Code of Good Research Practice at the University of Mannheim

as at

Based on section 3 subsection 5 of the act on the higher education institutions in the Land of Baden-Württemberg (LHG) as at 1 April 2014 (Gbl. p.99), last amended by law on 21 December 2022 (GBl. p.649,650), the Senate of the University of Mannheim has approved the following Code on 22 March 2023.

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Preliminary note

¹Research is the pursuit of knowledge. ²Researchers examine the findings of other researchers and may decide to use these findings as a basis for their work. ³Thus, scientific progress and acceptance of research results in the academic community and in society depend on academic integrity. ⁴A breach of academic integrity does not only constitute an act of personal misconduct but also undermines the foundation of scientific progress and the trust in the relevance of scientific findings as a bedrock of modern societies.

⁵Academic integrity and the unconditional pursuit of the truth are of the utmost importance throughout the entire research process and the presentation and publication of research results. ⁶This includes the recognition and appreciation of the work of other researchers, the consideration of results which may question already reported results and the support of the work of fellow researchers and colleagues. ⁷It is the duty of all students and scholars of the University of Mannheim to uphold academic integrity. ⁸The

University of Mannheim provides the conditions for honest academic research, promotes honest behavior and takes action against any form of academic misconduct.

⁹To this end, this Code establishes the principles of good research practice for the University of Mannheim. Adherence to this Code is fundamental for any academic work. ¹⁰This document is to increase the level of awareness of these principles and calls upon scholars to strictly adhere to them and upon the university as an institution to create and maintain an environment that fosters academic integrity and discourages academic dishonesty.

¹¹Still, this Code cannot and does not intend to give an exhaustive definition of good research practice. ¹²The particularities of every single field of research must be taken into account. ¹³This Code is to be more of a guideline providing a framework of rules which is not to be breached under any circumstances when undertaking scholarly work. ¹⁴The following rules are binding for all students and scholars of the University of Mannheim.

¹⁵The University of Mannheim adheres to the Code of Conduct of the German Research Foundation (DFG) on Safeguarding Good Research Practice¹, the recommendations of the German Rectors' Conference on handling scientific misconduct at higher education institutions² and the recommendations of the DFG and the German National Academy of Sciences Leopoldina on Handling Security-Relevant Research³. ¹⁶The following rules are based on said recommendations.

Section 1 - General Principles

(1) ¹The individual sense of responsibility for adhering to the rules of good research practice and to legal regulations as well as the awareness of possible consequences of one's own research are essential for honest research work that is accepted in society. All researchers at the University of Mannheim, including guest researchers, scholarship holders and students are obliged to follow the acknowledged rules particular to their discipline:

¹ Deutsche Forschungsgemeinschaft, "Guidelines for Safeguarding Good Research Practice. Code of Conduct", 2019.

² German Rector's Conference, "Zum Umgang mit wissenschaftlichem Fehlverhalten in den Hochschulen, Empfehlung des 185. Plenums vom 6. Juli 1998" and "Recommendations of the 14th General Meeting of the German Rectors' Conference (HRK) on 14 May 2013 in Nuremberg, Good scientific practice at German higher education institutions".

³ German Research Foundation and German National Academy of Sciences Leopoldina, "Scientific Freedom and Scientific Responsibility", 2014.

- 1. Apply scientifically sound and replicable methods and place great importance on quality assurance and establishing new standards when developing and applying new methods.
- 2. Record their results.
- 3. Consistently question their own research results.
- 4. Be absolutely honest about the work of partners, rivals and predecessors.
- 5. Avoid academic misconduct and not tolerate misconduct of others.
- 6. Reflect on and consider very carefully the use of their own research and possible damage resulting from misuse of their research results and
- 7. adhere to the following further principles of good research practice.
- (2) ¹Each school, center, institution and research group of the University of Mannheim is to set an example of good research practice. ²The schools, centers and institutions of the University of Mannheim are responsible for providing students and early-stage researchers with information about academic misconduct and the principles of good research practice as laid down in this Code. ³For students, this is to be done in regular courses providing an introduction to academic writing and research. ⁴In particular, early-stage researchers and students are to be taught about the importance of honesty, their responsibilities with regard to scholarly activities, and awareness of possible academic misconduct. ⁵This includes the obligation to be alert, not only in regard to one's own research but also in regard to possible misconduct of others. Experienced researchers of all career levels make sure to keep their knowledge with regard to good research practice up to date.
- (3) ¹The university takes its institutional responsibility seriously. In addition to its measures to detect and deal with academic misconduct, it is working towards creating and promoting an environment which encourages students and scholars to adhere to the principles of good research practice as well as legal and ethical standards and prevents academic misconduct. ²The university places particular value on quality rather than quantity, and evaluates academic work and applications based on this principle.

Section 2 - Additional Principles of Good Research Practice

(1) Research; framework conditions for research

¹In planning and implementing a project researchers consider the current state of research and mark it as such. ²Before formulating relevant and appropriate research questions, they thoroughly go through relevant and already published works of research. ³As far as this is possible, they apply methods to avoid deliberate and unconscious distortion when interpreting results. ⁴If possible and relevant, researchers are to consider as to how far gender and diversity are an important factor for the project

particularly with regard to methods, program and goals of the project. ⁵Moreover, researchers observe existing rights and obligations, particularly legal regulations and contractual agreements with third parties. ⁶Researchers make sure to obtain the necessary agreements regarding exploitation rights as early as possible within the research project. ⁷If there are no statutory, contractual or other legal regulations that prohibit it, researchers may use the data they collected. ⁸If required, researchers obtain approvals and votes from councils on ethics and provide the responsible authorities with these.

(2) Open academic discourse

¹Researchers are to consistently examine the accuracy of their results. ²Open academic discourse serves to critically question results and to discuss different points of view. ³Essential elements of open academic discourse are to encourage scientific criticism and freedom of expression regardless of hierarchies, and to acknowledge past and present ideas and findings of others and cite them as such. Moreover, researchers are to promote the willingness to deal with subject-related criticism in unprejudiced dialog and to acknowledge mistakes or conclusions proven wrong by others without any reservations.

(3) Research publications

If recognized practices particular to the discipline do not determine otherwise, the following rules apply for academic publications:

- 1. ¹Researchers always publish all research results for academic discourse. ²Researchers make the decision to not publish individual results on their own responsibility and consider legal and ethical aspects. ³After publishing the results, researchers are to also publish the research data that is the basis for the results, material and information, the methods applied as well as the software and the work stages as far as this is possible and reasonable. ⁴Self-programmed software is to be published by publishing the source code provided that there are no legal regulations prohibiting this. ⁵The origin of data, material and software needs to be indicated and re-use is to be proven; the original sources are to be cited. ⁶Source code of publicly available software needs to be persistent, citable and documented.
- 2. ¹The term "original work" ("Originalarbeit") is only to be used for the first publication of new findings or results, including the conclusions drawn from them. ²Multiple publications of the same results are only allowed if the original work is explicitly referenced. ³Inappropriately small compartmentalized publications are to be avoided.
- 3. ¹If more than one person works on a project, those who contributed in a genuine and transparent way to the research and its publication are to be named as co-

authors in the publication of the results. ²Whether a contribution is genuine and transparent needs to be verified individually, moreover, it depends on the respective field. ³A genuine and transparent contribution is made if researchers contributed substantially

- a) to the development and concept of the research project,
- b) to the preparation, collection, procurement, provision of data, software, sources,
- c) to the analysis, evaluation or interpretation of the data, the sources and to the conclusions drawn or
- d) to the manuscript.

⁴Those who did not contribute substantially to the research or its publication are not to be named as co-authors. ⁵It is possible to acknowledge such a contribution in another way, such as in a preface or in footnotes. ⁶It is not possible to name, for example, a superior or an examiner of a paper as honorary author simply because of the position that they hold. ⁷Authors and co-authors agree on the order of names early on, as a rule as they write the manuscript, based on transparent criteria and considering the conventions of the field.

- 4. ¹All authors and co-authors need to approve the final version of the work that is to be published. ²Approval can only be denied due to significant reasons; denial needs to be based on transparent critique regarding data, methods or results. ³Co-authors are responsible for ensuring that their contribution to the publication is up to academic standards. ⁴This means that co-authors are responsible for the accuracy of their contribution and its adequate integration in the publication. ⁵Furthermore, co-authors must not accept misconduct of others, in particular of the other co-authors of their publication.
- 5. ¹Reports on new research results must include a complete and comprehensible presentation of the results and the applied methods. ²The applied mechanisms of quality assurance are always indicated when scientific results are published, particularly when new methods are developed.
- 6. ¹One's own previous work or that of others is to be cited completely and accurately according to the practices particular to the discipline, including the author's name and the name of the publication. ²Results published earlier are only to be repeated in a publication if they are explicitly referenced as such.
- 7. ¹In case a co-author of publications, particularly of dissertations and habilitations, happens to be named as an examiner or similar in the respective examination process, it needs to be made sure that for every co-author on the examination panel, another examiner is added to the panel in addition to the existing regulations. ²The reasons

for naming additional examiners needs to be documented in the examination records.

- 8. ¹Authors carefully choose the publication channel considering the quality and visibility in the respective field. ²The quality of the work does not depend on the publication channel where it is published. ³Next to books and journals, repositories, data and software repositories or blogs can be considered.
- 9. In case scientific findings were published and other researchers later discover that there are mistakes or discrepancies, they either correct these mistakes or, in particularly difficult cases, work to have the publication retracted.
- 10. For empirical research, the following principles apply additionally:
 - a) ¹Studies must be replicable. ²Therefore, publications must include a complete and detailed description of the methods of data collection, the data and software used, the statistic analysis and the results in order to allow for verification of the results through replication.
 - b) ¹After its publication, research data is to be be passed on for further scholarly use provided that this does not violate any legal or contractual regulations. ²The same applies for information, applied methods and the software used.
 - c) ¹Concerning the interpretation and publication of empirical results, findings that challenge the hypothesis of the author must be reported as well as the findings that support it. ²As far as there are concrete recommendations specific to the discipline for the examination and evaluation of the work, the researchers document their work according to the respective regulations. ³If the documentation does not meet the requirements, the limitations and their reasons are to be indicated comprehensively. ⁴Documentation and research results must not be manipulated, they are to be protected from manipulation as good as possible.
 - d) If data from a data collection is used in more than one publication, later publications must explicitly name prior publications which feature the same data set.

(4) Securing and storing primary data

¹The person responsible for a research project must ensure that both the data used as the basis for publications, patents and development work (usually raw data), as well as the material that is the foundation for the project and, where applicable, research software, are adequately secured in accordance with the standards of the subject area and stored for an appropriate period of time, usually ten years from the publication date. ²If the data may not be stored or only be stored for a shorter period than ten years, the reasons must be documented transparently. ³Research data that is stored must be accessible and stored transparently in the institution in which it was created

or must be stored in central repositories, provided that this does not violate any legal or contractual regulations. ⁴Research data must also be made available to monitoring bodies, in particular to the Standing Committee for the Investigation of Academic Misconduct Allegations. ⁵Further storage obligations due to legal regulations or requirements of external funding institutions to ensure public accessibility of primary data and measures concerning the protection of personal data remain unaffected. ⁶The university provides the infrastructure that allows archiving.

(5) Organization

¹Management tasks involve the corresponding responsibilities. ²All responsible persons, in particular the President's Office, deans and heads of institutes must ensure that the tasks of management, supervision, conflict resolution and quality management are adequately organized, assigned and accomplished at all times. ³This includes ensuring adequate supervision of theses and dissertations, competent management of research projects as well as assignment of ombudsmen or women and ensuring the efficiency of the Standing Committee for the Investigation of Academic Misconduct Allegations. ⁴Those responsible work to prevent abuse of power and exploitation of dependencies in all areas of the university. ⁵The roles and responsibilities of those involved in a research project must be clear at all times. ⁶Where necessary, adjustments are made, in particular if the focus of those involved changes.

(6) Performance and evaluation criteria

¹The performance and evaluation criteria for examinations, academic degrees, promotions, recruitment and appointments should be determined in such a way that originality and quality of academic work always take priority over quantity. ²Quantitative measures may only be incorporated into the overall assessment in a differentiated and reflected manner. ³Considering higher-ranking law, particularities in CVs are to be included in the evaluation, in particular special commitment in teaching or academic self-governance. ⁴Prolonged training or qualification periods due to personal reasons, family responsibilities or health-related issues, alternative career paths or comparable circumstances are to be adequately considered.

(7) Early-stage researchers

¹Particular attention is to be paid to the education and promotion of early-stage researchers. ²At the beginning of their work, supervisors are to inform early-stage researchers of their obligation to adhere to this Code of Good Research Practice. ³Supervision tailored to individual needs and support by experienced researchers during the entire qualification phase is to create an environment that encourages adherence to this Code.

(8) Access to research data, research data repository and open access

¹In the context of a research project, the users decide whether third parties can have access to the data, considering all relevant legal regulations. ²In order to record, store

and make primary data accessible, the University of Mannheim has a research data repository (currently MADATA), which may be used by members of the University of Mannheim. ³To support the accessibility and verifiability of research results, the University of Mannheim gives researchers the opportunity to publish their research results on the university's open access publication server. ⁴The university library is available to answer any questions concerning publication.

(9) Confidentiality and neutrality in evaluations and consultations

¹Scientists who evaluate, in particular, submitted manuscripts, grant applications or the qualifications of persons are obliged to maintain strict confidentiality in this regard. ²They are to disclose any facts which may give rise to concerns about partiality. ³Sentences 1 and 2 apply mutatis mutandis to members of scientific advisory and decision-making bodies. ⁴Content to which scientists gain access as evaluators, as members of relevant bodies or in comparable positions, may not be used for their own purposes or passed on to third parties.

(10) Further references

¹Additional regulations in other university regulations must be observed. ²This includes in particular

- a) regarding personnel selection, the guidelines on creating attractive employment relationships at the University of Mannheim and the guidelines on professorial appointments,
- b) regarding gender equality, the equal opportunity strategy, including the equal opportunity plan,
- c) regarding furthering the career, the Tenure-Track statutes and the guidelines on creating attractive employment relationships at the University of Mannheim, the guidelines on professorial appointments and the staff development strategy of the University of Mannheim.
- d) regarding the assessment of consequences of research, the Statutes of the Ethics Committee of the University of Mannheim

in their respective valid version. ³Provisions of higher-ranking law, in particular the principle selecting the best candidate for an office that is established in the basic law, remain unaffected.

Section 3 - Discipline-specific Statutes of the University of Mannheim on Principles of Good Research Practice

¹The schools of the University of Mannheim may establish individual statutes for certain disciplines specifying the principles of good research practice named in section 2, for

example regarding citation, written academic work (especially theses and dissertations), the public accessibility of primary data or the like. ²These additional statutes are not to determine a standard that is lower than the standard set out in this Code. ³The statutes are to apply to research as well as teaching. ⁴They are to be published in an appropriate manner.

Section 4 - Contact Persons

Ombudspersons as defined by the Statutes of the University of Mannheim on Procedures for Handling Academic Misconduct and the DFG liaison officer (Vertrauensdozent*in) at the University of Mannheim are the contact persons for questions about good research practice for all members and affiliates of the university. ²In addition, members and affiliates of the university can turn to the national body "German Research Ombudsman" for questions regarding good research practice or regarding violations of good research practice.

Section 5 - Other Regulations

- (1) Regulations on how to deal with allegations of academic misconduct are laid down in separate statutes.
- (2) If a scholar at the University of Mannheim is simultaneously bound to regulations of other academic institutions which determine a lower standard than this Code, they are nevertheless obligated to adhere to this Code.

Section 6 - Entry into Force

¹This Code comes into effect on the day of its publication in the Bulletin of the President's Office (Amtliche Bekanntmachungen des Rektorats). (2) ²At the same time, the Code of Good Research Practice of the University of Mannheim as at 8 December 2014 ceases to be effective.

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members. Only the German text is legally binding. In the event of any conflict between the English and German
text, its structure, meaning or interpretation, the German text, its structure, meaning or interpretation prevails.

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Mannheim,

Professor Dr. Thomas Puhl President