On Academic Authorship

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Lecture for Research Integrity course
https://tinyurl.com/vubeta-ri-authorship

Who should be author?

- Authors are **all those** and **only those** who made a **significant contribution** to the work reported
  - “substantial, direct, intellectual contribution to the work” [1]
- Acquiring the research funds, managing the research group and/or supplying materials does not warrant by itself authorship
  - no “honorary” authors

Types of contributions that warrant authorship

- Conception of the work
- Design of the work
- Acquisition of the data (including tailor-made tools)
- Analysis of the data
- Interpretation of the data
- Data stewardship (e.g. for data publication and sharing)

Authorship and writing

- Paper writing is the duty of the authors (the people that made significant contributions)
  - But: writing does not automatically make you an author!
- All authors have a responsibility to contribute to writing and/or revising the article
- It is problematic if an author does not contribute to the writing/revision process → requires discussion

Unethical inclusions and exclusions

- Adding an author who does not qualify (gift author)
- Demanding authorship for which one does not qualify (gift author)
- Omitting a contributor who deserves authorship (ghost author)

See also, for example, the Tricky Goose Training typology of unethical practices, e.g. “solicited credibility”, “unholy deal”, and “hiding in the shadows”.

Discussing authorship

- How to assess whether a contribution is significant?
  - Is sometimes difficult
  - No hard rules; typically dependent on (sub-)discipline
- General approach: regularly **discuss** authorship issues from an early stage openly with all potential stakeholders
- Leadership role expected of senior staff in assuring that appropriate credit is given to all team members involved

Important!

Failing to discuss authorship appropriately at an early stage is a common cause of research-integrity problems!

Accountability of authors

- Each author is usually responsible for article as a whole
  - exception can be made in highly specialized teams
  - exception should be stated explicitly
- Each author should ensure that appropriate credit is given to co-contributors, either as co-authors or through acknowledgements.
- Each author should explicitly approve the final version,
- Each author should clearly state any conflict of interest **at the time of submission.**

Plagiarism

- = using another person's **ideas, work methods, results** or texts without appropriate reference
- You have to do a plagiarism scan on one of your paper/chapters within the first two years of you PhD work
  - Using th plagiarism tool selected by the VU
  - Goal: awareness of plagiarism issues
- Note: text plagiarism is secondary to plagiarism of ideas, work, methods and results

Planning authorship

- It is useful to explicit plan authorship over, for example, a series of project papers.
- This plan should take into account the career interest of all team members:
  - PhD students, non-tenured staff, tenured staff, support staff
- Senior staff should take the lead in such planning discussions (but everybody should feel free to ask for this)
- Senior staff should make sure disputes or conflicts are resolved as early as possible and in a fair fashion.

Authorship order

- Many differences exist across disciplines
- Authorship order should be part of the early discussions and publication planning
- Make sure to discuss the needs of team members for a particular authorship order
  - e.g. first authorship of PhD student or postdoc
- Preferably, the article should contain:
  - Rationale of authorship order (if not self-evident)
  - Contributions of the different authors

Articles in thesis

- The majority of Dutch science theses are at least partially based on published articles
  - details depend on discipline
  - two publications as main author is typically lower limit
- Planning of authorship and authorship order is thus of key importance for PhD students.
- A thesis should contain a specification of the role the student has had in the articles included in it.

Question: if two PhD students work on a paper together, can the paper be included in both theses?

Answer: Yes, definitely, but discuss early on and explain in thesis clearly the role each played.

Role of senior staff

- Supervisors should show leadership in helping students learning the tricks and trades of authorship.
- Senior staff should balance the interests of all team members and ensure that proper credit is given to everyone.
- Senior staff should achieve the above through timely and transparent team discussions.

Acknowledgements

- Contributions of non-authors should be explicitly acknowledged:
  - financial, managerial, and/or technical support
  - colleagues providing comments
- Make sure no “hidden authors” are being acknowledged.

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Data-acquisition tool builders

- In case of custom-built or specially-adapted data acquisition tools (e.g., instruments, software) the person(s) who constructed it are potentially authors of the resulting paper.
- This is in particular true if the tool itself is not reported in an separate academic publication.

Open Science

- Work on publishing data for use by others is valuable (see COVID019 examples).
- Data publishers/stewards can therefore be legitimate co-authors of articles, when applicable
- Alternatively, some disciplines/journals now cater for “dataset” articles.
- A “dataset” chapter should be considered a valid part of a PhD thesis.

Background materials

- Many journals, disciplines and institutions have published authorship guidelines., e.g.:
  - Harvard Medical School, Cambridge University, Committee on Publication Ethics (COPE)
- Tricky Goose Training materials (open). e.g.
  - Peer review primer
  - Discussion topics w.r.t generative AI