Poplavskyi P., Ph.D.

## Senior Lecturer of the Department of International Relations and Political Management

Zhytomyr Polytechnic State University

## The Role of International Support Programs in Preserving Ukraine's Scientific Potential

Since February 2022, the Ukrainian scientific system has faced a triple shock: the forced mobility of researchers, the physical destruction of research infrastructure, and severe budget constraints. Survey data indicate that access to laboratories and research time have been reduced, many researchers have shifted to remote work formats, and the share of those who have left the country has become significant for the sustainability of scientific schools. Under these conditions, special measures within the European framework programme for research and innovation Horizon Europe – in particular, the MSCA4Ukraine initiative – have played the role of temporary "shock absorbers" that help preserve human capital and prevent the degradation of Ukraine's research ecosystems.

MSCA4Ukraine was conceived as a rapid-response bridge between the safety of research and the preservation of institutional ties with Ukraine. Fellowships awarded under the programme have provided hundreds of research positions at European universities and laboratories. A particularly positive feature is the programme's requirement to maintain strong connections with Ukrainian teams, turning what might otherwise have been a "temporary evacuation" of scientists into the creation of channels for dual affiliations, joint PhD supervision, and collaborative project proposals under Horizon Europe. This approach not only supports individual researchers but also helps retain a critical mass of specialists in fields where a shortage of human capital constrains innovation.

Alongside grant support for individual scholars, the European Commission has also developed an institutional mechanism for Ukraine's integration into European research programmes. In late 2023, the Horizon Europe Office in Ukraine was opened in Kyiv to provide continuous support for the participation of Ukrainian universities and research institutions in international consortia. Through the work of this office and the network of National Contact Points (NCPs), individual research successes are gradually being transformed into collective institutional learning within Ukrainian universities and research centers – from skills in project proposal writing to effective intellectual property management.

Although the available empirical data on the results remain heterogeneous, a cautious conclusion can be drawn: international support programmes have helped preserve research groups in key fields, reduced the risk of their fragmentation, sustained activity in international co-authorship and grant applications, and enabled many young scholars to remain within the academic system. At the institutional level, these initiatives have stimulated the development of digital and hybrid research practices – from remote access to computational resources to the shared use of laboratory equipment. At the same time, data from UNESCO and surveys published in Nature Humanities and Social Sciences Communications highlight persistent challenges such as limited access to experimental laboratories, publication delays, and increased emotional fatigue among researchers. Without targeted reintegration policies, temporary mobility risks becoming long-term, potentially consolidating the outflow of scientific potential beyond Ukraine's borders.

In this context, the strategic dimension of international support programmes becomes especially evident. Evaluating them solely through the lens of short-term outputs – such as the number of fellows, grants, or publications –risks underestimating their broader, multiplicative impact. The true value of these initiatives lies in the formation of network capital and trust, which cannot be measured over short time frames. These intangible assets emerge gradually through daily interactions in international research groups, dual affiliations, joint PhD supervision, and collaborative projects. In other words, international programmes temporarily preserve Ukraine's scientific competencies while the country rebuilds the institutional and infrastructural conditions for their full and productive use.

This phenomenon represents not a classical brain drain, but rather forced scientific mobility under wartime conditions. With a well-designed framework of international support, this shock can be transformed into an opportunity for knowledge circulation, provided that the state, universities, and international partners coordinate their efforts and align institutional mechanisms.

In sum, international support programmes have already demonstrated their stabilizing effect: they have kept researchers within the scientific sphere, preserved collaboration networks, and laid the foundations for a new, resilient research architecture. The next step is to institutionalize dual affiliations, launch scalable reintegration pathways, and embed these instruments into Ukraine's infrastructure recovery roadmap. Through such efforts, temporary external assistance can evolve into sustainable internal development.

## **References:**

- 1. De Rassenfosse, G., Murovana, T. & Uhlbach, WH. (2023). The effects of war on Ukrainian research. *Humanit Soc Sci Commun* 10, 856. https://doi.org/10.1057/s41599-023-02346-x
- 2. UNESCO. (2024). Analysis of war damage to the Ukrainian science sector and its consequences. https://unesdoc.unesco.org/ark:/48223/pf0000388803
  - 3. Scholars at risk Europe. MSCA4Ukraine. https://sareurope.eu/msca4ukraine/
- 4. OECD. (2022). The future of science in Ukraine: Actions now will affect post-war recovery. *OECD Policy Responses on the Impacts of the War in Ukraine*. https://doi.org/10.1787/afbd05df-en.
- 5. Shapovalenko N. (2024). The impact of the full-scale invasion on the educational and scientific sphere of Ukraine. *Humanities science current issues*. Issue 81. Volume 2. <a href="https://aphn-journal.in.ua/archive/81\_2024/part\_2/81-2\_2024.pdf#page=250">https://aphn-journal.in.ua/archive/81\_2024/part\_2/81-2\_2024.pdf#page=250</a>.