

OPEN SCIENCE PLATFORM OF THE UNIVERSITY OF BELGRADE

The platform was adopted on the basis of the Open Science Platform enacted by the Ministry of Education, Science and Technological Development of the Republic of Serbia (Act No. 119-01263/2017-14/2 of 09. 7. 2018), pursuant to the Strategy on Scientific and Technological Development of the Republic of Serbia for the period 2016–2020.

The platform refers to members of the university community, who pursue their scientific research activities in affiliation with the University of Belgrade.

The platform promotes the concept of open science, implying that researchers and the public are provided with free and up-to-date access to peer-reviewed scientific publications, primary data generated during research and other research results, with the aim to accelerate the exchange of scientific information, and the repeatability of obtaining and verifying scientific results, which has a positive impact on the scientific, technological and economic development of the community.

The platform has been created with the understanding that open science is based on logic that is significantly different from the prevailing traditional research and academic practice at the University of Belgrade. Therefore, its introduction is a process that involves a gradual but fundamental change in academic culture.

1. What are the benefits of open science for researchers and for the University of Belgrade?

- a. An increase of the visibility and impact of the results of scientific research. For researchers, this is a prerequisite for increasing citation rates; at the same this enhances the recognition of the University of Belgrade in the world.
- b. Free access to primary data, methodology and analytical software enables the scientific community to reproduce and critically review the results of the original authors. Such synergy among members of the scientific community is beneficial to the advancement of science, the promotion of academic communication and distancing from practices that are contrary to academic integrity.
- c. Free access to research data and the results based on them increases the possibility of improving research methods, thereby directly encouraging the development of science.
- d. The use of standard numeric content identifiers (DOI, ORCID, etc.) guarantees adequate recognition to authors, institutions and funders, and contributes to the quality of citation analysis.
- e. On the one hand, the total fund of the up-to-date publicly available scientific information is enriched, while on the other hand, the society, at least in part, is relieved of the obligation to pay for access to the results of those researches by financing scientific research (through subscription to scientific publications).

f. It provides direct public insight into the use of public funds spent on financing the scientific research.

2. What does the implementation of open science principles mean to researchers in practical terms?

a. The results of their research works (articles, books, etc.) will be made available to the public via the Internet, through the *Creative Commons* and similar licenses. This does not challenge the substance of the copyright protection of the materials made available to the public, but rather, copyright is used in a manner that implies the consent of the copyright holder that any third party may, without obligation to pay a fee, get access to the protected material, record it on computer memory, and print it on paper for use in research or other work. The only obligation of that person is to respect the author's right of paternity (the obligation of the third party to indicate the author's name in quotations and other references) and the right of the author to the integrity of his or her work (prohibiting third party from making changes to the work).

b. Making available to the public, through the Internet, the primary scientific data used in creating the materials referred to in point (a) so that the conclusions reached in those materials can be critically considered.

c. Making research software used for data analysis accessible to the public via the Internet, so that the entire research process is reproducible.

d. It is implied that activities under (b) and (c) will not always be possible. The researcher has the right not to publish his or her results or research data, for example, until the completion of the series of publications planned to be relying on the use of that data. In such cases, the principles of open science do not imply any pressure or compulsion to publish.

e. When making publications and data available to the public via the Internet, it is important to use standard numeric content identifiers (DOI, ORCID, etc.) to increase the visibility and facilitate the reproducibility and critical evaluation of the results of scientific research.

3. What are the specific obligations of the researchers?

Researchers have the obligation to deposit the electronic versions of all scientific publications that have been published in affiliation with the University, and in particular those created as a result of projects funded by the responsible ministry, in the corresponding repository of the University of Belgrade. The research data collected during the research, the peer-reviewed manuscripts (the so-called *post-print*), various types of materials, audio-visual materials, working documents, posters, presentations, reports, and similar may be deposited in the repository.

Professors and researchers are encouraged to enable open access to these materials whenever there are no legal and/or ethical restrictions.

4. The first step towards the affirmation of the principles of open science was made at the University of Belgrade by introducing a system of mandatory deposit of defended doctoral dissertations in the electronic repository of the University. Further steps lead to dealing with several types of difficulties and obstacles.

a. It is necessary to alter perception and past practices based on an 'ownership' relationship towards research results and primary data. The transition to a culture of open science involves adopting a different system of values and incentives, which at the same time provides greater transparency of science, reduces the cost of disseminating scientific research results, and contributes to a more equitable appreciation of researchers and their institutions.

b. It is necessary to optimize the organization of publishing activities at the University of Belgrade, and adjust it to the operation in an open-access regime on a rational basis. At the same time, it is necessary to develop a modern IT infrastructure required by open science.

c. It is necessary to reconsider the existing system of rewards and incentives in the career development of professors and researchers, as well as the existing criteria for evaluating scientific contributions, in order to integrate the values and good practices of open science into them, and eliminate or make less relevant what is contrary to open science.

5. The University of Belgrade will establish an Open Science Committee as an expert body with the mandate to affirm the principles of open science and coordinate all activities to gradually introduce its principles.

(Open Science Platform of the University of Belgrade was adopted by the Senate of the University of Belgrade at its session held on March 13, 2019.)