The Danish Code of Conduct for Research Integrity

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Foreword

Research and research-based education is of central and increasing importance in developing society's knowledge base, increasing welfare and providing informed answers to local and global challenges. Together this helps guide the decisions that shape society.

This is why we invest heavily in high-quality research and education and why we have an extensive production of research. All this happens in a continually more complex and demanding interdisciplinary and internationalised research community.

To ensure high-quality research we must ensure that research is trustworthy by respecting the principles of research integrity. At the same time we must respect the basic principle of freedom of research to ensure that new views and understandings are put forward.

Freedom of research implies the right to freely choose and develop theories, gather empirical material and employ methods according to the research chosen. Honesty, transparency, and accountability should have a solid presence in all phases of the research process, as failure to respect these basic principles jeopardises the integrity of research to an extent that may threaten the freedom of research. Researchers and institutions should be aware of their responsibilities to the research community, to the funders of research activities and to society at large.

Over the past few years international guidelines and recommendations aimed at promoting research integrity have been developed. Three widely acknowledged documents are of particular importance:

- The Singapore Statement on Research Integrity (developed at the 2nd World Conference on Research Integrity in 2010)
- The Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations (developed at the 3rd World Conference on Research Integrity in 2013)
- The European Code of Conduct for Research Integrity (developed by the European Science Foundation and All European Academies in 2011)

These international guidelines recommend that all research institutions continuously ensure the integrity of their research. We must do the same in Denmark by promoting research integrity at the national and institutional level.

The Danish Code of Conduct for Research Integrity provides the research community with a solid framework to ensure that our research respects commonly agreed principles and standards. The Code of Conduct aims to create a common understanding and common culture of research integrity in Denmark. This means that collaborative research projects involving researchers from different institutions can refer to a common set of guidelines on research integrity.

On the background of three basic principles of research integrity, i.e. honesty, transparency, and accountability, the Code presents a set of standards on responsible conduct of research, a set of guidelines on teaching, training, and supervision, and, finally, a set of guidelines on how to respond to breaches of responsible conduct of research. These elements are intended as guidance tools for researchers in their day-to-day work. Furthermore, the Code provides a common foundation upon which institutions should further develop policies and procedures for promoting research integrity within each research discipline.

The Code has been developed to embrace all fields of research. Accordingly, it does not include an exhaustive list of how to conduct research in every detail, but provides institutions with a basic set of principles and standards to be implemented and to which the institutions can add more detailed guidelines for their field of research. .

The Code was drafted by a working group established in 2013 by the Ministry of Higher Education and Science and the organisation Universities Denmark. The working group comprised representatives from the eight Danish universities, the Sector Research Institutes of Denmark, the Danish Council for Independent Research and the Danish Council for Strategic Research. As part of the development of the Code, it was sent to public consultation and discussed at a conference in May 2014.

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I. Principles of Research Integrity

Adhering to the principles of research integrity ensures that research is trustworthy. The Danish Code of Conduct for Research Integrity rests on three basic principles that should have a solid presence in all phases of research.

1. Honesty

To ensure the reliability and trustworthiness of research, researchers should be honest when reporting research goals and intentions, methods applied, and data used.

This requires precise and balanced reporting when:

- presenting and interpreting research
- making claims based on findings
- acknowledging the work of other researchers
- reviewing the work of other researchers
- applying for research funding

2. Transparency

To ensure credibility of the scientific reasoning and to ensure that academic reflection is consistent with practice in the relevant field of research, transparency should be maintained in all phases of a research project.

This requires openness when reporting:

- all conflicts of interests
- planning of research
- methods applied
- collection, analysis and interpretation of data
- results and conclusions

3. Accountability

To ensure that research and communication about research and its results are carried out in accordance with responsible conduct of research, all parties accountable for ensuring the integrity of the research must live up to their responsibilities.

This requires that researchers and institutions accept responsibility for the research they are conducting, in terms of:

- accuracy and reliability of research results
- adherence to all relevant regulations
- fostering and maintaining a culture of research integrity through teaching, training, and supervision
- taking appropriate measures when dealing with breaches of responsible conduct of research

II. Responsible Conduct of Research

Responsible conduct of research requires that everyone involved in the research process follows high standards for conducting research. These standards cover a wide variety of subjects – from proper management of data to the dissemination of research results.

The standards for responsible conduct of research outlined here are intended to help researchers and institutions to ensure the integrity of their research. Widespread adoption of the standards should establish common ground for how responsible research should be carried out in Denmark.

The Danish Code of Conduct for Research Integrity covers six broad aspects of research that comprise the basic standards for responsible conduct of research:

1. Research planning and conduct
2. Data management
3. Publication and communication
4. Authorship
5. Collaborative research
6. Conflicts of interest

In addition to these six areas, supplementary standards should, where appropriate, be specified at the institutional level. Researchers and institutions should also be aware of existing regulations that impact on research, e.g. regulation on treatment of personal data, intellectual property rights, ethical reviews, etc.

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1. Research planning and conduct

Conscientious planning and conduct of research are essential prerequisites for responsible conduct of research, and consequently fundamental to ensuring transparent and credible research. This applies to all fields of research, regardless of the fact that research methods are as varied as the subjects of research.

Responsible conduct of research applies throughout the research process, from planning of research to reporting of results.

Definitions

- *Research strategies, plans and protocols* are planning tools for how a research project is carried out. The form, content and implementation of these tools are decided by the field of research in question and thus may vary across different disciplines.

1.1. Responsibilities

i. The design and conduct of the intended research should be outlined in a research strategy, plan or protocol, developed in accordance with current standards applicable to the field of research in question.

ii. Throughout the duration of the research project, records, logbooks or journals should be kept – if possible with dates and entries by the person(s) responsible for the conduct of the research. To the extent possible, records, logbooks and journals should be formulated in a way that allows the research to be examined and – when applicable – reproduced.

iii. When applicable, reporting of research should include details about procedures, hypotheses and assumptions to the extent that they are necessary for understanding and assessing the research.

1.2. Division of responsibilities

i. **Researchers** are responsible for planning and conducting their research projects.

ii. Throughout the research project, **researchers** should conduct assessments to determine if there are particular issues requiring permits, approvals, etc., e.g. approval from an ethics committee or an institutional review board.

iii. **Researchers** should not enter into agreements (e.g. with funders and others) that limit their access to all data and their ability to analyse data independently, unless such access limitations can be justified by the specific circumstances.

iv. Within each field of research, **institutions** should maintain policies for the proper management of research plans and protocols, experimental records, logbooks, journals, etc., and should maintain policies for the procedures regarding necessary approvals and permits.

2. Data management

Responsible conduct of research includes proper management of primary materials and data. The key purpose of data management is to guarantee credible and transparent research.

Definitions

- *Primary material* is any material (e.g. biological material, notes, interviews, texts and literature, or recordings) that form the basis of the research.
- *Data* are detailed records of the primary materials that comprise the basis for the analysis that generates the results.

2.1. Responsibilities

i. Data and primary materials should be retained, stored and managed in a clear and accurate form that allows the result to be assessed, the procedures to be retraced and – when applicable – the research to be reproduced.

ii. Data should be kept for a period of at least five years from the date of publication. However, the recommended period for retaining data should always be determined by the current standards applicable to the specific field of research.

iii. Primary materials should be stored for a period determined by the current standards applicable to the specific field of research.

iv. The data records should enable identification of persons having conducted the actual research and persons or institutions with final ownership of the data, primary materials, and research results. Any changes to the data or primary materials stored should be clearly accounted for in a way that allows clear identification of the changes made.

v. Results should be kept irrespective of whether or not they were published, and should contain a precise and traceable reference to the source.

vi. To the extent possible, research data and primary materials should be stored in the department of the researcher, or another appropriate institutional repository. Arrangements for storage of data and primary materials in other locations should be documented.

vii. Data and primary material should be retained in a way that makes them available for use by other researchers, except when this is in conflict with current regulations on for example ethical, privacy, or confidentiality matters or intellectual property rights.

2.2. Division of responsibilities

i. **Researchers** are responsible for storing their data and primary materials.

ii. **Researchers** are – unless otherwise regulated – responsible for deciding the extent to which primary material should be retained. When deciding this, **researchers** should consider the value of the primary materials for assessing the results of the research and take account of the physical and technical possibility of storage at the institution.

iii. **Institutions** should maintain a policy on the retention of data and primary materials that includes information on:

- Storage of research data and primary materials
- Secure and safe disposal of research data and primary materials after the retention period
- Ownership and access to research data and primary materials
- Data retention, accessibility and ownership when researchers leave the institution

iv. **Institutions** are responsible for providing secure data storage facilities that are consistent with confidentiality requirements, rules about privacy, legal requirements, and applicable regulations and guidelines.

v. **Institutions** are responsible for ensuring that research data and primary materials can be traced to the relevant researchers, and should allow access to the stored data and primary materials, except when this is in conflict with current regulations on for example ethical, privacy, or confidentiality matters or intellectual property rights.

vi. **Institutions** are responsible for informing their research staff about the policies and procedures that are in place at the institution for data management.

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3. Publication and communication

Publication and communication is essential for enabling the research community to scrutinize and discuss research results. Thus, researchers have a duty to publish their results to the research community, to professional practitioners, and to society at large.

Research can be communicated through various channels and fora ranging from strictly professional contexts aimed at peers to more popular research communication aimed at a broader audience. Although form, expression and level of detail may differ according to channels employed and audiences addressed, the standards for responsible conduct of research should always be respected when communicating research.

Definitions

- *Publication* is the process of reporting research and research results to the research community through articles, reports, etc. in periodicals, journals or other academic media.
- *Communication* is the broad concept of conveying information to society at large in any form of media.

3.1. Responsibilities

i. Research results should be published in an honest, transparent, and accurate manner as early as possible in the scientific process.

ii. Research results should not be broken down (fragmentized) into “least publishable units” to maximize the quantity of publications.

iii. Submission of research reports to more than one potential publisher at any given time (i.e. duplicate submission), or publishing findings in more than one publication without disclosure and appropriate acknowledgement of any previous publication (i.e. duplicate publication) is unacceptable – except in particular and clearly explained circumstances, such as review articles, anthologies or collections.

iv. When using primary materials, data or results from previous publications, clear information on the origin – and to the extent possible previous use – of the primary materials, data, or results should be provided in the current publication.

v. Information on ownership of research results should be available.

vi. If access to and analysis of all data are subject to limitations, this should be declared in a clear manner to the readers of the publication. Detailed information about the role of the study sponsor concerning research design, collection, analysis and interpretation of data, and publication decisions should be provided in the manuscript.

vii. When using the work of other researchers in a publication, appropriate and accurate references to such work should be provided. The use of the work of other researchers without appropriate reference is not acceptable.

viii. The right of researchers to unrestricted publication of their research should be respected. However, publication may be subject to limitations when reasonably justified by specific circumstances such as legal requirements, e.g. intellectual property rights.

ix. Comments on the importance and practical applicability of research findings should always be made with caution when communicating with the public, and when disseminating information about research findings. Researchers should be aware of the potential impact of their comments when communicating as an expert in the media.

3.2. Division of responsibilities

i. **Researchers** are responsible for disseminating their research.

ii. **Researchers** are responsible for ensuring adequate reference to the work of others.

iii. **Researchers** are responsible for ensuring that omission of research results is justified and documented, that data used in the publication are reliable and that the methods employed are pertinent to the data acquired.

iv. **Researchers** should take account of any restrictions relating to intellectual property rights concerning data in their publication activities.

v. **Researchers acting as peer reviewers and editors** should carry out their editorial and review obligations in an honest and unbiased manner. This includes assessing all manuscripts submitted for publication on equal terms and with respect for ownership of ideas.

vi. **Institutions** should promote and maintain an environment that supports honesty, transparency, and accuracy when disseminating research findings, e.g. through policies and training relating to publication and communication.

vii. **Institutions** should ensure that sponsors and other funders of research fully respect the duty of researchers to publish research and research results honestly, transparently, and accurately.

viii. **Institutions** are responsible for protecting confidentiality and for ensuring that all parties involved in the research are aware of the nature and scope of confidentiality agreements.

ix. **Institutions** are responsible for managing intellectual property rights and informing researchers of legal and contractual arrangements that may restrict, delay, or limit publication.

4. Authorship

Authorship has important academic, social, and financial implications as it plays an important part in the recognition and status of research and researchers in the research community.

Correct attribution of authorship – and appropriate acknowledgement of contributions that do not meet the criteria for authorship – contributes to the transparency and credibility of research, and is thus a key requirement in upholding responsible conduct of research.

Definitions

- An *author* is anyone listed as an originator of a research publication.
- *Authors with specialist roles* are persons who apply their particular area of expertise in the research publication, e.g. an expert in a certain scientific method applied in the publication.
- *Authors with leading roles* are persons who have an overall coordinating role and decision-making authority in the process leading to the publication, e.g. this person will often be the lead (or first) author, the senior (or last) author, or the corresponding author.

4.1. Responsibilities

i. Attribution of authorship should in general be based on the criteria below adopted from the Vancouver rules[1], and all those who meet these criteria should be recognised as authors:

   a. Substantial contributions to the conception or design of the work, or the acquisition, analysis, or interpretation of data for the work, *and*
   b. drafting the work or revising it critically for important intellectual content, *and*
   c. final approval of the version to be published, *and*
   d. agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

ii. These criteria for authorship should not be used to exclude persons who otherwise meet authorship criteria, and therefore persons who meet criterion #a should be given the opportunity to meet criteria #b-d.

iii. Important work and intellectual contributions of others that have influenced the reported research but do not meet the criteria for authorship should be appropriately acknowledged. Participation solely in the acquisition of funding, in the collection of data, or in general supervision of the research group does not justify authorship.

[1] International Committee of Medical Journal Editors – Uniform Requirements for Manuscripts Submitted to Biomedical Journals, Updated December 2013.

iv. If authorship is by a group name, all members of the group should fully meet the criteria for claiming authorship.

v. Guest authorship (i.e. listing authors who do not qualify as such) or ghost authorship (i.e. omitting individuals who should have been listed as authors) is not acceptable.

vi. Decisions concerning publication and authorship should be agreed on jointly and should be communicated to all members of the research team. Any alterations to manuscripts after submission should be approved by all authors.

vii. All authors are responsible for the content of the publication. However, the responsibility of each author should be assessed subject to their individual role in the research project. An author may have a special responsibility to ensure the integrity of the publication or specific parts of the publication depending on whether the author has a leading or specialist role.

viii. Authors with leading roles in the publication have a wider responsibility for ensuring the integrity of the reported research, including ensuring that all aspects are carried out in accordance with responsible conduct of research.

4.2. Division of responsibilities

i. **Researchers with leading author roles** are responsible for ensuring that all persons named as authors qualify as such, cf. the requirements for authorship as set out above.

ii. **Researchers with leading author roles** are responsible for appropriate acknowledgement of contributions that do not meet the criteria for authorship.

iii. **Researchers** should address issues relating to authorship – especially the roles of all collaborators and contributors – at an early stage of the design of a project while recognising that, subject to legal and ethical requirements, roles and contributions may change during the time span of the research.

iv. **Institutions** should maintain a policy on the attribution of authorship and on how to handle authorship disputes.

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5. Collaborative research

Research is increasingly a collaborative endeavour involving researchers from different disciplines, institutions, and countries. Such collaboration presents challenges for responsible conduct of research, as research cultures and perceptions of research integrity may differ across disciplines, institutions and countries.

The key purpose of establishing guidelines for collaborative research is to ensure a common understanding of and framework for the application of responsible conduct of research.

Definitions

- *Collaborative research* is research involving two or more collaborating partners.
- *Collaborating partners* are all parties involved with the collaborative research, including researchers, students, technical personnel, administrative personnel and institutions.

5.1. Responsibilities

i. All collaborating partners should – to the extent possible – take responsibility for the integrity of the collaborative research.

ii. Collaborating partners should – when feasible and preferably as early as possible – establish agreements on all relevant areas of the research project, and specify how responsible conduct of research will be applied throughout the collaborative research.[2]

iii. Where appropriate, common agreements should – in addition to standard agreements on the practical implementation of the project – be established on the following:

   a. Intellectual property rights
   b. Procedures for addressing conflicting laws, regulations, practices, etc.
   c. Procedures for resolution of conflicts between collaborating partners
   d. Publication issues
   e. Use, sharing, ownership and management of data
   f. Confidentiality
   g. Conflicts of interest
   h. Procedures for handling breaches of responsible conduct of research, including research misconduct

[2] When entering into international collaborative research, the boilerplate text from the OECD Global Science Forum 'Investigating Research Misconduct Allegations in International Collaborative Research Projects – A Practical Guide' (2009) may serve as inspiration for the collaborating partners.

5.2. Division of responsibilities

i. **Researchers** should identify areas in the collaborative research where common agreements may be necessary.

ii. **Institutions** are responsible for providing their collaborating partners with the tools and support necessary for establishing agreements as specified above.

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6. Conflicts of interest

Responsible conduct of research includes disclosure of all potential conflicts of interest. This allows financial or other interests to be assessed on an informed basis in order to evaluate possible bias of professional judgement.

Definitions

- A *conflict of interest* is a situation in which financial or other interests have the potential to compromise or bias professional judgement.

6.1. Responsibilities

i. All parties involved with the research in question, including all assessors of research and research proposals (e.g. editors, reviewers, research councils, etc.) should disclose any conflicts of interest.

ii. Assessors of research and research proposals who have a conflict of interest should withdraw from any involvement in the process.

iii. All parties involved with the research in question should address conflicts of interest, i.e. institutions and researchers have a joint responsibility for handling issues relating to conflicts of interest.

6.2. Division of responsibilities

i. **Researchers** are responsible for disclosing all conflicts of interest related to the research they are involved with.

ii. **Institutions** are responsible for addressing issues of conflicts of interest, and for ensuring that all conflicts of interest are handled adequately. In this context **institutions** should have a policy for handling conflicts of interest, which includes information on:

   a. Situations that constitute a conflict of interest
   b. Disclosure of conflicts of interest, including how to handle confidentiality issues

III. Research integrity teaching, training, and supervision

The Danish Code of Conduct on Research Integrity outlines the basic platform for research integrity teaching, training and supervision at the institutional level.

Fostering a culture of research integrity is a key element for ensuring high integrity in research. In this context teaching, training, and supervision are essential for developing and sustaining a culture of research integrity and for establishing and sustaining basic knowledge on research integrity among those involved in research.

It is important that institutions take responsibility for ensuring that researchers under their auspices receive relevant teaching, training, and supervision in the principles of research integrity and responsible conduct of research. The main purpose is to incorporate the elements of research integrity into the day-to-day work of researchers, and to maintain a mind-set that promotes research integrity.

A fundamental part of sustaining and developing a culture of research integrity is the role of supervisors and senior researchers acting as mentors and role models. Thus, it is important that supervisors and senior researchers engage in research integrity teaching, training, and supervision.

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1. Teaching, training, and supervision in the principles of research integrity and responsible conduct of research

The purpose of research integrity teaching, training, and supervision is to promote a research culture in Denmark that is governed by the principles of research integrity and responsible conduct of research.

Teaching, training, and supervision are of pivotal importance in raising awareness of research integrity because they provide a proactive and positive approach to promoting research integrity as central to the research mission.

Research leaders and supervisors have particularly important roles in research integrity teaching, training, and supervision.

Definitions

- *Research leaders* are individuals with the overall professional academic responsibility for the research carried out.
- *Supervisors* are experienced researchers providing guidance for less experienced colleagues, e.g. PhD students.

1.1. Responsibilities

i. The principles of research integrity and responsible conduct of research should be an element of all research endeavours and educational curricula, and should be seen as fundamental to the research process – not as a separate component.

ii. All involved in the research process should promote and maintain an environment that fosters research integrity where the fundamental values of research integrity are emphasized and practised as a matter of routine.

iii. In accordance with national and international best practice, research integrity teaching, training, and supervision should include:

   a. Principles of research integrity
   b. Responsible conduct of research
   c. Research misconduct and breaches of responsible conduct of research, including the procedures for handling suspicions
   d. Relevant regulations

iv. Undergraduate (bachelor) and graduate (master) educations should include an introduction to the principles of research integrity and responsible conduct of research.

v. PhD and postdoctoral programmes should include specific research integrity teaching and training. In this context, supervision of PhD students and postdocs should include guidance on research integrity.

vi. Research leaders and supervisors should receive specific research integrity teaching and training to support their mentoring roles in fostering a culture of research integrity.

1.2. Division of responsibilities

i. **Research leaders** and **supervisors** should act as role models, and manage research under their auspices in accordance with the principles of research integrity and responsible conduct of research.

ii. **Research leaders** and **supervisors** are responsible for nurturing a culture of research integrity and mutual respect in accordance with the principles of research integrity and responsible conduct of research.

iii. **Supervisors** are responsible for ensuring that the research carried out by researchers, research trainees, and students under their supervision is conducted in observance of the principles of research integrity and responsible conduct of research.

iv. **Institutions** are responsible for ensuring that all staff (including guest researchers) and students involved in research have thorough knowledge of – and understand the importance of – the principles of research integrity and responsible conduct of research.

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IV. Research misconduct and breaches of responsible conduct of research

It is important to have a system in place for handling breaches of the responsible conduct of research. This includes situations of direct research misconduct (cf. the definition used by the Danish Committee on Scientific Dishonesty below) as well as situations that do not reach the threshold of research misconduct.

In this regard, institutions and researchers share a responsibility for ensuring that suspicions of research misconduct as well as other breaches of responsible conduct of research are brought forward and dealt with appropriately.

The Danish Code of Conduct outlines the basic platform for institutions to deal with suspicions of research misconduct and breaches of responsible conduct of research. The institutional systems are intended to co-exist with the central national body, the Danish Committees on Scientific Dishonesty. Thus, the code of conduct lays out basic guidelines for the institutional systems for dealing with such suspicions, whereas the implementation of specific processes is the responsibility of the individual institution.

The Danish Committees on Scientific Dishonesty

The Danish Committees on Scientific Dishonesty (DCSD) form a central national body tasked with handling allegations on research misconduct based on complaints brought before the committees by individuals or institutions. The DCSD is an independent body established by an Act of Parliament under the Ministry of Higher Education and Science.

The DCSD's mandate is limited to allegations concerning research misconduct (referred to as 'scientific dishonesty' in the Act) as defined in Consolidated Act no. 1064 of 6 September 2010 on the research advisory system, etc., as amended, section 2 (3):

"Scientific dishonesty shall mean: Falsification, fabrication, plagiarism and other serious violation of good scientific practice committed wilfully or grossly negligent on planning, performance or reporting of research results."

Thus, the DCSD cannot deal with cases solely concerning breaches of responsible conduct of research, if these breaches do not represent research misconduct as described above.

More information on the mandate and structure of the DCSD is available here:
The Danish Committees on Scientific Dishonesty's website

1. Response to suspicions of breaches of responsible conduct of research

A prompt and effective response to suspicions of breaches of responsible conduct of research is required in order to maintain public confidence in research endeavours, and ensure observance of the principles of research integrity and responsible conduct of research.

Definitions

- *Breaches of responsible conduct of research* are breaches of current standards on responsible conduct of research, including those of the national code of conduct, and other generally respected and applicable institutional, national and international practices and guidelines on research integrity. If serious enough, a breach of responsible conduct of research may also represent research misconduct, cf. the definition used by the Danish Committees on Scientific Dishonesty.

1.1. Responsibilities

i. All parties involved in the research endeavour share responsibility for ensuring that reasonable suspicions of research misconduct or breaches of responsible conduct of research are addressed adequately.

ii. Institutional systems for addressing these matters should be clearly described and easily accessible. Institutional procedures should comprise at least the following elements in order to ensure coherent and effective handling of suspicions of breaches of responsible conduct of research at the institutional level:

a. *Preliminary advice concerning a suspicion of a potential breach*
Anyone with a reasonable suspicion that a breach of responsible conduct of research has been committed should have the opportunity to request preliminary advice concerning the suspicion, e.g. through a 'named person' or similar.

If there are qualified grounds for the suspicion, the case should be submitted for further investigation in accordance with institutional procedures and the parties to the case should be informed immediately.

b. *Investigation of a reasonable suspicion*
When addressing and investigating suspicions of breaches of responsible conduct of research, the following principles should be observed:

- the persons involved in addressing the suspicion and handling the investigation should be impartial
- the investigators should possess professional competences within the specific case's field of research and thorough knowledge of responsible conduct of research. Preferably, one or more investigators should have prior experience with cases concerning research misconduct and/or breaches of responsible conduct of research

- the parties to the case should be highly involved in processing the case by being allowed to comment on the investigational material and by being continually informed of the status of the case
- the parties to the case should be protected to the extent possible so that
    - persons bringing forward suspicions in good faith ('whistle-blowers') are protected from reprisals
    - complaints strictly brought forward as harassment (in bad faith) may in themselves be considered a breach of responsible conduct of research
    - the identities of the parties are kept confidential to the extent possible.
- similar cases/situations should be treated similarly
- investigation procedures should be made public
- cases should be concluded efficiently, so that no person is part of an investigation longer than strictly necessary

The investigation ends with an ascertainment of whether a breach of responsible conduct of research has occurred. If there is a qualified suspicion of research misconduct, the institution may choose to refer the case to the Danish Committees on Scientific Dishonesty.

c. *Conclusion of the investigation/sanctions*
If the investigation concludes that a breach of responsible conduct of research has taken place, it is the responsibility of the institution(s) where the research has been carried out and/or where the researcher is employed to impose relevant sanctions.

iii. Institutional systems for addressing suspicions of breaches of responsible conduct of research co-exist with the Danish Committees on Scientific Dishonesty. Thus, institutional systems do not limit researchers or others from putting forward their suspicions of research misconduct directly to the Danish Committees on Scientific Dishonesty.

1.2. Division of responsibilities

i. **Researchers** and **institutions** are responsible for creating and maintaining an environment where it is acceptable to bring forward reasonable suspicions of breaches of responsible conduct of research.

ii. **Researchers** are responsible for bringing forward reasonable suspicions of breaches of responsible conduct of research and for supporting the handling of such suspicions.

iii. **Institutions** are responsible for ensuring that a system for addressing reasonable suspicions of breaches of responsible conduct of research is in place at the institutional level.

iv. **Institutions** should have a policy which describes their system for addressing suspicions of research misconduct and breaches of responsible conduct of research, including:

- Where and to whom (e.g. named person or similar) a person can turn to for advice on a suspicion of a breach of responsible conduct of research
- The step-by-step procedure for addressing such suspicions
- The possible outcomes of an investigation
- The sanctions that may be imposed

- Other relevant information

v. **Institutions** should have procedures in place to deal with suspicions that involve research or staff from other institutions, including institutions abroad.

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Appendix 1 – Members of the working group on the Danish Code of Conduct for Research Integrity

The Ministry of Higher Education and Science

Hans Müller Pedersen (chair)
Director General
The Danish Agency for Science Technology and Innovation

Members nominated by Universities Denmark

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Vice-Dean, Faculty of Health and Medical Sciences
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Elisabeth Vestergaard
Director and Head of Department of Border region Studies
University of Southern Denmark

Claus Vesterager Pedersen
Library Director
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Lone Dirckinck-Holmfeld
Dean, Faculty of Humanities
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Henrik C. Wegener
Provost
Technical University of Denmark

Lotte Jensen
Head of Department of Management, Politics and Philosophy
Copenhagen Business School

Jørgen Staunstrup
Provost
IT University of Copenhagen

Member nominated by the Union of Directors of the Sector Research Institutes of Denmark

Jens Morten Hansen
Secretary for the Union of Directors of the Sector Research Institutes of Denmark
Geological Survey of Denmark and Greenland

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Member nominated by the Danish Council for Independent Research

Lene Koch
Professor, Department of Public Health
University of Copenhagen

Member nominated by the Danish Council for Strategic Research

Kim Krogsgaard
Director
Grete Lundbeck European Brain Research Foundation

Secretariat

Charlotte Elverdam
Head of Legal Division
The Danish Agency for Science Technology and Innovation

Thomas Nørgaard
Head of section, Legal Division
The Danish Agency for Science Technology and Innovation

Mathias Willumsen
Head of section, Legal Division
The Danish Agency for Science Technology and Innovation

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Appendix 2 – Bibliography

The Danish Code of Conduct for Research Integrity was developed with inspiration from various initiatives from the Danish universities and the sector research institutes of Denmark and from the following list of international initiatives.

The European Code of Conduct for Research Integrity (2011)
European Science Foundation(ESF)/All European Academies (ALLEA)

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