

Beyond Resilience

Professional Challenges, Preferences,
and Plans of Ukrainian Researchers Abroad



BEYOND RESILIENCE

Professional Challenges, Preferences, and Plans of Ukrainian Researchers Abroad

ScienceForUkraine Survey Report
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EXECUTIVE SUMMARY

Aims. Based on the data from the Ministry of Science and Education of Ukraine, in 2021 there were 60,000 researchers and 35,000 support staff in Ukraine. Many of them are currently displaced – both internally (in other Ukrainian locations) or externally (in different countries). The main objective of this survey is to provide first-hand reliable information on the professional challenges and preferences regarding the support measures for those Ukrainian researchers who left Ukraine in the aftermath of the Russian invasion of 24 February 2022.

Method. The survey is of exploratory character and, due to the lack of previous similar datasets, is aimed at outlining the current socio-demographic status of Ukrainian researchers abroad and the professional preferences and challenges they face. From 27 June to 5 September we collected 619 responses from the target group of the study, namely those who were employed by a scientific institution in Ukraine as of 24 February 2022 and left Ukraine as the result of the Russian invasion on or after that date.

Demographics. The majority of respondents are females aged between 40-49 years, located in Poland or Germany in large or very large cities. Overall respondents resided in 35 countries in Europe and North America. Over two thirds of respondents are accompanied by family members, usually by children (over 50%). The majority of respondents (62%) were senior researchers, who received a doctoral degree 7 or more years ago. Main research areas represented in the sample included social sciences (29%) and humanities (17%), as well as natural sciences (25%).

Professional status before February 24. Before February 24, the vast majority of respondents (94.8%) worked in academic settings (a higher education institution or academy of sciences). The bulk of respondents had home institutions based in the city of Kyiv (41.54%) or the Kharkiv Oblast (25.83%).

Relationship with the home institution. At the time of participation in the study, most respondents performed remote work for a home institution under the same conditions as before the invasion (30.16%) or were on unpaid leave (28.75%), which accounted for almost half of the respondents. Regardless of the current professional situation in relation to their home institution, almost 85% sought offers of support from outside of Ukraine. Just over half of the respondents have been receiving their salary or scholarship from their home institution. Among them, over half were paid with a delay and only around two thirds of the respondents received full remuneration. Over half of the respondents reported the home institution's attitude towards those who left the country as good or neutral, while almost a third reported difficulties (forced unpaid leave, ultimatum to either return or lose their job).

Professional situation abroad. More than one third of our respondents work remotely at Ukrainian institution while over half are currently attached to a foreign institution through a scholarship, temporary employment, or, very rarely, a permanent position.

Preferred support types. The majority of respondents marked their preference for research grants and internships, with more than one third opting for a permanent or temporary position. Only slightly more than a quarter favoured scholarships. The majority preferred long term support (i.e. a year or longer). When asked about the importance of different support types, respondents valued the accommodation and salary the most, followed by family allowance, ability to work remotely and medical insurance.

Main obstacles. Among the most important obstacles faced, respondents indicated an insufficient number of offers in their disciplines, followed by their lack of experience in applying for external funding, in addition to language barriers. There were some disciplinary differences observed: a lack of experience in applying for funding is a key obstacle in agricultural sciences, medical and health sciences, and humanities, while the language barrier was a major impediment in medical and health sciences, engineering and technology and agricultural sciences.

The value of experience abroad. Respondents almost unanimously see the value of being abroad for their future professional development. The most valued experiences gained abroad included establishing new professional contacts, together with gaining new skills and competences, especially language skills.

Plans and ideas. When asked whether they plan to return to Ukraine if the war was to end in a few months, more than a third expressed such a desire, with less than a third of respondents voicing the opposite opinion. Although the researchers indicated their plans for the next academic year, at the same time they note that it is difficult for them to plan in advance. Respondents have clear and thoughtful opinions about the post-war recovery of Ukrainian science, positing immediate changes in the funding system, overall reform of higher education and science management at the state level, greater autonomy of the universities, de-bureaucratisation, and an effective fight against corruption and plagiarism.

Conclusions. While navigating the uncertainty of both their personal and professional lives, Ukrainian scholars express not only a great resilience and strength in coping with their current situation, but also a great level of care about the future of their home institutions and the post-war recovery of Ukrainian science.

INTRODUCTION

Based on the [data from the Ministry of Science and Education of Ukraine](#), in 2021 there were 60,000 researchers and 35,000 support staff in Ukraine. Many of them are currently displaced - both internally (in other Ukrainian cities) or externally (in different countries). Moreover, as a result of Russian aggression against Ukraine, many higher education institutions have suffered large-scale material losses, including destruction of infrastructure, making research work in Ukraine extremely difficult. Numerous foreign institutions and funding bodies have already offered their help, as evidenced by the [ScienceForUkraine](#) database, which has provided over 2,600 support listings since the beginning of the Russian invasion. Nevertheless, the actual scale of the problems, the preferences of Ukrainian researchers and their plans for an uncertain future still remain to be assessed.

This survey builds on the previous studies directed at the Ukrainian scholarly community: a [study conducted by the Young Scientist Council \(YSC\)](#) and [data presented by the European Council of Doctoral Candidates and Junior Researchers Eurodoc](#). The YSC needs assessment was focused on those early career researchers who remained in the territory of Ukraine and on the options for providing them with remote support. It showed the possible approaches taken in providing support for researchers in Ukraine by the international organizations and funders. At the same time, the situation and the needs of those who have left the territory of Ukraine may be entirely different, and they might require different kinds of support. In particular, such issues include: housing, providing for dependents, availability of scholarship and job offers, possible discrepancies between Ukrainian and the EU higher education systems and employers' demands, discipline-related discrepancies, combining remote jobs in Ukraine with the opportunities abroad, career development motivations and strategies in war time.

The main objective of this survey is to provide first-hand reliable information on the professional challenges and preferences regarding the support measures for the Ukrainian researchers who left Ukraine in the aftermath of the Russian invasion of February 24, 2022.

The findings are proposed as empirical evidence for planning support programmes by academic institutions and funding institutions, and will help properly address their research needs by providing information about the demographic profile, discipline and career stage of scientists in need, as well as about the particular professional and living challenges they face.

We publish the highlights of our study in the first version of the report to provide general findings to the community, so as to better inform the ongoing initiatives being undertaken. A more elaborate analysis will follow in the subsequent months as we plan to deepen the qualitative study with follow-up interviews conducted with Ukrainian scholars.

The authors would like to thank the respondents for their active engagement with the survey and for contributing their time and reflections. We hope the results of this study will help not only the researchers themselves but also higher education institutions, funders, and other relevant stakeholders, to better comprehend and address the needs and plans of Ukrainian scientists affected by war.

Methodology

The survey is of an exploratory character and, due to the lack of previous similar datasets, it aims at setting out the current socio-demographic status of Ukrainian researchers abroad and the professional preferences and challenges they face.

Scope

In line with the [OECD glossary](#), researchers are defined in this study as "professionals engaged in the conception or creation of new knowledge, products processes, methods, and systems, and in the management of the projects concerned." The study follows the [European Charter for Researchers](#) by addressing researchers "at all stages of their career and covers all fields of research in the public and private sectors, irrespective of the nature of the appointment or employment, the legal status of their employer or the type of organisation or establishment in which the work is carried out. It takes into account the multiple roles of researchers, who are appointed not only to conduct research and/or to carry out development activities but are also involved in supervision, mentoring, management or administrative tasks." Consequently, this study also addresses researchers working in support staff positions.

The survey collected data on four main fields related to Ukrainian researchers and support staff :

1. **Current challenges** – their living and working conditions and professional situation.
2. **Current preferences** – what kind of support do they expect?
3. **Individual plans** – what are their individual plans for the near future?
4. **Ideas for the future** – how do they see rebuilding the Ukrainian research system in the future?
What could be done to facilitate it?

The questionnaire was prepared in English by the research team and then translated into Ukrainian and distributed only in this language to ensure that the responses come from the Ukrainian scientific community. The survey consisted of 57 questions, including 11 open questions.

Sampling strategy and data collection

The survey was available on a survey platform, [webankieta.pl](#), from 27 June to 5 September 2022. Since there is no central database of Ukrainian refugee scholars, we used an open call and snowball sampling technique. We disseminated the information about the survey through the mailing contacts and social media of institutions involved in the study or those supporting Ukrainian scholars: ScienceForUkraine, the Young Scholars Council at the Ministry of Science in Ukraine, Scholars at Risk, the Polish Academy of Sciences and the Confederation of Polish Rectors (CRASP). We wish to thank all those institutions and organisations for their help.

Data processing and the final dataset

Altogether, 833 respondents had filled out the questionnaire by the 5th September 2022, when the data were collected for analysis. Out of this total only 619 (74.3%) passed the filter questions, ensuring that respondents come from the target group of the research, namely that they were employed by a scientific institution in Ukraine as of 24 February 2022 and left Ukraine as the result of the Russian invasion on or after that date. This number exceeded our initial expectations as we

aimed for a threshold of 300 respondents, since this figure is in accordance with the number of refugee Ukrainian scholars hired in Poland at that time (app. 350 according to CRASP). We assumed that the total number worldwide is considerably higher.

It is worth noting that only 353 (57%) respondents completed the questionnaire, according to the tool. However, 436 (70%) responded to the final, open question, which could have been caused by not clicking on the final button closing the questionnaire. Moreover, there were no mandatory responses, so each respondent could omit some. The average response rate was 81% (median of 95%). Figure 1 shows the number of responses per question (including the initial filter questions).

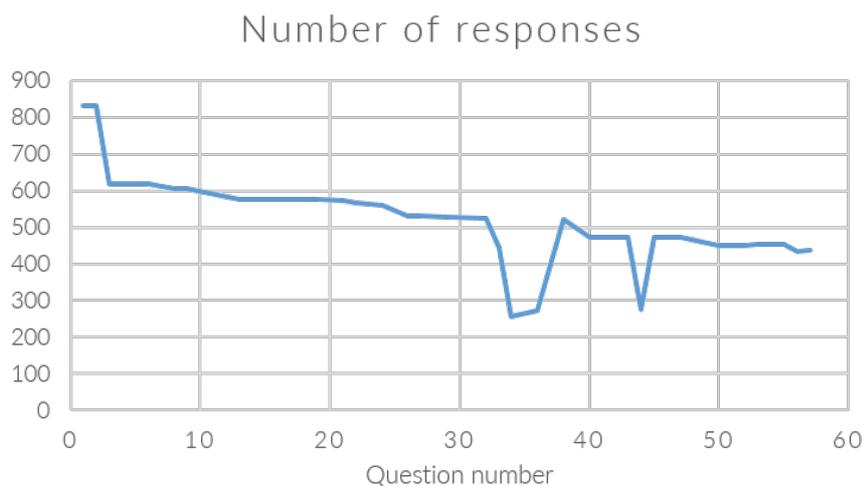


Figure 1. Number of responses per question.

Given the non-representative, exploratory nature of the survey and the high overall response rate, we decided to analyse the answers of all 619 respondents to ensure their point of view is represented. Responses to open questions were analysed by the research team and clustered into groups according to the observed tendencies.

Ethics

The study follows overarching ethical principles, including: respect for human dignity; scientific integrity and validity; social value; and the rights and interests of the participants in the research. Particular attention was given to respondents' safety (and that of their families and friends), security and well-being, and the principle of proportionality; the right to privacy; and the right to the protection of personal data. In particular, the study took into account the European Commission guidelines on research on refugees, asylum seekers and migrants, as well as the code of ethics of the International Association for the Study of Forced Migration, in order to avoid the risk of causing any undue harm or increasing the vulnerability of the respondents. Both the research design and the questionnaire were formulated in consultation with the CMR UW Ethical Board. The feedback was incorporated into the final research design. The survey was anonymous to avoid any risk of possible harm to researchers or the institutions they come from.

CURRENT SITUATION

Demographics

The vast majority (84%) of respondents were **women** (15% were **men** and 1% did not reveal their gender). The sample's inherent gender imbalance was expected, as men aged 18 to 60 have not been allowed to leave Ukraine since the early days of the invasion, with certain exemptions (disabled men, fathers with many children, etc). Given this situation almost half of the male respondents' group was over 60, whereas in the case of women over half of the respondents were between 30 and 49 years old. Furthermore, in the age range 18 to 59 some of the respondents did not reveal their gender. **Almost all respondents were citizens of Ukraine**, though our survey did also contain 7 non-Ukrainian researchers.

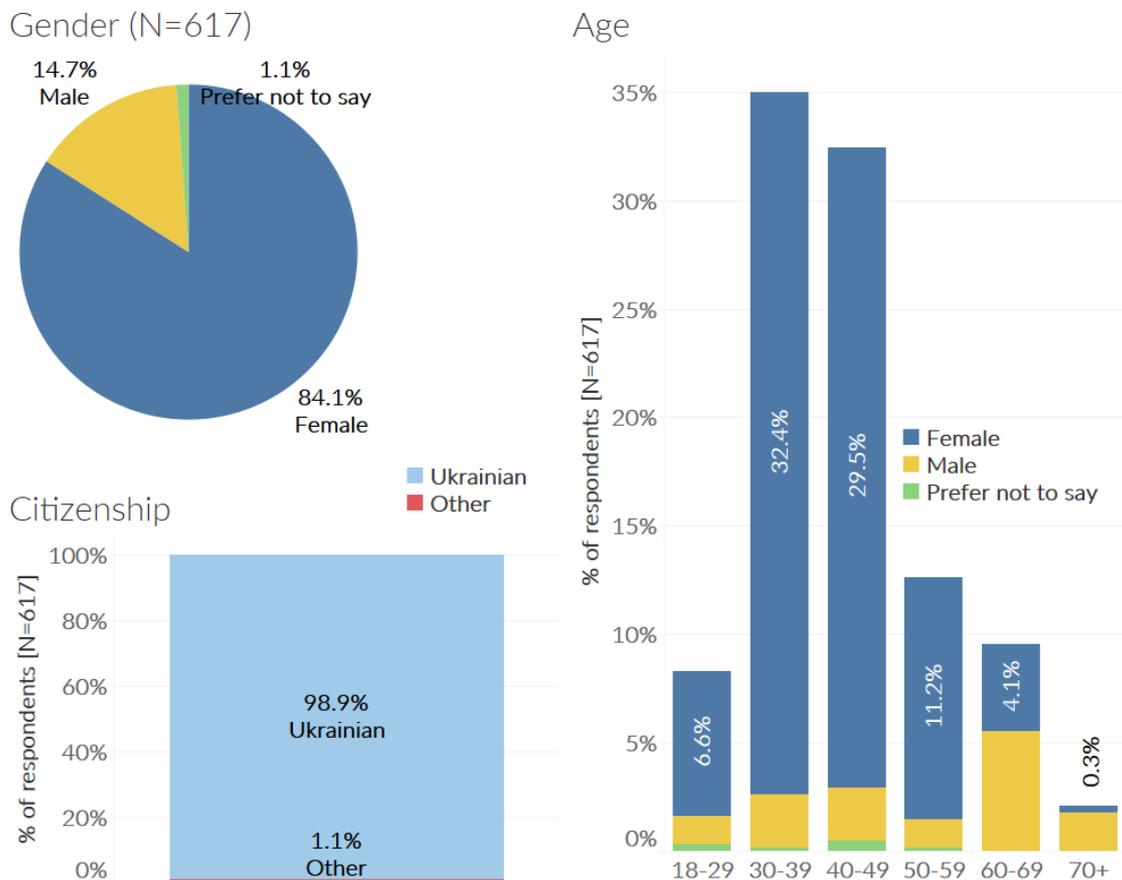
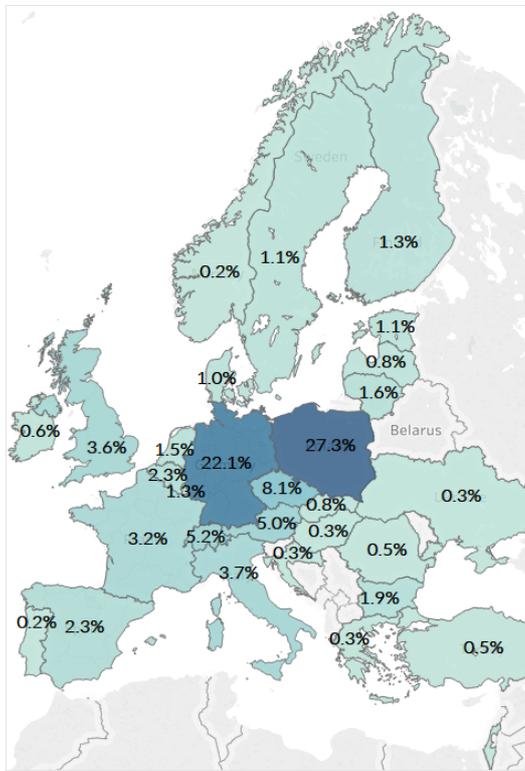


Figure 2. Gender, age, and citizenship of respondents.

Current country of residence (N=618)



Size of the current city (N=606)

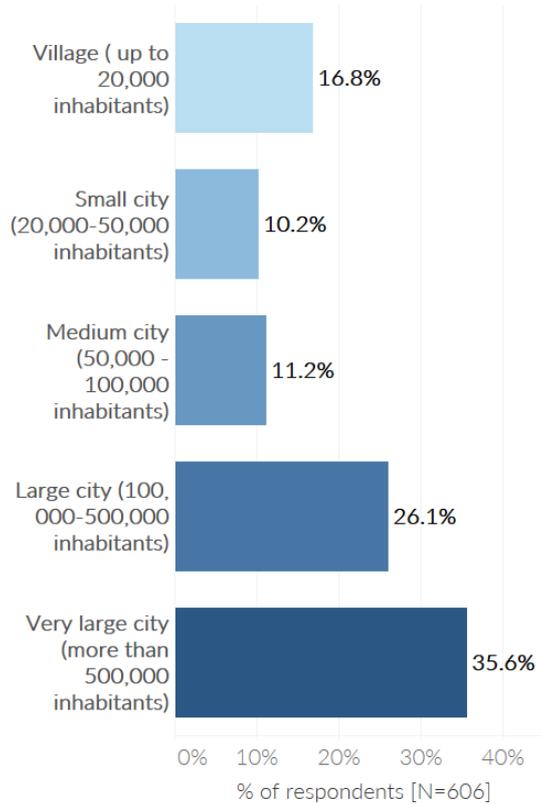


Figure 3. Current residence.

Our respondents are based in 35 countries, mostly in Europe and in the USA and Canada.

Most of the respondents resided in **Poland** (27.3%) and **Germany** (22.1%), with a notable presence found in countries such as **Czechia** (8.1%), **Austria** (5%), **Switzerland** (5.2%), **UK** (3.5%), and **France** (3.2%).

They were mostly located in larger urban areas – more than half of them (61.7%) reported living in a **large** (100,000 – 500,000) or **very large** (500,000+) city. The rest of the respondents were located in **medium** (11.2%) or **small** (10.2%) cities, with a relatively large proportion (16.2%) staying in **villages** of up to 20,000 inhabitants.

Family members

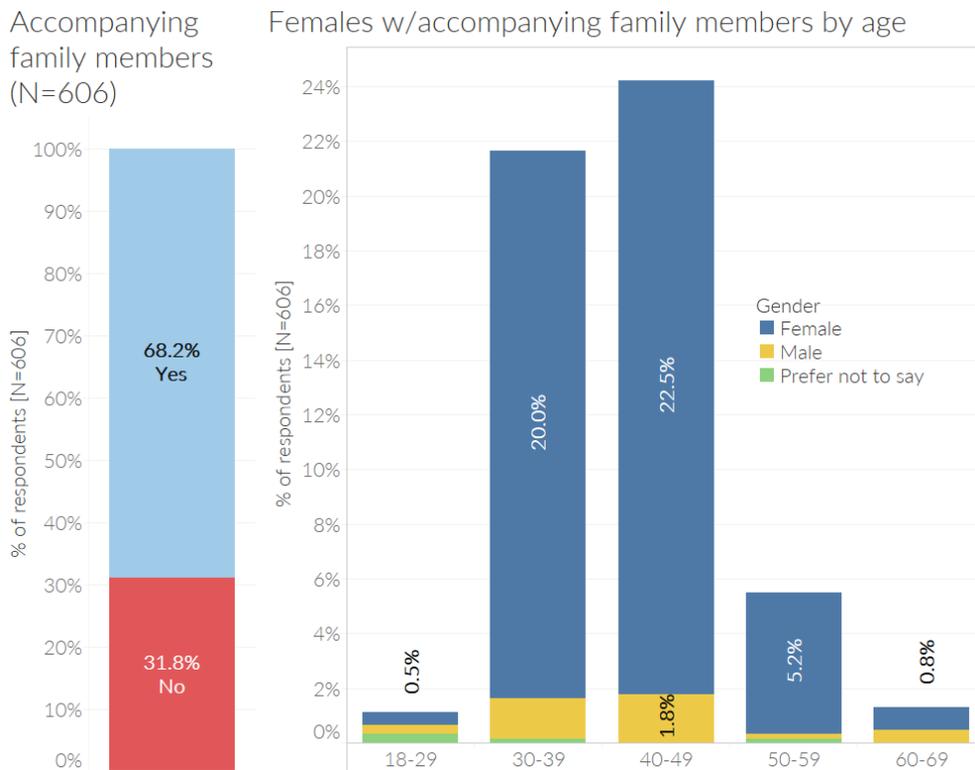


Figure 4. Accompanying family members.

Almost 70% (417) of the respondents had accompanying **family members**. In this group almost 50% are in the age range from 30 to 49, and most of them are women (Fig.4).

Accompanying family members (N=606)

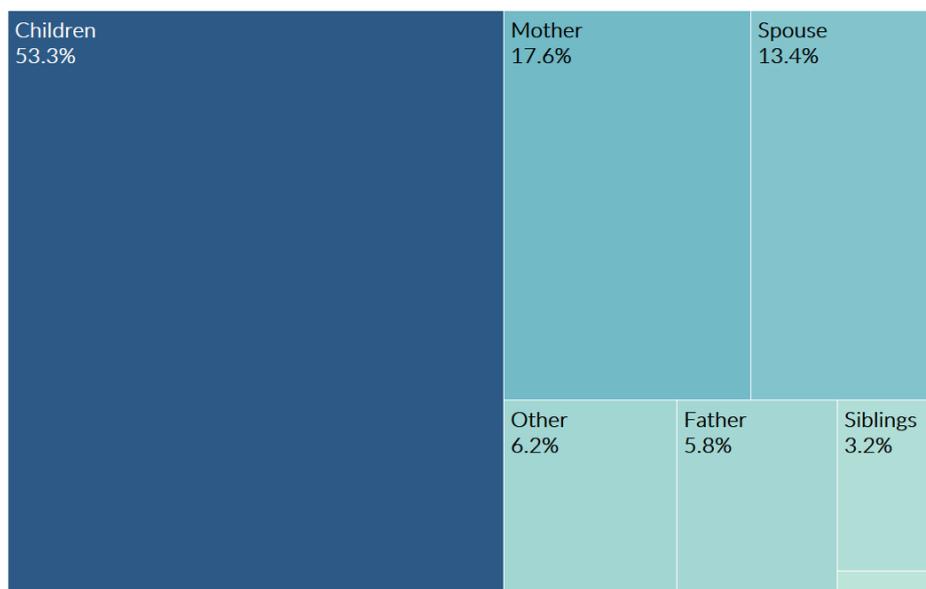


Figure 5. Accompanying family members - details.

Out of the respondents accompanied by family members, a majority reported having **children** under their care (55%), while 18% percent were accompanied by a **mother** and 14% by a **spouse**. Other options included **father** (5.7%), **siblings** (3.2%), or, relatively rarely, a **partner** (0.5%).

Professional status

Professional status in Ukraine (N=576)

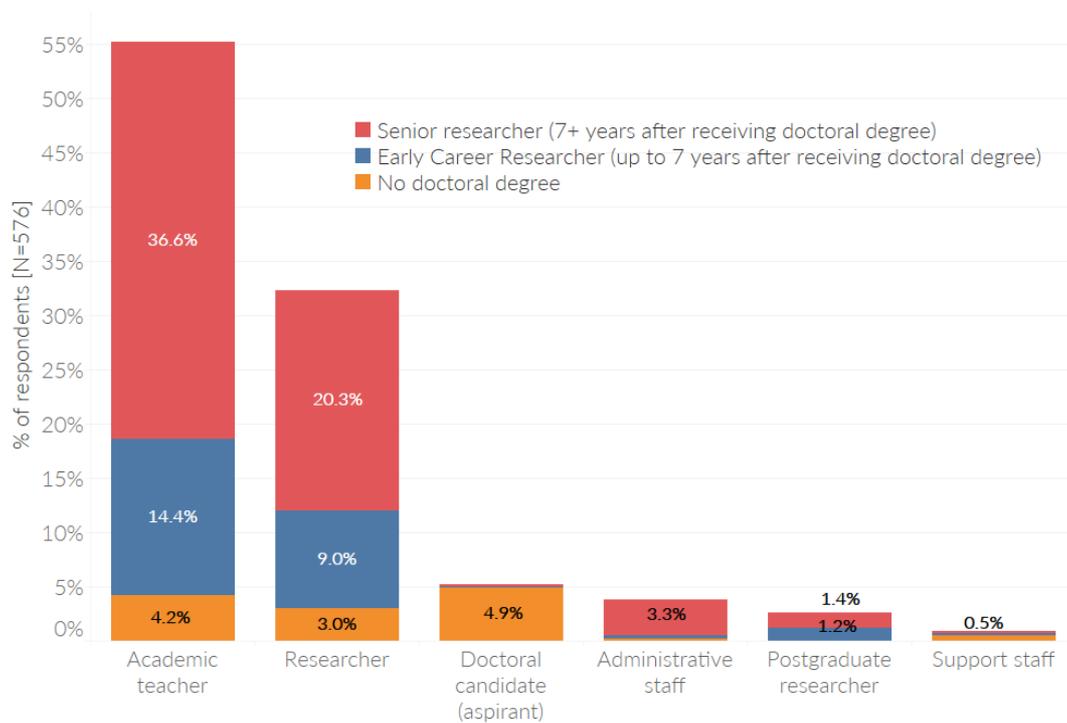


Figure 6. Professional status.

The majority of respondents (62 %) were **senior researchers**, who received a doctoral degree 7 or more years ago. In this group, almost all identified their profession as **academic lecturers or researchers**. One quarter of the respondents were **early career researchers** (less than 7 years after obtaining a doctoral degree), and the other 13% were **doctoral candidates** and **other professionals without a doctoral degree**. In the category of support staff, the following positions were mentioned: laboratory assistant and methodologist, teaching assistant and intern.

Disciplines

General OECD research areas

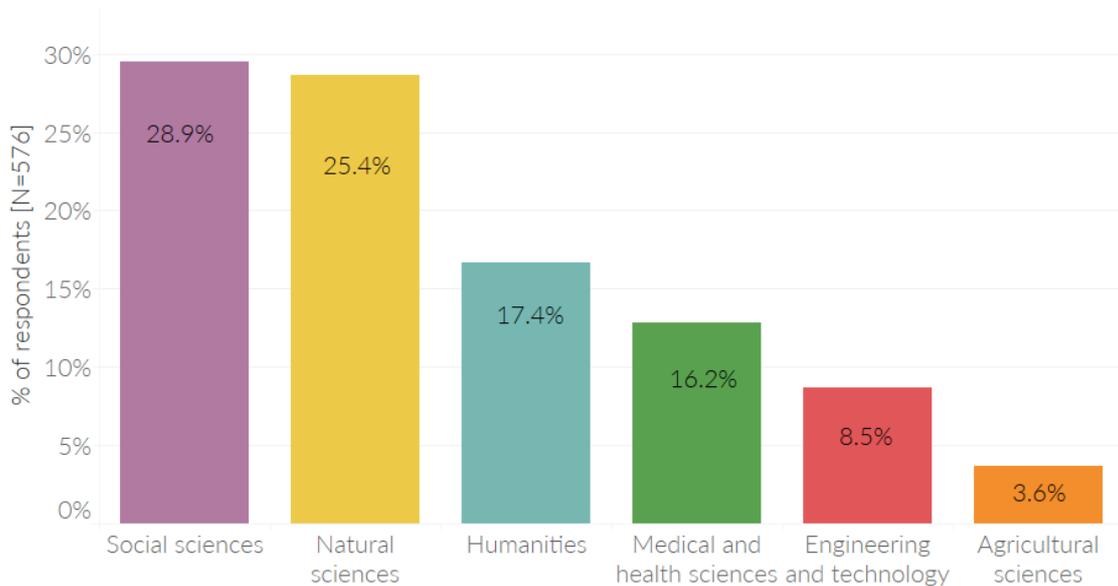


Figure 7. OECD research areas.

The majority of the respondents represent **social sciences** (29%) and **humanities** (17%), as well as **natural sciences** (25%). When it comes to particular disciplines, most researchers in social sciences came from **economics and business** (13.4% of all respondents), **educational sciences** (5%), **law** (4.8%), and **psychology** (3.1%). Natural sciences had the strongest representation in **physical sciences and astronomy** (7.9% of all respondents), **biological sciences** (7.8%), **mathematics** (3.3%), and **computer and information sciences** (3.5%). In the humanities there were researchers in **languages and literature** (7.8% of all respondents), followed by **history and archaeology** (2.8%) and **philosophy** (2.2%). In medical and health sciences **clinical medicine** was strongly represented (9.2% of all respondents), together with some representatives from **health sciences** (2.2%).

OECD research areas (N=576)



Figure 8. OECD research areas (details).

Professional status prior to 24 February

Employment before 24 February 2022 (N=575)

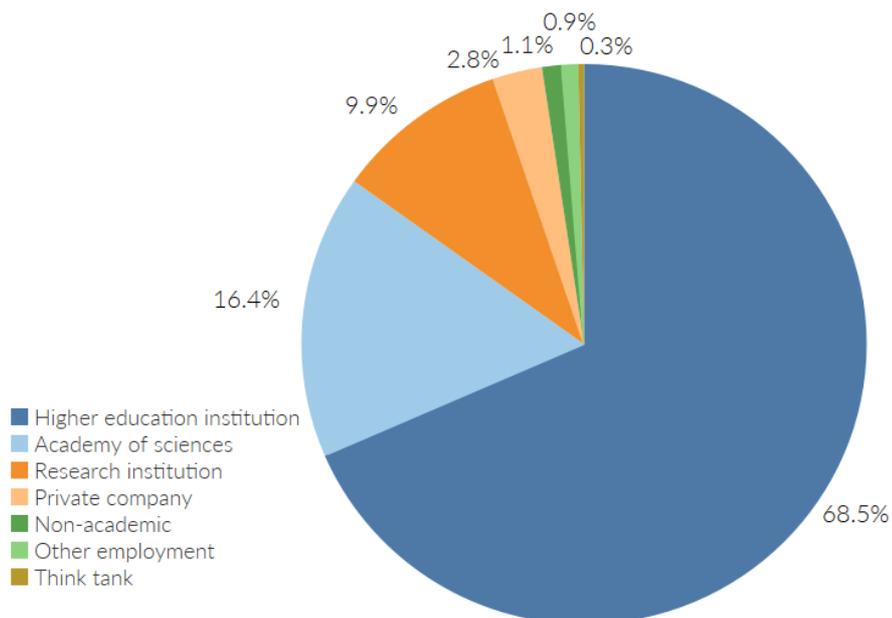


Figure 9. Employment before 24.02.2022.

Prior to February 24, the vast majority of respondents (94.8%) worked in **academic settings**, either at a **higher education institution** (68.5%), **academy of sciences** (16.4%), or at a **research institute** (9.9%). A small percentage of responses concerned employment in the **private sector** (2.8%), **outside the academy** (1.1%) or in a **think tank** (0.3%). Less than 1% indicated a different place of employment, and these were: NGO, a governing body in higher education, medicine and private museum.

The majority of respondents indicated their home institutions as being located in the **city of Kyiv** (41.5%) or the **Kharkiv oblast** (region) (25.8%). Only a few per cent (between 2 and 5%) of the respondents were attached to an institution based in one of the following oblasts: **Lviv, Donetsk, Odesa, Dnipropetrovsk, Sumy, and Volyn**. Each of the remaining oblasts was represented by less than 1% of responses (from 0.78% for Ivano-Frankivsk to 0.07% in the Transcarpathian oblast), other than the Kirovohrad and Crimea oblasts that are not represented in our sample (Fig. 10).

Location of home institution in Ukraine (N=573)

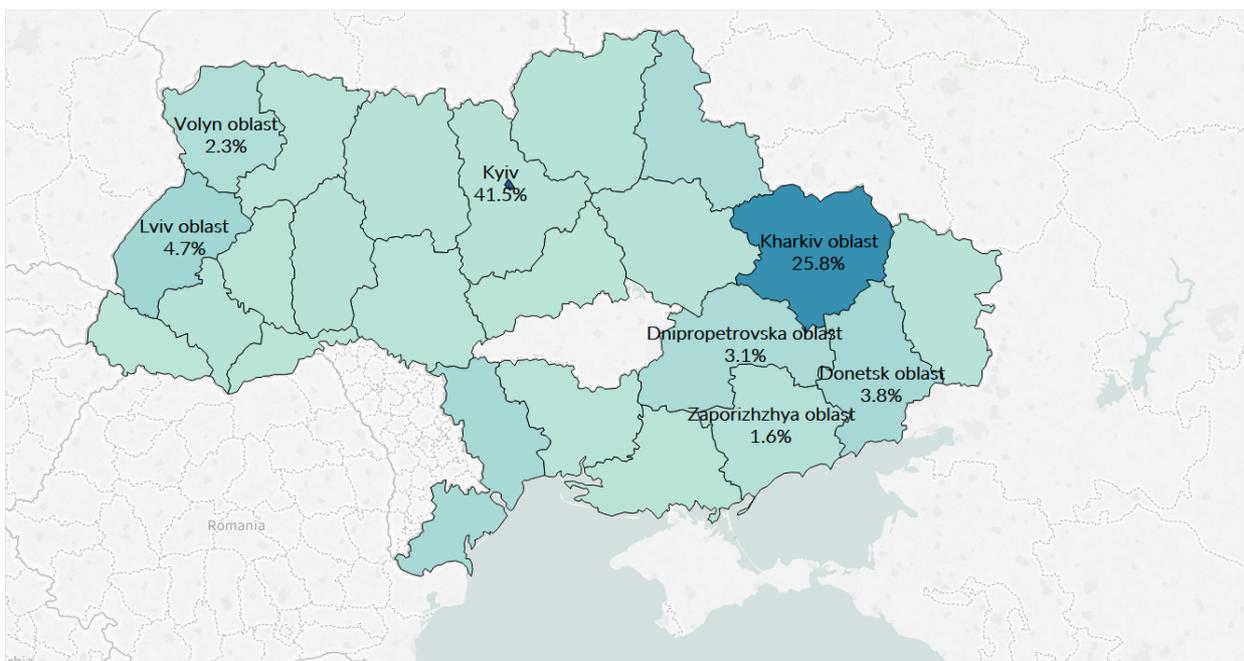


Figure 10. Location of home institution in Ukraine. The most frequently indicated oblasts are highlighted.

Relationship with the home institution in Ukraine

Relationship with the home institution (N=567)

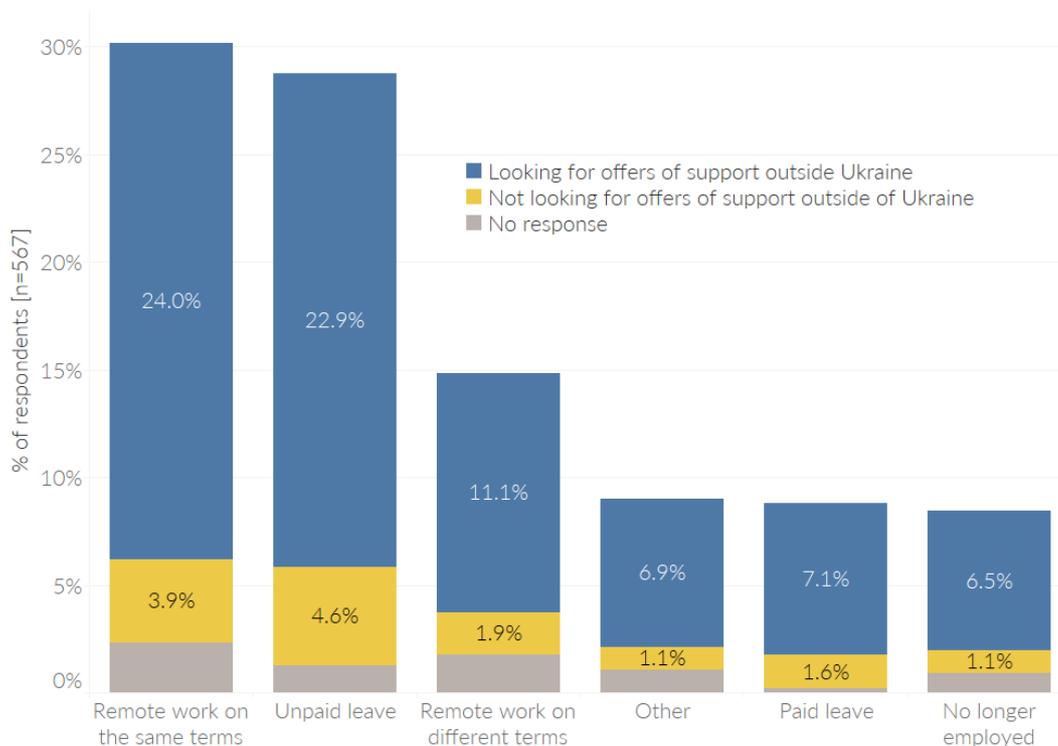


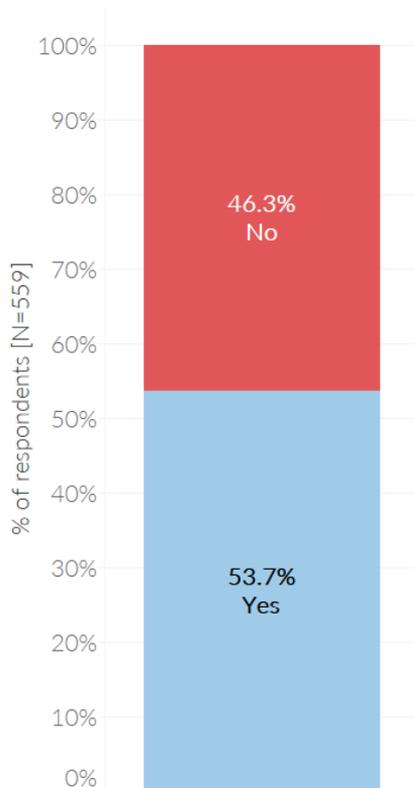
Figure 11. Relationship with the home institution.

At the time of participation in the study, most respondents performed **remote work for a home institution under the same conditions as before the invasion** (30.1%) or were on **unpaid leave** (28.7%), which accounted for almost half of the respondents in total (Fig.11). Subsequently, 14.8% **worked remotely but on different terms** than before 24 February. A comparable number of respondents were on **paid leave** or were **no longer employed** (17% in total). 9% of respondents declared that their situation was different, which primarily meant **employment in a foreign institution** treated and formalised as a form of academic mobility or as a research internship (3.2%), but also included exemptions from universities (1.9%). Individual cases concerned continuation of a PhD program or postdoctoral research (*doctorantura*), forced unpaid academic leave, maternity leave, the need to come to Ukraine from time to time, or other complicated situations.

Regardless of the current professional situation in relation to their home institution, **almost 85% sought offers of support from outside of Ukraine.**

When it comes to income, just over half of the respondents have been receiving their salary or scholarship from their home institution (Fig.12). Among them, about 55% were **paid with a delay** and only around two thirds of the respondents (64.7%) received **full remuneration.**

Do you receive salary or stipend from your home institution?



Difficulties in receiving salary from home institution

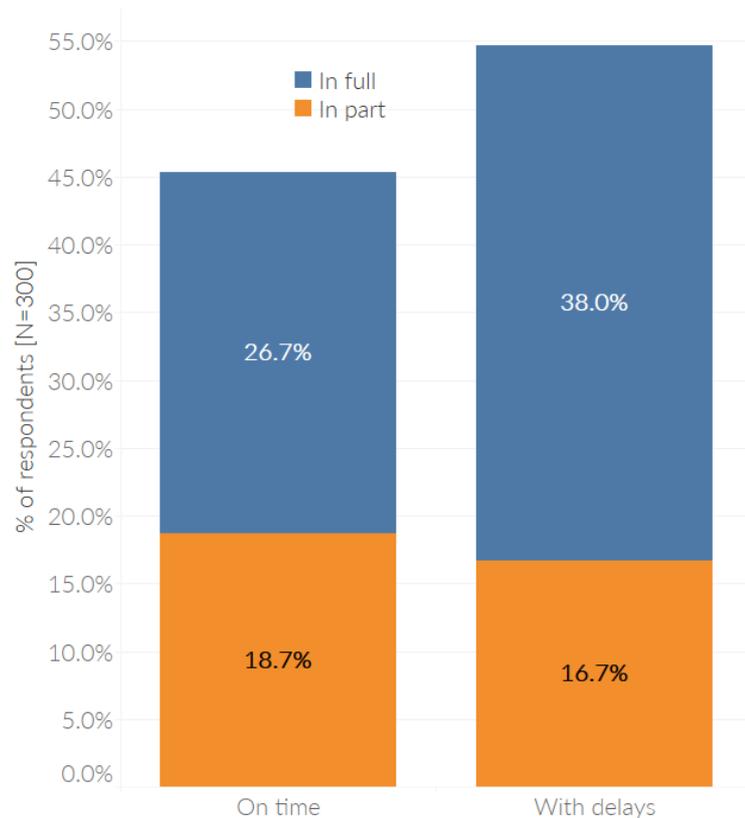


Figure 12. Financial relationship with the home institution.

We asked respondents about the attitude and/or policies of their home institution towards researchers who are currently abroad, asking for open responses (N=532) which were later analysed, coded and partially translated from Ukrainian by the research team. Given the sensitivity of the question, we asked about researchers in general, not respondents in particular. The responses were provided as brief notes in Ukrainian or in English, so we quote them without much correction to preserve the original expression.

In most of the cases (40.23%) the attitude was considered **good and positive**, supportive, showing respect and understanding of the situation. In respondents' own words their home institutions demonstrate characteristics such as: *"All kinds of support, searching for new connections and grants", "[Providing] help in every possible way within the limits of current possibilities", "[they] treat [scholars] with understanding, provide the opportunity to work remotely", "Allow researchers to work remotely", "Positive. Since in connection with a significant reduction in the funding of the institution, there is an opportunity to pay the wages of the employees who remained in Ukraine with the saved funds."*

Some form of **negative attitude** was reported in 29.6% of the cases. 9.5% respondents reported adverse treatment, such as calling expats traitors for leaving their students. 14.8% of respondents reported that staff abroad receives an ultimatum to either return to work or lose their job. This stems from the imposition of martial law and regulations adopted by the Ukrainian government,

which states that workers in the education sector who are abroad must be suspended or fired, and cannot receive salary: “Many of the staff, especially who are abroad, are likely to be made redundant in September”, “University administration warned me that they would not provide me with a teaching load, that would lead to my dismissal.” 5.3% of respondents noted that employees were forced to take unpaid leave: “Teachers are forced to be on leave without salary. There is no permission to work remotely”, “Teachers who are abroad signed an application for leave at their own expense until the end of hostilities”, “sent on unpaid leave”.

A **neutral attitude** was reported by 10% of the respondents, claiming that it is hard to respond with any degree of conviction and that the attitude is “Ambiguous”, “There is no unequivocal attitude. It all depends on what teachers are doing abroad - they are doing internships, teaching, conducting scientific research or simply staying in another country”, “ In different ways. There is a negative attitude, and there is a positive attitude. Depending on the person”, “Attitudes can change every day”. Some also reported that the University doesn’t care, i.e. the respondents don’t feel the university is interested in how they are doing : “they don’t care”, “They forgot about us”, “They are not interested at all, where we are and what is going on”. Others (7.65%) claim that attitude didn’t change as it is not clear what is ordinary and what was the attitude before, e.g. “The same as it was before, without any changes”, “ordinary”.

Situation abroad

Professional situation abroad (N=530)

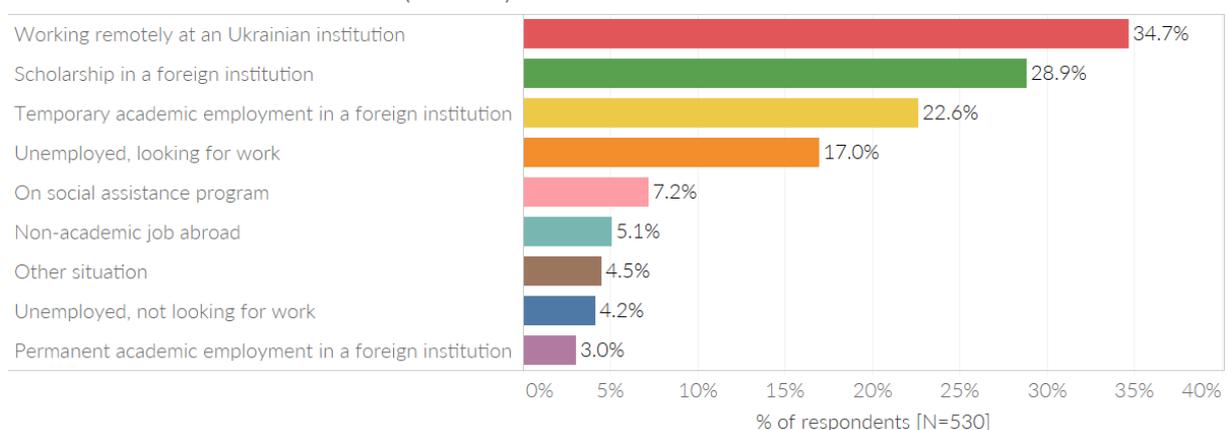


Figure 13. The professional situation abroad.

When asked about their professional situation abroad (Fig.13), more than one third reported **working remotely at a Ukrainian institution** (34.7%). More than a half of our respondents are currently attached to a foreign institution through a **scholarship** (28.9%), **temporary employment** (22.6%), or a **permanent position** (3.0%). 5.0% found a **non-academic job abroad** and 7.2% are on a **social assistance programme**. Although more than 20% remain **unemployed**, only 4.1% are not actively looking for work. Others declared they were on leave, living on the proceeds from social assistance or were being supported by family members.

PREFERENCES

Preferred types of support

Although in the initial months following the invasion **scholarships** seemed to be the preferred and quickest form of support, the majority of respondents indicated their preference for **research grants** (59.4%) and **internships** (51.3%), with more than one third opting for permanent (38.3%) or temporary (37.7%) positions, with only slightly more than a quarter (28.0%) favouring scholarships (Fig.14). Among other support options, respondents indicated financial and social support (allowance, housing, language courses), involvement in ongoing scientific projects and non-research jobs. We interpret these preferences in terms of the need to develop a more meaningful and long-lasting relationship with the hosting institution, focused on actual academic work. Similarly, the majority of respondents (52.7%) preferred **long term support** (i.e. a year or longer), with more than one-third (37.1%) preferring **medium term** (6-11 months) and just 10.1% opting for **short term solutions**.

When asked about the importance of different types of support available (with 1 as the most important and 12 as the least important), **accommodation and salary** were valued far ahead of other kinds (Fig.15). **Family allowance, ability to work remotely and medical insurance** were also valued. However, ability to work part-time, IT equipment and psychological support were not named as important.

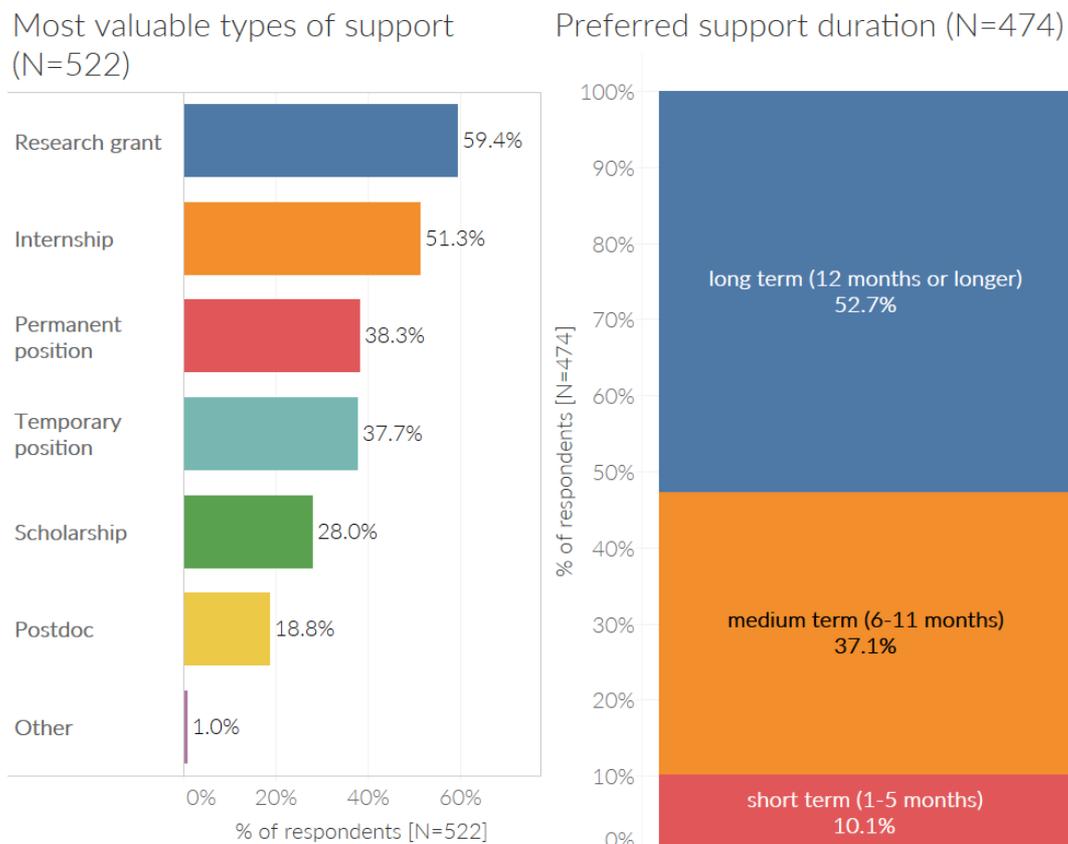


Figure 14. Most valuable types of support and support duration.

Importance of Support Types (N=474)

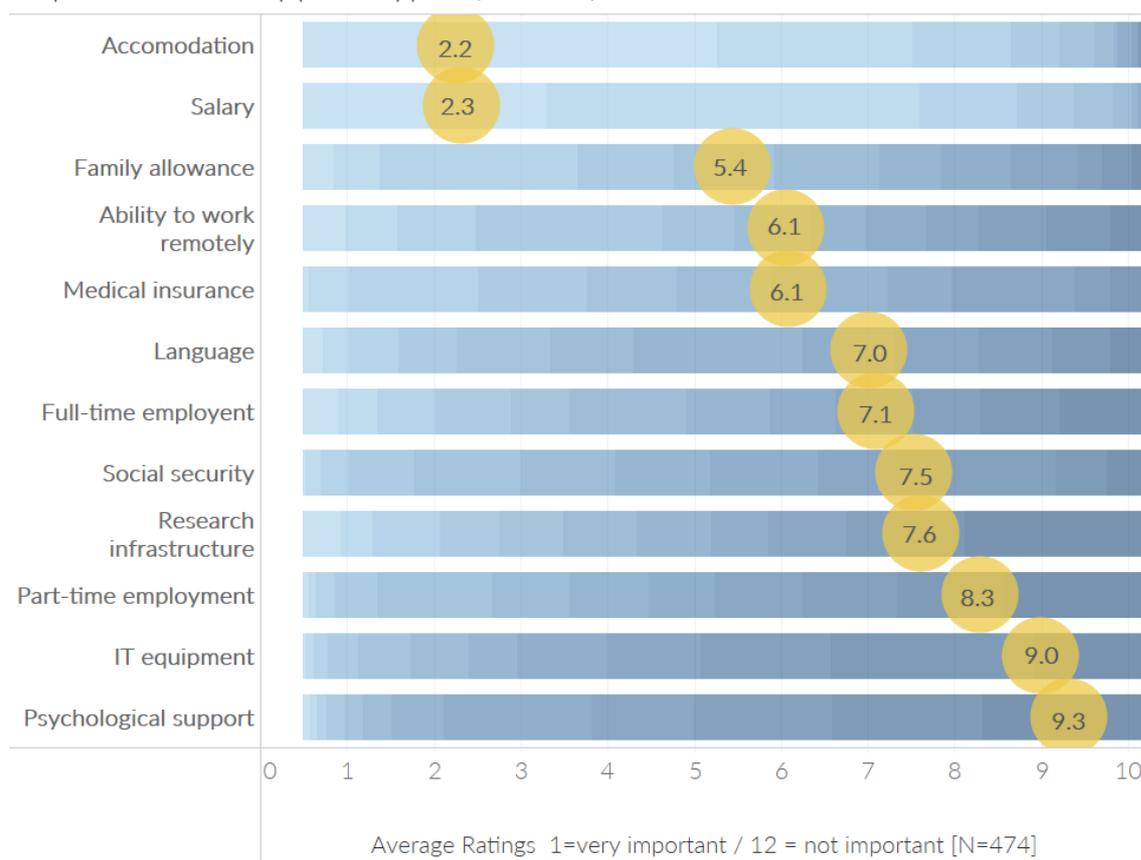


Figure 15. Importance of particular support types.

Other forms of support

We asked an open follow-up question about the additional forms of academic support respondents would like to receive. The responses (N=473) were analysed and categorised into two main groups: financial and non-financial support.

Financial support. Most scholars expressed their opinion that they would like to **participate in the existing programmes**. Many scholars would like to receive **individual mini grants** to cover both staff costs and costs of stay, **as well as travel grants for attending conferences**. Respondents are also interested in obtaining **virtual mobility** grants, as most male researchers cannot leave Ukraine and staying at home while receiving support allows them to cut down on the costs of living. Women also mentioned encountering difficulties in being single mothers abroad. Finally, virtual mobility grants are suitable for people with disabilities. Early career-researchers pointed out grants for **finishing their PhD thesis**.

Non-financial support. Ukrainian scientists need **access** to **research infrastructure**, **modern appropriate equipment**, **computer facilities** (some respondents had lost their laptops), and **licensed software**. **Mentorship** is another form of support mentioned by the respondents. There are needs in **advanced training** for getting new skills and knowledge (for example, preparing research projects, career path development, etc.). While being based abroad, **Ukrainian scholars would like to be a part of the local scientific community**, therefore respondents find it extremely important to be invited to conferences, seminars, and other social events for networking with other academics. **Recognition of**

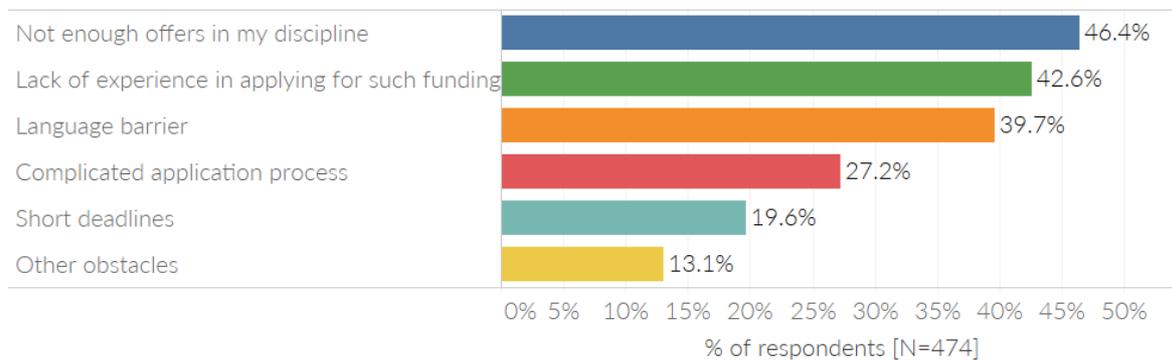
Ukrainian educational documents without elaborated procedures (*nostrification*) was also mentioned as a form of support. Diplomas of Ukrainian scientists are not formally recognised by EU higher education institutions, and many respondents pointed out such a need.

Less common responses concerned opportunities to learn the local language, obtaining new skills and competencies from the local staff and the possibility of having articles published in scholarly journals.

Main obstacles

When asked about the main obstacles in applying for an offer of support (Fig.16), respondents indicated a **lack of offers in their respective disciplines** (46.4%), followed by their **lack of experience in applying for such funding** (42.6%) and **language barriers** (39.7%). **Complicated application processes** (27.2%) and **tight deadlines** (19.6%) were less problematic, however.

Main obstacles in applying for funding (N=474)



Main obstacles in applying for funding by career stage (N=474)

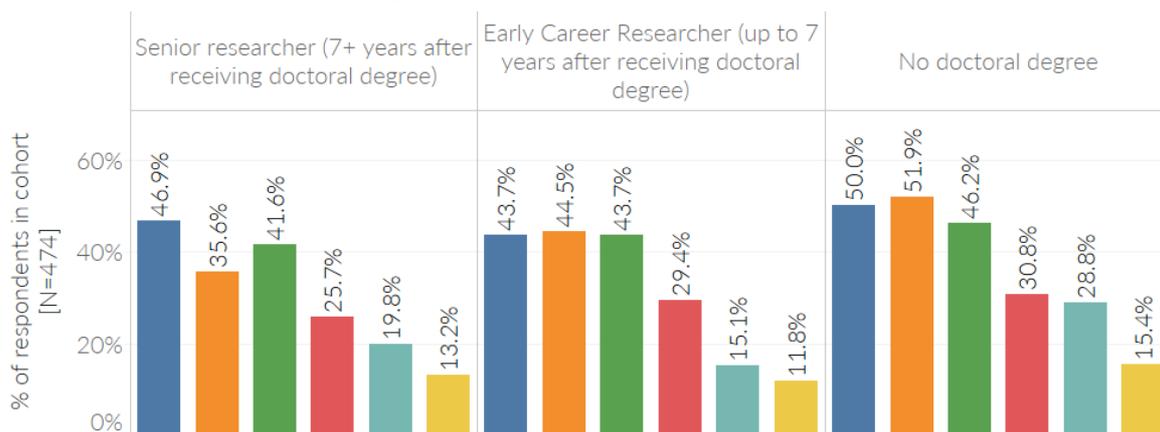


Figure 16. Main obstacles in applying for funding.

Among various other obstacles encountered, scholars named issues related to their **morale**: lack of energy or faith in the future, general uncertainty, inability to plan. Some pointed to more **technical issues in the application process**: lack of sufficient information, lack of support programmes in certain countries, programmes being too short in duration, overly long decision-making process (up to 6 months), drawn out application process, age requirements, and budget shortfalls in the host institutions. Some pointed to **professional deficiencies**: poor command of English, requirement of diploma recognition, lack of established contacts, or the low level of esteem accorded to Ukrainian science. There are also some **legal obstacles** related to the status of the scholar in the foreign country, e.g. regarding the asylum status granted by another country, or the fluidity of an applicant’s legal status at the time of application: “Who you are at the time of application, a refugee, a person working in Ukraine or abroad? Everything can change in a week”.

When analysed by career stage, the obstacles were similarly rated, although language barrier was a larger obstacle for researchers without a doctoral degree, while the lack of experience in applying for external funding was indicated as more problematic by early career researchers.

The analysis of the primary obstacles according to academic discipline reveals some differences (Fig.17). Lack of experience in applying for external funding is a key obstacle in agricultural sciences, medical and health sciences, and humanities, while the language barrier was indicated in medical and health sciences, engineering and technology, and agricultural sciences. Scholars in humanities and social sciences complained the most about the lack of funding opportunities in their disciplines.

Main obstacles in applying for funding by discipline

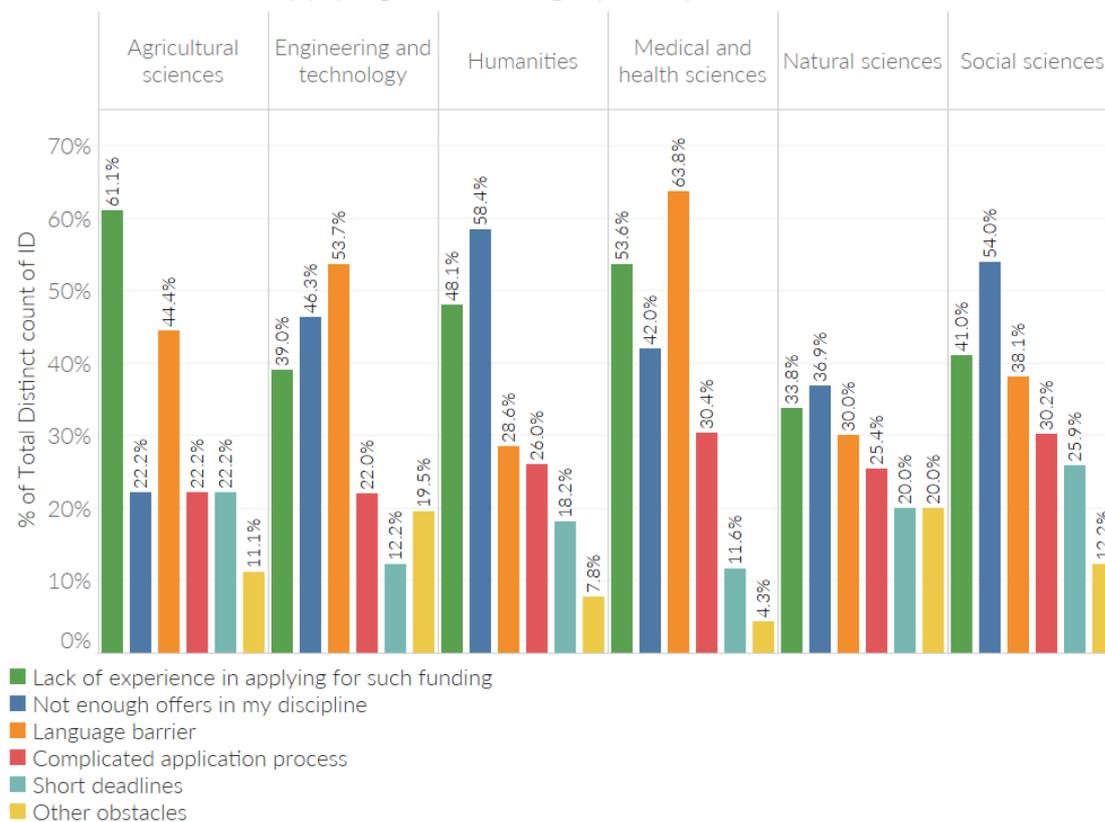


Figure 17. Main obstacles in applying for funding by discipline.

Experience gained abroad

Do you see any value of the experience of being abroad for your future professional development? [N=472]

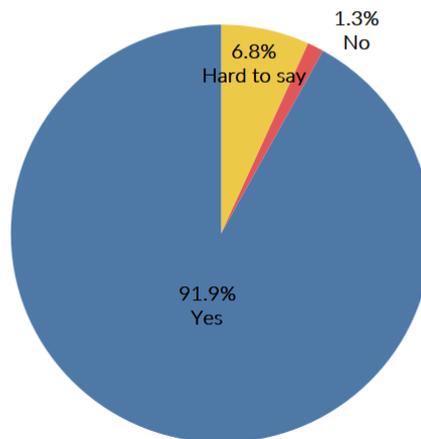


Figure 18. Value of the experience of being abroad.

Respondents almost unanimously see a value from the experience of being abroad for their future professional development, with just 1.27% negative answers and almost 7% without an opinion (Fig.18).

The value of particular experiences gained while abroad (N=472)

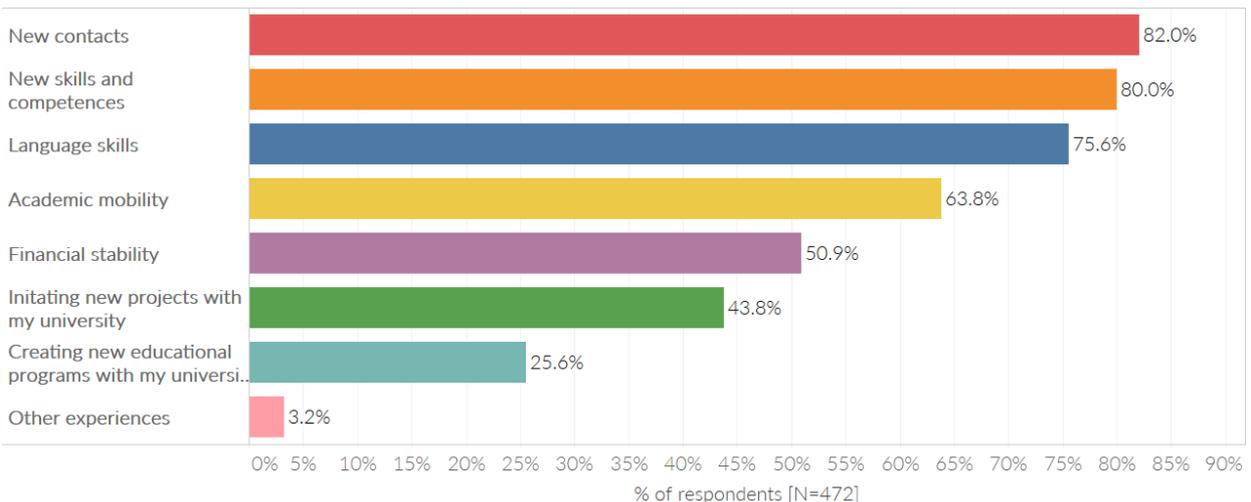


Figure 19. The value of particular experiences gained while abroad.

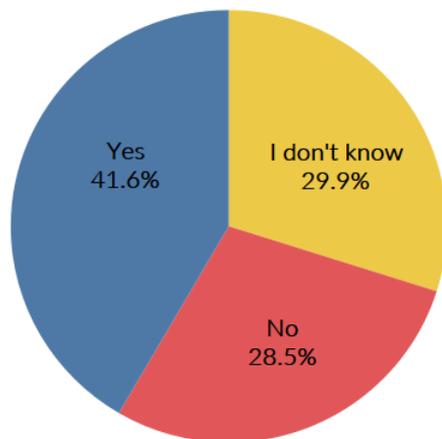
When asked about what has brought the greatest value in their experience of being abroad (Fig.19), more than three quarters of respondents pointed out developing **new professional contacts** (82.0%), **new skills and competences** (80.0%) and **language skills** (75.6%). Almost two thirds pointed to the **experience of academic mobility** (63.8%), while more than a half indicated **financial stability** (50.9%). Less common responses concerned the opportunity to create **new research**

projects (43.8%) or educational programmes (25.6%) with one’s home university. Other experiences reported (3.2%) can be divided into two main groups: firstly, related to different aspects of professional skills development, such as the opportunity to operate in an international academic environment. Secondly, pertaining to the personal life of the respondents.

PLANS

At the time of running this survey (as well as at the time of writing this report) the war in Ukraine was ongoing and no realistic timeline for the end of hostilities was in sight. We decided to ask the respondents about their plans concerning the future, so as to achieve a better understanding of their situation and immediate context. When asked whether they plan to return to Ukraine if the war was to end in a few months (i.e. by the end of the summer), the majority (41.6%) expressed such a desire, with less than a third of respondents voicing the opposite opinion (28.5%). A similar number of respondents (29.9%) did not know whether they would return or not. However, almost three quarters (72.8%) are willing to pursue their career abroad should the war continue, with a quarter of respondents (23.9%) without an opinion in this regard (Fig.20).

Do you plan to return to Ukraine if the war ends by the end of the summer [N=452]



If the war continues, are you considering continuing your career abroad? [N=452]

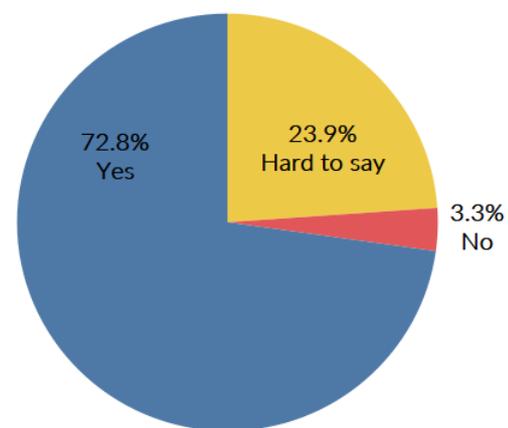


Figure 20. Plans concerning returning to Ukraine or continuing the career abroad.

Plans for the next 2-3 months

We asked scholars for their plans for the upcoming 2-3 months (N=451). A lot of our respondents simply expressed a desire to rest and did not admit to having any specific plans. Those plans relating to the nearest future could be divided into personal and professional aspects.

Personal aspects demonstrate an intention to remain in the host countries, obtaining required residence permits and learning the language of the host country. However, there are a number of those who want to return to Ukraine because of different reasons (“Because my [home] university does not allow me to continue working remotely”).

Professional aspects are related to the conditions under which the scholars imagine to continue their work. The majority plan to find a new job/postdoc position/fellowship/ scholarship in the host country (not Ukraine). Others plan to continue their work, working remotely at their home universities (teaching and recruiting students) or at the host university within an ongoing research project. Some mentioned the need to finish preparation of articles, monographs, or grant proposals (also in collaboration with new partners). Ukrainian scientists are also looking for opportunities for advanced training in the upcoming months.

Plans for the next academic year

In their responses (N=450) concerning plans for the next academic year (2022/2023), researchers expressed their vision of the near future by focusing on different perspectives:

- **employment** (position at home university, position abroad or combined, different types of positions, including PhD or postdoc), etc.
- **task-oriented** (doing research, working on publications, teaching, working on the double degree programs, diploma recognition, etc.)
- **professional and personal development** (e.g. developing language skills, project management skills, learning new skills or changing qualifications, etc.)
- **personal**: security, family and mental health (e.g. maternity leave, remain abroad due to security concerns or return home for family reasons, etc.).

At the same time, respondents expressed a lot of alternatives “or... or” or mentioned “I don’t know”, “hard to say”, “hard to plan”, which demonstrates a high level of insecurity, uncertainty, and challenges faced in juggling different tasks or functions, or simply the everyday challenges faced when living abroad. Respondents highlight that it is not possible to plan in a wartime situation, that it is psychologically hard to remain focused on the job, and that next year seems like a very long term perspective to them, making it hard to formulate concrete plans.

Concerning the **employment** status, the majority would like to keep their job in Ukraine and continue to work remotely in the same position in their home institution in Ukraine. They would like to continue teaching or research activities, as well to pursue scientific degrees and titles, very often combining those responsibilities with the job or scholarship in a foreign institution. Sometimes answers didn’t specify the place where they would like to continue to work, but just “work”, which may also reveal the significance of the job itself for the refugees. *“To work in a European university, you need to live for something and feed your family.” “[I’m] not looking for a temporary grant for 3 months, but a permanent position for at least a year or more to plan the future for myself and my child.”*

Job security represents one of the key issues for refugees/migrants; for academics it is much more important as it is a highly qualified intellectual resource and they want to find a job and work according to their qualifications and experience. This is why the right fit of skills and qualifications is an important consideration. Respondents expressed their priority to work in the profession and their desire to maintain relevant skills by continuing their personal and professional development, alongside acquiring new skills and experiences (e.g. teaching abroad, teaching new courses in English). Respondents stress that a short-term perspective alone will no longer suffice for making plans and that, taking family security and childcare into account also, the need for more stable long-

term programs is high. So the goal is not just to find a job but also to secure it: “[I plan] not to lose experience and practical skills when looking for a job and changing location.”

Describing the desired **forms of support** abroad, research projects, grants, fellowships, postdoc or PhD positions and academic mobility are prioritised by the respondents, alongside teaching experience and developing their own courses or training programs, also in cooperation with their home Ukrainian institution. Getting a grant, finding new opportunities, joining interesting projects, and gaining valuable research experience are among the most important wishes and plans for Ukrainian researchers abroad. We find it very interesting that respondents highlighted the willingness to gain new teaching experience and improve their qualifications, in order to use these at their home Ukrainian university or facilitate internationalisation in their institution (e.g. by creating double diploma programs or new courses). As one respondent put it: “Implementation of the acquired experience in one of the most highly rated technical universities into the educational process of my university in Ukraine”. Academics also perceive their experience abroad in terms of the development of a network of professional contacts that will be useful for their university. Almost nobody declared an intention to leave their position in Ukraine but they rather expressed an intention to go back to Ukraine. “[I plan to] learn and pass the Polish language exam; establish cooperation with local institutions, try to conclude a cooperation agreement with the local university and my scientific institution.”

Ukrainian researchers pursuing a **degree**, expressed their willingness to continue and finish their PhD or doctor of sciences procedures and obtain the scientific degrees and titles in Ukraine. “[I] Wait for the end of the war and work at my home university, or work here and work on the materials for a monograph to defend my doctor of science dissertation in Ukraine upon returning home”

At the same time, formal procedures allowing the ability to work abroad were also mentioned (recognition of foreign diplomas and licences for medical doctors, for example). “Nostrification of a doctor's diploma, obtaining a temporary license for medical practice, work on a new scientific project in cooperation with a Polish and Norwegian institutions”

Speaking of **task-related** plans, the majority expressed their desire to work on scientific publications, articles in high-impact journals, monographs, or on teaching materials (e.g. handbooks, methodological recommendations etc.). Another substantial group of tasks is related to knowledge and skills development: knowledge on how the system of education and research works in their host country, continuation of one's education or learning a new profession, obtaining research skills (working on new laboratory equipment), practical skills (e.g. surgical skills), transferable skills (e.g. project management, grant writing), and language skills. Given that the area of skills development and language learning forms one of the most important aspects in the adaptation and integration of migrants and refugees, this could also become a priority for support actions in the future. “[I plan to] Learn how to submit applications and manage the European projects, and then submit an application from a Ukrainian university.”

As for **personal plans**, the respondents highlighted that they need some time off, they need some time to take care of their mental health, some time for their family and children, more time for stabilisation and integration abroad. As one respondent put it: “I do not yet have the psychological

ability to plan for such a long period.” The fact that social security and psychological issues were not mentioned often, may prove that refugees don’t prioritise these issues, putting employment and financial security first. Respondents expressed their frustration due to the perception that their home universities want to “get rid of them”; this is a sign for Ukraine to think about the kind of messages they convey to their own citizens and the policies they introduce.

Support needed to implement those plans

There are two major challenges that define key needs of Ukrainian researchers: financial security and the relationship with their home institution from Ukraine. When asked about the kinds of support necessary to implement their plans, Ukrainian researchers indicate five key needs (N=451):

- **stabilisation and victory** (end of the war, victory of Ukraine and restoration of peace);
- **financial support of any kind** (job, scholarship or grant funding, accommodation grant, allowance to cover costs of living abroad, etc.);
- **research support** (grant preparation and submission, scientific assistance, mentoring, equipment, publication activity support);
- **support from Ukrainian institutions** (policies, attitudes);
- **social and family support**, including language courses, medical care and adaptation support (also school support for children).

These needs are further discussed in two perspectives: support received abroad and from the home institution.

Support abroad

As the primary goal for refugees is to survive and ensure they can cover the costs of living abroad, respondents define financial support as the primary need, yet they commonly see only one way of obtaining it – in the form of research funding. In fact, they may need more support in terms of **accommodation or living allowances** than research funding itself. It is important to differentiate these financial needs. In terms of **research-related financing**, respondents need such things as job offers, positions, extensive support in grant procedures (from finding the program to submitting the application), grants for conducting research, grants for Ukrainian institutions, for research teams (including students), professional internships, funding for publishing activity, participation in academic conferences, and funds for conducting experiments (including access to equipment and research infrastructure). Expressing their requirements for financial support in their **publishing activity**, Ukrainian researchers often mention assistance in translation and preparation of scientific articles in accordance with the requirements of top journals, including proofreading. There can also be some technical needs, e.g. laptop, computer, databases, software and access to IT infrastructure.

Mentorship and supervision, assistance and information support, childcare and psychological support are also highlighted as a need for displaced researchers. In terms of **information support**, Ukrainian respondents would like to have more information about the foreign universities, and their pedagogical processes, open calls for support schemes, and vacancies. Although the need to acquire adequate proficiency in a foreign language remains one of the most important barriers, it is the key

need for successful integration and adaptation of refugees, so free language courses should also be made available.

The need for **networking**, organizational and information support is highlighted as important, e.g. understanding of the administrative processes abroad, legal support, contacts with employers, access to databases for job searches. Ukrainian researchers seek cooperation with business for projects aimed at post-war recovery and expect more interest from foreign researchers and institutions to collaborate with Ukraine. Surprisingly, the need for contacts with foreign universities and foreign researchers was also highlighted as important.

In fact, the needs of the researchers as refugees abroad are very diverse and broad, and it is clear that this falls partially within the responsibility of the **general refugee support system** in a given country: *“Quality language courses (perhaps a language camp), a laptop, information on current grant programs and support programs, information on a platform for finding scientists with common scientific interests or who can create interdisciplinary teams (if any), access to health care (for adults and children), incl. the opportunity to undergo a comprehensive medical examination and, under qualified supervision, to take measures to support health in a timely manner, psychological support, financial support, including enough to solve the problem with housing, information about camps and development programs (for example, art) for children (it would be great with financial support). All this will create an opportunity to concentrate on professional activities as much as possible”.*

Support from Ukraine

Ukrainian respondents are fully aware that part of their needs should be met from the Ukrainian side, and Ukrainian institutions also have to improve their policies and take certain actions to support their own employees. Ukrainian researchers expect the following actions from the Ministry of Education and Science and Higher Education Institutions:

- There should be **no pressure or threats from the Ukrainian universities**; dismissal owing to refugee status is seen as unjust and unacceptable in a time of war. The Ukrainian researchers and teachers should not lose touch with their home Ukrainian institution, even if they do not receive a salary;
- The Ministry should conduct adequate policies on the requirements for reporting and academic bureaucracy, and introduce **more favourable legal conditions for researchers** to get paid a salary and implement projects even after they return to Ukraine;
- **More bilateral research projects** from the Ministry are needed (e.g. Polish-Ukrainian research programs, Ukrainian-German collaborations);
- The administration of Ukrainian HEIs should support their researchers who fled the country because of the war, and at the same time should strengthen the role of **international offices**, e.g. HEIs should allow them to work/teach online from abroad and introduce electronic documentation workflows;
- Neither the Ministry nor universities should create barriers or problems for their staff, but provide **support for the Ukrainian lecturers and researchers** who are currently based abroad and forced to work in a variety of jobs just to maintain their family.

Moreover, respondents often expressed their gratitude for what they have and indicated that they already have everything and do not have any additional needs.

As we may see, the requirements for implementing researchers' plans in the nearest academic year are quite diverse: sometimes they are actually limited in scope to basic humanitarian and financial support and at other times they relate to highly specific research needs.

IDEAS FOR THE FUTURE

Post-war recovery and the development of Ukrainian science

It appears that Ukrainian scientists have clear and thoughtful opinions about the post-war recovery of Ukrainian science. The respondents were eager to reply to the question about what is needed for the post-war recovery and development of Ukrainian science and they elaborate, often extensively, on the key changes needed (N=435).

According to the respondents, the predominant problem faced is the need for **urgent changes to the funding system**. This opinion has been expressed in a variety of ways, yet in the majority of cases respondents mentioned that science in Ukraine requires more money in general. As underfinanced as it is now, Ukrainian science will not overcome both the war-related losses and pre-war deficiencies. Respondents differed in their opinions regarding where the funding sources could come from: the state budget, EU funds and integration of Ukraine into European Research Area, cooperation with industry, private foundations that support science and others. As one of the respondents put it: *"Ukraine's neighbours should develop a network of scientific projects and institutions that will attract Ukrainians to work in teams with European scientists on the principle of distributed ownership of inventions"*. A related problem raised by the respondents was the modernisation of infrastructure, including both the rebuilding of universities destroyed by Russia and typical refurbishment and free access to modern technical equipment and components.

The second set of problems is related to the **overall reform of the higher education system and science management at the state level**. Many respondents posited what was called by one of the respondents: *"the formation of the strategic development model of Ukrainian research"*. This reform model appears to comprise multiple elements. Firstly, respondents underlined the lack of interest from the side of politicians, and a lack of understanding of science's role in a modern society. This difficulty is also expressed in looking at science solely from market perspectives, and linking financing to the number of students. On a more general level, respondents underlined the lack of prestige science holds among society in general and the political elite, a factor which they also associated with the heritage of post-communism. To overcome these problems, respondents suggested the provision of **greater autonomy to the universities** (at the expense of the current model of the centralised Ministry's management), **de-bureaucratisation**, and **an effective fight against corruption, plagiarism** and other negative phenomena. Freedom of academic activity, together with a focus on academic excellence, were also put forward as crucial goals of the reform. Well organised cooperation with business and industry sectors on the one hand, and society on the

other, were also indicated. Finally, respondents suggested close cooperation with the EU and with EU universities, as a way towards learning from their experience of conducting reforms.

According to our respondents, the modernisation of the science management system will be difficult without the return of scientists who left the country. They could bring the experience of countries where they were based and initiate much-needed international cooperation. However, in order to **encourage scientists to return**, Ukrainian authorities should provide them with decent salaries and working conditions. On a more general level, our respondents mentioned the need for a transparent treatment of scientists, including a clear career path, rise in salaries, and support in accommodation. Special interest should be paid to the needs of young scientists.

Among more **operational challenges**, respondents mentioned inter-alia: de-bureaucratisation of science management, introduction of electronic document workflows, further development of e-teaching techniques, granting scientists access to modern literature, and supporting the publishing of scientific papers in reputable journals.

Measures to be taken now

When asked about measures that should be taken straightaway (N=436), the majority of respondents continued to frame the answers in the perspective of the academic sector, hence we distinguish between responses pertinent to the general recovery of Ukraine on the one hand, and the recovery of the R&D (research and development) sector on the other.

As for general recovery, the following measures were mentioned:

- military support for the armed forces of Ukraine,
- aligning R&D topics with wartime and military needs,
- homecoming programmes for all categories of employees,
- providing housing for people who lost their homes,
- providing internally displaced persons with new skills for further employment,
- cooperation with business and local communities,
- strengthening STEM disciplines, including employing English as the language of instruction,
- preserving valuable collections and research samples,
- building bomb shelters,
- providing more hours for teaching the history of Ukraine.

As for **recovery of the R&D sector**, the following measures were mentioned:

- reducing the number of higher education institutions and administrative personnel,
- changing the governance of the MESU/National academy of Science of Ukraine,
- setting an age limit for top managers of HEIs and labs,
- acknowledging science development as a government priority,
- supporting displaced universities,
- strengthening cooperation between science and business,
- changing treasury regulations for implementing grants,

- digitalisation of all education and research processes,
- providing more academic freedom for employees,
- terminating contracts of retired personnel to support early career researchers.

Another group of answers concerned measures to be taken in order to address the **immediate personal needs of scholars**, such as the opportunity to work remotely for security reasons, providing higher salaries for scientists, learning English, improvement of project-based skills, providing visiting professor status for internally displaced personnel, and the creation of more non-residential fellowships for Ukrainian scholars.

Finally, many respondents consider it important to change the attitude of Ukrainian HEIs towards researchers who left the country. Researchers underline the importance of keeping in touch with those who are currently abroad and creating the conditions for their return to Ukraine to apply their acquired experience. For example, it would be advisable to retain a position for them, or to offer remote work. The key assumption here is that networking with those Ukrainian scientists who are abroad would bring benefits for Ukraine.

CONCLUSIONS

The findings of this report will be deepened in a follow-up study. We can already formulate some key conclusions that emerge from our analyses which merit further examination.

- Ukrainian scholars are looking for more stable support opportunities, which would respond to both their professional needs as researchers and their personal needs as migrants.
- Scholars in exile usually combine the remote work for their home institution with some kind of research activity in the host country. This requires flexibility and multitasking.
- Researchers declared their willingness to return to Ukraine and make use of their skills in rebuilding Ukrainian science.
- However, they also point out the need for reforms that should be introduced in order to improve scientific excellence and provide better opportunities at home institutions. Scholars in exile should be a part of this process as they can share their experiences gathered from international institutions.
- A coordinated action needs to be taken jointly by research community and policy makers both in Ukraine and abroad to provide a complex approach towards the current needs of scholars in exile, which could be addressed by different stakeholders.
- Such coordination could be also seen as a measure to avoid the 'brain drain' of Ukrainian institution, as such multi-stakeholder cooperation should also address the issue of supporting the subsequent return of exiled scholars to Ukraine and their contribution to the post-war recovery.

While navigating the uncertainty of both their personal and professional lives, Ukrainian scholars express not only a great resilience and strength in coping with their current situation, but also a great level of care about the future of their home institutions and the post-war recovery of Ukrainian science.