

Authorship contributions in papers

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AG-Meeting

CRedit to everyone

- What justifies a (co-)authorship on a scientific paper?
- Most journals follow some form of Contributor Role Taxonomy (CRedit) [Allen et al., 2019]
- This taxonomy clarifies who took over which work for a paper and is required for most journals.

Taxonomy

Conceptualization

Ideas; formulation or evolution of overarching research goals and aims

Methodology

Development or design of methodology; creation of models

Software

Programming, software development; designing computer programs; implementation of the computer code and supporting algorithms; testing of existing code components

Validation

Verification, whether as a part of the activity or separate, of the overall replication/reproducibility of results/experiments and other research outputs

Formal analysis

Application of statistical, mathematical, computational, or other formal techniques to analyse or synthesize study data

Investigation

Conducting a research and investigation process, specifically performing the experiments, or data/evidence collection

Resources

Provision of study materials, reagents, materials, patients, laboratory samples, animals, instrumentation, computing resources, or other analysis tools

Data curation

Management activities to annotate (produce metadata), scrub data and maintain research data (including software code, where it is necessary for interpreting the data itself) for initial use and later re-use

Writing - original draft

Preparation, creation and/or presentation of the published work, specifically writing the initial draft (including substantive translation)

Writing - review and editing

Preparation, creation and/or presentation of the published work by those from the original research group, specifically critical review, commentary or revision—including pre- or post-publication stages

Visualization

Preparation, creation and/or presentation of the published work, specifically visualization/data presentation

Supervision

Oversight and leadership responsibility for the research activity planning and execution, including mentorship external to the core team

Project administration

Management and coordination responsibility for the research activity planning and execution

Funding acquisition

Acquisition of the financial support for the project leading to this publication

Discussion

- Scenario 1:
 - Robbin writes a super useful Algorithm to detect walking bouts
 - Publishes it including the code
 - Hanna runs the code on her data without Robbins help
 - > What role would Robbin deserve?
- Scenario 2:
 - Steffen and Robin (Wolke) analyze IMU data from the FUS cohort
 - Milda advises on the statistical analysis, no codeing
 - > What role would Milda deserve?
- Scenario 3:
 - Jos needs patients with “Funktionelle Bewegungsstörung”
 - Walter says he has patients on the C320, Hanna talks to a patient and refers her to Jos
 - > What role would Walter and Hanna deserve?

Solutions

- Centralize communication for a specific paper
-> detached from project communication
- Predefine roles of contributors
- If authorship wanted, one must actively contribute to project work

