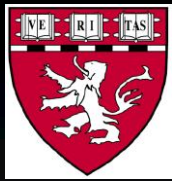
HMS: Integrity in Academic Medicine - Authorship Guidelines – Order of Authorship

- Many different ways of determining order of authorship exist
- Examples of authorship policies:
 - Descending order of contribution (hours work, N patients)
 - First authors:
 - Person who took the lead in writing
 - Person who thought of the research hypothesis
 - Alphabetical or random order
 - Senior authors
 - Most experienced contributor last
 - Mentor of first author
 - Greatest N of patients, \$ support, etc



HMS: Integrity in Academic Medicine - Authorship Guidelines – Order of Authorship

- The significance of a particular order:
 - May be understood in a given setting
 - BUT order of authorship has no generally agreed upon meaning
- As a result, it is not possible to interpret from order of authorship the respective contributions of individual authors
- Promotion committees, granting agencies, readers, and others who seek to understand how individual authors have contributed to the work *should not read into order of authorship their own meaning*, which may not be shared by the authors themselves

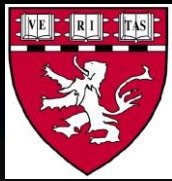


HMS: Integrity in Academic Medicine - Authorship Guidelines – Order of Authorship

- Authors should:
 - Decide the order of authorship together
 - Specify in their manuscript a description of the contributions of each author
 - Specify how they have assigned author order
- A primary author should prepare a concise, written description of how order of authorship was decided

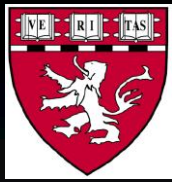
Integrity in Academic Medicine - Authorship Guidelines – Starred Authorship

- More than one author may legitimately claim first, second or senior authorship
 - Several people conceive of an idea
 - Writing groups may involve several junior investigators who put in an equal amount of work
 - Several senior investigators made equal contributions to intellectual or operational oversight
 - Some projects are so big that no one person or group can legitimately claim sole authorship
- There are many ways to determine starred author order
- Junior and Senior author order rules should be flexible



HMS: Integrity in Academic Medicine - Authorship Guidelines – Implementation

- Discuss authorship issues:
 - Openly and explicitly
 - Early in EACH project
- Decisions over authorship:
 - Best settled “locally” by the authors themselves or within the “writing group”
- Involvement of Senior investigators:
 - Is often desirable, especially to help Juniors formulate list
 - May be limited to approval of the overall author order
 - Seniors may need to decide among themselves Senior Author order



HMS: Integrity in Academic Medicine - Authorship Guidelines – Implementation

- Laboratories, departments, consortia, etc should:
 - Document a description of standard and local custom ways of deciding who should be an author and the order in which they are listed
 - Include authorship policies review in their orientation of new members
- Authorship should be a component of the research ethics course that is required for all research fellows at Harvard Medical School
- Authorship policies should be reviewed periodically
 - Both scientific and authorship practices change

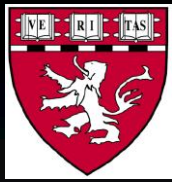
Integrity in Academic Medicine - Authorship Guidelines: Responsibilities of Authors

Key RCR Take Home Point

- First author(s)
 - Take responsibility for all manuscript elements, all the way to submission upload, revision & resubmission, galley proofs and responses to letters
 - Take full responsibility for the veracity of the data and analysis, the author list and acknowledgments
- Senior author(s):
 - May also responsibility for all manuscript elements, or supervise capable Juniors
 - Take full responsibility for the veracity of the data and analysis, the author list and acknowledgments

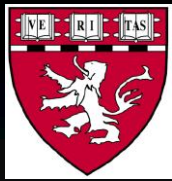
HMS: Integrity in Academic Medicine - Authorship Guidelines – HMS Ombuds Office

- Junior and senior incentives for author lists and order may or may not legitimately conflict
- If local efforts fail:
- HMS Faculty of Medicine can assist in resolving grievances through its Ombuds Office
 - <http://www.hms.harvard.edu/ombuds/>
 - “The Ombudsperson is a designated neutral and, as such, does not advocate for any individual or point of view. As an impartial complaint-handler, the Ombudsperson strives to see that people are treated fairly and equitably at Harvard Medical School...”



HMS: Integrity in Academic Medicine - Authorship Guidelines - Shortfalls

- Junior investigators:
 - May believe including senior colleagues as authors will improve credibility, whether or not the seniors are “authors”
 - May not want to offend their Chiefs if they desire authorship
- Senior faculty:
 - Might wish to be seen as productive researchers despite other responsibilities limiting true authorship
- May have old school views of authorship:
 - Senior investigators used to be listed as authors because of their logistic, financial, administrative support alone



HMS: Integrity in Academic Medicine - Authorship Guidelines – Disputes are Bad

- Disputes arise:
 - Who should be listed as authors
 - The order in which they should be listed
 - May be legitimate conflicts
- Disagreements over authorship can take a toll
- Many disagreements:
 - Result from misunderstanding and failed communication
 - Are preventable by a clear, early understanding of shared standards for authorship
- Example: MAGIC Guidelines



Meta-Analysis of Glucose and Insulin Consortium – MAGIC

Guidelines for sharing genome-wide association results for insulin and glucose related traits

16th April, 2008

1. Overview

Recent results from Type 2 diabetes, BMI and height, amongst other traits, have suggested that sharing of data pre-publication is an effective way to increase power of genome-wide association studies and to ensure finding true positive associations.

This agreement has two parts:

1) *In silico* replication

Initially, participating major groupings (see below) agree to share information on the top 10 most significant independent signals per trait (fasting insulin, fasting glucose, HOMA-IR, HOMA-B, 2hr glucose and HbA1c), plus 10 "wild-card" hits. In so doing, we hope to obtain further evidence of their effect on insulin and glucose traits and thus prioritize SNPs for further replication testing. A single manuscript or up to four parallel manuscripts (one per major grouping) can then be prepared with discovery + *in silico* replication in alternate groups and potential further replication genotyping in independent datasets;

2) Genome-wide meta-analysis across all cohorts

Following one above, summary statistics based on a mutually agreed analysis plan will be shared across all participating cohorts to allow meta-analysis and identification of further hits for replication testing.

2. Participating Cohorts

The participating cohorts are aggregated into four major groupings for objective 1 above. The groups are as follows, in no particular order:

1) Group one

- EPIC Norfolk
- CoLaus
- British Cohort 1958
- Twins UK
- KORA (HbA1c data only)
 - The above cohorts are represented by members of the GEM consortium as well as GSK and Lausanne Investigators

2) Group two

- SardiNIA
- Diabetes Genetics Initiative
- FUSION

3) Group three

- Framingham

4) Group four

- NFBC66
- deCODE
- ERGO
- NTR/NESDA
- KORA (Fasting glucose, fasting insulin, HOMA-B, HOMA-IR traits)
 - The above cohorts are represented by members of the ENGAGE consortium

For objective 2 all participating cohorts agree to share genome-wide data for meta-analysis.

3. Comment

External cohorts with insulin and glucose genome-wide association results not yet available and not party to this group will be considered as additional potential partners once their data become available. Inclusion of these additional groups in the consortium will be subject to agreement from all current participants. It is expected that groups approaching individual MAGIC members for collaboration or *in silico* replication will be referred join to the main MAGIC group, and that MAGIC members will not make external collaborative arrangements outside of the purview of MAGIC. In general it is expected that MAGIC will welcome additional consortium members to initiate participation at appropriate times in the analytic and publication process. That is, for example, ongoing analyses or manuscripts will not be held up to any great degree when new members join.

4. Sharing of Information

In the first instance the groups agree to:

1. Share information on their most significantly associated SNPs by exchanging lists of ~70 top scoring independent loci for association with insulin and glucose related traits (ten per trait plus 10 wild-cards). When exchanging information the minimal information to be supplied will be a list of SNPs, their chromosome coordinates on a given genome build, summary statistics such as p-values and identity of the "risk" allele will be provided.
2. Each group agrees to provide information to the others within a reasonable time-frame and no longer than 4 working days since the request.
3. Each group agrees to inform the others whenever significant action is to be taken when using the information from exchanged SNP lists, communication on the following should always take place when:
 - a. selection of SNPs for replication is done using the joint information;
 - b. new genotyping on the selected SNPs based on joint data is completed;
 - c. preparation of manuscripts for publication is to be initiated.
4. Essentially the groups agree to not use the information obtained from the others to gain unfair advantage over them, and to essentially behave well, in this context this means that the groups agree to communicate with each other regularly and that there should be no surprises.
5. At the point when shared data is to be used for publication the groups agree that there should be discussion whether this would mean including data in one publication or coordinating back-to-back publications. Agreement should be reached in a timely manner and not delay things, no group should expect the other to wait for >3 months in order to coordinate publications however a request of one month would be a reasonable one to agree to.
6. In cases of joint publication all parties agree to fair representation of participants (number of authors and order) on the manuscript. To try and obtain fair representation it is possible that several joint first and last authors will be required. The group that provided the initial input leading to the respective finding to be published deserves particular credit.
7. The information to be exchanged is CONFIDENTIAL between the groups and will not be communicated further with additional collaborators.

In the second instance the groups agree to:

1. Develop a realistic timeline for conduct of meta-analyses of common shared diabetes-related quantitative traits
2. Share data, results, and manuscript elements in a timely fashion such that the agreed-upon timeline will be honoured
3. In general, follow the manuscript development and publication agreements outlined above
4. In the event that individual MAGIC members decide to pursue additional analyses or external genotyping based on their own data sets, that developments in these investigations be conveyed to the main MAGIC group, that is, as above, to essentially behave well, in this context this means that the groups agree to communicate with each



Meta-Analysis of Glucose and Insulin Consortium – MAGIC

Appendix - Guidelines for sharing genome-wide association results for insulin and glucose related traits for replication purposes with non-MAGIC members

Dated: 22nd July 2008

1. Overview

Recent results from type 2 diabetes, BMI, and height, amongst other traits, have suggested that sharing of data pre-publication is an effective way to increase power of genome-wide association studies and to ensure finding true positive associations.

This agreement is an appendix to the agreement that was put in place in April 2008 for the first groups that joined MAGIC and agreed to share their genome-wide association data. The purpose of this appendix is to implement a set of agreed rules for those cohorts joining MAGIC for replication purposes.

We would like to offer new cohorts two options:

1. Join MAGIC on an *ad hoc* basis for replication purposes only for hits that we share with them;
2. Join MAGIC on a more permanent basis and include their GWA data in future larger scale meta-analysis when the sample sizes joining MAGIC are large enough that repeating the meta-analysis across traits makes sense.

Before data are exchanged groups that are approached for replication purposes should decide whether they want to be considered for option 1 or 2 above. For those groups choosing option 2, they will be asked to read, agree, and sign the general MAGIC agreement. All groups irrespective of whether they choose option 1 or 2 should agree to the MAGIC over-arching principle:

Groups agree not to use information obtained from others within the framework of this collaboration to gain unfair advantage over them, and to behave in accordance with general collaborative principles. In this context this means that all groups agree to communicate regularly with each other and have an implicit responsibility to report any events (discoveries, changes in circumstance, approaches etc.) that might have a substantive impact on other investigators within the consortium (the so-called “no surprises” rule).

Participation in the replication exercise will be regarded as indicating agreement to abide by this principle.

2. Sharing of Information

For groups choosing to join MAGIC on an *ad hoc* basis and for replication purposes only, the following are a set of sharing principles that we all agree to observe:

Current MAGIC members agree to:

- a. circulate a list of SNPs for which they would like new groups to attempt replication;
- b. circulate a detailed analysis plan of how they would like those data to be analysed, and with an agreed set of minimum QC criteria the data must meet for inclusion into MAGIC replication meta-analysis;
- c. provide a clear timeline (previously agreed between MAGIC members) in which genotyping results must be delivered;

MAGIC replication guidelines and authorship Version 220708

- d. provide templates for how the results should be sent back so that they conform to previously agreed MAGIC formatting style;
- e. provide templates for collecting cohort information that would be required for inclusion in any manuscript;
- f. provide documentation stating what authorship is on offer for each different replication cohort and information regarding what our authorship guidelines are.

Replication cohorts agree:

- a. to perform the replication genotyping and analysis within a timely fashion so as to meet MAGIC timelines;
- b. to meet the minimum QC criteria for genotyping;
- c. return the analysed data in a MAGIC approved fashion and in the same format as circulated in MAGIC templates;
- d. to return cohort information in the file format supplied by MAGIC and within the agreed timeline;
- e. to inform MAGIC as early as possible of any significant delays in their replication genotyping;
- f. not to share the information on the list of SNPs (or other material information such as the timing of manuscript submission) with third parties;
- g. where the relevant investigators have access to other large-scale genome-wide association data that are not already present within MAGIC, to exchange information of equivalent value with MAGIC (i.e. that list of SNPs that they were currently intending to follow-up themselves);
- h. to declare (within 24 hours after receipt) whether any of the signals present on the MAGIC list of SNPs lead to conflicts due to existing work and, where requested, to provide some documentation of this;
- i. except where there is evidence of prior activity with respect to one of the MAGIC signals, not to submit additional papers on the same association signals until the primary paper from MAGIC has been ACCEPTED for publication.
- j. where it is clear that the same signal has been identified independently by MAGIC and by other groups, to work constructively towards mutually satisfactory solutions (e.g. back-to-back submission)

MAGIC and replication cohorts agree that in the event of delays in obtaining replication genotyping data:

- a. MAGIC will not significantly delay submission of a manuscript to wait for data from a given group (a delay of one to two weeks may be acceptable but would be decided on a case-by-case basis);
- b. MAGIC will agree to include those additional data on revision of the manuscript allowing groups to still have their data included in MAGIC manuscript provided they can provide those data on time for revision changes;
- c. in the event that the data does not make it into the main MAGIC manuscript due to genotyping delays, groups will agree to not attempt to publish these data until the primary MAGIC paper has been ACCEPTED for publication.
- d. MAGIC will not accept data that does not meet their minimum QC criteria and if repeat genotyping is required to meet those criteria and therefore delays are expected, the rules for not meeting deadlines described above will apply.

MAGIC agrees that replication cohorts will be:

- a. free to use their data in secondary analyses to be published after the main MAGIC paper is out, but would actively encourage collaboration with other members of the consortium to avoid competing papers coming out in the same area.

MAGIC replication guidelines and authorship Version 220708



3. Authorship

Future authorship guidelines – There was general consensus that it would be helpful to set out some guidelines for future authorship of MAGIC manuscripts.

The following guiding principles were agreed:

1. Everyone wants to maintain the existing collegiate and collaborative spirit within MAGIC and continue to encourage cooperation and team work, particularly as MAGIC continues to expand.
2. Everyone agrees with the guiding principle of providing opportunities to all members of the consortium to participate and play a leading role on manuscripts. We should try to avoid prominent authorship positions being restricted to a limited set of authors and encourage participation from a wide variety of research groups on writing committees (whilst accepting that there are practical limits to the size of such committees if they are to be effective).
3. Senior authors agreed that forthcoming manuscripts could be submitted by a number of MAGIC junior authors (not necessarily all co-starred) on behalf of MAGIC. Senior authors would be listed in full at the back of manuscript and in pubmed, just not in the front of the print version of the manuscript. Their order from the last position would be dictated by three major considerations: a) their direct intellectual participation in the drafting of the manuscript, b) achieving balance with the junior authors positioned at the front end of the authorship list so as not to overemphasize a single group, and c) the number of genotypes/phenotypes contributed by the samples they represent.
4. It was agreed that a rigid rule of "equal representation" per sub-consortia (initially DGI-FUSION-Sardinia, GEM, FHS, and ENGAGE) was not necessary but that an overall balance of representation should be sought such that one subgroup would not be obviously dominating or less well represented.
5. Opportunity to lead on a given manuscript should be rotated between the juniors from various sub-consortia (including replication cohorts). It was noted that being given an opportunity only meant someone was being given the chance to earn the position as a named lead author and delivery on that expectation would be needed to earn that position. To facilitate this process, a list of available juniors should be circulated, and they should be encouraged to sign up for the planned writing groups.
6. In situations of authorship dispute, a Steering Committee of "seniors" (picked to be as non-conflicted as possible) agreed to intervene early on and moderate the discussions to avoid uncomfortable last minute authorship disputes.
7. It was agreed that a set of rules should be in place in terms of number of author slots offered for those undertaking replication testing. A number based on number of genotypes and phenotypes available seemed appropriate, with some degree of flexibility. Because the main contribution of the paper is predicated on the discovery phase enabled by GWAS, it seems natural that authors from the GWAS cohorts should be granted pre-eminence in the order. *In silico* replication and bespoke genotyping are deemed to be of equivalent value. The following scheme (which worked well on a recent manuscript which had a similar configuration) is proposed. Each replication cohort can nominate between
 - 0 and 3 authors for their contribution to assembling the cohort
 - 0 and 2 authors for providing and modeling the phenotypes included in the paper
 - 0 and 2 authors for genotyping
 - 0 and 2 authors for analysis

The total number of authors per cohort can thus extend to 9, but with the actual number (between 2 and 9) included being proportional to the number of genotypes provided for a given study. Position in the paper will be governed by contribution to the completion of the study and drafting of the manuscript with substantive contributions recognized by more prominent positions.

8. To ease some anxiety regarding future MAGIC opportunities it was felt that generating a list of potential future MAGIC manuscripts might help to provide an idea of what these opportunities might be. A separate document will outline the process to constitute writing groups and offer a mechanism for volunteering.

Please sign and date below to indicate your acceptance and return to Ines Barroso (ib1@sanger.ac.uk)

other regularly and that there should be no surprises. In the event that manuscripts arise from these independent efforts, the timing of their submission will be subject to discussion by the larger MAGIC group so as not conflict with or pre-empt submission of the larger meta-analysis.

Signed,

P. Klemm *Ines Barroso* *David Strachan*

Peter Vollenweider Inés Barroso David Strachan
For CoLaus/ GEM/ TwinsUK/ British Cohort 1958

Goncalo Abecasis *Richard Watanabe* *Leif Groop*

Goncalo Abecasis Richard Watanabe Leif Groop
For DGI-Lund/FUSION/Sardinia

James Meigs *Bruce M. Psaty*

James Meigs Bruce M. Psaty
For Framingham For CHS

Shona Durrant

Shona Durrant *Leena Peltonen* *Marjo Riitta Jarvelin* *Mark McCarthy*
For ENGAGE Leena Peltonen Marjo Riitta Jarvelin Mark McCarthy

K. Eril Wichmann

For ENGAGE Cornelia Van Duijn Kari Stefansson Erich Wichmann

For ENGAGE Dorret Boomsma

Authorship Questions

1. When should authorship and author order be discussed during manuscript development?
2. How do I manage first authorship when more than one junior investigator contributed to the work? Whose name is listed first or it does matter?
3. My lab tech contributed intellectually to the science in the paper but did not write a word of it. Should she be an author?
4. What if my mentor insists on being senior author of all my papers, even when s/he made minimal contributions?
5. Should I say yes to an authorship request when all I contributed were patients or materials but minimal intellectual input to the present manuscript?

Case Y

- Two groups collaborate. The junior author in one group does most of the work.
- The two seniors negotiate authorship on behalf of everyone. The seniors want to split the front and back positions. One senior author (already a full professor and mentor of the junior who did most of the work) takes the last-last position.
- The junior who did the work is sacrificed to co-starred second place. The senior's argument was "co-starred first authors are equivalent".

174 Authors!?

[Common variants at 10 genomic loci influence hemoglobin A_{1c} levels via glyceimic and nonglyceimic pathways.](#)

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Diabetes. 2010 Dec;59(12):3229-39. Epub 2010 Sep 21. Erratum in: Diabetes. 2011 Mar;60(3):1050-1. multiple author names added.

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More Cases

1. Senior PI disregards prior commitments and agreements re: author order to put himself last. When questioned, he threatened to hold the paper so that it could never be submitted for publication.
1. Several cohort studies agree to 'consort' to work on a specific paper. After some initial analyses it is clear that one study is too small to contribute. Should they still be co-authors even if they ended up not contributing anything? The more the merrier is not necessarily consistent with the responsible conduct of research regarding meriting authorship, even if it is inclusive.

Case X

- Senior author desires authorship in a nearly complete paper b/c its topic is in his research interest area
 - Junior First author is Fellow, making good use of study data with a good paper, but w little leverage
 - Sub-senior author makes request to other sub-senior author
 - Senior has not seen work until final draft
 - Senior holds keys to data
 - Senior has been a WONDERFUL mentor
 - Senior usually adds concrete value when involved

More Questions

1. Does the junior investigator have any recourse if the mentor adds someone to author list as a "favor" who contributed nothing to the science or writing of the paper? Under what circumstances would adding the person be worth considering?