1. General: The Danish Code of Conduct for Research Integrity

According to sec. 4 of the Danish Code of Conduct for Research Integrity fairness in attributing authorship – and suitable recognition of contributions that do not satisfy the criteria for authorship – supports transparency and credibility of research and is thus a core precondition for the maintenance of responsible research practice.

This document comprises the University of Copenhagen’s code for attribution of authorship and describes how disputes about authorship should be handled. It incorporates the principles of the Danish Code of Conduct for Research Integrity.

Different fields of research have different ways of implementing the Danish Code of Conduct for Research Integrity and the University of Copenhagen’s code for authorship. This means that some of the principles may be more relevant for a particular field of research and also less applicable for other areas. The principles of the Danish code and the University's code must always be construed in accordance with practice in individual fields of research.

2. Sole and joint authorship

i. As a result of freedom of research and publication, individual researchers (meaning all who contribute to the research, including e.g. students employed as research assistants and Ph.D. students) are free to choose between sole and joint authorship.

ii. It is recognized that there are different traditions in individual scientific fields with respect to type of authorship, including the number of authors and types of publication.

iii. Before embarking on a collaboration, there should be an explicit discussion of expectations for authorship concerning all participants and of the guidelines for attributing co-authorship. This applies especially to interdisciplinary collaborations.

3. Authorship

i. Attribution of authorship should generally be based on criteria a-d) from the Vancouver rules¹ and all persons that satisfy these criteria should be acknowledged as an author.

   a. Significant contributions to ideas underlying, or the design of, a work or in obtaining, analysing or interpreting data for the work, and
   b. Contributing significant intellectual content in formulating a work or critically revising it, and
   c. Final approval of the version to be published, and
   d. An agreement to be responsible for all aspects of the completed work by ensuring that questions relating to precision or integrity of any part of the work have been satisfactorily investigated and resolved.²

The most important factor in describing authorship is for the author to have provided a significant (substantive) contribution to the research on which a publication is based. When establishing the criteria for this factor, the traditions of the individual scientific areas must be respected.

² Cf. Sec 4.1 Danish Code for Integrity in Research.
Authorship does not necessarily mean that the author has written part of the publication but that the individual concerned should have made an important contribution to the research.

ii. The criteria for authorship should not be used to exclude individuals that in some other way satisfy the criteria for authorship and therefore those who meet criterion a) should be given the opportunity to satisfy criteria b-d).

iii. Co-authorship requires all co-authors to have approved the final manuscript and to have confirmed that they wish to be co-authors.

Decisions relating to publication and authorship should be taken jointly and should be reported to all members of the research team. Any amendments to manuscripts after submission should be approved by all authors.

iv. Authors have the right to refuse authorship if for example they disagree with (some of the) methods or conclusions in the publication. Important work and intellectual contributions to the work should always be stated however, for example under acknowledgements.

v. Important work and intellectual contributions from other individuals that have influenced the reported research but do not satisfy the criteria for authorship should be properly recognised, for example under acknowledgements.

vi. It is recommended that the contributions made by the various individuals should be specified either in the actual publication or in a document associated with it. Editors, publishers and other contributors’ role in the publication should likewise be clarified.

vii. If authorship is in the name of a team, all members of the team must meet the criteria for achieving authorship.

viii. Individual fields of science have different conditions for the way in which credit is given to an individual who has contributed to a publication, including the order in which authors are ranked in a publication. Especially in interdisciplinary collaborations, there should be an explicit discussion on this before embarking on the collaboration, which should also clarify expectations for authorship ranking.

4. Researcher’s responsibilities

i. In addition to being responsible for those parts of the work for which they have themselves undertaken, authors should be able to identify which co-authors are responsible for other specific parts of the work.

ii. All authors are responsible for the content of the publication. Each author’s responsibility must however be assessed with respect to their respective roles in research, taking into account their field of expertise, experience and seniority, any supervisory role or other relevant factors. In certain cases, an author may therefore have greater responsibility than others for ensuring the integrity of the publication or specific parts of it.

iii. Researchers with authorship roles are jointly responsible for ensuring that all individuals identified as being authors qualify as such and for ensuring proper recognition of the contributions that do not satisfy the criteria for authorship according to the criteria for authorship noted above.

iv. Researchers should address issues relating to authorship, especially the roles of collaborative partners and contributors, as early as possible whilst also acknowledging that roles and contributions may change during the research process.
In the relationship between PhD students and their supervisors, acting as supervisor does not in itself give entitlement to co-authorship. Attribution to co-authorship requires a PhD supervisor to have provided a significant (substantive) contribution to the publication in accordance with the principles set out above in Sec. 3(i).

5. **Black list**

The following forms of attribution of authorship conflict with the rules on responsible conduct of research.

i. Attribution of authorship solely based on assistance in obtaining funding, gathering data or general supervision of a research team.

ii. Attributing authorship solely on the basis of an individual's non-scientific contributions (guest authorship, for example authorship attributed solely on the basis of having made research facilities available).

iii. The omission of individuals who have made a substantive contribution (ghost authorship), motivated for example by a desire to conceal financial interests – although see Sec 3 (iv).

This list is not exhaustive.

6. **Disputes about authorship**

Disputes relating to authorship should be dealt with in accordance with the process below:

i. In the first instance, disagreements should be resolved by mediation. The mediator may be a named person, head of research, head of PhD school/coordinator or some other independent academic who has the confidence of all the parties in a dispute.

ii. If an aspect of a dispute relates to disagreement about tasking, areas of responsibility, superior or subordinate issues or otherwise that do not solely deal with academic or intellectual conditions for authorship, the issue should be submitted to local management.

iii. If there is no indisputable local management, or if the parties cannot reach agreement in any other way, the case can be brought before the Practice Committee.

7. **Accessibility and information**

i. The University of Copenhagen will ensure that this code is freely and easily accessible for all individuals associated with research at the University, including accessibility on searchable core websites.

ii. The University of Copenhagen will ensure that new employees and visiting researchers are made aware of this code.

iii. The University of Copenhagen will ensure that this code is incorporated in courses on good scientific conduct.

/Adopted be Management Team - 22 February 2017