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This is not a legally binding document.

It shall be applied unless superior regulations provide otherwise.

A guide for doctoral students who prepare a doctoral dissertation in the form of a collection of thematically related scientific articles

I. Legal grounds

1. Information on doctoral dissertations can be found on the website of the Faculty of Biology, University of Warsaw. The website also includes all applicable legal law - the Act, transitional provisions and the ordinance and regulations of the Rector of the University of Warsaw. Links to the websites:

https://www.biol.uw.edu.pl/instrukcja-dla-doktorantow-wydzialu-biologii-uniwersytetu-warszawskiego/https://www.biol.uw.edu.pl/nadawanie-stopnia-doktora-po-1-10-2019/

2. Information on doctoral dissertations is included in article 187.1, points 1-4 of the Act of July 20, 2018 - Law on higher education and science:

"Art. 187.

- 1. A doctoral dissertation presents the candidate's general theoretical knowledge in a discipline or disciplines and the ability to independently conduct scientific or artistic work.
- 2. A subject of a doctoral dissertation is an original solution to a scientific problem, an original solution in applying the results of own scientific research in the economic or social sphere, or an original artistic achievement.
- 3. A doctoral dissertation may be a written work, including a scientific monograph, a collection of published and thematically related scientific articles, design work, construction work, technological work, implementation or artistic work, as well as an independent and separate part of a collective work.
- 4. A doctoral dissertation shall be accompanied by an abstract in English and in the case of a doctoral dissertation in a foreign language also an abstract in Polish. If a doctoral dissertation is not a written dissertation, a description in Polish and English should be attached. "
- The abstract mentioned in point 4 of article 187.1 should present a whole dissertation, and therefore include all its elements introduction, hypotheses, goals, materials and methods, results and conclusions.
- 3. Paragraph 5.2 of the Regulation of the Minister of Science and Higher Education of January 19, 2018, on dissertation procedures and requirements, and on procedures for the conferment of the habilitation degree or the academic title of professor provides:
- "2. If the doctoral dissertation is an independent and separate part of collective work, the candidate shall submit it to the promoters referred to in § 2 sec. 1 and sec. 2 points 1 and 2, together with the documents referred to in sec. 1, statements by all its co-authors specifying individual contributions of each of them. In the event that a collective work has more than five co-authors, the candidate shall submit a declaration specifying his contribution to this work and statements of at least four other co-authors. The candidate is released from the obligation to submit a declaration in the event of a co-author's death, recognition of a co-author's death or permanent health impairment that prevents the candidate from obtaining the required declaration. "
- 4. The definition of a scientific article is included in the Regulation of the Minister of Science and Higher Education of February 22, 2019, on the evaluation of the quality of scientific activity:
 - "§ 9. 1. A scientific article is a peer-reviewed article published in a scientific journal or peer-reviewed proceedings of an international scientific conference:

- 1) presenting a specific scientific issue in an original and innovative, problem-based or cross-sectional manner:
- 2) provided with footnotes, bibliography or other scientific apparatus appropriate for a given scientific discipline.
- 2. A scientific article is also a review article published in a scientific journal included in the list of journals
- 3. A scientific article is not: editorial, abstract, extended abstract, letter, errata and editorial note." Thus, a scientific article is not a manuscript deposited in the repository, although it is eligible for a DOI.
- 5. A submission of a dissertation in a mixed form, including both published articles and manuscripts, is addressed in Communication No. 19/2020 of the Council of Scientific Excellence (in Polish): https://www.rdn.gov.pl/komunikaty,komunikat-nr-192020-w-sprawie-skladania-rozpraw-doktorskich.html

II. Choice of the form of a dissertation

- · If all papers are published or already have a DOI and are available in electronic form on a journal's website, and the student who is preparing the dissertation has at least drafted the manuscripts the student may prepare a dissertation in the form of a collection of articles.
- · If the student does not draft the text or its significant part, then regardless of the status of the publication, it is recommended that the dissertation is in the form of a classic compact dissertation with reference to these publications, but without verbatim repeating them, and that only the part of the work that was conducted by the student is described.
- · If none of the publications is published or has not been submitted in its final form, it is recommended that the student writes a classic compact dissertation.
- · If the text was drafted by the student, and some of the papers are published, the dissertation may have a mixed form, i.e. include publications and manuscripts. In the case of a mixed dissertation, it is recommended to attach the same documents as for the dissertation in the form of collective work (see below). This also applies to multi-author manuscripts. The dissertation should meet the requirements of text coherence as in the case of a classic dissertation.

III. Preparation of a dissertation in the form of a collection of publications

- 1. In the case of doctoral dissertations prepared in the form of a collection of published and thematically consistent scientific articles, the student should decide with the supervisor on the number of papers included in the dissertation. In case of doubt, it is possible to consult the content of the dissertation with the chairmen of the Doctoral Committees of the Biological Sciences Discipline Council of the University of Warsaw.
- 2. The publications that constitute a dissertation must present original data. Review papers may be supplementary, but they are not the content of a dissertation. All publications must have a DOI number.
- 3. In each of the papers that are included in a dissertation, the contribution of a student must be significant and distinguishable. If the journal to which the paper is submitted requires the authors' contribution to be described, it is recommended to ensure that this contribution is precisely described, and above all that the person presenting the dissertation is the main author of the manuscript, e.g. "NN wrote the first version of the manuscript "or" NN the original draft of the manuscript". Indication of another person as the main author of the text may cause the reviewer to question the dissertation from the formal point of view.

- 4. The student presenting a dissertation must prove that in the case of multi-author publications that are included in the dissertation, the student played a leading role in the implementation of the described research and preparing the manuscript. The student should prepare a description of her/his contribution to each publication. It is advisable that the description should have an introduction or a preface to the collection of works, contain brief presentations of research hypotheses, and then detailed information on the involvement of the student in verifying the hypotheses, implementing the projects, and preparing the manuscripts. The introduction should not include a description of the materials and methods, or a detailed presentation of the results, or their discussion. It can, however, present conclusions. This description should document the role of the student and the fact that the thesis meets the requirements set out in the Act.
- 5. Co-authors of the publications must submit written statements describing their contributions to the work in accordance with § 5.2 of the regulation. The description should not include an estimated percentage of the contribution but indicate what the co-author actually did. The co-author's statement should be as detailed as possible. As papers are written in English, statements should also be prepared in English. For example, they might look like this:

I hereby declare that I am aware that the work: NN, XX, YY (2020). Title. Journal Name, vol. pages. DOI.

of which I am a co-author, has been included in the doctoral thesis of NN.

I contributed to: (e.g., study design, collected the data (which data?), performed the analyses (what kind?), generated plots and figures (which one?), wrote the first draft and edited subsequent drafts of the manuscript, approved the final version of the manuscript, etc.)

XX (signature)