## **Undergraduate Student Research Paper (USRP)**

#### 1. Preamble

The USRP should be prepared according to the general requirements for research articles. The goals of an USRP are to describe the Author(s)'s involvement in research activities, to highlight the skills obtained, and to provide an opportunity to gain experience in the publication of scientific research findings.

# 2. Topics of USRP and accountability of authors

The USRP usually, but not exclusively report the experimental work of the author(s). Besides, USRP can be a review of a chosen field of health science, a statistical evaluation, computer software, moving picture, a tool or prototype, any kinds of educational material. Accordingly, the USRP does not necessarily describe new scientific revelations, but must be an intellectual work of the author(s). In line with this requirement, the author(s) should explicitly state if they made any activities with the direct involvement of others and list all of these activities in an annex of the USRP. The author(s) must keep note regarding the activities described in the USRP and keep these notes until their graduation. The Student Scientific Committee (SSC) has the right to request the examination of these notes in the presence of the author(s). The author(s) should provide any assistance necessary for overviewing their activities by SSC in this respect.

#### 3. Submission of the USRP

The USRP should be directly submitted in the Electronic Submission System (<a href="http://tdk.lib.unideb.hu/index.php">http://tdk.lib.unideb.hu/index.php</a>) maintained by the SSC. The USRP should be written in Hungarian or English. Upon successful submission, the Electronic Submission System generates the title page of the USRP, which needs to be printed out and signed by the head of the Department and the Institutional SSC representative. This signed title page is the only hard copy document, which needs to be submitted to the administrator of SSC in the Educational Office. The official date of submission (and the beginning of the reviewing procedure) is the arrival of this signed title page to the Educational Office.

The Student Scientific Committee (SSC) is setting a deadline (not later than the 5<sup>th</sup> week in the semester) for submission of USRP for those students who wish their USRP to be accepted as their thesis. This deadline cannot be earlier than 15 January. The USRPs submitted after this deadline will not be processed further (will not be sent to review) in the case of students graduating in the same semester.

Inquires regarding the review and submission should be sent to the Secretary of the SSC (Zsuzsanna Bereczky, MD, PhD, E-mail: <a href="mailto:zsbereczky@med.unideb.hu">zsbereczky@med.unideb.hu</a>). Only in TDK/SSC cases!

### 4. Formal requirements

The USRP usually 10-30 pages long excluding the List of references, Figures, Figure Legends, Tables. The USRP is being made in a document of A4 page size using a line spacing of 1.5, character size of 12 pt and margins of 2.5 cm at all sides. The USRP is being submitted as a portable document format (pdf)

in the ESS.

If medical terms are necessary to be used the original (*latin, greek*) form is preferred. Chemical names should be written in the internationally accepted format. Avoid unnecessary acronyms and symbols and specify their meaning when first used. Meaning of letters in mathematical equations should be explained. International System (SI) of Units is preferred.

It is recommended that the USRP consists of the following chapters (in this order): Title page, Table of contents, Abstract, List of abbreviations (if necessary), Introduction, Aims, Materials and methods, Results, Discussion, Acknowledgements, List of references, Annexes. When it is necessary, the Results and Discussion chapters can be merged.

**Title (first) page:** it should contain the title, names of the author(s) with their program, year and group number, the title of the Department, in which the work has been done, and the name and position of the supervisor. Finally, this page should be amended by the statement "I consent to the submission of this work" signed by the assigned representative for undergraduate research activities at the Department and by the head of the Department.

**Table of Contents:** beginning at a separate page...

**Abstract:** Concise, single page summary of the work in 20-25 lines. It should mention the aim of the work, the methods and introduce the most important results and their implications.

**List of abbreviations:** an alphabetically organized listing of the abbreviations used in the USRP.

Introduction: Should provide a background of the art with references with sufficient detail to make the aims understandable for a wider range of audience. This part of the USRP can be more detailed than that usual for scientific publications to prove the accumulated knowledge of the author(s) in their chosen field. This chapter should be ended by statement(s) pinpointing the most important results of the work.

**Aims:** Single page summary of the major aims pursued.

**Materials and methods:** This chapter should be detailed enough for a fellow researcher experienced in the field to be able to evaluate the experimental work and the appropriateness of the methods. The statistical methods should be presented together with information the number of observations (when applicable). This chapter should provide information on the statistical aspects of the work: statistical methods, level of significance (usually the p value), accuracy of the data (according to the deviation or error), number of parallel or independent experiments being done, etc.

**Results:** Detailed information is provided on the relevant findings of the work in this chapter. The Tables and Figures should be inserted into the text. Every Figure and Table should be informative in itself: they should be accompanied

by a title and a short, concise textual explanation. The units, symbols and abbreviations should be explained in each Figure and Table, irrespectively of the potential repetitions among the Figures and Tables.

**Discussion:** This chapter is for the subjective, "state of the art" evaluation of the results. It necessarily contains references to prior findings and sets the results in context of previous work. This chapter also highlights the potential novelty and implications of the work.

List of references: Every one of the references cited in the USRP should be included, excluding those ones, which are not being directly cited. The references need to be cited in a uniform manner. We suggest to cite in the text according to the family name of the first author and the year of publication such as (Authorname, 2015) or (Authorname et al, 2015). The List of references should be ordered in an alphabetical order of the family names of the first authors in a chronological order in case of multiple publications. The in-text citations should be amended by small letters (e.g. a, b, c, etc) in case of multiple publications by the same author in the same year. All relevant bibliographical data of publications in scientific journals should be provided, in the order of family names of the authors, initials of the given names, title of the publication, abbreviated name of the journal, the publication date, volume, first - last page number.

Example: Watson WE. An autoradiographic study of the incorporation of nucleic-acid precursors by neurons and glia during nerve regeneration. J Physiol 1965; 180(4):741-753.

Yancey ST, Laki K. Transglutaminase and tumor growth. Ann N Y Acad Sci.1972; 202:344-8.

If there are more than 10 authors, then the author's list can be abbreviated by "et al" after the tenth author.

Book chapters should be cited in the text as journal articles (e.g. Bock, 2013), and they should be cited in the reference list in the following manner:

Bock SC. Antithrombin and the Serpin Family. In: Marder VJ, Aird WC, Bennett JS, Schulman S, White GC II., editors. Hemostasis and Thrombosis, basic principles and clinical practice. Philadelphia: Lippincott and Williams and Wilkin; 2013. p. 286–96.

**Annexes:** A detailed list of the activities of the author(s) should be provided together with acknowledgements for direct assistance by others. This Annex is obligatory.

#### **Unusual USRPs**

**Review:** This form of USRP is only available for students already having an accepted first authored (previous) USRP. It contains the following chapters: Title Page, Table of Contents, Abstract, Aims, Review, List of References, Annexes. The citations and the formats of the chapters have the same requirements as described above. In addition, the Aims should describe the importance of the chosen topic for the Department/Student. The Review should be structured by appropriate levels of headings.

Casuistry: It is a report on observations made from single or multiple cases of a disease occurred at the clinic in which the USRP is being prepared. It may deal with the typical case of a rare disease syndrome or with unusual case of a disease. The case(s) can be introduced in the light of the diagnostic methods and data or the effects of the therapeutic efforts. It is required that the author provides self made representations (Figures, Pictures, Moving picture) of the case(s) and the pathomechanism of the disease. The work should also provide an exhausting discussion from the personal viewpoint of the Author.