

The Young Scientist Council at the Ministry of Education and Science in Ukraine



ASSESSING THE NEEDS OF UKRAINIAN SCHOLARS IN DANGEROUS CIRCUMSTANCES

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Ukrainian scholars and scientists, who are in a difficult situation due to the war that was launched by Russia, wish to extend their sincere thanks to the international academic community, which has given financial and moral support to Ukrainian academics, so that their professional development can continue even at this time, and assisting with the provision of accommodations for those obliged to leave Ukraine during the war.

It is important for us to be reassured that we are not left on our own, and your demonstration of solidarity with us is very encouraging for us.

We feel your support for our profession-related goals and for our desire to rebuild Ukraine and even to make it better than ever. All of the grants that are received make Ukraine stronger and more resilient in the face of crises and shocks.

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Background

For Ukrainian academics, facing the recent period of 2022 has been a difficult ordeal due to the war launched by Russia. Millions of Ukrainian families have been forced to flee from their homes and move elsewhere – either to the western part of Ukraine, or to some other country. The international academic community responded immediately to the needs of Ukrainians in the academic sphere. Since the outbreak of the war many offers have been received from various universities around the globe, although the majority have been directed to individuals who have already been abroad previously. According to various estimates, there are between 4,000 and 6,000 scholars who have already had to leave Ukraine. By their help, universities and research labs in the EU and beyond are making invaluable contributions to the preservation of Ukraine’s intellectual assets.

However, the vast majority of those in the Ukrainian academic community (about 100,000) have decided to remain in Ukraine for various reasons, and are in urgent need of assistance, as many universities and laboratories in the east and north of the country have been severely damaged or even destroyed; some of them have lost everything in the course of one month.

In order to assess how it may be possible to support academic personnel in Ukraine, the Young Scientists Council at the Ministry of Education and Science in Ukraine has conducted a needs assessment study entitled “*Assessing the needs of Ukrainian scholars in dangerous circumstances*”, the results of which may be useful to potential donors, government and local authorities, and foreign universities seeking to develop programs to support Ukrainian scientists remotely.

During the development of new mechanisms for Ukrainian scholars at risk (remote work) it worth paying attention on UAScience.Reload [report](#) - an initiative of Ukrainian scholars from all over the world.

Why remote assistance is important?

Since the onset of the COVID-19 pandemic, universities and labs everywhere have adapted to working remotely and have developed various tools and software programs for carrying out different types of academic activities, and this pattern includes scholars and scientists in Ukraine. Thus they were already prepared to work remotely when the war broke out, and in this way they will be able to further their professional development, establishing additional international contacts and making a contribution to the advancement of innovation in Ukraine.

Moreover, grants from abroad, whether from individuals or from institutions, will play a huge part in Ukraine’s economic survival. The euros, dollars, zlotys, kronas, etc. which are received in Ukraine will be used exclusively to cover expenses such as food, clothing, utilities, and transport. This infusion of funds will indirectly benefit Ukrainian businesses, which in turn will be able to pay their taxes; the funding will also help Ukrainian universities, schools, hospitals, etc. to contain operating and paying their personnel. This may be considered as the most effective type of international aid.

Methodology

The methodology is based on a written survey and short individual interviews in an oral form. The survey was conducted during the period from March 23 to 30 in communication (primarily) with 303 members of HEIs and research labs who have remained in Ukraine and are in varying degrees of personal danger. The respondents were reached via channels on social media Facebook, Viber, Telegram, and other platforms by the members of the Young Scientists Council at the Ministry of Education and Science in Ukraine.

Taking into account diverse military situation, problems with the Internet connection and time resource, the *Questionnaire* was limited to four main open questions:

- 1) Your position/academic status,
- 2) The field of science you represent,
- 3) What would you need from partner universities to continue working remotely (e.g access to databases, archives, etc.),
- 4) Your suggestions on how to ensure remote work with partner universities.

The survey was anonymous and was conducted via google-form in the Ukrainian language. Individual talks/short interviews were conducted by the same structure around four open questions. The results were analysed and summarised and presented in English.

Results

Survey

Among those who participated in the survey -

- 74% (224 people) belong to the academic staff of the HEIs in Ukraine, of which 49.5% (150 people) with research and teaching activities, including professors;
- 12% (36 people) are PhD candidates in HEIs and research institutions;
- 11% (34 people) are researchers;
- 3%(9 people) indicated a different status – medical doctor, freelance trainer, head of doctoral school (Unit for doctoral training), etc.

In replying to the question, “**What do you need for remote research work?**” Ukrainian scholars indicated the resources to which they need access in order to continue their work:

- open and free access to the research databases (such as Statista, Bloomberg, INICHECK, Springer Link, Scopus Preview, Reaxys, SciFinder, Web of Science, and Scopus etc. and others specific databases by the fields of sciences, e.g. aquaculture, cartography, earth remote sensing data)
- ensuring the journal subscriptions (with unlimited access) in the biggest scientometric databases;
- access to the archives, also specialized archives for specific scientific fields;
- access to the statistics in different countries to conduct analysis;
- possibility to use and work on the Internet platforms for remote work, also with a possibility to work in an asynchronic way, cloud services;
- access to the educational materials to use in the teaching process;
- access to the online libraries (such as JSTOR), access to the university and other repositories, including doctoral theses and monographs;
- management, accounting, taxation software (such as SAP);
- remote access to the research equipment and the laboratories in the foreign

institutions and the possibility to send samples for research by physical and chemical methods (e.g. synthetic chemical laboratories were mentioned specifically);

- access to the licensed software, also remotely;
- access to the supercomputer possibilities to conduct calculations of big amounts of data and for data analysis;
- grant support or inviting of researchers to the existing projects and partnerships;
- providing the consultations on patent-related issues in the EU;
- waiving the article processing charge for publication and allowing to publish in good journals in the Ukrainian language;
- new contacts and networking with the colleagues from abroad, also for writing joint articles and submit project proposals for funding;
- possibility to participate in the online events free of charge;
- additional training in academic English.

Almost all respondents from all fields of science stated that access to databases, libraries, archives, etc. is urgently needed. Representatives of the natural sciences noted that access to Statista, WoS, SCOPUS, Reaxys, SciFinder and other databases is required for remote work. Additionally, economics and business representatives need access to the Bloomberg database. Databases and repositories are the most important for doctoral candidates as well.

A small number of participants (12 of 303) responded that they needed computer equipment and to have good Internet connection in order to work effectively.

Some individuals mentioned very basic needs like save place to stay and the financial support as the most urgent need. Nevertheless, there were several optimistic answers assuring that everything is ok and they don't need anything.

Taking into account the basic information that was mentioned as the most important need for them, we assume that many of the respondents have not so much experience in the international cooperation and don't have partners from abroad at the individual level.

In answering the question “**Do you have any ideas for remote work?**” Ukrainian researchers and doctoral candidates indicated their willingness to:

- participate in the joint research projects, also interdisciplinary, including the internships;
- participate in the virtual mobility with ensured funding and scholarships;
- be involved in the peer-review activities for journals published in hosting universities;
- obtain the research equipment as the humanitarian aid;
- participate in teaching process, be invited as guest lectures or organize virtual lecture series, joint distance learning courses, online seminars, training sessions, and webinars, conferences;
- joint publication activities: prepare joint articles, monographs and collective monographs, dictionaries, reference books, encyclopedias;
- do specific scientific tasks, e.g. carry out calculations, including quantum chemical, model building and data array processing, analysis of research results;
- work with Ukrainian students who would translate Ukrainian scientific articles in their various specialties, into the languages of relevant countries, and who could represent the European scientific community at various research-related events;
- develop academic mobility programs, to be implemented when the invasion has ended;

- process "raw" data from the equipment of foreign universities;
- cooperate in the development of Ukrainian economic reconstruction programs;
- conduct joint study courses with bilateral certification (1-2 ECTS) for Ph.D. candidates and students;
- participate in training sessions related to patents for inventions, etc.

Besides the academic ideas, there are also humanitarian needs, like intensify the humanitarian aid, also to researchers and stop the war. Ensuring proper financial support and salary is important to the respondents to allow accommodation and motivation to stay in science.

According to some respondents, the priority should be given to the researchers from the most endangered areas of Ukraine or the territories with the heaviest damage.

Several respondents mentioned their needs addressed to their home institutions and Ministry, such as less bureaucracy, recognition of mobility periods abroad.

Some researchers from social sciences and humanities suggested very concrete research topics related to the current Russian-Ukrainian War.

Taking into account the amount of offers that is dedicated to Ukrainian researchers, doctoral candidates and students and that the respondents mentioned quite similar activities, we may assume that there is still lack of structured and clear information about the options and possibilities or they cannot get it due to different circumstances. Maybe more communication activities needed to raise awareness and get feedback about the problems and barriers in access to these opportunities.

Individual/private interviews

In private interviews scholars perceive remote work in different ways. Some of them express their readiness to be involved in different kinds of work immediately, for others it is still difficult to cope with stress and to start any research work.

Recommendations

For scholars and scientists in Ukraine, support from abroad will facilitate their professional development, and foster international cooperation and the integration of Ukrainian researchers and university teachers into the global academic society.

Short-term needs

Analysis of the needs assessment survey demonstrates that remote work arrangements enable Ukrainian scientists to continue their day-to-day work, and ensures the continuation of their research.

This can be facilitated by *short-term individual grants*. However, during the first month of the war, when foreign universities were extremely active in making offers, many academic personnel here were not in a position to make use of the assistance that was offered, due to psychological and physical stress factors, and the basic need to look for places where they could have shelter and keep themselves and their families safe. These factors prevented or at least impeded the preparation of project proposals and applications. In

view of this, it would be more logical to reserve these individual-grant funds for the second half of the year, so that scientists and scholars have time to adapt to the new circumstances, and then will be better able to take advantage of opportunities made possible by grants.

In addition to actual grants, it would be extremely beneficial for Ukrainian scientists if *scientific equipment* from the funders or European laboratories could be obtained under the general category of *humanitarian aid*.

Short-term funding could cover needs such as researchers' salaries, subscriptions (such as for journal and database sets), licensed software, ZOOM software, organizational expenses of Ukrainian scientists at conferences involving fees, and gaining access to distance learning platforms.

Separate support could be addressed to the researchers from the territories of Ukraine with the heaviest damage.

Medium-term needs

Grants for Joint Ukrainian and European research. Ukrainian scholars hope to increase the number of cooperation agreements with research groups from foreign universities and labs as well. This means that they are ready for institutional level cooperation dealing with research teams from different labs and universities. For remote work, the teams could be composed of a combination of Ukrainian researchers and ones from the other universities.

In the medium term, individual grants will continue to be useful; as long as the war continues, Ukrainian scholars have had to temporarily leave their careers in order to work as volunteers, military service people, or in other professions. Thus, these individuals who now may find themselves in dangerous circumstances will be greatly helped by *grants that assist them to return to their academic work*.

Long-term needs

As Ukraine is now seeking to move towards the path of European Union research systems, Ukrainian academics will require some training to obtain knowledge of EU research agencies and their activities, their management patterns, and their funding allocations. Training sessions of this kind would be helpful in fostering the innovational skills of Ukrainian research personnel in the upcoming period when extensive reconstruction will be necessary. It would be beneficial if these training sessions could be conducted partly by remote means, and partly in person. Academic English training could be beneficial.

Sectoral support

Grants for sectoral support can be useful for assist certain fields of science. It is necessary in order to accelerate the pace of their development. STEM industries are not widespread among young people for doctoral training in Ukraine, therefore the introduction of individual grants for them would help raise such industries to a new level and make them attractive to young people. Specifically the life sciences, with the focus on agrosience and industry needs to be addressed, given that Ukraine is the world's breadbasket and war can cause famine in poor countries.

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