Lviv Academic Bridge 2026

Ukraine–U.S. Science & Education Forum

Catalogue of Ukrainian Research, Education, and Innovation Projects

Lviv Polytechnic National University

June 11–12, 2026 ~ Lviv, Ukraine

Executive Summary

This catalogue presents 53 Ukrainian research, education, and innovation projects that are open to international cooperation, with a particular interest in partnership with U.S. universities, research institutions, foundations, companies, and civil-society organizations. It has been prepared for the Lviv Academic Bridge 2026: Ukraine–U.S. Science & Education Forum.

The projects span the full range of maturity, from early concept to active implementation, and cover the forum's priority areas: health and medical recovery; digital transformation and artificial intelligence; science and technology for reconstruction and resilience; research infrastructure and open science; education and human capital; cooperation with the Ukrainian professional diaspora; and the humanities and Ukrainian studies.

Each project is presented with a consistent profile: its goal and summary, current status and results to date, the specific expertise, data, infrastructure, or networks the Ukrainian team contributes, and the concrete form of cooperation it seeks. Forms of cooperation requested include joint research, co-funded research positions, shared access to laboratories and data, joint grant applications, curriculum and professional development, and technology partnership. A number of projects already hold international ties that a new partnership can build on.

Contact details are provided for each project to enable direct follow-up. Where a project is available to be presented at the forum, this is indicated in its profile.

Portfolio at a glance

The 53 projects are organized into nine thematic areas:

- Health & Medical Recovery (clinical, rehabilitation & diagnostics) — 10
- AI & Data-Driven Medicine — 5
- Digital Transformation, AI & Innovation — 4
- Education & EdTech — 9
- Human Capital, Careers & Professional Development — 4
- Reconstruction, Resilience, Energy & Engineering — 6
- Research Infrastructure & Open Science — 4
- Humanities & Ukrainian Studies — 4
- Media, Memory & Social Resilience — 7

Suggested projects for the pitching session

The catalogue is the primary output of this call; the choice of projects for the live pitching session rests with the forum organizers. As a suggestion for their consideration, the five projects below are well suited to a session oriented toward demonstrating established international momentum — Ukrainian teams already producing results with U.S. and international partners. All five have confirmed their availability to present.

- **No. 5 — Optimizing Antibacterial Therapy through PK/PD Target Monitoring in Patients with Anatomical Sequelae of Combat Trauma *[Health & Medical Recovery]*** — active joint study with the University of Colorado Anschutz Medical Campus on antibiotic-resistant wound infections in Ukrainian combat casualties, with peer-reviewed publications.
- **No. 18 — KnowledgeMaps AI *[Digital Transformation, AI & Innovation]*** — a working AI learning platform already piloted with American University Kyiv and Opole University of Technology (Poland).
- **No. 27 — Renewable Energy for Bolstering Ukraine's Infrastructure by Learning and Design (REBUILD) *[Education & EdTech (reconstruction / energy)]*** — already funded by the U.S. National Academy of Sciences under the IMPRESS-U program; an active multi-partner project.
- **No. 32 — SHIFT: A Future Readiness Framework for Higher Education Transformation *[Human Capital, Careers & Professional Development]*** — an active collaboration with California State University, San Bernardino, drawing on cross-country U.S., Ukraine, and U.K. data.
- **No. 37 — Smart Low-Temperature Heating System Based on a Condensing Modular Boiler *[Reconstruction, Resilience, Energy & Engineering]*** — peer-reviewed results and established ties with Cornell University and KTH (Sweden).

Suggested alternates, should any of the above be unavailable: No. 2 (Transcranial Magnetic Stimulation in Spinal Muscular Atrophy — Health & Medical Recovery); No. 23 (The (UN)Spoken — International Student Social Art Research Project — Education & EdTech / humanities); and No. 48 (Socio-Communicative Mechanisms of Decolonization Discourse under Wartime Conditions — Media, Memory & Social Resilience).

This selection is a suggestion only and does not imply endorsement, funding commitment, or exclusivity.

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Group 4 — Education & EdTech

20. Formation of the Integration Concept of State Management of Intellectual Capital of Higher Education Institutions
21. Development of an inclusive e-learning strategy and tactics for comprehensive support of the elderly with dementia and their caregivers during wartime and post-war recovery in Ukraine
22. AI-Assisted English Learning for Ukrainian Higher Education
23. The (UN)Spoken - International Student Social Art Research Project
24. VR Mathematics Education Platform for Stereometry and Spatial Thinking
25. Digital Framework for ESG Reporting and Sustainable Audit: Aligning Ukrainian Infrastructure with Global Standards
26. Sustainable Development Goals: overview, state, roadmap and best practices
27. Renewable Energy for Bolstering Ukraine's Infrastructure by Learning and Design (REBUILD)
28. Ukrainian-English bilingual books for Ukrainian kids in the United States

Group 5 — Human Capital, Careers & Professional Development

29. LabMed Bridge (International Laboratory Medicine Education and Research Bridge)
30. Pharma Bridge Hub
31. Ecosystem for Supporting the Career Development of Young Scientists in Ukraine
32. SHIFT: A Future Readiness Framework for Higher Education Transformation

Group 6 — Reconstruction, Resilience, Energy & Engineering

33. Systematic Mapping of Ecosystems Damaged by Military Activities for the Ecological Restoration of Ukraine
34. Development of the design, technology, and investigation of the properties of multilayer composites based on honeycomb elements
35. Physicochemical foundations of the thermochemical pressing of the solid inorganic systems
36. Creation of a laboratory for research and improvement of equipment for combined metallurgical processes.
37. Smart low-temperature heating system based on a condensing modular boiler
38. Climate change and plants must change!

Group 7 — Research Infrastructure & Open Science

39. Ukrainian Resilience Corpus: A Multilingual AI-Ready Corpus of Wartime Public Communication, Translation, and Civic Discourse
40. Parasitic and Infectious Environmental Screening: Molecular and Microscopic Approach
41. Digital Humanities Ukraine
42. Open Knowledge Corridor: A Ukraine–U.S. Testbed for Community-Based Scholarly Communication

Group 8 — Humanities & Ukrainian Studies

43. The Middle Dniester Region as a Transcultural Corridor: Sociocultural Mechanisms of Interaction in the Early Iron Age (Based on Burial and Settlement Complexes)
44. Literature Beyond Trauma: Humanities of Resilience
45. Visual narratives, war commemoration, graphic representation and strategies of resistance as the foundation for constructing and preserving Ukrainian identity
46. Intangible Cultural Heritage and Identity: Challenges of the Russian-Ukrainian War and the Experience of Diasporas

Group 9 — Media, Memory & Social Resilience

47. The Basics of Investigative Journalism (Educational Program)
48. Socio-Communicative Mechanisms of Decolonization Discourse under Wartime Conditions: Ukrainian and Global Contexts
49. Voices of Resilience: Oral History, War Memory, and Future Imaginaries of Frontline Communities in Ukraine (Zaporizhzhia)
50. Seven Forces of Mediation: Peacebuilding and Conflict Resolution in Wartime and Postwar Contexts
51. Peace and solution journalism in war-time Ukraine
52. Identity politics as a tool for building national resilience in the face of internal and external challenges: experiences from Ukraine and abroad.
53. Reclaiming Spaces: Public Communications, the Experience Economy, and Creative Industries

Group 1 — Health & Medical Recovery (clinical, rehabilitation & diagnostics)

1. REVIBRAIN-RECOVERY: Non-invasive neuromodulation for functional recovery and rehabilitation

Engineering and technology, Medical and health sciences, Interdisciplinary · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: Revibrain Rehabilitation Research Initiative / Private Neurology Practice of Dr Andriy Tymchenko

City: Kyiv

Website: revibrain.com.ua

Project lead: Dr Andriy Tymchenko — Neurologist, Rehabilitation Research Lead and Founder of Revibrain

Contact: tymchenkoandriy@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Technology partnership / commercialization, Mentorship and advisory, Data collaboration

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Company or industry partner

Estimated scale of support: Not primarily financial

Available to pitch (June 12): Yes, online

Project goal: Revibrain aims to explore whether non-invasive modulation of mandibular position and cranio-cervical biomechanics may influence functional mobility, posture, and neuromotor regulation.

The project focuses on developing a rehabilitation-oriented neuromodulation approach based on clinical observations and functional testing. Potential future applications include neurorehabilitation, post-traumatic recovery, rehabilitation medicine, and functional recovery support.

The long-term goal is to establish a scalable translational rehabilitation technology platform suitable for international research collaboration and future clinical validation.

Summary: Revibrain is an early-stage rehabilitation technology project focused on non-invasive neuromodulation and functional recovery.

The project originated from clinical observations in neurological and rehabilitation practice exploring relationships between mandibular position, cranio-cervical biomechanics, posture, and neuromotor regulation.

A pilot feasibility study involving functional mobility and balance testing demonstrated preliminary signals associated with changes in integrated motor performance.

The project currently includes:

working prototype,

pilot clinical observations,

functional testing data,

intellectual property strategy,

early rehabilitation-focused positioning.

Revibrain is seeking international collaboration for:

translational rehabilitation research,

biomechanics and neuromodulation studies,

rehabilitation technology development,

consortium building for Horizon Europe and Eureka projects.

Potential application areas include neurorehabilitation, post-traumatic recovery, rehabilitation medicine, and functional recovery technologies.

Current status and key results: Revibrain currently has:

working prototype devices,

pilot feasibility observations,

preliminary functional testing data,

intellectual property strategy,

early rehabilitation-focused positioning.

A pilot observational study involving functional mobility and balance testing (n=20) demonstrated preliminary signals associated with changes in integrated motor performance, particularly in Timed Up and Go (TUG) testing.

The project is physician-led and originates from over 15 years of clinical experience in neurology and rehabilitation practice.

Current activities include:

international networking,

conference submissions,

preparation of scientific publications,

consortium exploration for Horizon Europe and Eureka initiatives.

What the project brings: The project contributes:

physician-led clinical expertise in neurology and rehabilitation,

access to rehabilitation-oriented pilot observations,

functional testing protocols,

translational rehabilitation concept development,

prototype technology,

early-stage clinical datasets,

IP strategy and product positioning.

The project also provides experience in:

functional mobility assessment,

rehabilitation practice,

cranio-cervical and postural evaluation,

exploratory neuromotor testing.

Revibrain offers a flexible early-stage platform suitable for collaborative development in rehabilitation technology, biomechanics, neuromodulation, and translational MedTech research.

What the project asks: Revibrain is seeking international collaboration for:

joint rehabilitation and neuromodulation research,

biomechanics and motor control studies,

pilot clinical validation,

translational rehabilitation projects,

consortium building for Horizon Europe and Eureka calls.

The project is particularly interested in:

rehabilitation research groups,

PM&R departments,

neuroscience and biomechanics laboratories,

rehabilitation technology partners,

mentorship in regulatory and translational pathways.

Potential collaboration formats may include:

joint pilot studies,

data analysis support,

academic mentorship,

grant consortium participation,

rehabilitation technology co-development.

Existing international cooperation: The project has initiated communication with rehabilitation and academic contacts in the United Kingdom, including professionals associated with rehabilitation medicine and translational rehabilitation research.

Current interactions include:

preliminary discussions regarding feasibility observations,

conference abstract submission,

exploratory discussions related to future collaborative rehabilitation research and international consortium opportunities.

The project is actively seeking to expand international academic and translational partnerships.

2. Transcranial Magnetic Stimulation in Spinal Muscular Atrophy

Engineering and technology, Medical and health sciences · Active implementation · Ready to begin cooperation now

Lead institution / team: P.V. VOLOSHYN INSTITUTE OF NEUROLOGY, PSYCHIATRY AND NARCOLOGY OF THE NATIONAL ACADEMY OF MEDICAL SCIENCES OF UKRAINE» STATE INSTITUTION

City: Kharkiv

Project lead: Andriy Shatillo

Contact: shatil@ukr.net

Cooperation sought: Joint research, Technology partnership / commercialization, Equipment, infrastructure, or data access

Preferred partner(s): U.S. university, Research institute or laboratory, Company or industry partner

Estimated scale of support: Not yet estimated

Available to pitch (June 12): Either is possible

Project goal: The next goal is to find international partners for:

independent clinical validation;

optimization and standardization of the stimulation protocol;

regulatory strategy in the EU, USA, and Canada;

development of a practical treatment model;

commercialization of the TMS-based therapeutic service as an adjunctive or standalone treatment option for SMA.

The expected result is a validated, scalable TMS-based treatment approach that can be implemented internationally.

Summary: Lower motoneuron insufficiency is a leading cause of functional limitations in spinal muscular atrophy (SMA), a severe genetic neurological disorder. Controlled motoneuron activation may “train” or enhance compensatory mechanisms and increase neuronal viability. We applied a specific type of transcranial magnetic stimulation (TMS) to deliver a targeted and precise dose of motoneuron activation. Since not all SMA patients have access to recently developed disease-modifying therapies, and even when available, treatment effects may be modest, a TMS-based approach could extend meaningful benefit to a broader SMA population.

Our findings demonstrate that TMS is feasible, safe, and well tolerated in individuals with SMA. In our pilot clinical trial, more than 70% of participants showed meaningful functional gains across multiple validated scales after just two weeks of treatment. These early results, combined with high participant satisfaction and willingness to repeat the intervention, support continued investigation of TMS as a potential adjunctive or standalone treatment approach for SMA and further commercialization.

Current status and key results: A pilot clinical study of a TMS-based therapeutic approach for spinal muscular atrophy has been almost completed. The intervention is feasible, safe, and well tolerated. No serious adverse events related to the intervention were observed. After two weeks of treatment, more than 70% of participants showed meaningful functional improvement across multiple validated clinical scales. More than 80% of participants also showed a decrease in cerebrospinal fluid neurodamage marker concentration after treatment. Participant satisfaction was high, and most participants expressed willingness to repeat the intervention.

The current milestones are completion of initial clinical proof of concept, presentation of interim preliminary results at a specialized reputable international conference, and several PCT applications currently in progress. The next step is independent validation, optimization and standardization of the stimulation approach, regulatory strategy development, and preparation for broader clinical and commercial implementation.

What the project brings: The project brings a ready clinical and organizational base for further development of a TMS-based therapeutic approach for SMA. The proponent combines clinical, research and technical expertise, and also has direct experience with TMS use in SMA patients.

The team can contribute access to SMA patients through an existing patient registry, a biobank of biological samples, clinical assessment data using validated functional scales, and practical experience with patient recruitment, treatment delivery, and follow-up. Several TMS stimulators are available through personal and clinical infrastructure. The project also has ethical approval and patient consent documentation already in place.

The project is connected with the Kharkiv Charitable Foundation “Children with SMA”, which provides an established patient-community link. Depending on funding and cooperation format, the team can contribute data, clinical site capacity, patient access, methodology, local coordination, and implementation expertise.

What the project asks: The project is seeking partners for clinical validation, regulatory development and commercialization of a TMS-based therapeutic approach for SMA.

Specific cooperation sought includes:

an international clinical partner to conduct or co-conduct an independent validation study;

regulatory expertise to define the development pathway in the EU, USA, and Canada;

collaboration in hardware/software development, optimization, and standardization;

support in creating a scalable treatment model;

cooperation with TMS device manufacturers or clinical service providers interested in SMA as a new therapeutic indication;

funding or co-funding for clinical validation, data analysis, biomarker testing, and coordination of patient recruitment;

commercial partners interested in licensing, joint development, or building a treatment-service model around the approach.

The preferred format is flexible: joint clinical study, sponsored validation study, licensing, co-development, or clinical-commercial partnership, depending on the partner's expertise and resources.

Existing international cooperation: The project is currently in the pre-application phase for assessment by the TREAT-NMD Advisory Committee for Therapeutics (TACT). TACT provides independent, multidisciplinary expert advice to academic and industry groups developing therapies for neuromuscular diseases (https://www.treat-nmd.org/what-we-do/tact/).

3. Development of a Comprehensive (Physical and Mental) Rehabilitation Method for Military Personnel with Cerebrovascular Pathology Based on Animal-Assisted Therapy and Other Nature-Oriented Technologies

Medical and health sciences, Education and pedagogy · Established, seeking expansion · Ready to begin cooperation now

Lead institution / team: State Institution "P.V. Voloshyn Institute of Neurology, Psychiatry and Narcology of the National Academy of Medical Sciences of Ukraine," Kharkiv, Ukraine. Department of Cerebrovascular Pathology and Rehabilitation

City: Kharkiv

Website: 1976mv@ukr.net

Project lead: Vladyslav Mykolaiovych Mishchenko, MD, Doctor of medical science, Head of the Department of Cerebrovascular Pathology and Rehabilitation, State Institution "P.V. Voloshyn Institute of Neurology, Psychiatry and Narcology of the National Academy of Medical Sciences of Ukraine," Kharkiv, Ukraine.

Contact: 1976mv@ukr.net

Cooperation sought: Joint research, Technology partnership / commercialization, Joint laboratory or research infrastructure, Mentorship and advisory, Data collaboration, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor

Estimated scale of support: Not yet estimated

Available to pitch (June 12): Either is possible

Proposed presenter: Vladyslav Mykolaiovych Mishchenko, MD, Doctor of medical science, Head of the Department of Cerebrovascular Pathology and Rehabilitation, State Institution "P.V. Voloshyn Institute of Neurology, Psychiatry and Narcology of the National Academy of Medical Sciences of Ukraine," Kharkiv, Ukraine.

Project goal: The goal of the project is to develop and scientifically substantiate an innovative model of comprehensive physical and psycho-emotional rehabilitation for military personnel with cerebrovascular pathology, post-traumatic stress, and comorbid disorders through the use of animal-assisted therapy and other nature-oriented technologies. The project is aimed at

improving neurological, cognitive, and mental health outcomes, enhancing quality of life, and promoting functional recovery through the integration of multidisciplinary approaches into the rehabilitation process.

Summary: The project aims to develop and scientifically validate an innovative model of comprehensive physical and psycho-emotional rehabilitation for military personnel with cerebrovascular pathology, post-stress conditions, and comorbid disorders in wartime settings. The project is based on a multidisciplinary approach and the integration of animal-assisted therapy and other nature-oriented technologies into neurorehabilitation.

Clinical and research activities are being conducted at the Department of Cerebrovascular Pathology and Rehabilitation of the State Institution "P.V. Voloshyn Institute of Neurology, Psychiatry and Narcology of the National Academy of Medical Sciences of Ukraine" with military personnel experiencing cerebrovascular, cognitive, and psycho-emotional disorders. In cooperation with an ecopark, the project plans to implement structured rehabilitation programs involving interaction with animals, exposure to natural environments, and psycho-emotional support.

The project seeks international partners for joint research, methodological support, academic mentorship, exchange of experience in PTSD care and veteran neurorehabilitation, as well as collaborative grant applications and program scaling.

Current status and key results: The project team has significant clinical and scientific experience in the fields of cerebrovascular pathology, neurorehabilitation, and the study of chronic stress effects in wartime conditions. Research activities are currently being conducted at the Department of Cerebrovascular Pathology and Rehabilitation focusing on cerebrovascular disorders among military personnel during martial law. Clinical material has been accumulated regarding disease progression in patients with comorbid psychoneurological and somatic disorders. The team has experience in the clinical assessment of neurological, cognitive, and psycho-emotional status, as well as in preparing scientific publications and conducting interdisciplinary collaboration. Preliminary agreements have been reached regarding rehabilitation activities in the natural environment of an ecopark using animal-assisted therapy and other nature-oriented technologies.

What the project brings: The project combines unique clinical experience in working with military personnel affected by cerebrovascular pathology, psycho-emotional disturbances, and comorbid conditions in wartime settings. The team provides access to a clinical patient base, multidisciplinary expertise (neurology, rehabilitation, psychotherapy, physical therapy), and a real-world environment for implementing nature-oriented rehabilitation. An important advantage is cooperation with an ecopark, creating opportunities to integrate animal-assisted therapy and ecotherapy into structured rehabilitation programs. The team also has experience in clinical observation, the use of validated assessment scales, and long-term patient follow-up. The project offers a platform for international research in innovative neurorehabilitation for veterans and war-affected populations.

What the project asks: The project requires international scientific and organizational collaboration to develop, evaluate, and scale an innovative rehabilitation model for military personnel. Desired areas of cooperation include:

• joint research on the effectiveness of animal-assisted therapy and nature-oriented approaches in neurorehabilitation;

• methodological support in clinical study design and statistical analysis;

• access to international experience in rehabilitation of veterans with PTSD and cerebrovascular disorders;

• academic mentorship for early-career researchers;

• joint publications and participation in international conferences;

• opportunities for short-term fellowships or exchange programs;

• support in implementing digital tools for monitoring psycho-emotional and cognitive status;

• potential joint grant support for the development of research infrastructure and program scaling.

Particular interest is focused on collaboration with U.S. institutions experienced in veteran rehabilitation, PTSD care, and animal-assisted therapy.

Existing international cooperation: At present, the project team does not have formalized international partnerships within this specific research area. However, the team maintains professional scientific contacts and is highly interested in developing international collaboration in neurorehabilitation, cerebrovascular pathology, and mental health care for military personnel. The project is envisioned as a platform for building long-term international partnerships, joint research initiatives, academic exchange, and collaborative grant development.

4. Development of a clinical model for objective assessment of stress burden levels in depressive disorders during wartime

Medical and health sciences · Concept / early planning · Ready to begin cooperation now

Lead institution / team: State Institution "P.V. Voloshyn Institute of Neurology, Psychiatry and Narcology of the National Academy of Medical Sciences of Ukraine"

City: Kharkiv

Website: https://inpn.org.ua

Project lead: Maruta Nataliya, Doctor of Medical Sciences, Professor, Deputy Director of Scientific Work, Head of the Department of Border Psychiatry of the State Institution "P.V. Voloshyn Institute of Neurology, Psychiatry and Narcology of the National Academy of Medical Sciences of Ukraine"

Contact: mscience@ukr.net

Cooperation sought: Joint research, Co-funding or grant partnership, Equipment, infrastructure, or data access, Data collaboration, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor

Estimated scale of support: USD 50,000–100,000

Available to pitch (June 12): No, but I would still like to be included in the catalogue

Project goal: Determining the impact of stress factors on the development of depressive disorders among the general population during wartime through comparison of the level of stress burden and the severity of clinical symptoms.

Summary: Studies demonstrate the development of depressive disorders (DD) in wartime conditions against the background of prolonged traumatic stress and psychosocial factors. Contemporary theories of the pathogenesis of DD associate them with allostatic load – the long-term effect of the physiological response to stress. The project hypothesis proposes considering DD as a consequence of the cumulative effect of stress factors that accumulate under conditions of constant or recurrent stress and over time lead to overload and gradual exhaustion of non-specific stress-associated systems.

At the present stage, programs and algorithms involving artificial intelligence (AI) function as auxiliary tools for screening DD, where the key role in diagnostics is assigned to the clinician. In contrast, determining the level of stress burden requires objectification in clinical conditions. Efficiency and accessibility may be ensured by using non-biochemical stress markers that allow detecting stress state without laboratory tests. The team considers cognitive markers (registration of deterioration in information processing functions and intellectual performance) and emotional markers (changes in internal psycho-emotional state and mood) to be promising in terms of AI software development. Clarification of the impact of war-related stress factors in the development of DD will increase the effectiveness of their timely diagnosis and therapeutic approaches.

Current status and key results: The project team possesses substantial scientific and clinical experience in working with both depressive and stress-associated disorders. The scientific portfolio includes determination of the mental traumatization factor structure and its influence on the development of a wide spectrum of mental disorders (schizophrenia, BD, PTSD, suicidal behavior, neurotic disorders), particularly among internally displaced persons. Psychopathological and pathopsychological consequences of exposure to stressors associated with the SARS-CoV-2 pandemic were also investigated. The team conducted a comprehensive study of prognosis factors for the formation, course and outcome of depressive disorders using clinical-psychopathological, pathopsychological and biochemical approaches. Based on the performed factor analysis, the impact was established for such factors as episode duration, fixation on psychic traumatization factors, clinical presentation structure and personality traits.

What the project brings: Our team's expertise:

- deep experience in evidence-based clinical medicine and patient management;
- methodological base for clinical validation of the model;
- access to a clinical base for conducting trials and primary data collection.

The project team consists of experienced psychiatrists and psychotherapists; possesses its own clinical base for verified recruitment of respondents. The team will fully ensure the clinical block of the study from screening depressive disorders to determining severity level and structure of depressive symptoms using the clinical-psychopathological method with standardized scales. The team is currently developing an original questionnaire for determining the structure and subjective impact of stress factors on the development of depressive disorders under wartime conditions. The team is open to the integration of advanced international methods for objective non-biochemical measurement of the stress load level. All results will be systematized in Excel format for subsequent joint analysis and construction of prognostic statistical models.

What the project asks: The project is aimed at creating and validating a clinical model for objective assessment of the stress burden level in depressive disorders. The approach is based on the use of non-biochemical stress markers. Cognitive and emotional markers are considered promising. The model is developed as an intuitive, non-invasive tool optimized for rapid implementation into routine medical practice.

Expected contribution of partners

- Expertise: in the field of neurobiology, biomedical engineering and data analysis.

- Mathematical modeling: development of the theoretical framework and algorithms for objective measurement.

- Technical development: design, engineering and creation of a software-hardware complex or a digital solution.

- Funding: full provision for the technical development stage, funding the implementation of the engineering part, co-funding the clinical part of the project.

5. Optimizing Antibacterial Therapy through PK/PD Target Monitoring in Patients with Anatomical Sequelae of Combat Trauma

Medical and health sciences · Concept / early planning · Ready to begin cooperation now

Lead institution / team: Shupyk National Healthcare University of Ukraine, department of anesthesiology and intensive care

City: Kyiv

Website: No

Project lead: Ruslan Tkachenko, D.Sc., MD, head of the department

Contact: hexenal63@gmail.com, cc: naccik@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Student or doctoral exchange, Equipment, infrastructure, or data access, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory

Estimated scale of support: Not yet estimated

Available to pitch (June 12): Yes, in person in Lviv

Proposed presenter: Nazar Beley, PhD, MD, assistant professor

Project goal: To establish PK/PD target-guided monitoring strategies for optimizing antibacterial therapy in patients with severe combat-related wound infections and anatomical alterations resulting from battlefield trauma.

Summary: The ongoing War has produced an unprecedented burden of complex combat-related wound infections in Ukraine, frequently caused by multidrug-resistant (MDR) pathogens and contributing to high rates of limb amputation and mortality. Management of these infections increasingly relies on reserve-group antibacterial agents — including colistin, cefiderocol, ceftazidime-avibactam, and other novel β-lactam/β-lactamase inhibitor combinations — for which robust pharmacokinetic/pharmacodynamic (PK/PD) data in this patient population remain scarce. The challenge is further compounded by altered drug distribution in patients with sepsis, septic shock, major tissue loss, and anatomical alterations following combat trauma, where standard dosing regimens may fail to achieve therapeutic PK/PD targets.

This project aims to develop and validate methods for therapeutic drug monitoring and PK/PD target-guided dosing of antibacterial therapy in patients with combat trauma-induced anatomical alterations. We will characterize drug exposure profiles in this population, identify key factors driving PK/PD variability, and establish evidence-based monitoring algorithms to optimize therapeutic outcomes.

Expected outcomes include reduced treatment failure and amputation rates, improved antimicrobial stewardship, lower selection pressure for further resistance, and clinically applicable monitoring protocols that can be integrated into both military and civilian care for trauma patients with severe infections.

Current status and key results: Preliminary work has established the microbiological and epidemiological foundation required for PK/PD-guided antibacterial optimization in combat trauma. Between 2022 and 2024, the research team conducted retrospective cohort study of Ukrainian service members wounded during the full-scale war, published in peer-reviewed national journals: characterization of the evolving microbiological landscape of combat wound infections (Beley et al., Emergency Medicine, 2024); analysis of the microbiological profile of bacteremia following combat trauma (Beley et al., Emergency Medicine, 2024); and assessment of antimicrobial susceptibility patterns of wound-infection pathogens after combat injury (Beley & Zhrzheblovska, Clinical Anesthesiology, Intensive and Emergency Medicine, 2024). Data on antibiotic consumption among patients in cohort was also collected but not yet published. Collectively, these findings define the pathogen spectrum, resistance constraints and antibiotics of interest the proposed PK/PD monitoring strategy must address, providing baseline data and direct rationale for this project.

What the project brings: Clinical expertise and patient access. The team operates within a leading Ukrainian centers (Feofania clinical hospital, NAMS Institute of traumatology, Kyiv oblast hospital) managing severe combat trauma, providing direct access to a cohort of patients with anatomical sequelae of combat injuries.

Microbiological intelligence. Three peer-reviewed cohort studies (2022–2024) have already mapped the pathogen spectrum, resistance dynamics, and real-world antibiotic consumption of war-wound infections in Ukrainian service members.

Intensive care capacity. Combined expertise in anesthesiology, intensive care in treating war-related injuries.

Infrastructure. ICU beds dedicated to combat casualties, in-house microbiology with susceptibility testing.

Networks. Active collaboration with Ukrainian military medical services, national anesthesiology and emergency medicine societies, and academic clinical bases supporting multicenter recruitment.

What the project asks: The project seeks a multi-component partnership:

Funding. Co-funding for a 24–36 month PK/PD monitoring program, including consumables, reagents, and salary support for researchers.

Equipment and assays. Provision of, or shared access to, an LC-MS/MS platform with validated bioanalytical methods for β-lactams, aminoglycosides, glycopeptides, and polymyxins; supply of calibration standards, internal standards, and quality-control materials; software for PK modeling and Bayesian dose individualization (e.g., InsightRX, DoseMeRx, or equivalent).

Methodological mentorship. Faculty guidance on clinical study design, population PK modeling, PK/PD target attainment analysis, and Monte Carlo simulation; statistical support for protocol development and interim analyses.

Clinical data exchange. Reciprocal access to partner datasets on antibiotic exposure–response in critically ill trauma or burn populations for joint analysis and external validation of dosing nomograms.

Publication and dissemination. Co-authorship on joint outputs, editorial support, and open-access publication fees in international peer-reviewed journals.

Mobility. Short-term research visits (1–3 months) for two-four team members to a partner laboratory and hospital for hands-on training in LC-MS/MS, model-informed precision dosing, and clinical PK protocol implementation.

Existing international cooperation: The team has active collaboration with the University of Colorado Anschutz Medical Campus (Department of Emergency Medicine; Center for COMBAT Research) on the ARROW study — Antimicrobial Resistance Research to Improve Outcomes of Traumatic Wounds — a multi-site observational study of antibiotic-resistant wound infections in Ukrainian combat casualties. The project is led by Adit A. Ginde, MD, MPH (Principal Investigator) and Corey Bills, MD (Co-Lead Investigator), with Ukrainian implementation across five sites (three frontline hospitals and two referral centers). ARROW is the first study under the broader RESOLUTE program, funded by the U.S. Department of Defense Combat Casualty Care Research Program. The study design and implementation framework were recently published in the Journal of Trauma and Acute Care Surgery (DOI: 10.1097/TA.0000000000005017). Thus proposed PK/PD project naturally extends as an interventional next step. PI from our department - Nazar Beley, PhD, MD.

6. Objective biomarkers of adaptive and compensatory processes and personalized neurorehabilitation following blast-induced closed traumatic brain injury

Medical and health sciences · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: State Institution "P. V. Voloshin Institute of Neurology, Psychiatry, and Addiction of the National Academy of Medical Sciences of Ukraine", sleep medicine dept, Kharkiv, Ukraine

City: Kharkiv

Project lead: Sukhorukov Victor Victorovich, Senior Research Fellow of Sleep Medecine Dept

Contact: vicvicci85@gmail.com

Cooperation sought: Co-funding or grant partnership

Preferred partner(s): Foundation or donor

Estimated scale of support: Prefer not to disclose

Available to pitch (June 12): No, but I would still like to be included in the catalogue

Project goal: To develop comprehensive prognostic criteria for the course and outcomes of blast-related closed traumatic brain injury based on the identification of objective biomarkers of adaptive and compensatory processes, enabling early detection of risks for severe complications that may pose a significant threat to the health and life of affected individuals. Based on the obtained results, to establish evidence-based approaches to personalized etiopathogenetic treatment, differentiated neurorehabilitation, and psychocorrection of cognitive, emotional, and behavioral impairments across different categories of patients, as well as to formulate recommendations for the restoration of functional capacity, social reintegration, and subsequent employment, with the aim of improving quality of life.

Summary: Blast-related closed traumatic brain injury represents one of the most pressing medical and social challenges of modern times due to its high prevalence among military personnel and civilian populations, as well as a substantial risk of long-term cognitive, emotional, and behavioral disturbances. The insufficient understanding of adaptive and compensatory mechanisms and the long-term consequences of injury limits the ability to predict patient outcomes in a timely manner and to implement effective rehabilitation strategies.

This project proposes a comprehensive clinical, neurophysiological, and psychodiagnostic investigation of brain functioning after blast-related closed traumatic brain injury, with a particular focus on interhemispheric interactions, neurodynamic processes, and the relationship between cortical and subcortical regulatory systems. To assess subtle changes in brain functional status, a proprietary computerized neuropsychological method for analyzing the dynamic characteristics of motor functions will be employed.The study findings will enable the identification of objective biomarkers of adaptive and compensatory processes, improve prognostic modelling of long-term injury outcomes, and support the development of personalized approaches to neurorehabilitation and psychocorrection. The practical implementation of the

obtained results is expected to enhance recovery efficiency, improve quality of life, and facilitate social reintegration of affected individuals.

Current status and key results: A complex of clinical, neurophysiological, and psychodiagnostic methods has been developed and validated, including a proprietary patented computerized neuropsychological method for assessing the dynamic characteristics of motor functions, whose effectiveness has been confirmed in healthy individuals as well as in patients with neuropsychiatric disorders. Distinct features of impaired integrative brain activity have been identified in military personnel and civilians following blast-related closed traumatic brain injury, including reduced cortico-subcortical connectivity, disrupted interhemispheric integration, and depletion of the brain's energetic resources in both acute and long-term post-injury phases.

The nature of cognitive, emotional, and behavioral impairments has been characterized, and a set of criteria has been established for identifying high-risk groups for adverse outcomes. The obtained results have been published in peer-reviewed scientific journals (2016–2025) and provide a foundation for the development of personalized approaches to neurorehabilitation and prognostic assessment of long-term outcomes following blast-related closed traumatic brain injury.

What the project brings: The project team introduces a scientifically grounded concept of adaptive and compensatory processes in military personnel and civilians affected by blast-related closed traumatic brain injury. A comprehensive set of clinical, neurophysiological, and psychodiagnostic methods has been developed and validated, including a proprietary patented computerized neuropsychological method for assessing the dynamic characteristics of motor functions, whose effectiveness has been confirmed in clinical studies.The team has extensive research experience in neuropsychology, neurophysiology, and the consequences of blast-related injury, as well as an established research database. Distinct features of impaired integrative brain activity have been identified, along with their associations with cognitive, emotional, and behavioral disorders across different phases of the traumatic process. A set of criteria has been developed for identifying risk groups and predicting adverse outcomes, providing a foundation for personalized rehabilitation strategies and international scientific collaboration.

What the project asks: The project foresees international and interdisciplinary collaboration in the fields of neuroscience, clinical neurology, neuropsychology, and rehabilitation medicine. Preferred areas of partnership include joint research activities, exchange of scientific expertise, and participation in the validation of obtained results. Key domains of collaboration comprise access to advanced neurophysiological analysis methods and digital tools for assessing brain functional status; joint analysis of clinical and neuropsychological data; expert support in the development and evaluation of personalized neurorehabilitation approaches; cooperation in statistical analysis and predictive modelling; academic mentorship of early-career researchers; and preparation of joint scientific publications and international grant applications.Of particular value will be partner involvement in multicenter studies, exchange of research protocols and rehabilitation approaches for patients with blast-related closed traumatic brain injury, ensuring international validation of findings and their subsequent implementation into clinical practice.

Existing international cooperation: At present, formalized international collaboration has not been established. However, the team remains open to the development of international partnerships, joint research initiatives, exchange of expertise, and the advancement of multicenter projects in the fields of neuroscience and neurorehabilitation.

7. Genetic studies in children with epilepsy

Medical and health sciences · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: State Institution "P.V. Voloshin Institute of Neurology, Psychiatry, and Narcology of the National Academy of Medical Sciences of Ukraine"

City: Kharkiv

Project lead: Tantsura Liudmyla Mykolayivna – Head of the Department of Child Psychoneurology and Paroxysmal Conditions of the SI "P.V. Voloshin Institute of Neurology, Psychiatry, and Narcology of the National Academy of Medical Sciences of Ukraine"; Pylypets Olena Yuryivna – Leading Researcher at the Department of Child Psychoneurology and Paroxysmal Conditions, SI "P.V. Voloshin Institute of Neurology, Psychiatry, and Narcology of the National Academy of Medical Sciences of Ukraine"

Contact: _tantsura@ukr.net

Cooperation sought: Joint research, Co-funding or grant partnership, Joint laboratory or research infrastructure

Preferred partner(s): Research institute or laboratory

Estimated scale of support: Not yet estimated

Available to pitch (June 12): No, but I would still like to be included in the catalogue

Project goal: To determine the frequency of polymorphisms in transporter genes and genes encoding cytochrome P450 in children with drug-resistant forms of epilepsy in Ukraine. To improve approaches to the treatment of epileptic seizures, taking into account the presence of allelic variants that control the transport and metabolism of antiepileptic drugs

Summary: Research into the human genome has revealed that an individual's genetically determined characteristics influence both the risk of developing many diseases and the course of those diseases, as well as the efficacy and safety of drug therapy—especially when it is prescribed for long periods and involves the simultaneous use of multiple medications. This is particularly true for epilepsy, and especially for drug-resistant forms. It is known that the effectiveness of treatment depends on the activity of genes responsible for the transport of antiepileptic drugs (the genes involved belong to the ABC transporter family) and the rate of biotransformation (genes of the cytochrome P450 family, such as CYP3A4, CYP2C9, CYP2C19, CYP2D6) determines the effectiveness of treatment.

The same drug substance at a therapeutic dose can have varying effects on different individuals: ranging from a lack of efficacy to pronounced toxic effects. The results of pharmacogenetic testing can serve as an important tool for personalized treatment of pediatric patients with drug-

resistant forms of epilepsy and help reduce the risk of complications associated with drug therapy.

Current status and key results: For about 30 years, the Department of Child Psychoneurology and Paroxysmal Conditions has been studying various aspects of epilepsy, including drug-resistant variants of the disease, and other paroxysmal conditions. We studied some aspects of CYP2C9, CYP2C19, and CYP3A4 gene polymorphisms in children with pharmacoresistant epilepsy, their influence on the effectiveness of treatment and the course of the disease. The results of the research were covered in publications:

1. Tantsura Liudmyla, Pylypets Olena, Tretiakov Dmytro, Tantsura Yevhen. Variants of the formation and course of drug-resistant epilepsy in children with genetic polymorphisms CYP2C9, CYP2C19, CYP3A4. Wiadomości Lekarskie, Medical Advances, May 2023. Vol. LXXVI. Issue 5. Part I. P. 1007-1014. (Scopus Q4) DOI: 10.36740/WLek202305.

2. Tantsura L. M., Pylypets O. Yu., Tretyakov D. V., Tantsura E. O. Cytochrome P450 system gene polymorphisms in children with pharmacoresistant epilepsy, their potential impact on the effectiveness and tolerability of treatment. Herald of medicine, psychology and pharmacy. 2024. No. 1. P. 28–37. doi: https://doi.org/10.20998/BMPP.2024.01.03

What the project brings: Specialists in the Department of Child Psychoneurology and Paroxysmal Conditions have extensive experience in studying various aspects of childhood epilepsy (diagnosis, differential diagnosis, clinical course, treatment approaches, follow-up, and prevention). One of the key aspects is the existence of a large database on these patients, along with their long-term follow-up by specialists at the P.V. Voloshin Institute of Neurology, Psychiatry, and Narcology of the National Academy of Medical Sciences of Ukraine. Thousands of such patients receive consultations and treatment annually.

However, in Ukraine, there are limited opportunities for genetic testing of such patients—specifically, the identification of genetic variants of epilepsy, polymorphisms of cytochrome P450 genes involved in the metabolism of antiepileptic drugs, and genes that act as transporters for antiepileptic medications.

What the project asks: Opportunities for collaboration and joint research involving a genetic laboratory, which will enable pharmacogenetic testing to identify polymorphisms in -transporters and genes involved in the biotransformation of antiepileptic drugs in children suffering from drug-resistant forms of epilepsy , as well as exome sequencing to study patients with various forms of epilepsy, particularly drug-resistant ones.

Studying the frequency and role of genetic pathology, as well as the genetic characteristics of individual patients in the development of drug-resistant forms of epilepsy, will enable the development of the most personalized therapy for children with this severe condition

8. Development of a Personalized Therapy Method for Multiple Sclerosis Based on the Use of Mesenchymal Stem Cells and Monitoring of Neurodegeneration Markers

Natural sciences, Medical and health sciences, Interdisciplinary · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: P.V. Voloshyn Institute of Neurology, Psychiatry and Narcology of the National Academy of Medical Sciences of Ukraine

City: Kharkiv

Website: https://inpn.org.ua

Project lead: Maksym Ye. Chernenko, MD, DSc Acting Head of the Department of Autoimmune and Neurodegenerative Diseases of the Nervous System. Multiple sclerosis center.

Contact: mchernenko78@ukr.net

Cooperation sought: Joint research, Co-funding or grant partnership, Mentorship and advisory, Equipment, infrastructure, or data access, Data collaboration, Training and capacity building, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Government or public institution

Estimated scale of support: USD 50,000–100,000

Available to pitch (June 12): Either is possible

Proposed presenter: Maksym Ye. Chernenko, MD, DSc Acting Head of the Department of Autoimmune and Neurodegenerative Diseases of the Nervous System. Multiple sclerosis center.

Project goal: The project aims to investigate the safety, tolerability, and clinical effects of mesenchymal stem cell therapy in patients with neurodegenerative and neuroinflammatory disorders, primarily multiple sclerosis, using integrated neurological, neuroimaging, cognitive, and patient-reported outcome measures.

Additional objectives include:

• development of remote clinical monitoring approaches;

• evaluation of disability progression and quality-of-life outcomes;

• assessment of different routes of MSC administration;

• identification of potential predictors of therapeutic response;

• improvement of personalized therapeutic strategies for progressive neurological disorders.

Summary: This project aims to evaluate the safety, clinical efficacy, and translational potential of mesenchymal stem cell (MSC)-based therapy in patients with neurodegenerative and neuroinflammatory disorders, with a primary focus on multiple sclerosis and related CNS conditions. The research integrates neurological examination, MRI-based neuroimaging, disability assessment, cognitive evaluation, and remote patient monitoring tools. The project builds upon more than 20 years of clinical and research experience in neurodegenerative diseases

at the P.V. Voloshyn Institute of Neurology, Psychiatry and Narcology of the National Academy of Medical Sciences of Ukraine. Previous work by the team included studies on neuroplasticity, neurorehabilitation, cognitive impairment, and cellular approaches in multiple sclerosis. The current initiative seeks international collaboration to strengthen methodological standardization, longitudinal follow-up, biomarker analysis, and translational interpretation of MSC therapy outcomes. Particular emphasis is placed on developing scalable remote monitoring approaches suitable for patients affected by war-related disruption of healthcare access. The project is designed as a clinically oriented translational research platform with potential for future multicenter international collaboration.

Current status and key results: The research team has more than two decades of experience in neurodegenerative and demyelinating diseases, including multiple sclerosis, Wilson disease, ALS, and neurorehabilitation research. Previous studies conducted at the institute included investigations of neuroplasticity, cognitive impairment, MRI correlates of neurodegeneration, and early cellular therapy approaches in neurological disorders. The team has produced peer-reviewed publications, methodological recommendations, patents, and Ukrainian-language adaptations of neurological quality-of-life instruments. Preliminary clinical experience with stromal and mesenchymal cell-based interventions was obtained in earlier observational studies performed between 2003 and 2008.The project infrastructure includes a specialized Multiple Sclerosis Center, clinical neurology expertise, neuroimaging access, and experience in longitudinal patient assessment.

What the project brings: The project contributes unique clinical expertise in neurodegenerative and neuroinflammatory disorders within a large Ukrainian referral center operating under wartime healthcare conditions. The team provides access to clinically characterized patient cohorts, long-term experience in multiple sclerosis research, expertise in neurorehabilitation and neuroplasticity, and established neurological assessment protocols. The project also offers experience in remote patient monitoring approaches, adaptation of patient-reported outcome tools, and longitudinal disability assessment. Existing institutional expertise includes MRI interpretation, cognitive assessment, and clinical follow-up of progressive neurological diseases. The collaboration environment provides opportunities for translational clinical research, real-world observational data collection, and development of scalable monitoring approaches relevant to disrupted healthcare systems and resource-limited settings.

What the project asks: The project seeks international academic and research collaboration focused on strengthening methodological quality, translational interpretation, and long-term follow-up of MSC-based interventions in neurodegenerative disorders.

Specific areas of cooperation include:

- joint clinical research and co-authored publications;
- methodological mentorship in stem cell clinical research design;
- collaboration in biomarker analysis and neuroimaging interpretation;
- support for longitudinal data analysis and biostatistics;
- development of standardized protocols for remote monitoring;

 access to international expertise in regenerative neurology and translational neuroscience;

 potential co-funding for research personnel, imaging studies, laboratory assays, and digital monitoring infrastructure.

The team is also interested in future multicenter observational studies and international networking opportunities related to neuroregeneration, neuroimmunology, and progressive neurological diseases.

Existing international cooperation: No formal international partnership is currently established. The team is actively seeking academic and translational research collaboration with U.S. and international institutions.

9. Biological aging, cardiometabolic and psycho-emotional risks during the war in Ukraine: an integrative interdisciplinary research initiative

Medical and health sciences · Concept / early planning · Ready within 3–6 months

Lead institution / team: D.F. Chebotaryov Institute of Gerontology of the NAMS of Ukraine, Kyiv, Ukraine

City: Kyiv

Website: https://ig.org.ua/

Project lead: Boris Mankovsky - MD, PhD, Doctor of Sci (Med), Professor, corresponding member of the National Academy of Medical Sciences of Ukraine, director of the D.F. Chebotarev Institute of Gerontology of the National Academy of Sciences of Ukraine

Contact: mankovsky1964@yahoo.com

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Data collaboration, Joint educational program development, Publications and scholarly communication, Policy and advisory collaboration

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Company or industry partner, Ukrainian diaspora organization, Government or public institution, Publisher or scholarly infrastructure provider

Estimated scale of support: USD 100,000–250,000

Available to pitch (June 12): Yes, online

Proposed presenter: Boris Mankovsky - MD, PhD, Doctor of Sci (Med), Professor, corresponding member of the National Academy of Medical Sciences of Ukraine, director of the D.F. Chebotarev Institute of Gerontology of the National Academy of Sciences of Ukraine, Honored Worker of Science and Technology of Ukraine or Zoya Serebrovska, a Head of the Department of Physiology at the D.F. Chebotarev Institute of Gerontology, National Academy of Medical Sciences of Ukraine.

Project goal: The aim of this interdisciplinary initiative is to investigate the impact of chronic wartime stress on biological aging, cardiometabolic health, endothelial dysfunction, and psycho-

emotional well-being in the Ukrainian population. The project seeks to develop integrated approaches for early detection, risk stratification, prevention, and personalized management of stress-induced accelerated aging and cardio-renal-metabolic disorders during and after the war.

Summary: The ongoing war in Ukraine has created an unprecedented model of chronic stress associated with accelerated biological aging, psycho-emotional maladaptation, and increased cardio-renal-metabolic risk. This interdisciplinary research initiative aims to investigate the complex interactions between biological aging, endothelial dysfunction, microcirculatory impairment, metabolic disorders, and mental health disturbances under wartime conditions.

The project integrates expertise in gerontology, internal medicine, diabetology, psychocardiology, psychoneuroendocrinology, and public health to develop innovative approaches for early detection, prevention, and personalized management of stress-associated aging processes. Particular attention will be focused on vascular aging, chronic low-grade inflammation, insulin resistance, autonomic dysfunction, sleep disturbances, cognitive decline, and psychosomatic manifestations of chronic stress.

The initiative will evaluate promising biomarkers of accelerated aging, including endothelial function, heart rate variability, telomere length, epigenetic age, and inflammatory markers. Ukraine currently represents a unique real-world environment for studying the mechanisms linking chronic psycho-emotional stress with vascular, metabolic, and neurocognitive disorders.

The expected outcomes include the development of integrated screening models, risk stratification algorithms, and personalized resilience-oriented preventive strategies aimed at improving cardiometabolic and mental health outcomes in vulnerable populations during and after wartime.

Current status and key results: To date, on based at the D. F. Chebotarev Institute of Gerontology, has established a multidisciplinary research framework focused on vascular aging, endothelial dysfunction, metabolic disorders, and stress-induced mechanisms of accelerated biological aging under wartime conditions in Ukraine. Key scientific activities include investigations of cardio-renal-metabolic syndrome, hypertension, type 2 diabetes, cognitive decline, chronic inflammation, microcirculatory dysfunction, and psycho-emotional stress-related vascular damage. Priority research directions and biomarker platforms have been identified, including telomere length, epigenetic aging markers, endothelial function, heart rate variability, and systemic inflammatory markers. The team has also integrated its research strategy with the national mental health initiative “How Are You?” to develop screening models, early detection algorithms, and resilience-oriented preventive strategies. International collaboration initiatives and interdisciplinary partnerships are currently being actively developed.

What the project brings: Our team contributes internationally recognized expertise in gerontology, diabetology, cardiovascular medicine, vascular aging, and stress-related mechanisms of accelerated biological aging. The project is implemented in collaboration with the D. F. Chebotarev Institute of Gerontology, providing strong academic, clinical, and translational research infrastructure.

We provide access to unique wartime-related clinical cohorts and real-world longitudinal data on chronic psycho-emotional stress, endothelial dysfunction, cardio-renal-metabolic syndrome, hypertension, type 2 diabetes, cognitive decline, multimorbidity, and aging processes in older adults. The team has expertise in advanced biomarker assessment, including endothelial function testing, heart rate variability, telomere biology, epigenetic aging markers, microcirculatory studies, and inflammatory profiling.

Our multidisciplinary network integrates internal medicine, psychocardiology, psychoneuroendocrinology, diabetology, gerontology, and public health, creating a unique platform for international collaboration on "war as a model of accelerated systemic aging."

What the project asks: We seek long-term international academic and clinical partnerships focused on joint research, data integration, translational medicine, and capacity building in the field of accelerated aging under chronic stress and wartime conditions. Priority areas of cooperation include collaborative multicenter studies, shared access to biomarker technologies, and joint analysis of clinical and epidemiological data related to vascular aging, cardio-renal-metabolic disorders, cognitive decline, and psycho-emotional stress.

We are particularly interested in:

• joint grant applications within Horizon Europe, NIH, Wellcome Trust, and other international funding frameworks;

• development of shared longitudinal databases and AI-assisted predictive models of stress-induced aging;

• collaborative publications, international workshops, and educational initiatives.

The project also welcomes partnerships supporting digital health, mental health resilience programs, and personalized prevention strategies for vulnerable populations affected by war.

Existing international cooperation: Unfortunately, at the moment, we are not cooperating with anyone.

10. SPHERE: Building Psychosocial Support Ecosystems for Relocated Ukrainian Universities

Medical and health sciences, Social sciences, Humanities, Education and pedagogy, Interdisciplinary · Concept / early planning · Ready to begin cooperation now

Lead institution / team: Berdyansk State Pedagogical University

City: Zaporizhzhia (temporarily relocated from Berdiansk)

Website: Project-specific webpage is not yet available. Main institutional online presence: https://bdpu.org.ua/en/

Project lead: Natalia Tsybuliak, Associate Professor, Berdyansk State Pedagogical University

Contact: nata.tsibulyak@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Student or doctoral exchange, Postdoctoral hosting, Joint laboratory or research infrastructure,

Mentorship and advisory, Data collaboration, Training and capacity building, Joint educational program development, Publications and scholarly communication, Policy and advisory collaboration, Field experiment partnership; implementation support; digital psychosocial support infrastructure; advisory board participation; support for piloting and scaling a low-threshold psychosocial support model in relocated Ukrainian universities.

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Ukrainian diaspora organization, Government or public institution, Publisher or scholarly infrastructure provider, Public mental health centres, university counselling and well-being services, implementation science groups, behavioural science labs, trauma-informed education networks, and organisations supporting displaced or war-affected students and academics.

Estimated scale of support: USD 100,000–250,000

Available to pitch (June 12): Yes, online

Proposed presenter: Natalia Tsybuliak, Associate Professor, Berdyansk State Pedagogical University

Project goal: SPHERE aims to develop, implement and evaluate a low-threshold, preventive and culturally appropriate psychosocial support ecosystem for students and staff at relocated Ukrainian universities. The project responds to the disruption caused by the full-scale war, including relocation, digital or hybrid delivery, weakened campus-based support structures, psychological strain and reduced institutional capacity. SPHERE will identify psychosocial needs and support barriers, co-design support pathways and digital/low-threshold tools with stakeholders, evaluate the model through a field experiment in a relocated university against a matched control university, and prepare an implementation toolkit for broader use in other relocated universities in Ukraine. The goal is to move from documenting distress to building an institutionally embedded, scalable and evidence-informed model of psychosocial support for crisis-affected higher education.

Summary: SPHERE develops, implements and evaluates a low-threshold psychosocial support ecosystem for students and staff at relocated Ukrainian universities. Since the full-scale war, these institutions have faced relocation, digital or hybrid delivery, weakened campus-based support structures and prolonged psychological strain. While existing research documents high levels of distress, burnout and disrupted academic functioning, there is still limited evidence on how universities can organise feasible, culturally appropriate and sustainable psychosocial support in wartime conditions.

SPHERE addresses this gap by combining needs assessment, stakeholder co-design, behavioural and implementation science, and field evaluation in a real university setting. The project will map psychosocial needs and institutional capacities across relocated universities, co-design support pathways and low-threshold tools, test the model in an experimental university against a matched control university, and prepare implementation materials for broader use.

Current status and key results: A full project concept has been developed, including the theoretical framework, research questions, hypotheses, four-stage methodology, field experiment

design, work packages, risk management plan, ethics logic and dissemination strategy. The project builds on the team's existing research on mental health, burnout, anxiety, depression, migration, institutional support and academic functioning among Ukrainian students, academic staff and researchers during wartime. No project-specific empirical data have yet been collected; the next milestone is securing international partnership and funding to launch needs assessment, co-design and field evaluation.

What the project brings: The project brings a highly relevant Ukrainian implementation site: Berdyansk State Pedagogical University, a relocated "university without walls" operating under wartime disruption and digital mediation. The team contributes direct access to students, academic staff, leadership and support actors; expertise in wartime mental health, public mental health, psychosocial support, mixed-methods research, co-design, implementation science and open science; and a strong publication record on Ukrainian academia during the war. BSPU provides institutional communication channels, digital learning infrastructure, research ethics procedures, stakeholder access and experience in supporting academic communities under crisis conditions. The project also contributes a mature field experiment concept, a clear intervention architecture, and a potential comparative setting across Ukraine's relocated universities.

What the project asks: We seek international partners to help launch and implement SPHERE as a funded field-based intervention project. Specific cooperation sought includes: co-funding for a 2–3 year pilot and evaluation; methodological partnership in field experiment design, psychometrics, implementation science and behavioural engagement strategies; support for adapting and testing measures such as distress, perceived stress, trauma-related symptoms, support access, help-seeking and psychosocial functioning; and advisory input on safeguarding, data protection and ethical implementation in war-affected university settings. We also seek partners to co-develop digital low-threshold support tools, peer-support formats, staff guidance, referral pathways, outreach/onboarding materials and an implementation toolkit. Additional cooperation may include hosting Ukrainian researchers for short research visits, supporting a postdoctoral or research coordinator position, providing expert mentorship, supporting open-access publications, and collaborating on comparative analysis with U.S. university well-being systems. Partners may contribute as funders, methodological advisers, implementation partners, university counselling/well-being services, public mental health centres or diaspora networks.

Group 2 — AI & Data-Driven Medicine

11. Integrated Morphofunctional and Electrophysiological Model for Visual Prognosis After Vitrectomy in Epiretinal Membrane

Information technology and computer science, Medical and health sciences · Concept / early planning · Ready within 3–6 months

Lead institution / team: Shupyk National University of Healthcare of Ukraine, Department of Adult and Pediatric Ophthalmology

City: Kyiv

Project lead: Doctor of Medical Sciences, Professor, Head of the Department of Adult and Pediatric Ophthalmology: Putienko O. O.

Contact: byblikpeper@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Student or doctoral exchange, Data collaboration, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory

Estimated scale of support: Not yet estimated

Available to pitch (June 12): Yes, in person in Lviv

Proposed presenter: PhD candidate at Shupyk National University of Healthcare of Ukraine, MD, Valerii Vasylevskyi

Project goal: To lay the scientific foundation for investigating metamorphopsia prevention in patients with epiretinal membrane. The project will establish this foundation by building a structured multimodal dataset and exploring preliminary predictive approaches to visual outcomes — creating the infrastructure and methodological base that future intervention-focused research will require. Metamorphopsia remains one of the most functionally debilitating and underinvestigated consequences of ERM, and no solid research foundation for prevention-oriented work currently exists.

Summary: This PhD research develops the first integrated predictive model for visual recovery after vitrectomy in idiopathic epiretinal membrane (iERM) — a common macular condition causing vision distortion and reduced acuity. Current surgical outcomes remain poorly predictable, limiting personalized treatment planning.

The study combines optical coherence tomography (OCT), multifocal electroretinography (mfERG), visual evoked potentials (VEP), and immunohistochemical analysis of removed membranes (GFAP, CD68, Vimentin, CRALBP) into a single multimodal framework. Machine learning methods (Random Forest, CART, logistic regression) are applied to identify preoperative biomarkers with the highest prognostic value.

The expected output is a clinician-facing decision support algorithm that individualizes surgical tactics and improves patient routing before vitrectomy. The research is conducted at the National University of Healthcare of Ukraine (Shupyk), with data collection running from 2025 to 2029.

This work is directly relevant to US academic ophthalmology and biomedical AI centers interested in retinal biomarker research, multi-site model validation, or clinical AI tool development. We are open to research partnerships, data collaboration, and joint publication with international institutions.

Current status and key results: The project is in active preparation phase. A research protocol and informed consent documentation have been developed in accordance with applicable ethical standards. The study population has been defined, with a focus on identifying eligible patients. Visit schedules and operational procedures are established.

What the project brings: Direct access to a patient base with macular pathologies, specifically idiopathic epiretinal membrane. Multimodal diagnostic infrastructure including electrophysiology and high-resolution retinal imaging. A surgical team with deep subspecialty expertise in macular surgery. Institutional base at Shupyk National University of Healthcare of Ukraine, one of the country's primary postgraduate medical training centers.

What the project asks: Collaboration with researchers who have expertise in ocular tissue morphology and biochemistry, specifically to explore potential correlations between morphological and biochemical factors and visual recovery outcomes, with a focus on metamorphopsia. This is an area the current team does not cover and where external expertise would meaningfully extend the research scope.

Funding support is sought for morphological and biochemical testing, as well as operational logistics related to patient management and study visits.

A researcher exchange or visiting program would also be welcomed, with the lead investigator open to visiting a partner institution.

Existing international cooperation: No

12. ISBAS-V: Intelligent Speech and Biometric Analysis System for Psychological Rehabilitation of Veterans

Information technology and computer science, Medical and health sciences, Interdisciplinary · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: «P.V. Voloshyn Institute of Neurology, Psychiatry and Narcology of the NAMS of Ukraine» State Institution "; Department of Software Engineering and Management Intelligent Technologies of the Educational and Scientific Institute of Computer Sciences and Information Technologies of the National Technical University "Kharkiv Polytechnic Institute"

City: Kharkiv

Website: https://isbas-v.github.io/

Project lead: Linskiy Igor Volodymyrovych, Director of the «P.V. Voloshyn Institute of Neurology, Psychiatry and Narcology of the NAMS of Ukraine» State Institution; Kopp Andrii Mykhailovych, Head of the Department of Software Engineering and Management Intelligent Technologies of the Educational and Scientific Institute of Computer Sciences and Information Technologies of the National Technical University "Kharkiv Polytechnic Institute"

Contact: i_linskiy@yahoo.com; koppandrii@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Technology partnership / commercialization, Data collaboration, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Company or industry partner

Estimated scale of support: Not yet estimated

Available to pitch (June 12): Yes, online

Project goal: The project aims to increase the effectiveness of therapy and psychological rehabilitation of veterans of the Armed Forces of Ukraine and other categories of the population affected by russia's war against Ukraine, in particular internally displaced persons, the civilian population of frontline territories and people with severe psychological consequences of the war.

Summary: The ISBAS-V project involves the creation of an AI assistant for mental health professionals working with veterans of the Armed Forces of Ukraine. The project aims to identify hidden psycho-emotional consequences of trauma that patients cannot or do not want to verbalize. It is based on multimodal data fusion, combining physiological indicators with intelligent speech analysis.

During therapist-patient interaction, Speech-to-Text and Large Multimodal Models algorithms analyze linguistic patterns (words, grammatical structures, intonation), revealing hidden markers of psycho-emotional stress, anxiety, aggression, depression or apathy. At the same time, the fitness tracker sensors will record the slightest changes in physiological indicators (heart rate variability, respiratory rate, electrodermal activity). The system will automatically and synchronously analyze these flows, identifying the exact moments of emotional stress and their causes. This will allow in real time to compare verbal "triggers" with the body's vegetative reactions, creating a holistic picture of the patient's psycho-emotional state.

To ensure safety, the system implements Human-in-the-Loop (HiTL) and Explainable AI (xAI) approaches. These guarantee specialist control over recommendations and clarify why specific states were detected.

Key advantages: predicting of psycho-emotional breakdowns and preventing re-traumatization; personalizing and adjusting rehabilitation intensity; supporting clinical decisions via session "heat maps" highlighting traumatic areas.

Current status and key results: An analysis of current practice in therapy and psychological rehabilitation of veterans of the Armed Forces of Ukraine was carried out. It was established that one of the most important problems in this area is the difficulty of determining the true psycho-emotional consequences of trauma, which the patient cannot or does not want to verbalize. A concept for overcoming these difficulties was developed based on multimodal analysis of audio signals and physiological data using artificial intelligence technologies with the application of HiTL approaches to control and validate results and xAI to ensure transparency and interpretability of the system's conclusions.

What the project brings: 1. Many years of experience in therapy and psychological rehabilitation of patients with mental health disorders.

2. Access to clinical data on mental health disorders in modern warfare for joint analysis (about 1000 new patients each year).

3. Experience in developing software systems using artificial intelligence, machine learning, natural speech processing, and computer vision, including creating web-based AI solutions and research prototypes.

What the project asks: Access to modern methods of processing multimodal data (linguistic speech patterns, heart rate variability, respiratory rate, electrodermal activity, etc.) using artificial intelligence tools.

Providing mutual access to anonymized physiological and audio datasets for training and cross-validation of artificial intelligence models

Existing international cooperation: There is no such cooperation now.

13. AI-Assisted Functional Redox Precision Medicine: Thiol-Disulfide Response Profiling for Personalized Drug Therapy Selection

Natural sciences, Information technology and computer science, Medical and health sciences, Interdisciplinary · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: Lead Ukrainian Institution: Shupyk National Healthcare University of Ukraine.

City: Kyiv

Website: https://www.nuozu.edu.ua/en

Project lead: Oleksandr Obodnikov, Associate Professor of the Department of Thoracic Surgery and Pulmonology.

Contact: obodnikovsansan@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Technology partnership / commercialization, Mentorship and advisory, Equipment, infrastructure, or data access, Data collaboration, Training and capacity building, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Company or industry partner, Government or public institution

Estimated scale of support: Not primarily financial

Available to pitch (June 12): Yes, online

Proposed presenter: Lead Researcher: Assoc. Prof. Oleksandr Obodnikov.

Project goal: The project aims to develop and validate an AI-assisted functional redox precision medicine framework for personalized drug therapy selection based on thiol-disulfide response profiling of patient blood samples in vitro.

The proposed approach investigates whether dynamic thiol-disulfide changes induced by competing therapeutic agents may serve as adaptive physiological biomarkers for comparative therapeutic ranking and individualized treatment optimization before therapy initiation.

Building upon more than two decades of translational research, patents, clinical applications, and international oncology studies, the project seeks to transform thiol-disulfide response analysis from a conventional oxidative stress marker into a functional systems-level biomarker for adaptive precision therapeutics.

The initiative integrates redox biology, functional diagnostics, translational medicine, multimodal biomarker analytics, and explainable AI-assisted modeling to support physiologically interpretable therapeutic decision-making.

Potential application areas include oncology, endocrinology, immunology, dermatology, pulmonology, inflammatory diseases, rehabilitation medicine, and comparative targeted therapy selection.

Summary: This project develops a functional redox-guided precision pharmacotherapy framework for personalized selection of drug treatment based on in vitro assessment of thiol-disulfide response in patient blood exposed to competing therapeutic agents.

The initiative builds upon more than 20 years of Ukrainian-origin translational research, including early patents, international oncology conference presentations, clinical applications, and the US patent application “Method for Improved Selection of Therapeutic Agents” (US20140234888A1).

The central hypothesis is that drug-induced thiol-disulfide dynamics may reflect individual adaptive biological compatibility with therapy and support comparative ranking of therapeutic options before treatment initiation.

The project integrates redox biology, functional diagnostics, translational medicine, and explainable AI-assisted analytics. Potential application areas include oncology, endocrinology, immunology, dermatology, pulmonology, inflammatory diseases, and rehabilitation medicine.

The initiative seeks international collaboration for pilot validation studies, multimodal biomarker analysis, AI-assisted therapeutic modeling, and development of physiologically interpretable precision medicine platforms.

Current status and key results: The project builds upon more than 20 years of translational research in individualized therapeutic selection using thiol-disulfide response profiling. Previous work includes patents in Ukraine and the Russian Federation, international conference presentations, clinical applications, and the U.S. patent application “Method for Improved Selection of Therapeutic Agents” (US20140234888A1).

Earlier studies explored comparative therapeutic selection in oncology, pulmonology, immunology, dermatology, and endocrine therapy, including individualized chemotherapy approaches in advanced non-small cell lung cancer presented at international oncology meetings.

The current stage focuses on conceptual modernization of the framework through integration with systems medicine, functional diagnostics, multimodal biomarker analytics, and explainable AI-assisted therapeutic modeling.

A historical-conceptual archive and translational roadmap for future pilot validation studies are currently being developed.

What the project brings: The project contributes an original translational medicine framework developed through long-term interdisciplinary research in functional therapeutic profiling and redox biology.

The Ukrainian team provides:

• prior intellectual groundwork and patents;

• historical clinical experience in individualized therapeutic selection;

• expertise in oncology, endocrinology, immunology, dermatology, and translational medicine;

• conceptual models for comparative therapeutic ranking using thiol-disulfide response dynamics;

• pilot clinical observations and translational hypotheses;

• emerging AI-assisted precision medicine framework development.

The initiative offers a unique opportunity to expand an underexplored area of functional precision medicine linking redox biology, adaptive therapeutics, and physiologically interpretable AI-assisted analytics.

The project is especially suitable for collaborative pilot studies, multimodal biomarker integration, computational therapeutic modeling, and translational precision pharmacotherapy research.

What the project asks: The project seeks international collaboration for pilot translational validation of functional thiol-disulfide response profiling as a potential platform for personalized drug therapy selection.

Priority areas of cooperation include:

joint pilot clinical studies;

access to modern biomarker and redox-analysis infrastructure;

collaboration in AI-assisted multimodal data analysis;

computational modeling and explainable AI development;

comparative therapeutic profiling research;

joint publications and future grant applications;

mentorship and interdisciplinary translational research networking.

Particular interest includes collaboration with oncology centers, precision medicine programs, systems biology laboratories, AI-in-medicine research groups, and translational pharmacology teams.

Potential collaborative activities may include:

co-funded postdoctoral or visiting researcher positions;

shared access to anonymized clinical datasets;

multimodal biomarker integration studies;

development of physiologically interpretable therapeutic decision-support models.

The initiative is currently focused primarily on scientific co-development, translational validation, and international research collaboration rather than immediate commercialization.

Existing international cooperation: At present, formal international collaboration within the project is in the process of development. Previous research activities included participation in international oncology conferences and publication of translational research related to

individualized therapeutic selection and thiol-disulfide response profiling. The project is currently seeking new U.S.-Ukraine collaborative partnerships in precision medicine, redox biology, translational therapeutics, and AI-assisted biomedical analytics.

14. Artificial intelligence-based multimodal system for the early diagnosis of brain development disorders in infants (NeuroInfant)

Medical and health sciences · Concept / early planning · Ready to begin cooperation now

Lead institution / team: Bukovinian State Medical University

City: Chernivtsi

Project lead: Babintseva Anastasiya, Full Professor, Doctor of Medical Science, professor of the Department of Paediatrics, Neonatology and Perinatal Medicine, Leading Specialist of the Scientific Department with an Innovative Sector

Contact: babintseva@bsmu.edu.ua

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Postdoctoral hosting, Technology partnership / commercialization, Joint laboratory or research infrastructure, Mentorship and advisory, Equipment, infrastructure, or data access, Data collaboration, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Publisher or scholarly infrastructure provider

Estimated scale of support: USD 100,000–250,000

Available to pitch (June 12): Yes, online

Proposed presenter: Frunza Alina, PhD, Leading Specialist of the Scientific Department with an Innovative Sector, Paediatric Neurologist, Neonatologist

Project goal: The ultimate goal of the project is to create and clinically validate an AI-driven tool that combines software and technological solutions (portable wearable devices adapted from birth). This allows:

early detection of signs of brain maturation disorders;

prediction of neurodevelopmental risks during the first year of a child's life;

optimization of clinical decisions and patient pathways;

planning of individualized early intervention programs from the first days of life;

reducing the financial costs of treatment and rehabilitation for children, and to compensate parents for loss of earning capacity resulting from caring for a child with a disability.

Summary: NeuroInfant is a multimodal system for early diagnosis of brain development disorders in infants based on artificial intelligence. It is an innovative digital solution for early prediction and diagnosis of neurodevelopmental disorders in children, built on a complex set of biomedical data: amplitude-integrated EEG (aEEG), heart rate variability (HRV), video analysis of infant general movements (General Movements Assessment, GMA), assessment of motor

functions using the Hammersmith Infant Neurological Examination (HINE), as well as clinical and perinatal data. The project integrates three levels of expertise — medical, engineering, and cybernetics — with the aim of creating a tool to support clinical decision-making and optimize patient pathways. This will significantly improve children's quality of life, reduce the long-term burden on healthcare systems, and foster international scientific and clinical collaboration.

Current status and key results: A total of 442 patients were examined, with 550 aEEG recordings, 120 aEEG recordings with HRV, 150 GMA video recordings, and 150 assessments using the HINE scale. A secure database has been created. Three articles were published (Scopus, Q4 - 2, Ukrainian publication of Group B - 1), and one article was submitted (Scopus, Q2). The results were presented at 6 conferences (international - 3, national - 3). The applications submitted for grant funding (Horizon Europe, LUKE, NRFU).

What the project brings: To ensure successful collaboration, the Ukrainian team can provide access to clinical facilities and patient assessments (team members are staff and consultants at these clinical sites), a high level of clinical expertise in conducting and interpreting aEEG results, and in applying various tools for assessing child development (team members hold the relevant certification), as well as a high level of scientific expertise in study design, writing grant applications, grant management, and preparing publications and presentations at national and international level, cooperation with stakeholders, policymakers, etc.

What the project asks: The scientific team of the NeuroInfant project provides strong clinical expertise in neonatal neurology, including conducting and interpreting aEEG, HRV, GMA, and HINE, as well as access to clinical databases and patient cohorts. However, to transform the project into a scalable solution, we require partners with competencies in engineering, cybernetics, and data processing.

Specifically, we are seeking partners for:

Software development to build and validate a telemedicine platform, as well as to create a secure cloud environment for safe storage, standardization, and processing of large volumes of biomedical data;

Cybernetics expertise to integrate multimodal biomedical signals into a unified AI-based system;

Statistical processing and machine learning support to improve algorithm accuracy and ensure high-quality clinical validation;

Mentorship and commercialization to guide the project toward scaling, adaptation to international standards, and future market readiness.

Faculty exchange or Postdoctoral hosting in the US center with the same clinical expertize.

Existing international cooperation: Within the framework of the preparation and implementation of the project, international cooperation has been established with the University of Pisa and SMILE Lab, Infant Neurology Section and the Clinical Trials CP Center at IRCCS Stella Maris Research Institute (Prof. Andrea Guzzetta), University of Helsinki and BABA Centre (Prof. Sampsa Vanhatalo, Dr. Anton Tokariev), Heidelberg University and Marschik Lab (Prof. Peter Marschik), Karolinska Institutet (Dr. Gustav Nilsonne), Nalecz Institute of

Biocybernetics and Biomedical Engineering of Polish Academy of Sciences, IBIB PAN (Prof. A. Liebert, Dr. S. Wojtkiewicz). Any partners from the U.S.

15. Ukrainian Platform for Research of Radiation-Induced and Radiation-Associated Injuries of Tissues, Digital Pathology, and AI-Assisted Spatial Analysis

Engineering and technology, Medical and health sciences · Concept / early planning · Ready to begin cooperation now

Lead institution / team: National Research Center for Radiation Medicine, Hematology and Oncology (NCRM), National Academy of Medical Sciences of Ukraine, Kyiv (lead institution), and the First Lviv Territorial Medical Union (FLTMU), Lviv (clinical partner)

City: Kyiv

Project lead: Viktor Sushko, Doctor of Medical Sciences, Professor, Corresponding Member of the National Academy of Medical Sciences of Ukraine; First Deputy Director General for Research, National Research Center for Radiation Medicine, Hematology and Oncology, National Academy of Medical Sciences of Ukraine, Kyiv.

Contact: viktor.o.sushko@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Technology partnership / commercialization, Joint laboratory or research infrastructure, Equipment, infrastructure, or data access, Data collaboration, Training and capacity building, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Company or industry partner

Estimated scale of support: Over USD 250,000

Available to pitch (June 12): Yes, in person in Lviv

Proposed presenter: Viktoriia Piets, MD, Pathologist, First Lviv Territorial Medical Union, Lviv, Ukraine; +380639609204

Project goal: To develop an integrated research-analytical platform combining digital pathology, multiplex tissue phenotyping, and AI-assisted spatial profiling for investigation of radiation-induced and radiation-associated tissue injury mechanisms, to identify and characterize candidate biomarkers for subsequent clinical validation.

Specific objectives:

1. Digital Biobank. Assemble a WSI-based digital biobank from archival and prospective cases presenting radiation-induced and radiation-associated tissue pathology, annotated per CTCAE v5.0 grading criteria.

2. AI Model Development. Develop and validate machine learning models (convolutional and transformer-based architectures) for differential grading of radiation tissue pathology; target: AUC $\geq$ 0.90 on independent cohorts.

3. Spatial Profiling. Implement multiplex spatial phenotyping (Vectra Polaris/PhenoCycler-Fusion) to reconstruct cellular interaction networks and immune infiltration dynamics in radiation-affected tissues.

4. Open Science. Publish AI models, annotated datasets, and digital pathological atlases (GitHub, Zenodo) under open-access licence for reproducibility and benchmarking.

Summary: Radiation-induced and radiation-associated injuries of tissues—differing in the certainty of radiogenic causation—represent clinically significant complications of oncological radiotherapy and environmental radiation exposure. Late-onset manifestations, including pulmonary fibrosis, pneumonitis, and nephropathy, affect 5–15% of irradiated patients (QUANTEC, 2010); given global cancer incidence exceeding 19 million annually (GLOBOCAN, 2022), the absolute case burden is estimated in the hundreds of thousands per year.

Ukraine presents a research context not replicable elsewhere: the 1986 Chornobyl NPP disaster (UNSCEAR, 2008), combined with ongoing radiation-related risks at the Zaporizhzhia NPP, constitutes a multi-generational cohort presenting radiation-induced and radiation-associated tissue pathology with individualized dosimetric documentation enabling etiological stratification.

A critical knowledge gap persists: standardized digital pathomorphological databases quantifying spatial heterogeneity of tissue microenvironment remodeling in radiation-affected specimens do not exist, and conventional histopathology lacks the resolution required for microenvironmental reconstruction at the cellular interaction level (Niazi et al., 2019).

The project delivers three original contributions:

1) Ukraine's first annotated digital biobank of radiation-affected tissue whole-slide images (WSI);

2) deep learning models for automated CTCAE-graded injury classification;

3) spatial mapping of tissue immune microenvironment via multiplex immunohistochemistry (mIHC). Clinical outputs include decision-support tools for etiological stratification and early detection of radiation tissue pathology.

Current status and key results: The project is implemented by an academic-clinical consortium: the National Research Center for Radiation Medicine, Hematology and Oncology (NCRM), Kyiv (lead institution), and the First Lviv Territorial Medical Union (FLTMU), Lviv (clinical partner).

The primary milestone to date is the assembly of a retrospective cohort of over 500 histopathologically documented cases from NCRM archives: a Chornobyl sub-cohort comprising the majority of registry-enrolled individuals with individualized dosimetric records spanning four decades, encompassing radiation-induced and radiation-associated tissue pathology with documented etiological classification; and a radiotherapy sub-cohort with linked treatment planning documentation. Prospective enrolment across both sites is ongoing under institutional ethics clearance.

Clinical cohort, specimen archive, multi-site ethics approvals, and methodological protocols are operationally established. Primary barriers—GPU infrastructure, multiplex spatial phenotyping

platforms, and external validation cohorts—are addressed through the proposed international partnership.

What the project brings: The project's primary contribution is access to histopathological material linked to individualized dosimetric records from the national Chornobyl follow-up registry—a data configuration not replicable under standard institutional conditions providing a documented clinical foundation for dose-effect correlation modelling. Subspecialty expertise in oncomorphology, diagnostic pathology, and radiation medicine enables expert-level annotation of whole-slide images, addressing the quality bottleneck in supervised deep learning pipelines for histopathological analysis. NCRM's national custodianship of the State Chornobyl Registry and established multi-site ethics clearances support bilateral data-sharing frameworks and prospective case enrollment—including a western Ukrainian clinical stream through FLTMU. All computational outputs are designated for open-access dissemination under CC BY 4.0, supporting reproducibility and international benchmarking standards.

What the project asks: Computational infrastructure. GPU clusters (≥ NVIDIA A100-class) or HPC cloud access for training transformer-based architectures on WSI datasets (cohort: 500+ cases); domestic computational infrastructure does not support this at scale.

Advanced spatial phenotyping. Shared instrument access for multiplex spatial profiling (Vectra Polaris/PhenoCycler-Fusion/MIBI-TOF) applied to ≥ 60 cases; platforms unavailable domestically.

Independent validation cohorts. De-identified radiotherapy datasets (n ≥ 100, CTCAE v5.0-annotated) for external AI model cross-validation on independent populations—a prerequisite for regulatory-grade performance claims.

Joint grant development. Co-submission to NIH/NCI (R01/U01), DoD CDMRP, or Horizon Europe (MSCA Doctoral Networks); shared PI/co-I roles, co-authorship, and co-funded postdoctoral position at the partner institution considered.

Researcher training. Secondment (3–6 months, 1–2 early-career researchers) for training in spatial transcriptomics, advanced imaging, and regulatory-grade AI validation.

Early-phase deliverables (months 1–6). Upon agreement, the project provides: 1) transfer of a de-identified annotated WSI subset (≥ 50 Chornobyl cases) formatted for immediate deep learning integration;

2) remote orientation to the dosimetric data architecture;

3) joint Letter of Intent to NIH/NCI;

4) dedicated pathology consultation (4 hrs/week, remote) for annotation protocol calibration.

Existing international cooperation: No formal bilateral research agreements with U.S. or international institutions are currently in force for this project. NCRM's national mandate in radiation medicine positions the institution within international scientific frameworks relevant to Chornobyl health effects documentation, including UNSCEAR reporting processes and WHO radiation health programs – constituting the primary existing interface with the international scientific community in the project's domain. This application represents the project's first structured initiative toward bilateral collaboration in digital pathology and AI-assisted radiation

injury research. Priority partner profiles include North American and European research centres with active programmes in computational pathology, radiation biology, and radiation health research.

Group 3 — Digital Transformation, AI & Innovation

16. Ukrainian Text Complexity and Simplification Platform

Information technology and computer science, Education and pedagogy · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: SET University

City: Kyiv

Website: The website is currently under development, and the first version is expected to be released within the next month.

Project lead: Dr. Olha Kanishcheva

Contact: o.kanishcheva@setuniversity.edu.ua

Cooperation sought: Student or doctoral exchange, Joint laboratory or research infrastructure, Data collaboration, Publications and scholarly communication

Preferred partner(s): Research institute or laboratory, Ukrainian diaspora organization, Government or public institution

Estimated scale of support: USD 10,000–50,000

Available to pitch (June 12): Yes, online

Proposed presenter: Olha Kanishcheva

Project goal: The goal of the project is to develop an AI-driven platform for the analysis and assessment of Ukrainian-language texts according to language proficiency levels. The project aims to support teachers, learners, and researchers by providing automated tools for text classification, complexity analysis, and linguistic profiling.

The platform is designed to identify and analyze morphological, syntactic, and lexical features that are relevant for teaching and learning Ukrainian as a foreign language. In addition, the project seeks to improve the accessibility of Ukrainian educational resources through text complexity evaluation and future text simplification functionalities.

Another important objective of the project is to create and integrate linguistic resources for Ukrainian, including CEFR-oriented vocabulary lists and collocation datasets, which can be used both for educational purposes and for further NLP research.

Summary: The project focuses on the development of an AI-driven platform for the analysis of Ukrainian-language texts with regard to language proficiency levels and text complexity. The system combines natural language processing methods with CEFR-oriented linguistic analysis to support language learning, teaching, and educational research.

The platform currently includes automatic classification of Ukrainian texts by proficiency level, analysis of morphological and syntactic complexity features, lexical diversity assessment, and identification of words according to CEFR levels. In addition, the system detects and analyzes collocations and multiword expressions, providing deeper insight into lexical and phraseological complexity.

The project aims to create an explainable and linguistically informed framework that helps teachers, researchers, and learners better understand the characteristics of Ukrainian texts at different proficiency levels. Future work includes text simplification, enhancement of linguistic resources for Ukrainian, and integration of advanced NLP models for adaptive educational applications.

The platform contributes to the development of digital tools for Ukrainian language education and supports broader research in readability assessment, language complexity analysis, and educational NLP.

Current status and key results: The current results of the project include the following:

1) A comprehensive review and analysis of existing studies and approaches in the field have been conducted.

2) A model for the classification of Ukrainian texts according to language proficiency levels has been developed.

3) An analysis has been carried out to identify the morphological and syntactic features that are most relevant for teachers of Ukrainian as a foreign language.

4) Additional linguistic resources for the software platform have been prepared, including vocabulary lists and collocation datasets.

5) The software service itself is currently under development, including the implementation of the frontend and the creation of an adaptive user interface design.

Publications:

1) Olha Kanishcheva and Mikhail Kopotev. Automated CEFR-Level Assignment for Ukrainian Texts. TALA 2026: Workshop on New Trends in Automatized Language Assessment. 7 Apr. 2026, Louvain-la-Neuve, Belgium.

2) Kanishcheva, O., & Kopotev, M. Automated CEFR-Level Assessment for Ukrainian Texts. The Fifth Ukrainian Natural Language Processing Conference (UNLP 2026), Lviv, Ukraine. (accepted)

What the project brings: Our team contributes a strong combination of expertise, linguistic resources, and NLP infrastructure to a potential partnership. We specialize in Ukrainian Natural Language Processing, with a focus on text complexity analysis, CEFR-oriented language assessment, and lexical-semantic modeling. We have developed a classification model for Ukrainian texts by proficiency levels and a detailed feature set covering morphological, syntactic, and lexical properties, including collocations and CEFR-based vocabulary mapping.

What the project asks: We are seeking collaboration with partners in several specific areas to further develop and validate our Ukrainian NLP platform for text complexity analysis and language proficiency classification.

First, we would highly value access to multilingual and/or learner corpora, especially annotated datasets aligned with CEFR or similar proficiency frameworks. Such data would allow us to improve the robustness and cross-linguistic comparability of our models.

Second, we are interested in methodological collaboration with experts in readability research, educational linguistics, and applied NLP, particularly those working on text simplification, lexical profiling, and syntactic complexity metrics. Joint work on feature design and evaluation protocols would be especially beneficial.

Finally, we would welcome opportunities for participation in co-funded research visits or short-term secondments to strengthen interdisciplinary cooperation.

Overall, we aim to build a collaborative network that supports data sharing, methodological development, and applied research in educational NLP and Ukrainian language technologies.

Existing international cooperation: There are contacts for cooperation with the Athena Research Centre, namely with Voula Giouli https://www.athenarc.gr/en/people/195, they have similar developments for learning the German language.

17. InfraVeritas — Physical Trust Infrastructure for Tokenized Real-World Assets

Engineering and technology, Information technology and computer science, Interdisciplinary · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: InfraVeritas (LLC InfraVeritas, Ukraine)

City: Lviv

Website: https://infraveritas.pro

Project lead: Petro Sydliarchuk — Founder, InfraVeritas; Licensed Structural Engineer (CC3)

Contact: petro@infraveritas.pro

Cooperation sought: Co-funding or grant partnership, Technology partnership / commercialization, Joint laboratory or research infrastructure

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Company or industry partner, Ukrainian diaspora organization

Estimated scale of support: USD 100,000–250,000

Available to pitch (June 12): Either is possible

Project goal: To build the verification layer that tokenized real-world assets currently lack — a hardware-rooted system that cryptographically proves physical reality (energy generated, commodities produced, property condition) at the point of measurement, before data enters any registry or blockchain. The goal is to make physical-asset claims independently verifiable rather

than dependent on operator self-reporting, closing the trust gap at the foundation of the multi-trillion-dollar real-world asset tokenization market.

Summary: InfraVeritas is a physical trust infrastructure for tokenized real-world assets — solving the "physical oracle problem" at the foundation of digital asset verification. Current blockchain systems can guarantee data immutability but cannot guarantee data truthfulness. Our architecture closes this gap through hardware-rooted cryptographic attestation: tamper-resistant edge devices sign physical measurements (energy generation, grain mass, oil production volumes, property condition) using keys held in hardware-secure elements that cannot be exported even if the device is physically compromised. Time is anchored via GPS satellites. Signed measurements are aggregated through zero-knowledge proofs and committed to public Ethereum networks for independent verification.

Current state: working end-to-end pipeline on Sepolia testnet for the energy vertical (edge device → aggregator → smart contract → public dashboard). Open source code, USPTO Provisional Patent #63/876,031 covers the methodology as a universal physical oracle — applicable across energy, agriculture, oil & gas, real estate, and commodities.

Team: Petro Sydliarchuk (founder, licensed structural engineer CC3, 25+ years practice, 157+ verified infrastructure projects), Oleksandr Sydliarchuk (CTO, Lviv Polytechnic cybersecurity graduate, Web3/Solidity), Taras (systems analysis, edge hardware track).

We seek U.S. partnerships with research institutes, foundations, or industry actors working on real-world asset verification, supply chain integrity, or critical infrastructure trust.

Current status and key results: Working end-to-end pipeline deployed on Ethereum's Sepolia testnet: an edge device captures physical measurements, signs them in a hardware-secure element (ATECC608B), generates a zero-knowledge proof, and submits to a verification smart contract, with results on a public dashboard.

Security: pre-audit sprint completed — Slither and Mythril static analysis (zero high/medium findings), 91.88% test coverage (100/100 tests passing), Echidna fuzzing (100M+ calls, zero invariant violations).

Repository public since May 2026 under a Source-Available License. USPTO Provisional Patent #63/876,031 filed September 2025, covering the methodology as a universal physical oracle.

IPAS Standard v1.0 (Infrastructure Physical Attestation Standard) authored and published, submitted to the ERC-3643 Association. The standard is modular: IPAS-E (Energy), IPAS-S (Structural/Real Estate), IPAS-A (Agricultural), with oil-and-gas and commodities instances in development.

A working hardware demonstration of the full attestation chain is in final preparation.

What the project brings: Domain expertise: 25+ years of licensed structural engineering practice (CC3, the highest consequence class under Eurocode), 157+ verified infrastructure projects across Ukraine and the EU — rare first-hand authority on physical verification and data integrity, combined with cybersecurity and Web3/Solidity development capability.

Working technology: a functioning hardware-to-blockchain attestation pipeline, not a concept — deployable today on testnet, open source, security-audited.

Intellectual property: a USPTO Provisional Patent and a published verification standard (IPAS v1.0) covering a universal methodology applicable across energy, agriculture, oil & gas, real estate, and commodities.

Cross-vertical architecture: a single modular framework that generalizes across asset classes, so a partner gains a reusable verification primitive rather than a single-use solution.

Active engagement with international standards bodies (EnergyTag, ERC-3643 Association) and the climate-tech research community.

What the project asks: Three concrete forms of cooperation, in order of priority:

1. Pilot deployment partnership. A U.S. research institution, utility, or industry actor with a real physical asset (renewable energy installation, agricultural facility, or commodity operation) willing to host a verification pilot. We provide the hardware and software stack; the partner provides the deployment site and operational data. Outcome: an independently documented case study validating cross-vertical verification.

2. Co-funding or grant partnership. Connection to U.S. climate-tech foundations, research grants, or pre-seed funding aligned with verification infrastructure, supply-chain integrity, or real-world asset tokenization. Target range USD 100,000–250,000 to reach mainnet deployment and external security audit.

3. Joint research collaboration. A U.S. university or research lab working on data provenance, IoT security, zero-knowledge systems, or energy/carbon accounting, for joint validation of the methodology and co-authored publications.

We are ready to begin immediately. The technology is built; what accelerates it is real-world deployment context, funding to reach production, and academic validation of the cross-vertical generalization.

Existing international cooperation: Early-stage engagement, not yet formal cooperation:

- IPAS Standard v1.0 submitted to the ERC-3643 Association (international tokenization standards body).

- Active dialogue with EnergyTag (UK-based granular energy certification standards body, 1000+ members including Google, Microsoft, Eurelectric).

- Invited to a research cohort by the Verida Charter Foundation (U.S.-based trust-infrastructure non-profit) for a structured engagement on cross-firm verification.

These are emerging relationships at the standards and research level; no formal partnership or funding agreement is yet in place.

18. KnowledgeMaps AI: An LLM-Based Platform for Interactive Concept Maps, Learning Content, and Educational Analytics

Information technology and computer science, Medical and health sciences, Education and pedagogy, Interdisciplinary · Active implementation · Ready to begin cooperation now

Lead institution / team: American University Kyiv, AI Research Center

City: Kyiv

Website: https://knowledgemaps.auk.edu.ua/

Project lead: Sergiy Tytenko, Head of AI Research Center at AUK, Deputy Dean of EPAM School of Digital Technologies, American University Kyiv

Contact: sergiy.tytenko@auk.edu.ua

Cooperation sought: Joint research, Co-funding or grant partnership, Technology partnership / commercialization, Joint laboratory or research infrastructure, Mentorship and advisory, Data collaboration, Training and capacity building, Joint educational program development, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Company or industry partner, Ukrainian diaspora organization, Publisher or scholarly infrastructure provider

Estimated scale of support: USD 100,000–250,000

Available to pitch (June 12): Yes, online

Proposed presenter: Sergiy Tytenko, Head of AI Research Center, American University Kyiv; project lead of KnowledgeMaps AI.

Project goal: KnowledgeMaps AI aims to develop, validate, and scale an AI-powered educational technology platform that transforms course materials into interactive hierarchical concept maps with integrated explanatory learning content and learning analytics. The project seeks to help students navigate complex knowledge domains visually, understand relationships between concepts, and review learning materials more effectively. For educators, the system supports AI-assisted course structuring, generation of node-linked explanatory content, human-in-the-loop quality control, and analytics on student engagement. The broader goal is to create a practical, research-grounded digital learning infrastructure that combines generative AI, concept mapping, learning analytics, and educator oversight to improve teaching and learning in higher education and professional education contexts.

Summary: KnowledgeMaps AI is a practical LLM-based educational technology platform that transforms course materials into interactive hierarchical concept maps with integrated explanatory learning content and learning analytics. The system supports educators in structuring complex knowledge domains, generating and refining concept maps, creating node-linked explanatory articles, and monitoring student engagement with learning materials. Students can explore knowledge visually, drill down from high-level concepts to more detailed subtopics, and combine map-based navigation with focused reading.

The project is being developed and piloted at American University Kyiv as part of research and innovation activities in AI-supported digital learning. It combines human-in-the-loop AI generation, educator control over content quality, structured JSON-based map editing, and analytics on student interaction with maps and learning content. The research explores how AI-powered concept maps can improve comprehension, support review of learned material, and provide instructors with actionable insights into student learning behavior.

We are seeking U.S. and international partners for joint research, pilot studies, publications, educational technology validation, grant proposals, and potential technology partnership. The project is especially relevant for higher education, digital learning environments, learning analytics, AI-assisted course design, and scalable support for personalized learning.

Current status and key results: KnowledgeMaps AI is already a functioning software product deployed in AWS cloud infrastructure. The platform supports AI-assisted generation of hierarchical concept maps, node-linked explanatory content, educator review and refinement, student-facing map exploration, and learning interaction tracking. The project builds on prior research outputs by our team, including "AI-driven Interactive Hierarchical Concept Maps for Digital Learning Environments and Intelligent Textbooks" and "AI-Driven Digital Concept Maps in Learning Environments: Empirical Insights from Student Use." A new ECTEL 2026 submission has also been prepared under the title "KnowledgeMaps AI: A Practical LLM-Based System for Interactive Hierarchical Concept Maps with Integrated Learning Content and Learning Analytics." The system is currently being piloted and evaluated in several educational contexts, including American University Kyiv, Opole University of Technology in Poland, and the University of Alicante in Spain. These pilots provide a foundation for further empirical validation, comparative studies, joint publications, and international research cooperation.

What the project brings: The project brings a functioning AI-powered educational technology platform, production-oriented software engineering expertise, and practical experience in deploying LLM-based learning systems in AWS cloud infrastructure. Our team contributes expertise in software engineering, generative AI, concept map generation, learning analytics, human-in-the-loop educational workflows, and digital learning innovation. We also bring a real higher education environment for piloting and validation through American University Kyiv, as well as emerging international pilot contexts with Opole University of Technology in Poland, the University of Alicante in Spain, and a planned pilot with Arizona State University in the United States. In addition, the team contributes prior research outputs, current empirical study design, accumulated instructional design experience, and a network of academic and industry contacts interested in AI-supported learning, educational technology validation, and responsible use of generative AI in education.

What the project asks: We are seeking U.S. and international partners for joint research, pilot implementation, educational validation, and further development of KnowledgeMaps AI. Specifically, we are looking for university courses or programs where the platform can be piloted with students and faculty; learning science, HCI, and educational technology researchers who can support comparative studies; and partners interested in joint publications, conference submissions, and grant proposals.

We are also seeking co-funding or sponsored R&D support to advance the system to a deeper production-grade engineering level. This includes strengthening cloud architecture, scalability, security, reliability, user management, learning analytics, LMS integration, AI quality assurance, and deployment processes for broader institutional use.

Concrete forms of cooperation may include: hosting pilot studies; co-designing evaluation methodology to measure student comprehension, review effectiveness, engagement, and learning

experience; providing faculty mentorship on learning analytics and educational effectiveness research; collaborating on publications and conference papers; supporting integration with LMS platforms; and joining grant proposals for further R&D, scaling, and long-term sustainability.

We are also open to technical and product-oriented partnerships related to commercialization or institutional adoption.

Existing international cooperation: KnowledgeMaps AI already has emerging international cooperation with several academic partners. The system is being piloted and evaluated in cooperation with American University Kyiv, Opole University of Technology in Poland, and the University of Alicante in Spain. These activities focus on testing the platform in real educational contexts, collecting feedback from instructors and students, and preparing the basis for comparative research and joint publications. In addition, a pilot with Arizona State University in the United States is currently under preparation. This planned cooperation is especially important for expanding the project's U.S. academic validation and exploring broader applications of AI-powered concept maps in higher education. We are now seeking to build on these existing and emerging partnerships through more structured multi-institutional research, joint grant applications, and long-term educational technology collaboration.

19. RISE: From Fragmentation to Integration – Digital Governance for a Resilient University

Information technology and computer science, Education and pedagogy, Interdisciplinary, Digital Governance and Institutional Resilience · Concept / early planning · Ready to begin cooperation now

Lead institution / team: Vasyl' Stus Donetsk National University

City: Vinnytsia

Website: www.donnu.edu.ua

Project lead: Illya Khadzhynov, Rector

Contact: rector@donnu.edu.ua

Cooperation sought: Faculty exchange, Mentorship and advisory, Training and capacity building, Policy and advisory collaboration

Preferred partner(s): U.S. university, Foundation or donor, Company or industry partner, Ukrainian diaspora organization

Estimated scale of support: Not yet estimated

Available to pitch (June 12): No, but I would still like to be included in the catalogue

Project goal: The project is aimed at co-creation of a digitally resilient, data-driven, and human-centered model of HEI governance that strengthens institutional capacity in Ukrainian universities operating under conditions of long-term uncertainty, displacement, and post-war reconstruction, in collaboration with partners from the USA.

Summary: Vasyl' Stus Donetsk National University (DonNU) is the first Ukrainian higher education institution that was forcibly relocated in 2014 due to the war in Eastern Ukraine and has since operated without a permanent campus in a distributed, multi-site model. Over more than a decade, the University has developed a unique institutional experience of continuity and adaptation under conditions of uncertainty.

DonNU is looking for ways to further strengthen its resilience through institutional digitalisation. While key academic processes are already supported by learning management systems and electronic communication tools, administrative and governance functions remain fragmented across multiple disconnected platforms and paper-based workflows. This gap between the academic capacity and administrative infrastructure reflects challenges faced by Ukrainian universities, particularly displaced institutions.

The RISE project is aimed to develop a digital governance ecosystem which will integrate academic, administrative, financial, and HR processes into a coherent institutional framework. In partnership with U.S. universities and experts, DonNU seeks to co-create scalable models of digital governance for higher education institutions operating in conditions of uncertainty, contributing to Ukraine's higher education reform and post-war recovery.

Current status and key results: DonNU has implemented several digital solutions supporting academic and administrative functions. The University uses Moodle Learning Management System (https://moodle.donnu.edu.ua/), which has been essential following institutional relocation, during the COVID-19 pandemic, and throughout the full-scale war in Ukraine. Communication is supported through Microsoft 365 services. Student academic records are managed via the "Dekanat" information system, while dedicated software solutions support accounting and HR processes. Admissions, including international student admissions, are managed through national digital platforms.

The university has been operating in Vinnytsia without a centralized campus for more than 11 years. Its academic and administrative departments are located in several rented premises in different parts of the city, complicates coordination and administrative workflows.

These conditions will result in a basis for the next stage of development: the design of an integrated digital governance ecosystem connecting academic, administrative, financial, and management processes within a unified institutional framework.

What the project brings: DonNU contributes a unique institutional case of a university operating in displacement since 2014 and maintaining academic continuity throughout relocation, the COVID-19 pandemic, and the full-scale war in Ukraine. The University provides a real-world environment for developing and testing digital governance solutions for higher education institutions operating under uncertainty.

The project brings together a team of staff members, established digital infrastructure (Moodle LMS, Microsoft 365, academic records and administrative systems), and direct access to institutional processes targeted for digital transformation. DonNU can serve as a pilot Ukrainian institution for designing, implementing, and evaluating scalable digital governance models for resilient universities.

What the project asks: DonNU is seeking to collaborate with U.S. universities and experts in digital governance, organisational transformation, higher education management. We are particularly interested in mentorship and expert support for institutional process mapping, electronic document management, systems integration, data governance, cybersecurity, and change management.

Potential cooperation may include staff training, expert consultations, peer-learning activities, study visits, and joint development of a digital governance roadmap. We also welcome collaboration on identifying and piloting appropriate software solutions, cloud services, analytics tools, and related infrastructure needed to implement an integrated digital governance ecosystem.

The long-term goal is to co-create a scalable model that can strengthen institutional resilience and support digital transformation in Ukrainian higher education.

Existing international cooperation: DonNU has experience in the implementation of projects with European partners through Erasmus+, DAAD, NAWA, TWINNING, and other programs. These partnerships were focused on curriculum development, academic mobility, and institutional capacity building. The projects supported the modernization of teaching and learning practices and strengthened the University's international engagement.

The University currently has no active U.S. partner in the area of digital transformation and institutional governance and is seeking to establish such cooperation through the RISE project.

Group 4 — Education & EdTech

20. Formation of the Integration Concept of State Management of Intellectual Capital of Higher Education Institutions

Information technology and computer science, Social sciences, Education and pedagogy, Interdisciplinary · Concept / early planning · Ready to begin cooperation now

Lead institution / team: Kyiv National University of Technologies and Design

City: Kyiv

Website: https://knutd.edu.ua/files/science/temat-plany/Tem-plan-2025-DB-n-11-2025.pdf

Project lead: Khaystova Yevheniia, Professor of the Department of Economicst

Contact: g.haystova@gmail.com

Cooperation sought: Joint research, Joint laboratory or research infrastructure, Data collaboration, Publications and scholarly communication

Preferred partner(s): U.S. university

Estimated scale of support: USD 50,000–100,000

Available to pitch (June 12): Yes, online

Proposed presenter: Lebedev Marko, Lecturer, Department of Economics, PhD

Project goal: Substantiation of the integration concept of public management of intellectual human capital for higher education institutions based on the use of innovative artificial intelligence tools to preserve and increase existing intellectual human resources in the context of military migration processes, which will contribute to improving the quality of the educational process based on existing experience in public management and experience of digital transformation in the field of education.

Summary: The study is devoted to the theoretical and methodological substantiation of approaches to the assessment and management of intellectual capital (IC) of higher education institutions (HEIs) in the context of military migration processes and the rapid spread of artificial intelligence (AI) technologies. Analysis of models of management of IC of HEIs has shown a transition from resource and inventory approaches to complex structural concepts in which human, structural and relational capital are considered as complementary components of a holistic development system. The strategic need to maintain the proportionality of the development of all ICs through the concentration and centralization of capital has been established. When substantiating the principles of integrating AI into the management of intellectual human capital (IHC), an analysis of demographic and labor trends in Ukraine was carried out and it was established that forced migration under digitalization conditions is capable of creating new channels for the accumulation of ILC. The scientific value of the work lies in the development of an original hybrid AI model for managing the ILC of state higher education institutions, which is adapted to the conditions of military migration processes and is built on the principle of proportional development of the components of the IHC. Compared with the best world practices, the proposed model is characterized by greater methodological completeness and integration of fuzzy logic in the evaluation of machine learning results, which increases transparency and trust in management rocesses. The feasibility of using SC-methods of relative and point evaluation for non-profit organizations is substantiated, a system of specific indicators for evaluating IHC in state higher education institutions is defined. It is established that the capitalization of organizational capital is possible only if university-wide AI systems are used.

Current status and key results: Expansion of theoretical provisions on the capitalization of intellectual activity of universities in the context of digitalization and the use of artificial intelligence (AI), namely: expanded accumulation of a higher education institution's own intellectual capital - organizational capital - is accompanied by greater effectiveness when using university-wide AI systems, rather than its individual tools, which expands the possibilities of direct capitalization of attracted human assets with an increase in their social value, as well as the possibility of increasing the financial capital of state HEIs and increasing the effectiveness of the use of all intellectual assets in subsequent cycles of intellectual capital functioning. Development of an original hybrid conceptual AI model for managing the HEI, which, unlike existing foreign analogues, is adapted to the specific conditions of military migration processes. The proposed model organically combines the technological flexibility of American People Analytics platforms (Visier, Workday, Oracle) with the ethical sensitivity of the European regulatory approach (GDPR, AI Act), which constitutes a fundamentally new methodological approach in

the field of education management. Unlike fragmentary Ukrainian studies that consider individual aspects of education digitalization or migration challenges in isolation, the proposed analytical model integrates three technological components into a closed management loop: organizational network analysis (ONA) for diagnosing communication gaps, natural language processing (NLP) for monitoring psychological state, and a skills management platform (LXP) for personalized competence development.

What the project brings: The project brings to the partnership experience in conducting research and publishing scientific articles on the issues of management of higher education institutions, data on the productivity of scientific and pedagogical staff in the context of digitalization, and the capacity of a laboratory equipped with appropriate software.

What the project asks: Access to data on the productivity of research staff, expansion and exchange of experience in using artificial intelligence tools in managing educational and scientific processes of a higher education institution

Existing international cooperation: The project participants do not have any cooperation with representatives of US academic circles.

21. Development of an inclusive e-learning strategy and tactics for comprehensive support of the elderly with dementia and their caregivers during wartime and post-war recovery in Ukraine

Information technology and computer science, Medical and health sciences, Social sciences, Interdisciplinary · Pilot or proof-of-concept · Needs preparation (6+ months)

Lead institution / team: Laboratory of Social Gerontology of the State Institution "D.F. Chebotarev Institute of Gerontology of the National Academy of Medical Sciences of Ukraine"

City: Kyiv

Website: Under development

Project lead: Nataliia Prokopenko, D.Sc. — Head of the Laboratory of Social Gerontology

Contact: nataliiaprok@gmail.com

Cooperation sought: Co-funding or grant partnership, Technology partnership / commercialization, Joint educational program development, Publications and scholarly communication

Preferred partner(s): Research institute or laboratory, Foundation or donor

Estimated scale of support: USD 50,000–100,000

Available to pitch (June 12): Yes, online

Proposed presenter: The project will be presented by the Project Leader: Nataliia Prokopenko, D.Sc. Head of the Laboratory of Social Gerontology

Project goal: The project aims to establish a viable digital support system that enables people with dementia and their caregivers to maintain quality of life during wartime and the post-war

crisis. Key Education: Providing caregivers with critical knowledge via a "stress-resilient" micro-learning platform adapted for time and connectivity deficits. Risk Minimization: Reducing emergency hospitalizations and injuries through tactically sound care protocols for crisis situations (shelling, evacuation).Psychological Resilience: Preventing caregiver burnout and preserving their mental health and productivity—vital for the national economy. Inclusive Standards: Developing new gerontological care protocols scalable to other low-mobility groups. The Outcome: The project seeks to overcome the isolation of vulnerable groups by using e-learning as a professional medico-social support tool in resource-limited environments.

Summary: Project Goal: To develop a conceptual model and technological prototype for an e-learning platform that ensures continuous caregiver training under extreme conditions (war), accounting for patients' cognitive impairments and users' critical stress levels.

Urgency: The project addresses the intersection of rapid population aging, specialized care shortages, and unprecedented wartime challenges. It integrates medicine, social work, and digital technology.

Key Innovations:

• Stress-Resilient Inclusive Design: Implementation of micro-learning tactics to minimize cognitive load on users facing security and connectivity deficits.

• Tactical Support Model: "Quick access" algorithms for critical knowledge during crises (evacuations, shelling, acute symptoms).

Impact: Training caregivers in proper dementia management significantly reduces hospitalizations from complications, delays institutionalization, and preserves the mental health of caregivers—vital for the economy during post-war recovery.

Prospects: This project offers a viable, resource-efficient model for medico-social support of vulnerable groups regardless of geography. The strategy is scalable to other low-mobility populations and people with disabilities, providing a foundation for new standards in palliative and geriatric care.

Current status and key results: The project is currently in the conceptual development and theoretical modeling phase.Key results to date include: Scientific Hypothesis: A hypothesis has been formulated suggesting that the implementation of micro-learning tactics and inclusive design principles will significantly minimize the cognitive load on caregivers operating under critical stress. Conceptual Model: A structural framework for the future e-learning strategy has been outlined, integrating medical care protocols with psychological support methods tailored for wartime conditions. Analytical Research: A preliminary study of the challenges faced by caregivers in Ukraine has been completed. This research identified critical "gaps" in care during evacuations and acute dementia symptom flare-ups.Methodological Design: Core requirements for instructional content have been established, ensuring information is adapted for rapid comprehension in crisis situations. The project is grounded in years of research by the laboratory and is now ready to transition toward designing the architecture of the learning platform.

What the project brings: Our team brings profound scientific expertise and a unique research foundation to any potential partnership: Expert Knowledge: Over 30 years of research at the

Laboratory of Social Gerontology. We offer specialized insights into the psychophysiology of aging and the specific progression of dementia under chronic stress. Unique Data: Access to long-term monitoring results of the elderly population in Ukraine, including current data on the impact of war on the nation's cognitive health. Methodological Framework: Established medico-social support protocols and care algorithms ready for digital adaptation. Networks and Infrastructure: Direct access to a professional network of gerontologists, social services, and patient organizations. The Institute's facilities allow for the clinical validation of proposed solutions. Crisis Context: Practical experience in adapting social care to wartime conditions, making our model highly applicable to other global crisis zones.

What the project asks: To successfully implement the project, we are seeking collaboration in the following areas:

Technological Expertise and Development: We require partnership with IT specialists and UX/UI design experts to co-design the platform architecture, focusing on "stress-resilient" inclusive design and micro-learning principles. Methodological Mentorship: We are interested in knowledge exchange with international centers specializing in digital palliative and geriatric care to align our protocols with global e-learning standards. Infrastructure Access: We need cloud-based resources to host the platform prototype and advanced data analytics tools to evaluate user interaction and educational efficiency. Joint Validation: Collaborative efforts in conducting comparative studies on how digital support systems impact caregiver stress levels across different countries or crisis contexts. Scaling and Fundraising: Consultative support to secure long-term funding and integrate the project into international aid programs for populations affected by military conflicts. This partnership will enable us to transform our rigorous scientific foundation into a functional, socially significant digital product.

Existing international cooperation: Currently, this project is in its initial phase, and formal international partnerships specific to this initiative are in the process of being established. However, our team has a strong track record of successful international collaboration. Notably, I personally participated in the major international project GEHA (Genetics of Healthy Aging, 2004–2008), which united leading European research centers to study the genetic foundations of longevity. This experience provided a solid foundation in high-level scientific standards, data collection methodologies, and ethical frameworks, all of which are being applied to the current project. We are actively seeking to expand our partnerships with colleagues from the United States and Europe to scale our digital support models for caregivers on a global level.

22. AI-Assisted English Learning for Ukrainian Higher Education

Education and pedagogy · Concept / early planning · Ready within 3–6 months

Lead institution / team: Herman Petro Sahaidachnyi National Army Academy

City: Lviv

Project lead: Dr. Oksana Sovhar, professor of the Foreign Languages Department

Contact: okssov@yahoo.com

Cooperation sought: Training and capacity building

Preferred partner(s): U.S. university, Foundation or donor, Company or industry partner

Estimated scale of support: USD 10,000–50,000

Available to pitch (June 12): Either is possible

Project goal: The project aims to integrate AI-assisted learning methods into English language education in Ukrainian higher education institutions in order to improve students' academic communication skills, digital literacy, and access to international educational and research opportunities.

The initiative seeks to support both students and educators through practical use of generative AI tools for academic writing, speaking practice, personalized feedback, and multilingual communication. Another key goal is to promote AI literacy and ethical AI use in education while helping Ukrainian universities adapt to modern digital learning environments.

Through international collaboration with U.S. universities and educational partners, the project also aims to develop innovative teaching practices, joint educational initiatives, and sustainable capacity-building opportunities for Ukrainian higher education.

Summary: We are developing an AI-enhanced English education initiative for Ukrainian higher education focused on improving students' academic communication, digital literacy, and international engagement. The project integrates generative AI tools into English language teaching to support academic writing, speaking practice, research communication, and access to global educational opportunities.

The initiative aims to help Ukrainian students and educators adapt to the rapidly changing digital and academic environment by introducing practical AI-assisted learning methods, personalized feedback systems, and innovative approaches to language education. Special attention is given to AI literacy, ethical use of AI in education, and accessible low-cost digital learning solutions.

We are seeking international collaboration with U.S. universities, educational organizations, and partners interested in joint curriculum development, educator training, student engagement, and capacity building in AI-enhanced education. The project supports the internationalization of Ukrainian higher education and strengthens connections between Ukrainian students and the global academic community.

Current status and key results: The project is currently at the development and pilot implementation stage. Initial work has focused on integrating generative AI tools into English language teaching and academic communication practice for university students. AI-assisted activities for writing support, speaking practice, and digital learning engagement have already been tested in classroom and independent learning settings.

The initiative has also explored practical approaches to AI literacy and ethical AI use in education, helping students better understand how AI can support academic and professional communication. Early feedback from students has shown increased engagement, confidence in English communication, and interest in international academic opportunities.

Current efforts are focused on expanding the project through international collaboration, curriculum development, educator training, and the creation of sustainable AI-enhanced learning practices for Ukrainian higher education institutions.

What the project brings: Our team contributes practical expertise in English language teaching, AI-assisted education, and digital learning implementation within Ukrainian higher education. The project is grounded in direct classroom experience and focuses on real educational challenges faced by students and educators in a rapidly changing academic environment.

We bring experience in integrating generative AI tools into language learning, academic communication training, and student engagement activities. The initiative also contributes knowledge in AI literacy, ethical AI use in education, and accessible low-cost digital learning practices.

In addition, the project offers connections with Ukrainian students, educators, and academic communities interested in international collaboration and educational innovation. We are prepared to contribute to joint curriculum development, pilot educational programs, workshops, educator training activities, and cross-cultural academic communication initiatives with international partners.

What the project asks: We are seeking collaboration with U.S. universities, educational organizations, and international partners interested in AI-enhanced education, digital learning, and academic communication development. Specifically, we are looking for support in joint curriculum development, faculty mentorship, educator training, and collaborative pilot programs focused on integrating generative AI into English language teaching.

The project would benefit from partnerships involving guest lectures, workshops, short-term faculty exchange opportunities, and access to international expertise in AI literacy, digital pedagogy, and educational innovation. We are also interested in co-developing online learning modules, student engagement initiatives, and research-informed teaching practices related to AI-assisted education.

Additional support may include access to educational platforms, AI tools, training resources, or small co-funded initiatives that would help scale sustainable AI-enhanced learning practices in Ukrainian higher education. The project is open to long-term academic collaboration, joint educational activities, and participation in international grant or capacity-building programs.

Existing international cooperation: Military academies in Sweden, Denmark, Lithuania, Romania

23. The (UN)Spoken - International Student Social Art Research Project

Social sciences, Humanities, Education and pedagogy, Interdisciplinary · Established, seeking expansion · Ready to begin cooperation now

Lead institution / team: Rivne State University of Humanities

City: Rivne

Website: www.instagram.com/theunspoken.project/

Project lead: Nataliia Antonenko, Head of Educational and Methodological Laboratory for Innovative and Project-Based Technologies in Foreign Language Education

Contact: nataliia.antonenko@rshu.edu.ua

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Student or doctoral exchange, Mentorship and advisory, Training and capacity building, Joint educational program development, Publications and scholarly communication, Policy and advisory collaboration

Preferred partner(s): U.S. university

Estimated scale of support: Not yet estimated

Available to pitch (June 12): Either is possible

Proposed presenter: Nataliia Antonenko, Alla Fridrikh and Olena Kasatkina-Kubyshina - faculty members of RSUH

Project goal: The (UN)Spoken aims to cultivate global empathy, environmental responsibility, and active citizenship in university students through the intersection of art, research, and international collaboration.

Summary: The (UN)Spoken is an international art and research project that unites students worldwide to speak for all of nature - those who cannot speak for themselves - through art, stories, and shared cultural expression.

Working entirely in English, students create visual artworks, conduct research into cultural approaches to animal welfare, and craft narratives that bridge linguistic and cultural divides. The project runs in both online and offline formats, connecting participants across time zones through real, meaningful, high-stakes communication.

The (UN)Spoken is simultaneously a language learning environment, a global citizenship program, and a social advocacy platform. Pre- and post-project data show a 55% increase in global collaboration competence, a 41% increase in empathy, and a 27% increase in social advocacy among participants, measured across the full project cycle.

Partners have embedded the project into academic courses, public exhibitions, and research - each institution shaping the idea in its own way.

Founded at Rivne State University of Humanities, Ukraine, the project currently unites over 20 partner institutions across four countries and continues to grow.

The working language is English. The mission is to foster emotional intelligence, social advocacy, and empathy.

Current status and key results: The (UN)Spoken completed its first full international project cycle in 2025–2026, uniting 20+ partner universities across Ukraine, the USA, Denmark, Poland, and Japan.

Key milestones to date:

International Zoom meetings were held, connecting hundreds of students and faculty across time zones

Student artwork and narrative database assembled from participating institutions across four countries

Public student exhibition held at Florida International University

Ukrainian students' academic exchange conducted at Roskilde University, Denmark

Pre/post impact survey administered and analysed, documenting measurable student growth across empathy, global collaboration, and social advocacy

Conference presentation delivered at TESOL-Ukraine Convention 2026, with further presentations in progress

Active social media presence built around #UNSPOKEN

Academic publication of impact data is currently in preparation. The project is open for its second international cycle and actively seeking new institutional partners.

What the project brings: The (UN)Spoken brings a fully operational international project infrastructure: an established network of 20+ partner universities; a tested three-stage Zoom collaboration model; and a growing database of student artworks and narratives.

Our team offers expertise in ESP methodology, intercultural education, social art facilitation, and project-based learning design. We provide ready-made participation infrastructure, social media promotion via #UNSPOKEN, and dedicated coordination support throughout the project cycle.

For U.S. partners specifically, we bring direct experience of Ukraine–U.S. academic collaboration and a community of Ukrainian student voices actively seeking international dialogue.

We do not just offer an idea. We offer a project.

What the project asks: The (UN)Spoken seeks faculty partners willing to embed the project into an existing course or dedicate a standalone module — ideally in ESP, intercultural communication, environmental humanities, education, social sciences, or the arts.

Specifically, we ask for:

Course integration — a faculty member who assigns the project as part of coursework, guiding students through the research, creative, and presentation stages over the academic year.

Student participation — a cohort of students who create artworks or narratives, contribute to the shared project database, and present their work at the final showcase.

Local exhibition or event — where possible, a public display or presentation of student work.

Social media advocacy — sharing student work using #UNSPOKEN and tagging the organising team.

The project is built on academic goodwill, shared values, and the belief that education should mean something.

Existing international cooperation: The (UN)Spoken has active international partnerships across several countries outside Ukraine.

In the US, Florida International University, we have two faculty collaborations: a course "Every Species is a Masterpiece", culminating in a public student exhibition; the "Ukraine 101 course" at FIU's Honors College, bringing the project into the curriculum.

These partnerships demonstrate that the (UN)Spoken model is adaptable across disciplines, institutional cultures, and national contexts — and that it consistently delivers meaningful outcomes for students and faculty alike.

24. VR Mathematics Education Platform for Stereometry and Spatial Thinking

Information technology and computer science, Education and pedagogy, Interdisciplinary · Concept / early planning · Ready to begin cooperation now

Lead institution / team: Kryvyi Rih State Pedagogical University

City: Kryvyi Rih

Website: -

Project lead: Dmytro Bobyliev, Head of the Department of Mathematics and Mathematics Teaching Methods

Contact: dmytrobobyliev@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Technology partnership / commercialization, Equipment, infrastructure, or data access, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Company or industry partner, Ukrainian diaspora organization

Estimated scale of support: Not yet estimated

Available to pitch (June 12): Yes, in person in Lviv

Project goal: The goal of the project is to develop an open-source VR platform for teaching stereometry and improving spatial reasoning through mathematical visualization, immersive learning, and AI-assisted educational technologies. The project aims to enhance the quality of STEM education by enabling interactive exploration of three-dimensional geometric objects, strengthening mathematical intuition, and supporting modern digital approaches to mathematics education. An additional objective is to increase access to innovative educational technologies for Ukrainian educational institutions.

Summary: VR Mathematics Education Platform for Stereometry and Spatial Thinking is an interdisciplinary educational and research project aimed at developing an open-source platform for teaching stereometry, spatial reasoning, and mathematical visualization using virtual reality technologies. The project integrates mathematics, pedagogy, computer modeling, immersive learning, and AI-assisted educational approaches to support a deeper understanding of three-dimensional objects and geometric structures. The platform is designed for secondary school students, STEM and teacher education students, and mathematics educators. It provides interactive exploration of 3D mathematical models, virtual geometry laboratories, dynamic

constructions, and adaptive learning scenarios. Special attention is given to improving accessibility of STEM education, enhancing spatial thinking skills, and supporting the digital transformation of education in Ukraine. The project is open to international cooperation in joint research, software development, AI-assisted learning technologies, learning analytics, academic exchange, and collaborative educational program development.

Current status and key results: The project is currently at the concept development and prototype design stage. An analytical review of contemporary approaches to VR and immersive learning in mathematics education has been conducted, and key use cases for teaching stereometry and developing spatial reasoning have been identified. Initial work on the architecture of the open-source platform and interactive visualization models for geometric objects has begun. The project builds upon the team's extensive experience in mathematics education, digital learning technologies, mathematical modeling, and STEM education. Conceptual frameworks for integrating AI-assisted learning, adaptive educational scenarios, and learning analytics to support personalized learning have also been developed.

What the project brings: The project brings expertise in mathematics education, STEM pedagogy, mathematical modeling, digital educational technologies, and learning analytics. The team has extensive experience in teaching mathematics at higher education institutions, developing innovative educational approaches, creating digital learning resources, and integrating open-source solutions into educational environments. The project also builds on practical experience in quality assurance in education, curriculum development, and digital transformation of learning. Potential partners are offered collaboration in VR content development, AI-assisted educational tools, research on immersive learning effectiveness in mathematics education, and joint international STEM initiatives. The team has access to academic networks, educational communities, and partner institutions for piloting and implementing project outcomes.

What the project asks: The project seeks international partners for joint research, technological development, and pilot implementation of VR-based solutions in mathematics education. We are particularly interested in collaboration with universities, research laboratories, foundations, and EdTech organizations working in immersive learning, AI-assisted education, STEM education, and educational analytics. The project is seeking cooperation in VR content development, methodological support for studying the effectiveness of VR learning environments, joint scientific publications, academic exchanges, and preparation of international grant applications. An important direction is the search for co-funding opportunities, grant support, and investment for the development of the open-source platform, acquisition of VR equipment, creation of digital educational content, and implementation of international pilot studies. Additional areas of interest include access to VR infrastructure, expertise in UX/UI and educational design, and support for scaling the platform. The project also welcomes mentorship opportunities for early-career researchers and initiatives aimed at strengthening international STEM collaboration networks.

Existing international cooperation: -

25. Digital Framework for ESG Reporting and Sustainable Audit: Aligning Ukrainian Infrastructure with Global Standards

Information technology and computer science, Social sciences, Education and pedagogy, Interdisciplinary · Concept / early planning · Needs preparation (6+ months)

Lead institution / team: Zaporizhzhia National University, Department of Accounting and Taxation

City: Zaporizhzhia

Website: https://www.znu.edu.ua/

Project lead: Nataliia Seisebaieva PhD in Economics, Associate Professor, Associate Professor of the Department of Accounting and Taxation

Contact: ngs19570104@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Student or doctoral exchange, Mentorship and advisory, Data collaboration, Training and capacity building, Joint educational program development, Publications and scholarly communication, Policy and advisory collaboration

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Company or industry partner, Government or public institution, Publisher or scholarly infrastructure provider

Estimated scale of support: Not yet estimated

Available to pitch (June 12): No, but I would still like to be included in the catalogue

Project goal: The project aims to develop a digital educational and methodological framework for ESG reporting, sustainability assurance, and digital audit practices aligned with international standards and EU integration requirements. The initiative seeks to strengthen Ukraine's accounting and audit infrastructure by preparing a new generation of professionals capable of working with ESG disclosures, environmental auditing, IFRS-based digital reporting tools, and iXBRL taxonomy. The project also supports Ukraine's post-war reconstruction by improving financial transparency, accountability, and sustainability reporting practices in both public and private sectors.

Summary: The project aims to develop an open digital framework and a series of certificate-based educational modules for training a new generation of auditors and accounting professionals capable of conducting sustainability audits, ESG reporting, and environmental assurance in accordance with international standards.

The initiative focuses on integrating IFRS-based digital reporting tools, including iXBRL taxonomy, into Ukrainian accounting and audit education. The project supports Ukraine's post-war economic recovery, European integration, and the modernization of financial transparency infrastructure.

The proposed framework combines academic training, practical case studies, open-data analytics, and digital reporting instruments. Special attention is given to auditing challenges in war-affected economies, asset valuation under uncertainty, and ESG compliance for reconstruction projects.

The project team offers methodological expertise aligned with Ukrainian and EU regulations, practical experience in educating professionals in war-affected regions, and integration with open-data ecosystems such as Prozorro and YouControl.

The team seeks international partnerships for peer review, joint research, academic exchange, and collaborative development of globally aligned ESG and digital audit education standards.

Current status and key results: The project is currently at the pilot and conceptual development stage. The team has already developed preliminary methodological materials and educational concepts related to ESG reporting, sustainability auditing, and digital accounting transformation. Academic expertise has been accumulated through research and teaching activities in accounting, taxation, audit, and financial reporting under wartime economic conditions. The department has practical experience integrating open-data tools such as Prozorro and YouControl into educational activities and analytical case studies. The project concept has been presented within academic discussions focused on post-war recovery, digital transparency, and modernization of accounting education in Ukraine.

What the project brings: The project team contributes methodological expertise in accounting, taxation, audit, ESG reporting, and digital financial transparency adapted to Ukrainian and EU regulatory environments. The department has practical experience educating professionals in war-affected regions and working under conditions of economic disruption and institutional transformation. The project offers access to Ukrainian case studies related to wartime risks, reconstruction processes, sustainability reporting, and corporate resilience. The team also contributes integration experience with open-data ecosystems such as Prozorro and YouControl, interdisciplinary academic networks, and the ability to pilot innovative educational formats within Ukrainian higher education institutions.

What the project asks: The project seeks international academic and institutional partnerships for the joint development of ESG and digital audit education standards aligned with global practices. Specifically, the team is seeking:

peer review and academic evaluation of educational modules and curricula by U.S. universities and professional associations (AICPA, AAA, etc.);

joint research projects on sustainability reporting, wartime risk assessment, asset valuation, and post-war reconstruction economics;

faculty exchange, guest lectures, and academic mobility opportunities;

mentorship for early-career researchers and doctoral students;

collaboration on grant applications and co-funded educational initiatives;

access to international expertise, digital tools, and best practices in ESG assurance and IFRS-based reporting technologies, including iXBRL implementation.

Existing international cooperation: The department maintains academic communication with international researchers and participates in international academic events and scholarly publications. The project is currently open to expanding structured cooperation with U.S. and European universities, professional associations, and research networks in the fields of accounting, audit, ESG reporting, and digital transformation.

26. Sustainable Development Goals: overview, state, roadmap and best practices

Natural sciences, Agricultural sciences, Social sciences, Humanities, Education and pedagogy · Concept / early planning · Ready within 3–6 months

Lead institution / team: Zaporizhzhia National University

City: Zaporizhzhia

Website: non for the project

Project lead: Olena Boika, associate professor Department of Genetics and Plant Resources

Contact: olena.boika.ua@gmail.com

Cooperation sought: Training and capacity building, Joint educational program development

Preferred partner(s): U.S. university, Foundation or donor, Ukrainian diaspora organization

Estimated scale of support: USD 10,000–50,000

Available to pitch (June 12): Yes, online

Proposed presenter: Project leader - Olena Boika, PhD in Biology, associate professor, Department of Genetics and Plant Resources, Zaporizhzhia National University

Project goal: Rising awareness of the SDGs and ways to achieve them among youth.

Summary: This project aimed to provide different audiences with an overview of STG. As our survey revealed, the level of awareness about STG and its importance is low in our region, especially among youth. So, this course will help increase awareness of STG and explain how to achieve it. It will help to understand everyone's personal responsibility and how each person can build their everyday life in a sustainable way.

Current status and key results: We have an experienced group of professors to design and implement the course. The course can be designed for December, with the first implementation in Spring 2027.

What the project brings: The Textbook for the course. Posters, presentations, and videos on the SDGs will be created by course participants. Webinars for the public audience about SDGs and ways to achieve them (including international participants).

What the project asks: Take part in the course preparation and implementation. Financial support: Fee for the design of the course (90 hours/ 70 USD = 6300 USD); Fee for the implementation of the course (90 hours / 80 USD = 7200 USD); Printing of the Textbook and materials 2000 USD; Indirect cost 1500 USD. Total 17 000 USD.

Existing international cooperation: Zaporizhzhia National University is a member of the Baltic University Programme.

27. Renewable Energy for Bolstering Ukraine's Infrastructure by Learning and Design (REBUILD)

Engineering and technology, Information technology and computer science, Education and pedagogy, Interdisciplinary · Active implementation · Ready to begin cooperation now

Lead institution / team: Institute of Renewable Energy of the National Academy of Sciences of Ukraine (IRE NASU)

City: Kyiv

Website: https://sites.google.com/view/rebuild-ua

Project lead: Dr. Oleh Lysak, Senior Researcher, Principal Investigator (Ukraine)

Contact: olegteplotehn@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Training and capacity building, Joint educational program development

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Government or public institution

Estimated scale of support: Not yet estimated

Available to pitch (June 12): Either is possible

Proposed presenter: If the session is attended online, the pitch will be delivered by the project lead, Dr. Oleh Lysak. If attended in person in Lviv, it will be presented by project member Dr. Habil. Anna Iatsyshyn from the Institute of Digitalization of Education of the NAES of Ukraine.

Project goal: The overarching goal of the REBUILD project is to systematically improve the qualifications of Ukrainian educators by providing them with the necessary methodological materials and digital tools to conduct extracurricular classes focused on building energy efficiency and renewable energy. By integrating the Aladdin online simulation platform and deploying AI-powered chatbots, the initiative seeks to promote a "learning by design" pedagogical approach, ultimately fostering the development of STEM education in Ukraine and heightening student engagement with sustainable technologies.

Summary: The REBUILD (Renewable Energy for Bolstering Ukraine's Infrastructure by Learning and Design) project is a trilateral initiative aimed at advancing STEM education by improving the qualifications of Ukrainian teachers in the domains of building energy efficiency and renewable energy. Funded by the US National Academy of Sciences via the STCU under the IMPRESS-U program, the project is coordinated by the Institute of Renewable Energy of the National Academy of Sciences of Ukraine, in strategic partnership with the US-based Institute for Future Intelligence and Lithuania's Kaunas University of Technology. Our core objectives include the integration of the Aladdin online simulation platform to facilitate a "learning by

design" methodology, the deployment of AI-powered chatbots to support instructional staff, and the creation of comprehensive methodological materials for extracurricular citizen science programs. Active since May 2025, this two-year project involves extensive professional development for educators and the organization of competitive events for youth teams. We seek to expand our international network to enhance our capacity-building framework and structural resilience.

Current status and key results: The project officially commenced on May 1, 2025, and is currently in its second year of active implementation. Over the past year, we have successfully initiated a targeted professional development program for Ukrainian educators. Key milestones achieved include conducting comprehensive teacher surveys to assess baseline competencies , rolling out instructional training on the Aladdin online 3D platform developed by our U.S. partners, and drafting core educational methodological materials integrated into the citizen science concept. Additionally, we conducted training courses focused on creating energy-efficient buildings and organized a competition for teachers and their school teams.

What the project brings: As the coordinating institution, IRE NASU brings deep technical expertise in renewable energy integration, building performance modeling, and NZEB standards. Crucially, our established network includes eight partner institutions providing comprehensive specialties in engineering (renewable energy, building performance, HVAC), pedagogy, and IT. These partners include the Institute of Digitalization of Education of NAES of Ukraine, Kyiv National University of Construction and Architecture, G.E. Pukhov Institute for Modelling in Energy Engineering of NAS of Ukraine, Sumy State University, Lviv Polytechnic National University, South Ukrainian National Pedagogical University, Berdyansk State Pedagogical University, and Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University. This robust network provides a ready-made framework for scaling educational pilot programs, collecting pedagogical data, and deploying curricula. Furthermore, we possess practical experience in teaching the "learning by design" methodology via the Aladdin platform and analyzing simulation datasets.

What the project asks: We seek strategic partners to expand the scope and long-term sustainability of the REBUILD initiative. Specifically, we are looking for:

1. Funding for Educational Training. Financial support to scale our professional development programs, enabling us to train a significantly larger cohort of Ukrainian educators in energy efficiency and renewable energy concepts.

2. Practical Educational Infrastructure. Co-funding to enhance our curricula with hands-on practical lessons, specifically by providing classrooms with physical mini-models of energy-efficient buildings and renewable energy installations.

3. Joint Grant Partnerships. Collaboration on upcoming international funding to transition our current framework into larger educational or infrastructural projects.

Existing international cooperation: Yes, the REBUILD project is a trilateral initiative funded by the U.S. National Academy of Sciences (US NAS) via the Science and Technology Center in Ukraine (STCU), contract No. 7135, under the IMPRESS-U program. Our primary U.S. partner

is the Institute for Future Intelligence (Natick, Massachusetts). As a non-profit organization specializing in STEM education research, they developed the core Aladdin platform—an open-source, AI-enabled CAD software that integrates 3D architectural modeling with physics-based energy simulations. Their technology provides the pedagogical foundation for our "learning by design" approach, enabling Ukrainian students and educators to design and analyze energy-efficient buildings in real time. In Europe, we are actively cooperating with the Kaunas University of Technology (Lithuania), which acts as a central consortium member and contributes to the course development.

28. Ukrainian-English bilingual books for Ukrainian kids in the United States

Education and pedagogy · Active implementation · Ready within 3–6 months

Lead institution / team: «Knyzhky bez mezh» NGO (Books Without Borders)

City: Kyiv

Website: https://www.facebook.com/share/1N7qbnZ1M4/?

Project lead: Elisa Carlisle, President and CEO

Contact: elisa.Carlisle@gmail.com

Cooperation sought: Joint educational program development

Preferred partner(s): Ukrainian schools abroad

Estimated scale of support: USD 10,000–50,000

Available to pitch (June 12): Yes, online

Proposed presenter: Elisa Carlisle

Project goal: Support Ukrainian children affected by war, displacement, and life abroad by providing free bilingual (Ukrainian-English) children's books and related educational activities.

Summary: We are Richard and Elisa Carlisle, a creative couple who write children's books together.

Stories about true friendship and sincere love, exciting adventures and wise life lessons quickly capture the hearts of young readers.

Our first book “Jake the Snake & his marvelous adventures” was successfully published in English, Ukrainian, Spanish, Arabic, Chinese and also Braille (for visually impaired and blind people). So we accomplished the goal to be accessible for 99.8% of the child population of our planet.

We would like to spread a word about our new book which we believe deserves special recognition.

It is bilingual: written in English and Ukrainian languages with excellent illustrations; created for Middle Grade and called “Life-affirming stories of Tony the Pony and his friends”.

This book was created during the historical events in Ukraine, February and March 2022.

Many of our partners in creating this book live and work in Ukraine. Sergey Nazarenko, Olena Strizhak, Ksenia Tischenko are the names of individuals who didn’t stop helping with the book even during the war. These courageous people did their very best during the most difficult of times. Sometimes we had to pause because our associates were under the threat of being bombed.

We present this book as an example of extraordinary courage and commitment.

Current status and key results: Current Status and Key Results to Date

Books Without Borders UA is an active nonprofit that has already written, published, and distributed multiple bilingual (Ukrainian-English) children's books focused on resilience, friendship, anti-bullying, personal growth, and cultural identity. To date, more than 20,000 books have been distributed free of charge to Ukrainian children in Ukraine and abroad. The organization has conducted book presentations and outreach activities in numerous countries, including the United States, United Kingdom, Germany, Switzerland, Poland, Ireland, Israel, Italy, Spain, Belgium, the Netherlands, France, Norway, Canada, the UAE, and others. The books have been translated into several languages and adapted in Braille format to improve accessibility. The organization reports partnerships with schools, libraries, and Ukrainian community groups worldwide, and its publications are held in major institutions including the Library of Congress (USA) and the Royal Library at Windsor Castle (UK).

What the project brings: The project combines high-quality bilingual children's literature, established relationships with schools, libraries, and Ukrainian community organizations, and experience delivering programs across multiple countries. Through its network, partners gain access to engaged audiences of children, families, educators, and community leaders both in Ukraine and throughout the global Ukrainian diaspora. The project also offers strong social impact credentials, including free book distribution, inclusive formats such as Braille editions, cultural preservation initiatives, and educational programming that promotes literacy, language learning, resilience, and positive values. Partners benefit from visibility through international presentations, community events, social media outreach, and collaborative educational activities while contributing to the well-being, development, and cultural connection of Ukrainian children affected by war and displacement.

What the project asks: The project seeks partners who can help expand its reach and impact among Ukrainian children in Ukraine and abroad. Specifically, it asks partners to:

Assist with the distribution of free bilingual books through schools, libraries, cultural centers, community organizations, and family support networks.

Host or help organize book presentations, author visits, reading events, workshops, and other educational or cultural activities for children.

Provide access to Ukrainian children and families who may benefit from the books and related programming.

Support local logistics, outreach, communications, and promotion through community networks, social media, and educational channels.

Collaborate on future initiatives, including translations, accessible formats (such as Braille editions), and new educational programs.

Help build a sustainable international network dedicated to supporting Ukrainian children through culture, literacy, creativity, and emotional well-being.

The project is not primarily seeking operational control from partners; rather, it seeks collaboration, distribution channels, community engagement, and shared commitment to supporting Ukrainian children affected by war, displacement, and cultural disruption.

Existing international cooperation: USAID (2022-2024)

Group 5 — Human Capital, Careers & Professional Development

29. LabMed Bridge (International Laboratory Medicine Education and Research Bridge)

Medical and health sciences, Education and pedagogy, Interdisciplinary · Active implementation · Ready to begin cooperation now

Lead institution / team: NGO “Educational Institute of Clinical Laboratory Diagnostics” (NGO CLADEI) - www.osilad.com.ua

City: Lviv

Website: www.osilad.com.ua /// https://www.youtube.com/channel/UCRHYnqBfD4RdEPd7EaxZ2Qw /// www.ujlm.org.ua

Project lead: Viorika Akimova, Professor, Deputy editor-in-chief of Ukrainian Journal of Laboratory Medicine, co-founder of NGO "CLADEI"

Contact: viorikakimova@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Postdoctoral hosting, Technology partnership / commercialization, Joint laboratory or research infrastructure, Mentorship and advisory, Data collaboration, Training and capacity building, Joint educational program development

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Company or industry partner, Publisher or scholarly infrastructure provider, Profesional medical organization

Estimated scale of support: USD 10,000–50,000

Available to pitch (June 12): Either is possible

Proposed presenter: Nataliia Kozopas, MD, PhD, Editor-in-Chief, Ukrainian Journal of Laboratory Medicine

Project goal: The strategic goal of LabMed Bridge is to systematically elevate laboratory medicine within Ukraine and enrich the global healthcare landscape through an advanced framework of education, implementation science, collaborative research.

The project drives systemic transformation across strategic areas:

• Standards implementation: To integrate global quality guidelines into national clinical practice;

• Educational modernization: To upgrade academic curricula and deliver high-impact training through international mobility, faculty exchanges, joint educational programs, workshops, webinars;

• Resilience modeling: To conceptualize Ukraine's wartime laboratory crisis-management strategies into scalable, universal operational frameworks for global disaster preparedness.

• Workforce sustainability: To accelerate early-career talent and reduce diagnostic errors through structured international mentorship, collaborative research, and cross-border academic co-authorship.

Summary: LabMed Bridge is an active, Ukraine-based initiative designed to strengthen laboratory medicine through structured international collaboration in education, research, and professional development. Supported by NGO "CLADEI" and an associated scientific journal, the project connects professionals, educators, and early-career specialists into a sustainable professional ecosystem. The initiative focuses on three strategic pillars:

• Standards & Evidence-Based Practice: Driving the full cycle of aligning Ukrainian academic and clinical environments with global quality standards - from conducting baseline awareness research and adapting international guidelines to executing pilot studies, implementing them into practice, and evaluating post-implementation outcomes.

• System Resilience & Crisis Management: Investigating and documenting the strategic transformation, operational continuity, and crisis-response models of medical laboratories functioning under extreme wartime disruptions. This direction empowers the Ukrainian laboratory community to conceptualize their professional challenges and solutions, creating a unique, scalable framework highly valuable for global healthcare security and international disaster preparedness.

• Next-Gen Professional Growth: Prioritizing the development of early-career specialists entering laboratory medicine through structured mentorship, continuous medical education, and international academic integration. This includes strategic research into expanding professional capacity, fostering talent acceleration, and enhancing laboratory workforce integration to sustainably improve the broader healthcare system.

Current status and key results: The LabMed Bridge initiative is currently in active implementation, having established a scalable professional network across Ukraine's academic and clinical laboratory sectors.

Key measurable achievements to date include:

• High-Impact Scientific Events: Organized 2 landmark international conferences, including the high-visibility online forums dedicated to the European Lab Day ("Medical Laboratory Operations During Wartime", 2024 and 2025) which engaged over 1,500 participants, as well as the specialized "Laboratory Medicine: Quality, Innovation, Safety" forum.

• Standards Adaptation & Targeted Educational Outreach: Executed the ongoing translation, baseline awareness research, and curricular integration of international laboratory guidelines (such as EFLM quality standards). This direction is backed by 10+ dedicated webinars on

standardization, post-implementation research, and the successful presentation of findings at major international platforms, including the EFLM Preanalytical Conference (Padua, 2025).

• Scientific Publishing Infrastructure: Successfully published 10 issues of the initiative's associated peer-reviewed scientific journal, disseminating research articles and academic reviews to foster robust professional and pedagogical communication.

• Wartime Resilience Frameworks: Pioneered an emerging research direction on health infrastructure survival, conceptualizing operational continuity and risk-zoning models for medical laboratories operating under active crisis disruptions. This includes drafting a landmark policy-oriented letter to the editor of a leading international journal.

What the project brings: The project offers a unique, practice-based international collaboration platform embedded in real clinical and educational environments in Ukraine, driven by mutual growth.

Partners gain direct access to:

- An active network of laboratory medicine professionals, educators, and researchers;

- A real-world environment for implementing and testing international laboratory standards;

- Established infrastructure for education delivery (webinars, conferences, and workshops);

- A scientific journal platform for joint publication and professional dissemination;

- A unique research context on laboratory system resilience under crisis conditions to help the global community prepare for future emergencies;

- Opportunities for piloting and adapting modern educational models in a dynamic healthcare system.

What the project asks: The initiative seeks structured international collaboration focused on long-term capacity building, academic exchange, and mutual growth. Priority areas include:

• Expert Participation: Involving international experts as guest speakers in our webinars, workshops, and conferences.

• Exchange Programs: Organizing professional exchanges, including short-term training and clinical observerships.

• Joint Research: Launching collaborative projects in laboratory diagnostics, quality systems, and healthcare resilience.

• Content Co-Development: Working together on evidence-based laboratory medicine guidelines and modern educational content.

• Academic Output: Writing co-authored scientific publications and sharing research findings globally.

• Training Modules: Designing structured international training programs for laboratory specialists.

• Funding & Sponsorship: Securing financial support through competitive international grants and corporate industry sponsorship to cover research costs, training placements, and educational infrastructure.

• Mentorship: Supporting early-career laboratory professionals and educators through dedicated mentorship programs.

Existing international cooperation: Yes, we are actively expanding our international network, built on an established foundation of scientific communication within the global laboratory medicine community.

Key areas of cooperation include:

- EFLM Alignment: We actively collaborate and exchange knowledge within the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) professional environment, aligning our project goals with their priorities in laboratory quality, standardization, and crisis preparedness.

- International Outreach: We are currently focused on expanding our initial professional connections with U.S. and European academic institutions, laboratory organizations, and industry leaders to launch joint educational and research initiatives.

30. Pharma Bridge Hub

Natural sciences, Engineering and technology, Medical and health sciences · Concept / early planning · Ready within 3–6 months

Lead institution / team: Department of Technology of Biologically Active Substances, Pharmacy and Biotechnology Lviv Polytechnic National University in collaboration with Department of Pharmaceutical Chemistry I.Horbachevsky Ternopil National Medical University

City: Lviv-Ternopil

Project lead: Vira Lubenets, Prof., Dr. Sc., Head of Department of Technology of Biologically Active Substances, Pharmacy and Biotechnology Lviv Polytechnic National University

Contact: vira.i.lubenets@lpnu.ua

Cooperation sought: Mentorship and advisory, Training and capacity building, Joint educational program development

Preferred partner(s): U.S. university, Foundation or donor, Company or industry partner, Government or public institution

Estimated scale of support: USD 10,000–50,000

Available to pitch (June 12): Yes, online

Proposed presenter: Liliya Logoyda, PhD, DSc, Professor and Head of Department of Pharmaceutical Chemistry I. Horbachevsky Ternopil National Medical University

Project goal: The goal of Pharma Bridge Hub is to create an innovative digital platform that supports the continuous professional development of pharmacists through accessible education, mentorship, collaboration, and knowledge exchange. The project aims to enhance pharmacists' professional competencies, improve the quality of pharmaceutical services, and promote lifelong learning in response to evolving healthcare needs

and modern pharmaceutical practices.

Summary: Pharma Bridge Hub is a digital platform aimed at supporting the continuous professional

development of pharmacists through accessible education, expert collaboration, and professional networking. The project seeks to bridge the gap between academic knowledge, practical pharmacy experience, and modern healthcare challenges by providing innovative learning opportunities tailored to pharmacists' needs.

The platform will offer online training modules, webinars, mentorship programs, expert

consultations, and access to up-to-date professional resources. Pharma Bridge Hub also aims to foster a collaborative professional community where pharmacists can exchange knowledge, share best practices, and strengthen their competencies.

The initiative focuses on improving the quality of pharmaceutical services, enhancing workforce capacity, and promoting lifelong learning within the pharmacy sector. Through partnerships with educational institutions, healthcare organizations, and international experts, the project aspires to create a sustainable ecosystem for professional growth and innovation in pharmacy practice.

Current status and key results: The project is currently at the conceptual and partnership development stage. Initial research has been conducted to identify the professional development needs of pharmacists and explore existing digital education practices in the healthcare sector. The project concept, objectives, and preliminary platform structure have been developed, including ideas for online training modules, mentorship opportunities, and professional networking tools. Discussions with academic institutions, pharmacy professionals, and potential partners have been initiated to establish collaboration opportunities and

define priority areas for capacity building. The project team is also exploring international best practices in continuous professional education and digital learning. The next phase includes platform design, content development, and pilot implementation with the involvement of pharmacists and healthcare experts.

What the project brings: Pharma Bridge Hub brings interdisciplinary expertise in pharmacy education, professional

development, and digital learning innovation. The project team includes pharmacy educators, healthcare professionals, and researchers with experience in academic training, curriculum development, and professional capacity building. The initiative contributes a strong professional network connecting pharmacists, academic institutions, healthcare organizations, and industry representatives. The project also offers a clear concept for a digital learning and networking platform tailored to the needs of pharmacists, including online education modules, mentorship opportunities, and knowledge-sharing tools. In addition, the team is committed to fostering international collaboration and integrating best practices in lifelong learning and healthcare education. Through strategic partnerships, Pharma Bridge Hub aims to co-create high-quality educational content, expand professional mobility opportunities, and strengthen the competencies of pharmacists in line with modern healthcare standards.

What the project asks: Pharma Bridge Hub is seeking partnerships with academic institutions, healthcare organizations, professional associations, and international experts to support the development and implementation of the platform. The project is particularly interested in collaboration on educational content development, mentorship programs, and digital learning methodologies for pharmacists. Potential areas of cooperation include joint creation of online courses and webinars, expert contributions to training materials, faculty mentorship for early-career pharmacists, and participation in international knowledge exchange initiatives. The project also welcomes support in platform development, pilot

testing, and evaluation of educational outcomes. In addition, Pharma Bridge Hub seeks

opportunities for collaborative research, professional mobility programs, financial support, and co-funding for the development of digital infrastructure, educational content creation, and long-term project sustainability. Strategic partners may also contribute through co-organization of workshops, conferences, and networking events aimed at strengthening pharmacists' competencies and fostering interdisciplinary collaboration.

31. Ecosystem for Supporting the Career Development of Young Scientists in Ukraine

Social sciences, Humanities, Education and pedagogy, Interdisciplinary · Active implementation · Ready to begin cooperation now

Lead institution / team: Berdyansk State Pedagogical University

City: Zaporizhzhia (temporarily relocated from Berdiansk)

Website: https://bdpu.org.ua/ekosistema-suprovodu-kar%D1%94rnogo-rozvitku-molodih-uchenih-v-ukra%D1%97ni/

Project lead: Natalia Tsybuliak, Associate Professor, Berdyansk State Pedagogical University; Project Lead

Contact: nata.tsibulyak@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Mentorship and advisory, Data collaboration, Training and capacity building, Publications and scholarly communication, Policy and advisory collaboration, Open science cooperation; development of a research career support ecosystem; engagement of the Ukrainian professional diaspora in mentoring, advisory support and international networking for young scientists.

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Ukrainian diaspora organization, Publisher or scholarly infrastructure provider

Estimated scale of support: Not primarily financial

Available to pitch (June 12): Yes, online

Proposed presenter: Natalia Tsybuliak, Associate Professor, Berdyansk State Pedagogical University; Project Lead

Project goal: The project aims to develop an inclusive, evidence-based and multi-level ecosystem for supporting the career development of young scientists in Ukraine during war and

post-war recovery. It seeks to identify the needs, barriers, risks and support gaps affecting early-career researchers; analyse institutional and national policies; compare relevant European practices; and design a practical model, roadmap and recommendations for universities, research institutions, policymakers and international partners. The long-term goal is to strengthen Ukraine's scientific human capital, reduce career uncertainty, support academic well-being, and create more transparent and sustainable research career pathways.

Summary: The project "Ecosystem for Supporting the Career Development of Young Scientists in Ukraine" aims to develop an inclusive, multi-level and nationally relevant model for supporting the career trajectories of young researchers in Ukraine during wartime and post-war recovery.

Young scientists in Ukraine face multiple overlapping challenges: professional uncertainty, limited access to stable funding and infrastructure, disrupted academic communities, displacement, emotional exhaustion, and restricted opportunities for international cooperation. These challenges threaten not only individual research careers but also the long-term renewal of Ukraine's scientific potential.

The project combines interdisciplinary research, policy analysis, institutional mapping, online surveys, semi-structured interviews, focus groups, case studies, and comparative analysis of European practices. It focuses on individual, institutional and national levels of support, with attention to mentoring, academic well-being, gender sensitivity, open science, internationalisation and institutional career policies.

The expected outputs include an evidence-based model of a career support ecosystem for young scientists, a roadmap for implementation, methodological recommendations for universities and policymakers, open research artefacts with DOI, datasets and metadata, analytical reports, academic publications and science communication materials.

The project is designed to support Ukrainian universities, research institutions, policymakers, councils of young scientists, international partners and donors in building sustainable, transparent and inclusive career pathways for early-career researchers.

Current status and key results: The project has been institutionally anchored at Berdyansk State Pedagogical University and designed as a 2026–2028 research and capacity-building initiative. The team has developed the conceptual framework, research objectives, mixed-methods methodology, implementation logic and expected outputs. The first-year plan includes a research protocol, data management plan, survey and interview instruments, mapping of institutional practices, and open research artefacts with DOI via Zenodo and/or the institutional repository. The project builds on the team's prior studies on Ukrainian academia during wartime, including research on academic burnout, anxiety, migration, institutional support and preservation of scientific potential. Team members also have experience in open science, researcher mental health, mentoring and international cooperation through initiatives and cooperation with European academic partners.

What the project brings: The team contributes strong contextual expertise on Ukrainian higher education and science under wartime conditions, access to networks of young scientists,

supervisors, research managers and relocated universities, and experience in mixed-methods research, policy analysis, open science and academic well-being. Berdyansk State Pedagogical University offers a unique case of a relocated “university without walls,” with digital infrastructure, an institutional repository, Zenodo community, research ethics procedures, Google Workspace, Zoom infrastructure and the ArsDocendi Teaching Excellence Center. The project will generate original quantitative and qualitative data on young scientists’ career needs, support gaps, institutional practices and mentoring experiences. The team also brings expertise in FAIR/CARE-oriented data management, science communication, policy recommendations, and international academic collaboration.

What the project asks: The core research project is already supported in Ukraine. We are therefore seeking international partners not for duplicate funding of the same activities, but for added-value cooperation that would strengthen the project’s international, comparative and capacity-building dimensions.

We are looking for U.S. and international partners to contribute methodological advice on survey design, qualitative protocols and mixed-methods integration; support comparative analysis of early-career researcher development systems; co-develop mentoring models, training modules and career support tools; and participate in joint publications, policy briefs, webinars and conference presentations.

We are also interested in virtual or short-term mentoring schemes involving Ukrainian and diaspora experts, opportunities for doctoral or postdoctoral research visits, and collaboration with doctoral schools, postdoctoral development centres, open science organisations and research career offices. Additional support could cover expert consultations, mobility, translation/editing, open science infrastructure, dissemination and training activities that extend the impact of the NRFU-funded project.

Existing international cooperation: The project team has active experience in international cooperation with European partners in the areas of researcher mental health, open science, academic career development and institutional support. Team members are involved in the Erasmus+ project ReACT, focused on psychological flexibility and work-related stress management for researchers. The team also has experience with Open4UA and open science initiatives, cooperation with European academic networks, and research collaboration with institutions in Germany and other European countries. These collaborations provide a strong foundation for expanding cooperation with U.S. universities, research centres, foundations, Ukrainian diaspora organisations.

32. SHIFT: A Future Readiness Framework for Higher Education Transformation

Social sciences, Education and pedagogy, Interdisciplinary · Active implementation · Ready to begin cooperation now

Lead institution / team: Lviv Polytechnic National University

City: Lviv

Project lead: Olena Pozniakova. Visiting researcher in California State University Sam Bernardino

Contact: pozniakovalv@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Postdoctoral hosting, Mentorship and advisory, Data collaboration, Publications and scholarly communication, Policy and advisory collaboration

Preferred partner(s): U.S. university, Foundation or donor, Ukrainian diaspora organization

Estimated scale of support: USD 50,000–100,000

Available to pitch (June 12): Yes, online

Proposed presenter: Olena Pozniakova PhD, Visiting researcher California State University San Bernardino (Associate professor of Lviv Polytechnic National University until 2025)

Project goal: The goal of the SHIFT project is to develop a Future Readiness Framework that helps universities better align student skills, industry needs, and institutional practices in an era of AI, innovation, and global uncertainty.

The project aims to identify critical future competencies, measure alignment between students, universities, and employers, and generate practical recommendations for higher education transformation. Through international collaboration, SHIFT seeks to support the development of future-ready graduates, stronger innovation ecosystems, and more resilient universities.

Summary: SHIFT (Skills, Human Capital, Innovation, Foresight and Transformation) is an research project aimed at developing a Future Readiness Framework for higher education in an era of artificial intelligence, rapid technological change, and global uncertainty.

The study examines how well universities prepare students for future challenges by analysing the alignment between three key stakeholder groups: students, university leaders, and industry representatives. Using a mixed-method triangulation approach, the research combines quantitative surveys and qualitative interviews to identify gaps between student-perceived skills, employer-valued competencies, and institutional leadership practices.

The project moves beyond traditional employability studies by focusing on innovation capacity, entrepreneurial thinking, leadership, adaptability, and collaboration as critical drivers of future readiness. It also explores how open innovation practices, AI capabilities, and university-industry partnerships contribute to sustainable institutional transformation.

Current research activities include survey implementation and stakeholder engagement in the United States and Ukraine. The project seeks international partners for comparative studies, joint publications, framework validation, data collection, policy development, and collaborative research on higher education transformation.

Expected outputs include the SHIFT Framework, a Future Readiness Index, policy recommendations, academic publications, and an international network of universities and industry partners committed to preparing future-ready graduates.

Current status and key results: The SHIFT project has completed its conceptual and methodological development phase. A Future Readiness Framework and mixed-method triangulation research design have been developed, integrating perspectives from students, industry representatives, and university leaders.

Research instruments have been designed, and ethical approval (IRB) has been obtained through California State University, San Bernardino (USA). Data collection is currently underway, with survey responses being gathered in the United States, Ukraine, and the United Kingdom. Semi-structured interviews with university leaders and innovation stakeholders have also commenced.

The project has established an international foundation for comparative research on higher education transformation, future skills, innovation, and human capital development.

The next stage focuses on expanding the research network, increasing the sample size across countries and institutions, conducting comparative analyses, and engaging international partners in framework validation, joint publications, and future policy recommendations.

What the project brings: The project seeks to build an international team of universities, researchers, entrepreneurs, and innovation practitioners to scale the study across countries and institutional contexts. Beyond generating comparative research and academic publications, the project aims to serve as a platform for co-designing and testing new educational approaches, innovation programs, mentorship models, and AI-enabled learning solutions that strengthen future readiness.

International partners will have the opportunity to contribute to cross-country research, validate findings in different settings, and jointly develop practical tools and interventions for higher education. The long-term vision is to move beyond research alone by creating pilot initiatives, testing innovative products and services, and exploring opportunities for new ventures, educational technologies, or startup projects emerging from the collaboration. The project welcomes partners interested in combining rigorous research with real-world experimentation and impact.

What the project asks: The project is seeking partners willing to participate in cross-country studies, provide access to relevant student, faculty, or innovation communities, support pilot testing of new educational approaches, and collaborate on joint publications and grant applications.

A particularly valuable form of cooperation would be a co-funded or host-supported postdoctoral position (up to two years) within a U.S. university or research center, enabling the expansion of data collection, comparative international analysis, and the development of joint research initiatives.

The long-term goal is to bring together researchers, universities, entrepreneurs, and innovation practitioners to move beyond research alone. The collaboration will support joint studies and publications, testing new approaches to developing future skills and entrepreneurship, and creating evidence-based educational solutions. Participating partners will have opportunities to pilot new learning models, mentorship formats, AI-enabled educational tools, and innovation programs within their institutions. Over time, successful initiatives may be scaled into broader

educational platforms, university-industry projects, digital products, or startup ventures emerging from the collaboration.

Existing international cooperation: The project is currently being conducted in collaboration with California State University, San Bernardino (USA), and includes emerging research data from the United States, Ukraine, and the United Kingdom.

Group 6 — Reconstruction, Resilience, Energy & Engineering

33. Systematic Mapping of Ecosystems Damaged by Military Activities for the Ecological Restoration of Ukraine

Natural sciences, Engineering and technology, Information technology and computer science, Interdisciplinary · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: Ukrainian National Forestry University, Department of Computer Science

City: Lviv

Project lead: Mykhailo Paslavskyi

Contact: mykhailo.paslavskyi@nltu.edu.ua

Cooperation sought: Co-funding or grant partnership, Faculty exchange, Joint laboratory or research infrastructure, Equipment, infrastructure, or data access, Training and capacity building

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor

Estimated scale of support: Not yet estimated

Available to pitch (June 12): Yes, in person in Lviv

Proposed presenter: project manager

Project goal: To develop a systemic model for ecological restoration in war-affected regions of Ukraine and identify leverage points for effective and scalable interventions.

Summary: The war in Ukraine has caused significant damage to ecosystems and biodiversity. These impacts are part of complex socio-ecological systems, where environmental degradation interacts with governance, economic recovery, and community resilience.

Traditional approaches to recovery often focus on technical interventions but fail to consider systemic interdependencies. Applying systems thinking to the recovery processes of war-affected ecosystems provides a deeper understanding of feedback loops, system dynamics, and transformation pathways.

This interdisciplinary study combines the principles of complex adaptive systems and socio-ecological systems to analyze the recovery processes in war-affected regions of Ukraine.

Using Systems Thinking and systems mapping approaches, the project aims to create an insight model to identify effective strategies for recovery and transformation management. The focus is

on identifying key actors, structural relationships, and leverage points that can accelerate sustainable change.

The project aims to apply systems leadership and systems mapping tools to analyze complex social transformations in the process of ecological restoration of degraded ecosystems.

The research results will be used to: plan sustainable ecological restoration at the community level; improve decision-making in complex degraded systems; support state environmental policy; support international programs working in the field of ecological restoration.

Current status and key results: Currently, a system map of degraded ecosystems has been created, key relationships have been identified, and a draft Insight model has been prepared. Within the framework of the Erasmus+ program, the project manager completed an internship in the field of research on socio-ecological systems and the development of systemic leadership competencies. An article was published based on the results of the research - SHYBANOVA, A., RUDA, M., & PASLAVSKYI, M. (2025). IMPACT OF ACTIVE MILITARY ACTIONS ON THE ECOLOGICAL STATE OF SOIL AND WATER RESOURCES IN SOUTHERN UKRAINE. Herald of Khmelnytskyi National University. Technical Sciences, 351(3.1), 579-584. https://doi.org/10.31891/2307-5732-2025-351-75

What the project brings: The project team has developed a draft Ukrainian national standard titled “Compound Landscape Complexes: Environmental and Protective Requirements,” which is based on the fundamental principles of the compartmental concept, taking into account the assumptions and limitations of this concept. An analysis of the current state was conducted, and directions for improving environmental regulation of the functioning of disturbed ecosystems were identified. An environmental assessment of the quality of disturbed ecosystems was developed, which should be based on an evaluation of the resilience of specific ecological systems to specific external (including anthropogenic) impacts and pressures. A conceptual scheme of a hierarchical ecosystem compartment system with corresponding subsystems and tiers is proposed. A methodology for the comprehensive assessment of the protective effectiveness of disturbed ecosystems is proposed, based on mathematical modeling of the rates of individual reactions involving the formation and removal of specific substances within the system.

What the project asks: We are seeking partners to jointly develop and validate system models of ecological restoration in post-conflict areas. Main areas of cooperation:

1. Joint development of social-ecological system models using approaches from systems thinking, system dynamics, and complex adaptive systems.

2. Development of systems maps for affected regions, identifying key stakeholders, structural interdependencies, and leverage points.

3. Joint development of an insight model to support decision-making, scenario modeling, and transformation management.

4. Access to methodologies, joint publications, and preparation of joint proposals for grant programs.

Existing international cooperation: We do not cooperate.

34. Development of the design, technology, and investigation of the properties of multilayer composites based on honeycomb elements

Engineering and technology · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: Zaporizhzhia National University

City: Zaporizhzhia

Website: https://www.znu.edu.ua/ukr/university/11929/12623/12079

Project lead: Skachkov Viktor, professor

Contact: skavira@ukr.net

Cooperation sought: Joint research, Technology partnership / commercialization, Joint laboratory or research infrastructure, Publications and scholarly communication

Preferred partner(s): Research institute or laboratory, Foundation or donor, Publisher or scholarly infrastructure provider

Estimated scale of support: USD 100,000–250,000

Available to pitch (June 12): Yes, online

Proposed presenter: Skachkov Viktor

Project goal: The aim is to develop structural schemes and manufacturing technology for multilayer honeycomb products of complex geometrical shapes, designed for operation within a wide temperature range of 70 K – 1700 K, based on carbon-fiber plastics, carbonized carbon-fiber plastics, pyro-densified, and siliconized carbon–carbon materials.

Summary: The work is devoted to addressing the problem of developing the scientific and technological foundations for the design of structural and technological schemes of honeycomb constructions of complex shapes and geometrical dimensions, based on carbon-fiber plastics, carbonized carbon-fiber plastics, pyro-densified, and siliconized carbon–carbon composite materials.

This topic is of exceptional importance for the space and aviation industries, since the developed honeycomb structures make it possible to improve the properties of aerospace engineering samples, enhancing their weight characteristics under harsh operating conditions. These conditions are characterized by frequent thermal fluctuations within the ranges of 70 K – 600 K and 1000 K – 1700 K, variable mechanical loads, and significant radiation exposure.

The proposals presented in the work regarding the creation of industrial equipment belong to dual-use scientific and technological developments and are of global significance.

Current status and key results: The technology for producing the honeycomb structures under development involves the formation of a carbon-fiber plastic preform, followed by carbonization, improvement of the porous structure, and filling of the porous framework with pyrolytic carbon from the gas phase or liquid-phase impregnation with molten silicon, with subsequent carbiding.

In the monographs of V.O. Skachkov, mathematical models and methods are presented for the entire complex of described chemical-technological operations, enabling the calculation of technological regimes and the properties of the composite after each stage.

In the practice of creating honeycomb structures, there have been no attempts to produce such constructions based on carbon–carbon composite materials, which makes this a priority direction both in Ukraine and globally.

What the project brings: The development of the design of payload fairings based on honeycomb elements, produced by the winding method combined with the winding of skins, along with technological equipment and winding process regimes, will significantly reduce the technological cycle, improve the operational characteristics of the fairings, and decrease their cost by two to three times. Such a structural-technological solution ensures a breakthrough approach in the production of large-scale honeycomb structures not only in Ukraine but also in international mechanical engineering.

What the project asks: Funding, design and manufacturing of equipment and special tooling, materials for the production of experimental honeycomb structures, control and measuring instruments

Existing international cooperation: No

35. Physicochemical foundations of the thermochemical pressing of the solid inorganic systems

Engineering and technology · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: Zaporizhzhia National University

City: Zaporizhzhia

Project lead: Belokon Yuriy, Doctor of Technical Sciences, Professor, Head of Department of Metallurgical Technologies, Ecology and Technological Safety Zaporizhzhia National University

Contact: belokon.zp@gmail.com

Cooperation sought: Joint research, Faculty exchange

Preferred partner(s): U.S. university, Research institute or laboratory

Estimated scale of support: USD 100,000–250,000

Available to pitch (June 12): Either is possible

Proposed presenter: Sahuliakin Oleksandr, Postgraduate, Junior Scientific Assistant, Assistant of Department of Metallurgical Technologies, Ecology and Technological Safety Zaporizhzhia National University Zaporizhzhia, Ukraine, e-mail: aleksandrsagulakin@gmail.com, Kurinnyi Maksym, Postgraduate, Junior Scientific Assistant, Assistant of Department of Metallurgical Technologies, Ecology and Technological Safety Zaporizhzhia National University Zaporizhzhia, Ukraine, e-mail: kurinnyimaksym2907@gmail.com,

Project goal: This project aims to establish the physicochemical foundations of thermochemical pressing — a hybrid process that simultaneously combines the energy of exothermic chemical reactions with plastic deformation — as a universal, energy-efficient method for producing three structurally distinct classes of advanced solid inorganic materials: intermetallics (ordered structures), cermets (matrix structures), and high-entropy alloys (disordered structures). The goal is to develop a predictive theory of structure formation under combined thermal-deformation impact and to define the rational process parameters enabling controlled microstructure and mechanical performance across all three material classes — replacing multiple inefficient, single-purpose conventional methods with one unified scientific and technological framework.

Summary: Modern methods for the synthesis of new solid inorganic systems with different types of structural ordering have significant disadvantages: process duration, high cost, risk of melt contamination and the occurrence of significant thermal stresses. The proposed method of the thermochemical pressing is an innovative approach that combines the energy of an exothermic chemical reaction with plastic deformation, which helps to significantly reduce energy consumption and ensure stable formation of target phases. And here an important scientific question arises: establishing the physicochemical regularities of structure formation of inorganic systems in the regime of high-speed thermal and deformation effects to create materials with predicted operational characteristics, because the nature of their formation is not fully understood right now. Therefore, the development of fundamental scientific principles for the energy-efficient production of complex solid inorganic systems with different types of structures (ordered, matrix, and disordered) under the thermochemical pressing conditions is one of the priority tasks for obtaining high-quality composite materials and expanding the scope of their use.

Current status and key results: TRL 3 - The concept is reinforced by laboratory tools. Project has experimental proof of concept already established. The team has demonstrated stable, reproducible synthesis of three cermet systems — TiN–Ni, TiN–W, and TiN–Mo — using thermochemical pressing, with results published in Q1/Q2 Scopus-indexed journals (Results in Engineering, 2022; International Journal of Lightweight Materials and Manufacture, 2023; International Journal of Thermofluids, 2025). The underlying method is protected by Ukrainian Patent No. 133598. The principal investigator, Prof. Yurii Belokon (Scopus h-index 14), has led three competitively funded predecessor projects on this topic and received Ukraine's Presidential Prize for Young Scientists (2022). The host institution, Zaporizhzhia National University, holds Ministry of Education Category B research certification (October 2025).

What the project brings: The team contributes a validated proprietary process (Ukrainian Patent No. 133598) with three peer-reviewed publications confirming experimental reproducibility. Specific assets include: a specialized high-temperature composites laboratory equipped with hydraulic presses, induction furnaces, ultrasonic flaw detection, dynamic hardness testers, and optical microscopy. The team holds deep expertise across the full research chain — from thermodynamic analysis through microstructural characterization to mechanical property testing. Two senior researchers completed international internships at the University of

Paderborn (Germany). A dedicated IP law specialist on the team ensures rigorous protection of jointly developed outputs.

What the project asks: Research collaboration: Joint experimental campaigns using partner-side infrastructure unavailable in Ukraine — particularly high-resolution transmission electron microscopy (TEM/STEM), synchrotron X-ray diffraction, or spark plasma sintering (SPS) equipment — for complementary microstructural characterization of thermochemically pressed samples produced by our team.

Co-authored publications and joint grant applications: We seek partners willing to co-submit proposals to NSF, DOE, or NATO Science for Peace programs, or to bilateral Ukraine–U.S. funding instruments, building on the NRFU-funded foundational work.

Postdoctoral or PhD researcher exchange: A co-funded short-term research stay (3–6 months) for one of our early-career researchers at a U.S. university materials science department, focused on high-entropy alloy characterization, would substantially accelerate the project's Stage 2 and 3 outcomes.

Industrial or defense R&D partnership: Given the direct applicability of thermochemical pressing to aerospace and defense-grade materials, we are open to cooperative R&D agreements with U.S. defense contractors, national laboratories (e.g., Argonne, Oak Ridge, AFRL), or advanced manufacturing companies working on HEA or cermet components.

Mentorship: Senior faculty mentorship in high-entropy alloy thermodynamics or deformation mechanics for the PI and early-career researchers.

Existing international cooperation: The team currently has no active U.S. partnerships. Several senior researchers completed research internships at the University of Paderborn and Technical University Bergakademie Freiberg, Germany, which resulted in shared methodological expertise in materials characterization.

36. Creation of a laboratory for research and improvement of equipment for combined metallurgical processes.

Engineering and technology · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: ZAPORIZHZHIA NATIONAL UNIVERSITY

City: Zaporizhzhia

Project lead: Hrechanyi Oleksii, Associate Professor Department of Metallurgical Equipment

Contact: hrechanyi@znu.edu.ua

Cooperation sought: Joint research, Faculty exchange, Joint laboratory or research infrastructure

Preferred partner(s): U.S. university, Research institute or laboratory, Government or public institution

Estimated scale of support: Over USD 250,000

Available to pitch (June 12): Either is possible

Proposed presenter: Sahuliakin Oleksandr, Postgraduate, Junior Scientific Assistant, Assistant of Department of Metallurgical Technologies, Ecology and Technological Safety Zaporizhzhia National University Zaporizhzhia, Ukraine, e-mail: aleksandrsagulakin@gmail.com, Kurinnyi Maksym, Postgraduate, Junior Scientific Assistant, Assistant of Department of Metallurgical Technologies, Ecology and Technological Safety Zaporizhzhia National University Zaporizhzhia, Ukraine, e-mail: kurinnyimaksym2907@gmail.com,

Project goal: The primary goal is to develop and industrially implement technological foundations for combined processes of casting, crystallization, and pressure treatment for manufacturing solid billets. It aims to achieve this by creating a modern research laboratory to improve a unique continuous roll casting-rolling unit. The project seeks to significantly reduce energy consumption by eliminating intermediate heating from the technological cycle and to introduce artificial intelligence, specifically machine vision, for real-time process automation and predictive maintenance of critical components like crystallizer rolls.

Summary: The introduction of combined processes is key to energy-efficient metallurgy. The authors developed a unique roll casting-rolling unit that produces solid profiles directly from liquid metal via simultaneous crystallization and compression between rotating rolls. This eliminates intermediate heating and thermal equipment, significantly saving energy resources.

Currently, the process is limited to laboratory research. To overcome operational imperfections and implement it industrially, advanced control methods are required. We propose integrating artificial intelligence, specifically machine vision. Installing cameras and specialized software will allow real-time monitoring of the deformation center. This system will provide signals to automatically adjust the liquid metal supply while simultaneously diagnosing the technical condition of the crystallizer rolls. If predefined wear markers are reached, it will signal the need for replacement. This AI-driven method offers the significant advantage of being easily scalable to other metallurgical equipment.

Current status and key results: The research team has successfully designed and built a functioning pilot plant for the continuous roller casting-rolling of solid billets. This unit is currently equipped with heating and melting furnaces capable of reaching 850°C and 1200°C. To date, the team has developed an original methodology for experimental research , designed and patented a novel banded roll configuration , and conducted experimental assessment of the thermal state of the metal-roll system during the casting-rolling process. Theoretical and experimental findings have been published in several Scopus-indexed journals and monographs.

What the project brings: Our team offers robust expertise in mechanical engineering, metallurgical equipment design, and materials science, led by researchers with extensive industrial production experience. We provide partners access to our proprietary, custom-built pilot plant for continuous roll casting-rolling. Potential partners can leverage our patented equipment designs, including novel rolling mills and banded rolls , as well as our established physical-mechanical testing methodologies. Once the laboratory upgrade is complete, it will

function as a shared-use research center, offering international collaborators free access to conduct joint full-scale and model experiments in advanced combined metallurgical processes.

What the project asks: Access to Advanced Analytical Facilities: Opportunities for our researchers to visit partner facilities to conduct cross-validation of our structural and microstructural analyses (e.g., scanning electron microscopy and X-ray structural analysis).

Joint Scaling Initiatives: Collaborative research aimed at co-authoring high-impact publications and scaling our laboratory results into semi-industrial and industrial applications.

Existing international cooperation: Yes, the team maintains active international cooperation within Europe. Since 2024, the project authors have been invited participants in the Erasmus+ Staff Week focused on metallurgy in Freiberg, Germany. The Principal Investigator has also completed an international internship under the ERASMUS+ KA171 program at TU Bergakademie Freiberg. Additionally, the project framework includes ongoing consultations and planned collaborative visits with colleagues from European institutions and enterprises, specifically Technologies in Metallurgy s.r.o. (Czech Republic).

37. Smart low-temperature heating system based on a condensing modular boiler

Engineering and technology · Active implementation · Ready within 3–6 months

Lead institution / team: National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute». Team: Prof. Volodymyr Voloshchuk, Prof. Eugene Nikiforovich, Prof. Valerii Deshko, Assoc. Prof. Inna Bilous, Assoc. Prof. Pavlo Novikov, Assoc. Prof. Oleksandr Stepanets, Assistant Anastasiya Zakharchenko.

City: Kyiv

Website: https://www.youtube.com/watch?v=3Mbrh0finSc&t=1s, https://aep.kpi.ua/project/proyekt-boiler-digital-twin/, https://aep.kpi.ua/dz-mon-stage-two-experimental-sample/

Project lead: Professor Volodymyr Voloshchuk

Contact: v.voloshchuk@kpi.ua

Cooperation sought: Joint research, Co-funding or grant partnership, Technology partnership / commercialization, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Company or industry partner, Ukrainian diaspora organization, Government or public institution, Publisher or scholarly infrastructure provider

Estimated scale of support: Over USD 250,000

Available to pitch (June 12): Yes, in person in Lviv

Project goal: The primary objective of this project is to develop, validate, and scale an intelligent, data-driven energy management framework that maximizes the real-time operational

efficiency of municipal and public building heating systems without requiring expensive, invasive structural overhauls.

Summary: Condensing boilers for providing heating can achieve significantly higher efficiency than conventional ones due to possibility to recover latent heat of vaporization from the flue gas. But it can be achieved when return temperature of heating system is sufficiently low (below the dew temperature of the flue gas), which directly depends on real thermal modes of the heating system. So, development of methods and tools that can use data under real operating conditions and have possibilities to find the most efficient modes is crucial for improving performance of such system. The Project presents development of a digital twin-based smart heating system, which includes a modular condensing boiler. The proposed framework of a digital twin takes advantage of the latest technologies in information technology, which could be applied for real-time information interchange between the physical system and its virtual copy. A methodology and a user-friendly interface, which are easy to use and navigate, have been developed for estimation of energy efficient solutions in the studied system. It has been demonstrated that real-time adjustment of the system modes can increase seasonal boiler efficiency by up to 7%.

What the project brings: Our team contributes a proven blend of advanced thermal engineering, data science, and field-tested implementation assets:

- Proprietary Digital Twin Architecture: A fully operational, cloud-integrated software pipeline linking IoT telemetry with automatically calibrated EnergyPlus and Python optimization modules;

- Empirical Baseline Datasets: High-resolution operational data, building thermal profiles, and verified efficiency metrics;

- Technical Expertise: Deep specialization in the modeling of complex energy systems, advanced state estimation;

- Institutional Networks & Infrastructure: Direct access to the research infrastructure and engineering talent at Igor Sikorsky Kyiv Polytechnic Institute (KPI), strong operational ties with municipal authorities, and an active project-management framework

What the project asks: To scale our validated Digital Twin framework from single pilots to regional smart-grid deployments, we seek specific strategic cooperation with US academic, industrial, and municipal partners in the following areas:

- Joint Pilot Deployments & Data Validation: Collaboration with US universities or smart-city initiatives to deploy our control architecture on diverse building portfolios (e.g., US campus facilities or municipal buildings) to test the framework across different climate zones and HVAC configurations;

- Advanced AI & Scalability Research: Joint research tracks focusing on machine learning methods to further automate the Digital Twin calibration process and cloud-to-edge computing architectures;

- Capacity Building & Academic Mobility: Exchange opportunities, including a co-funded postdoctoral or visiting researcher position (1–2 years) hosted in the US, focused on smart energy systems and data-driven thermal modeling;

- Commercialization & Funding Pathways: Partnerships with US energy service companies (ESCOs) or technology integrators to adapt our decision-support software for commercial markets, alongside joint applications for international innovation grants.

Existing international cooperation: The Sibley School of Mechanical and Aerospace Engineering in the College of Engineering at Cornell University in Ithaca, New York. Royal Institute of Technology, Sweden, Stockholm

38. Climate change and plants must change!

Natural sciences, Agricultural sciences · Concept / early planning · Ready within 3–6 months

Lead institution / team: Zaporuizhzhia National University

City: Zaporizhzhia

Website: not yet

Project lead: Olena Boika, associate professor, Department of Genetics and Plant Resources, Faaculty of Biology, Zaporizhzhia National University

Contact: olena.boika.ua@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Technology partnership / commercialization, Joint laboratory or research infrastructure, Equipment, infrastructure, or data access, Data collaboration, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Company or industry partner

Estimated scale of support: Over USD 250,000

Available to pitch (June 12): Yes, online

Proposed presenter: Olena Boika, associate professor Department of Genetics and Plant Resources, Faculty of Biology, Zaporizhzhia National University

Project goal: The project aimed to identify the best genotypes of agricultural crops to incorporate into the breeding process to obtain new tolerant varieties.

Summary: Food security is one of humanity's main problems. We are currently experiencing environmental changes that are causing a decline in harvests. Evaluating genetic diversity and identifying genotypes tolerant of drought and high temperatures are vital. The Department of Genetics and Plant Resources at ZNU has a clear understanding of how this should be done and its own methodological approaches to breeding. This project will focus on selecting the best genotypes of the most popular vegetable crops and incorporating them into the breeding process to develop new varieties tolerant of harsh environmental conditions. We can use any crops proposed by our partners if they can grow under our conditions. As part of the project, we will publish our results in high-impact scientific journals.

Current status and key results: All member of the Department are PhD in Biology (Genetics), moreover two of them are Doctor of Science (Biology and Agricultural Science). We have strong metodology aproach for the selection work based on the pollen.

What the project brings: To the Universities and Research Institutions - join research, publication, and the possible creation of new varieties of agricultural crops for future use. For industry and agricultural businesses, obtain new, more tolerant varieties.

What the project asks: Financial support and joint research work.

Existing international cooperation: Durham University, Great Britain

Group 7 — Research Infrastructure & Open Science

39. Ukrainian Resilience Corpus: A Multilingual AI-Ready Corpus of Wartime Public Communication, Translation, and Civic Discourse

Information technology and computer science, Social sciences, Humanities, Education and pedagogy, Interdisciplinary · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: Dragomanov Ukrainian State University, Faculty of foreign philology + Centre for Collective Use of Scientific Equipment “Digital Technologies in the Humanities”

City: Kyiv

Project lead: Prof. Svitlana Matvieieva, Professor of Applied Linguistics and Translation Studies

Contact: sam141175@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Student or doctoral exchange, Postdoctoral hosting, Joint laboratory or research infrastructure, Equipment, infrastructure, or data access, Data collaboration, Training and capacity building, Joint educational program development, Publications and scholarly communication, Policy and advisory collaboration

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Ukrainian diaspora organization, Government or public institution, Publisher or scholarly infrastructure provider

Estimated scale of support: USD 50,000–100,000

Available to pitch (June 12): Either is possible

Proposed presenter: The pitch will be delivered by the project lead: Prof. Svitlana Matvieieva, Doctor of Philology, Professor of Applied Linguistics and Translation Studies at the Faculty of Foreign Philology, Dragomanov Ukrainian State University, Kyiv, Ukraine. Her research focuses on corpus linguistics, multilingual corpora, translation studies, digital humanities, and language technologies.

Project goal: The project aims to create the Ukrainian Resilience Corpus: a multilingual, AI-ready corpus of Ukrainian wartime public communication, civic discourse, and translation practices. Its goal is to preserve, systematize, and analyse socially significant Ukrainian-language materials and their translations, including public safety messages, institutional communication, media texts, civic and volunteer discourse, educational content, and public speeches.

The project seeks to transform these materials into a reusable research and educational infrastructure for corpus linguistics, translation studies, Ukrainian studies, digital humanities, public communication, and low-resource NLP. By combining corpus design, metadata standards, text alignment, linguistic annotation, terminology extraction, and AI-assisted analysis, the project will support international research, teaching, translation training, and language technology development.

A broader goal is to strengthen the global visibility of Ukrainian linguistic data and to create a sustainable platform for U.S.-Ukraine and international cooperation in humanities-based digital research and AI-ready language resources.

Summary: The Ukrainian Resilience Corpus is a multilingual, AI-ready research and educational infrastructure designed to document, analyse, and make internationally accessible Ukraine's wartime public communication, civic discourse, and translation practices. The project will build a linguistically annotated corpus of Ukrainian public safety messages, institutional communication, media texts, public speeches, volunteer and civic discourse, and their translations into English and other partner languages. The corpus will support research in corpus linguistics, translation studies, digital humanities, public communication, discourse analysis, and low-resource NLP.

The project responds to an urgent need to preserve Ukraine's contemporary linguistic record while also transforming it into reusable data for international scholarship, education, AI development, and policy communication. It will combine corpus design, metadata standards, text alignment, linguistic annotation, terminology extraction, and AI-assisted analysis.

We seek U.S. and international partners for joint research, data collaboration, technical infrastructure, doctoral and faculty exchange, publications, and training. The expected outputs include an open-access searchable corpus prototype, teaching modules, joint publications, workshops, and a scalable model for documenting socially significant discourse in crisis contexts.

Current status and key results: The project is at the pilot / proof-of-concept stage and builds on the team's established expertise in corpus linguistics, translation studies, multilingual corpora, and digital humanities. Previous work includes research on English-Ukrainian parallel corpora, corpus-based terminology studies, translation technologies, AI-assisted language analysis, and Ukrainian linguistic data processing. Relevant publications include studies on English-Ukrainian parallel corpus development, migration terminology, legal translation, and corpus-based analysis of socially significant discourse.

The project is also supported by teaching and research activities at Dragomanov Ukrainian State University, including courses in digital technologies, corpus linguistics, translation studies, and language technologies. Initial methodological decisions have been developed regarding corpus

structure, text types, metadata categories, alignment procedures, and possible annotation layers. The team is ready to move from conceptual and pilot work to systematic corpus building, international data collaboration, and joint research outputs.

What the project brings: The Ukrainian team contributes strong expertise in corpus linguistics, translation studies, applied linguistics, digital humanities, and multilingual corpus development. The team has experience in designing English-Ukrainian parallel corpora, working with linguistic annotation, text alignment, corpus-based terminology analysis, translation technologies, and AI-assisted language research.

The project also brings access to Ukrainian-language expertise, authentic linguistic data, domain knowledge of Ukrainian public, civic, institutional, and educational communication, and experience in teaching corpus methods and digital technologies to philology and translation students. The institutional environment includes the Faculty of Foreign Philology and the Centre for Collective Use of Scientific Equipment "Digital Technologies in the Humanities" at Dragomanov Ukrainian State University.

The team can contribute research leadership, data collection and curation, Ukrainian-language annotation, translation analysis, educational modules, student involvement, doctoral supervision, and publication capacity in corpus linguistics, translation studies, Ukrainian studies, and digital humanities.

What the project asks: The project seeks concrete cooperation with U.S. and international partners in several areas. First, we are looking for joint research collaboration in corpus linguistics, digital humanities, Ukrainian studies, translation studies, public communication, and low-resource NLP. This may include co-designed research questions, shared methodology, joint publications, and comparative studies of multilingual crisis communication.

Second, we seek technical and infrastructural support for corpus development, including advice on metadata standards, corpus architecture, annotation protocols, data management, ethical access models, and searchable corpus interfaces. Access to existing corpus platforms, repositories, annotation tools, or language technology infrastructure would be especially valuable.

Third, we are interested in academic mobility and capacity building: faculty mentorship, doctoral or postdoctoral collaboration, short research visits, online workshops, guest lectures, and training for early-career researchers and students.

Fourth, we seek co-funding or joint grant development to support data collection, annotation, alignment, corpus interface development, student assistants, workshops, and open-access dissemination. An ideal partnership would combine research expertise, technical infrastructure, training, and a jointly prepared external grant application.

Existing international cooperation: The project builds on existing international academic cooperation with European partners in applied linguistics, translation studies, language technologies, and digital humanities. The project lead has cooperated with Kaunas University of Technology, Lithuania, including joint research and conference activities related to language technologies, translation, and the use of artificial intelligence in linguistic research. Previous

academic cooperation also includes professional development in corpus linguistics at Friedrich Schiller University Jena, Germany.

The team is open to expanding this cooperation toward U.S.-Ukraine partnerships, especially with universities, research institutes, Ukrainian studies centres, digital humanities laboratories, Slavic studies programmes, computational linguistics groups, and organizations supporting Ukrainian research and education. At present, the project is specifically seeking U.S. and international partners for systematic corpus development, joint research, training, publications, and grant applications.

40. Parasitic and Infectious Environmental Screening: Molecular and Microscopic Approach

Natural sciences, Medical and health sciences, Agricultural sciences, Interdisciplinary · Concept / early planning · Exploratory — looking for direction

Lead institution / team: Center for Collective Use of Scientific Equipment "STRUCTURE" at Zaporizhzhia National University

City: Zaporizhzhia

Website: https://web.znu.edu.ua/NIS/1976.ukr.html

Project lead: Nataliia Voronova, Candidate of Biological Sciences (PhD), Associate Professor at the Department of General and Applied Ecology and Zoology

Contact: voronovanv@st.znu.edu.ua

Cooperation sought: Joint research, Co-funding or grant partnership, Joint laboratory or research infrastructure, Data collaboration, Training and capacity building

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor

Estimated scale of support: USD 100,000–250,000

Available to pitch (June 12): Either is possible

Proposed presenter: The pitch will be delivered by the project lead: Nataliia Voronova, Candidate of Biological Sciences (PhD), Associate Professor at the Department of General and Applied Ecology and Zoology.

Project goal: The main goal is to establish a modern open-type molecular-genetic (PCR) laboratory at ZNU's "STRUCTURE" Center to study environmental parasites and pathogens. This facility will enable the identification of invasive, cryptic, and new species using molecular barcoding and environmental DNA (eDNA) approaches. It will serve as a crucial regional hub for biosafety and post-ecocide monitoring in Southern Ukraine, detecting animal and human pathogens, acting as a reserve center for emergency mass testing, and training highly qualified specialists in molecular biology to overcome the current personnel deficit.

Summary: The Center for Collective Use of Scientific Equipment “STRUCTURE” at Zaporizhzhia National University proposes the project “Molecular-Microscopic Screening of Parasitic and Infectious Threats in the Environment.”

Our goal is to establish a modern open-type PCR laboratory for the study of parasites and pathogens in the natural environment, the monitoring of invasive species, and the assessment of biosafety in southeastern Ukraine after the ecocide. An application has been submitted to procure a PCR laboratory. For molecular extraction and DNA amplification, we will rely on European partners (France, Spain, and Poland).

We are seeking academic or institutional partners in the United States to submit joint grant applications, co-finance basic molecular equipment (for example, real-time PCR thermal cyclers and automated nucleic acid extraction stations; budget approximately €130,000), and build research capacity.

The modernized laboratory will enable rapid environmental screening based on environmental DNA (eDNA), veterinary diagnostics, and forensic identification.

We offer a highly qualified research team, institutional support, and readiness for active integration into joint international research projects. This partnership will transform our center into a key regional hub for biosafety monitoring, student training, and global scientific collaboration.

Current status and key results: Since 2005, our research team has actively conducted molecular genetic studies, describing over 20 new species of parasites and pathogens in collaboration with European partners. Currently, our center operates fully functional light and transmission electron microscopy laboratories. However, lacking local extraction and amplification facilities, DNA analyses were previously outsourced to partner institutions in France, Spain, and Poland. We have now fully developed the conceptual design, budget, and optimal equipment specifications (including Gentier 96R and Auto-Pure96) for the new PCR laboratory. Our team is trained in molecular protocols, and we are ready to launch the facility and initiate environmental screening upon securing equipment funding.

What the project brings: Our team contributes strong expertise in parasitology, ecology, and zoology, supported by an existing robust infrastructure in light and transmission electron microscopy. We offer access to unique environmental and biological samples from the frontline and Southern regions of Ukraine, which are critical for studying invasive species dynamics and post-ecocide ecosystem degradation. We bring a dedicated team of experienced researchers and motivated PhD students skilled in field sampling, morphometric analysis, and molecular extraction protocols. We are ready to contribute our data to joint international publications and actively integrate our future laboratory into global R&D networks and joint grant applications.

What the project asks: We are seeking co-funding or a grant partnership to acquire the core molecular equipment necessary to launch the open-type PCR laboratory. The total estimated infrastructure budget is approximately 130,000 EUR (roughly 140,000 USD), specifically targeting an automated DNA/RNA extraction station (e.g., Auto-Pure96), a Real-Time PCR thermal cycler (e.g., Gentier 96R), and a Class II biological safety cabinet. Beyond financial or

equipment support, we seek academic partnerships with U.S. universities or research institutes for joint eDNA biomonitoring and ecological screening projects. We are highly interested in capacity building: specifically, faculty mentorship for our early-career researchers in advanced bioinformatics (NGS data analysis), and short-term academic mobility programs (e.g., hosting our PhD students in U.S. labs to master cutting-edge molecular ecology protocols and data collaboration).

Existing international cooperation: Yes, we have extensive ongoing and past cooperation with European institutions (Volodymyr Sarabeev, Doctor of Biological Sciences, Associate Professor at the Department of Forest Biology, Hunting and Ichthyology). Key partnerships include Sorbonne University (France) on invasive species parasites (Horizon 2020 Assemble+ project), the University of Valencia (Spain) on Mediterranean ecosystem pollution indicators, the University of Santiago de Compostela (Spain) on molecular diagnostics of zoonoses, and the Pomeranian University in Slupsk (Poland) on invasive amphipods.

41. Digital Humanities Ukraine

Information technology and computer science, Social sciences, Humanities, Education and pedagogy, Interdisciplinary, Digital Humanities, research data, digital archives, and Ukrainian Studies · Pilot or proof-of-concept · Ready within 3–6 months

Lead institution / team: Individual

City: Kyiv-Berlin

Website: https://www.instagram.com/dh.ukraine/

Project lead: Tetiana Shyshkina

Contact: tetiana@shyshkina.eu

Cooperation sought: Joint research, Co-funding or grant partnership, Mentorship and advisory, Equipment, infrastructure, or data access, Data collaboration, Training and capacity building, Joint educational program development, Publications and scholarly communication, Digital Humanities community-building, knowledge exchange, and open educational resources

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Ukrainian diaspora organization, Publisher or scholarly infrastructure provider, Digital humanities center, library, archive, museum, or digital scholarship unit

Estimated scale of support: Not primarily financial

Available to pitch (June 12): Yes, online

Proposed presenter: Tetiana Shyshkina, PhD candidate - project lead

Project goal: The project aims to build a Ukrainian Digital Humanities community and platform for knowledge exchange, training, collaboration, and international networking. It seeks to increase the visibility of Ukrainian DH initiatives, connect researchers and cultural heritage professionals, and strengthen capacity in digital archives, research data, computational methods, and responsible digital tools for humanities research.

Summary: Digital Humanities Ukraine is an initiative that has a very ambitious goal – to create a Ukrainian Digital Humanities Community. It aims to connect Ukrainian researchers, educators, students, and cultural heritage professionals who work or are willing to work with digital methods and tools in humanities and social sciences.

The project responds to the fragmentation and limited visibility of Ukrainian DH by proposing a platform that can unite interested practitioners. As the first iteration, a social media account was created where DH-related content is posted in both Ukrainian and English. The communication has already started with several researchers in Ukraine and with several DH centers outside of Ukraine.

The idea is to attract both Ukrainian audience and global DH community. The next planned step is to create a platform for this dialogue, through virtual and offline formats. The following steps include launching a newsletter, designing a website and later organizing offline and online events.

The project is looking for international partners from universities, DH centers, libraries, archives, museums, foundations, and scholarly infrastructure providers. This matters because sustainable Digital Humanities capacity is essential for preserving, studying, and communicating Ukrainian cultural and historical knowledge, especially under conditions of war, displacement, and infrastructural disruption.

Current status and key results: The pilot has already reached more than 200 followers, mostly from the project's target audience. At this stage, the audience is largely based outside Ukraine, which confirms the project's potential for international networking. Over the past 90 days, the account has received 7,686 views. Initial communication has also started with researchers in Ukraine and DH centers outside Ukraine.

What the project brings: The project is currently at the pilot stage. Its first public format is a bilingual social media account that publishes curated Digital Humanities content in Ukrainian and English. The account introduces DH concepts, projects, events, tools, and methodological discussions, while also highlighting complex topics such as Chornobyl, archives, access, documentation, and the politics of digital visibility.

A visual identity for the project has been developed and will be implemented across future communication formats. The key result so far is a tested communication channel, an emerging network, and a clearer editorial direction.

What the project asks: The project is seeking initial cooperation, expert engagement, and practical support to develop the current pilot into a sustainable Ukrainian Digital Humanities platform. At present, there is active interest and communication from researchers and DH-related communities in Germany and Colombia, but no formal long-term partnership has yet been established.

The project recognizes existing Ukrainian DH initiatives, including the DH center at UCU, and does not seek to duplicate them. Its contribution is to build a broader connective infrastructure: a communication and networking layer that helps dispersed Ukrainian DH initiatives, researchers, projects, and resources become more visible, accessible, and internationally connected.

The main need at this stage is partnership and institutional engagement: mentoring, strategic advice, guest contributions, online workshops, and support for shaping community-building formats. Financial support would be useful for a website, newsletter infrastructure, and event organization, but the project is not primarily seeking funding.

Such cooperation would help move the initiative beyond social media and build a long-term space for Ukrainian DH visibility, knowledge exchange, networking, and international collaboration.

Existing international cooperation: No formal international cooperation has yet been established. However, the communication has already started with different institutions and researchers in and outside Ukraine.

42. Open Knowledge Corridor: A Ukraine–U.S. Testbed for Community-Based Scholarly Communication

Information technology and computer science, Interdisciplinary · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: Lviv Polytechnic National University

City: Lviv

Website: https://peers.international/

Project lead: Dr. Oleksandr Berezko, Associate Professor

Contact: oleksandr.l.berezko@lpnu.ua

Cooperation sought: Joint research, Co-funding or grant partnership, Joint laboratory or research infrastructure, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Publisher or scholarly infrastructure provider

Estimated scale of support: USD 100,000–250,000

Available to pitch (June 12): No, but I would still like to be included in the catalogue

Project goal: The project aims to build and validate an experimental, community-based knowledge infrastructure shared between Ukraine and the United States — a trust infrastructure in which research is openly verified by expert communities rather than certified by journal prestige. It demonstrates that open, community-led peer review, organized as durable online communities rather than around individual journals, can serve as a practical mechanism for quality assurance, reproducibility, and cross-border trust. Concretely, the project seeks to (1) establish a working bilateral "open knowledge corridor" with co-designed open-review workflows and governance rules; (2) form a first transatlantic reviewer community and run one full open-review cycle; and (3) produce reusable infrastructure, protocols, and evaluation methods that other Ukrainian and international partners can adopt. The longer-term aim is to help shift research assessment from journal prestige and raw metrics toward demonstrable, openly verifiable impact and integrity.

Summary: Scholarly communication is mid-transformation, and trust — not volume — is becoming its scarce resource. This project proposes a Ukraine–U.S. testbed for community-based scholarly communication: a shared knowledge infrastructure where research is openly evaluated by durable expert communities rather than by journal prestige. In the first cycle, a Ukrainian and a U.S. coordinating team would form one reviewer community of 15–25 experts, openly review 10–15 research outputs, test moderation and data-governance protocols, and publish a reusable evaluation report. The platform is not built from scratch: it adapts the existing open-review system developed through Ukraine's OPTIMA project, which has hosted open review for roughly 20 academic conferences. Inspired by models such as France's Peer Community In but grounded in Ukraine's wartime open-science experience, the project treats openness as a verification instrument and trust-building mechanism — operationalizing the friend-shoring agenda in research.

Current status and key results: The project builds directly on completed and ongoing work. Through the OPTIMA project, the team co-developed an open peer-review platform that hosted open review for roughly twenty academic conferences across multiple Ukrainian universities — demonstrating that open community review is operationally feasible and providing the platform the proposed testbed will adapt rather than rebuild. OPTIMA also produced Ukraine's first printed and online open-science handbook, now used in universities, and formal open-science courses for master's and doctoral students at four Ukrainian institutions, including Lviv Polytechnic. Through the Open4UA project, the team contributed substantially to Ukraine's new research-assessment methodology, adopted by the Ministry of Education and Science, consolidating practices from the Netherlands, Slovenia, and other systems. The team also coordinates the Ukrainian Reproducibility Network (UARN) and helped develop Ukraine's National Open Science Plan (2022). A concept design and partner map for the bilateral testbed are prepared.

What the project brings: The Ukrainian team contributes a rare combination of working infrastructure, policy experience, and community networks. Assets include: a tested open peer-review platform and the operational know-how to run open review at conference scale; authorship of Ukraine's open-science handbook and university curricula; direct experience shaping national research-assessment policy (Open4UA → Ministry methodology); and coordination role in UARN, plus prior leadership in Eurodoc, giving access to European early-career and open-science networks. The team brings deep expertise in open science, metascience, scholarly communication, and reproducibility, anchored at an institution with proven capacity to coordinate major EU-funded research and capacity-building projects, including Horizon Europe. Crucially, it offers a reverse-innovation perspective: methods forged under wartime constraints and resource scarcity that transfer to more stable systems. It also brings a credible willingness to be openly audited and reproduced — the very behavior the corridor is meant to demonstrate.

What the project asks: We seek a U.S. partner — a university, research institute, or open-science infrastructure organization — to co-design and run the first pilot cycle. Three priority asks:

(1) A U.S. co-lead for the first reviewer community: one faculty counterpart and a small group of researchers willing to review and edit in an open community-review pilot over a 12–24 month cycle.

(2) A technical and governance partner to help adapt and co-host the existing platform, align it with U.S. public-access expectations (e.g., the Nelson Memo framework) and interoperability standards, and co-steward open versus controlled-access materials.

(3) A joint funding route: co-application to a U.S. or international funder, ideally seeded by one co-funded postdoctoral or visiting-researcher position.

Concrete first step — a short design sprint to select outputs, recruit 15–25 reviewers, and run one open-review cycle. Natural U.S. entry points include open-science infrastructure organizations, university libraries, metascience and research-on-research groups, and scholarly societies. Methodological collaboration on integrity- and impact-based metrics is welcome as a secondary track.

Existing international cooperation: The team has substantial international experience through EU-funded projects (OPTIMA and Open4UA, drawing on partners and practices from the Netherlands, Slovenia, and other EU countries), through Lviv Polytechnic's participation in Horizon Europe, and through the project lead's former leadership of Eurodoc at the pan-European level. The team participates in international open-science and reproducibility networks and engages with models such as France's Peer Community In. Formal U.S. partnership for this specific testbed is at an early stage and is the primary aim of this submission.

Disclosure and recusal: The project lead also coordinates Lviv Academic Bridge 2026. To remove any conflict of interest, this project is submitted for the catalogue only and will not be entered into the selection process for the June 12 pitching session. The lead will take no part in any review or selection decision concerning this submission; any decision about its catalogue inclusion rests with another member of the organizing committee.

Group 8 — Humanities & Ukrainian Studies

43. The Middle Dniester Region as a Transcultural Corridor: Sociocultural Mechanisms of Interaction in the Early Iron Age (Based on Burial and Settlement Complexes)

Humanities · Active implementation · Ready to begin cooperation now

Lead institution / team: Kamianets-Podilskyi Ivan Ohiienko National University

City: Kamianets-Podilskyi

Website: https://scholar.google.com/citations?user=dNApbMYAAAAJ

Project lead: Vitalii Hutsal, Candidate of Historical Sciences, Associate Professor, Department of Archaeology, Special Historical and Legal Disciplines, Kamianets-Podilskyi Ivan Ohiienko National University

Contact: gucol.vitalij@kpnu.edu.ua

Cooperation sought: Co-funding or grant partnership

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor

Estimated scale of support: USD 10,000–50,000

Available to pitch (June 12): No, but I would still like to be included in the catalogue

Project goal: The project aims to reconstruct sociocultural interaction mechanisms in the Middle Dniester region during the Early Iron Age (8th–5th centuries BCE), conceptualizing it as a transcultural corridor between forest-steppe, steppe nomadic, and western Hallstatt cultural worlds. By systematically analysing burial and settlement complexes, the project seeks to develop a theoretical model of cultural exchange, identity hybridization, and social adaptation in contact zones, integrating regional findings into the broader European archaeological discourse

Summary: The Middle Dniester region in the Early Iron Age (8th–5th centuries BCE) functioned as a key transcultural corridor connecting forest-steppe local communities (Chornolis and Vysotska traditions), steppe nomads (Cimmerian and Early Scythian world), and western Hallstatt cultural influences. This project offers a comprehensive reconstruction of sociocultural interaction mechanisms based on systematic analysis of burial complexes (barrow and flat cemeteries) and settlement sites (fortified hillforts and open settlements) in the Middle Dniester area.

The research aims to identify patterns of cultural exchange, identity hybridization, social stratification, and adaptation in this contact zone. Methodology integrates typological, stratigraphic, and comparative-historical analysis with GIS spatial modelling and interdisciplinary approaches (physical anthropology, archaeozoology, palaeobotany).

The project will analyse existing collections from prior excavations and conduct new fieldwork at key sites. Expected outcomes include a theoretical model of transcultural processes specific to this corridor, filling significant gaps in regional historiography and integrating findings into the broader European context of Hallstatt and Early Scythian cultural contacts.

The research team has extensive fieldwork experience and institutional support from Kamianets-Podilskyi National University and the Institute of Archaeology of the National Academy of Sciences of Ukraine

Current status and key results: The research team has conducted extensive fieldwork in the Middle Dniester region, including excavations of Early Iron Age barrow complexes at Malynivtsi, Shutnivtsi, Kamianka, Teklivka, Kupyn, and other sites. Existing archaeological collections from these excavations have been partially analysed and documented. Key results include identification of burial complexes with stone constructions dating to the 8th–5th centuries BCE, reflecting Chornolis and Early Scythian cultural horizons. The team has published findings in peer-reviewed Ukrainian and international academic journals. Institutional collaboration between Kamianets-Podilskyi Ivan Ohiienko National University and the Institute of Archaeology of the National Academy of Sciences of Ukraine has been established. The archaeological laboratory of the university provides material and technical support for ongoing research.

What the project brings: The team has extensive fieldwork experience in Early Iron Age archaeology of the Middle Dniester region, including original excavation data from barrow complexes at Malynivtsi, Shutnivtsi, Kamianka, Teklivka, and Kupyn. We offer access to unique unpublished archaeological collections, site documentation, and a growing GIS database of regional monuments. The university's archaeological laboratory is appropriately equipped for both fieldwork and post-excavation processing of materials. The team maintains established institutional networks with the Institute of Archaeology of the National Academy of Sciences of Ukraine and regional museums. Our expertise encompasses burial and settlement complex analysis, cultural typology, and selected interdisciplinary approaches including physical anthropology and archaeozoology. We provide a proven platform for joint publications in Ukrainian and international peer-reviewed journals.

What the project asks: The project seeks several forms of partnership. First and foremost, the project requires grant funding or co-funding through joint application to international research foundations in partnership with a U.S. institution, to support fieldwork, laboratory analysis, and publication of results. Second, faculty exchange enabling short-term research visits by the project lead to a U.S. partner university, and reciprocal hosting of U.S. researchers at fieldwork sites in the Middle Dniester region. Third, mentorship from U.S.-based specialists in GIS spatial modelling and network analysis as applied to archaeological contact zone research. Fourth, collaboration on joint peer-reviewed publications in Scopus and Web of Science indexed journals to integrate regional findings into international scholarly discourse.

Existing international cooperation: No formal international cooperation has been established to date. The project is currently seeking its first international partnership.

44. Literature Beyond Trauma: Humanities of Resilience

Humanities, Education and pedagogy, Interdisciplinary · Concept / early planning · Ready within 3–6 months

Lead institution / team: Zaporizhzhia National University

City: Zaporizhzhia

Website: -

Project lead: Horbach Nataliia, Associate Professor, Head of the Department of Ukrainian Literature – Zaporizhzhia National University.

Contact: horbachnathalia@gmail.com

Cooperation sought: Co-funding or grant partnership, Mentorship and advisory, Joint educational program development, Publications and scholarly communication

Preferred partner(s): U.S. university, Foundation or donor, Ukrainian diaspora organization

Estimated scale of support: USD 50,000–100,000

Available to pitch (June 12): Either is possible

Project goal: The scientific goal is to form an innovative center for literary studies aimed at the comprehensive study of the discourse of trauma in works of Ukrainian literature as a tool for preserving and structuring cultural memory, processing individual and collective trauma, countering disinformation and imposed narratives, and forming a new literary ethics of representations of war.

The educational goal is to coordinate educational programs and basic and selective educational components of the literary studies cycle with scientific goals in order to train a new generation of literary scholars capable of working in the field of public humanities in order to broadcast complex humanitarian knowledge in an accessible public format, participate in public discussions, and influence the formation of humanitarian language. policy.

The social goal is to strengthen the humanitarian resilience of society, restore cultural integrity, and support reintegration processes in conditions of war and military development, in particular, the use of the literary discourse of trauma as a tool for psychological support and rethinking the tragic experience of war.

Summary: The project is aimed at the integration of scientific, educational and social priorities and is aimed at strengthening the humanitarian resilience of society. It provides:

- International scientific conference "Humanities of sustainability: local experiences and global perspectives"

- Collective monograph "Humanitarianism of sustainability: local experiences and global perspectives"

- Methodical recommendations and training modules for teachers on working with texts about the war "Narratology of sustainability".

- Scientific and methodical recommendations regarding the ethical representation of trauma in modern educational discourse;

- Interactive course on literature for non-formal education and adult education on the specified subject;

- "Living Book" of IDPs - a collection of short stories (quotes) of people who moved to Zaporizhzhia, about their favorite books that saved them (in "quote + photo" format);

- Regular literary performances, meetings with writers and discussion platforms for the intellectual unity of the community of the Zaporozhye region.

Current status and key results: The department has been implementing the research work "Discourse of the Past in Ukrainian Literature: Reception of Trauma and Dimensions of Memory". The following dissertations have been defended: Verba T. "Genre-Style Evolution of the 21st Century Ukrainian Historical Novel about the Cossacks", Zuenko Ya. "Mythologism of L. Kononovich's Historical Prose in the Ethno-National Dimension". The following are being implemented: Smyrnov O. "Universe of the Lyric-Epic about the Holodomor", Konev V. "Anti-Totalitarian and Anti-Colonial Discourse of the Holodomor Story of 1932-1933 in Ukrainian Literature", Ovsyanytska G. "Trauma and Memory in Ukrainian Poetry of the First Decades of the 21st Century: Poetics of the Borderland". The results are being implemented in the courses "Literature and History", "Evolution of the Historical Novel in Ukrainian Literature", "Memoir

and Diary prose". They were used in the course within the framework of the scholarship program of the Center for Advanced Holocaust Studies of the United States Holocaust Memorial Museum. The work was used in the course "European Experience in Forming a Culture of Tolerance in a Ukrainian Perspective: Media, Education, Art" (Erasmus+). The conferences "Literature and History" and "Ukrainian Literature in the Space of Culture and Communication" are held. Scientific School: https://surl.li/kqjzuz

Publications: https://surl.li/etyvnh

Collections of conference materials: https://surl.li/ktbcze

What the project brings: The project brings to the partnership interdisciplinary expertise in the fields of literary studies, memory studies, trauma studies, and public humanitarianism. The team has experience in researching Ukrainian literature on war, the Holocaust, the Holodomor, collective memory and cultural trauma, as well as integrating these topics into educational programs and public humanitarian practices. A separate component is expertise formed in the conditions of a full-scale war, which allows the analysis of literary texts as evidence of traumatic experience and tools for understanding modern events. This includes the development of methodologies for working with war narratives, a critical reading of texts about war, and the formation of a new ethics of their representation. The team is able to transform complex humanitarian knowledge into formats accessible to society, contributing to the development of humanitarian resilience, cultural memory, rethinking the experience of war, strengthening local identity, restoring cultural integrity and international academic dialogue.

What the project asks: Expectations from international cooperation within the project "Literature after trauma: humanities of resilience" are to form a stable and long-term network of partnerships with leading universities, research centers and institutions of the USA working in the fields of humanities, memory studies and trauma studies. This involves expanded access to academic databases, archives and research platforms to integrate the Ukrainian experience of war and cultural trauma into a global scholarly context. An important component is the involvement of international reviewers, mentors and experts to advise graduate students and young scientists, increase the quality of research and their competitiveness at the international level. Cooperation also involves promoting the publication of departmental research results in international peer-reviewed publications. A separate direction is the implementation of educational courses in international educational platforms and the exchange of best practices of teaching the "complex past", which will allow modernization of educational programs. In addition, the project opens opportunities for the involvement of teachers as experts and consultants in international organizations on the consequences of war, as well as participation in relevant international working groups

45. Visual narratives, war commemoration, graphic representation and strategies of resistance as the foundation for constructing and preserving Ukrainian identity

Social sciences, Humanities, Arts and design, Education and pedagogy · Pilot or proof-of-concept · Ready within 3–6 months

Lead institution / team: Zaporizhzhia National University

City: Zaporizhzhia

Project lead: Hanna Chemerys, Head of Department of Design, PhD, Assoc.prof.

Contact: Anyta.Chemeris@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Student or doctoral exchange, Postdoctoral hosting, Technology partnership / commercialization, Joint laboratory or research infrastructure, Mentorship and advisory, Equipment, infrastructure, or data access, Data collaboration, Training and capacity building, Joint educational program development, Publications and scholarly communication

Preferred partner(s): U.S. university, Foundation or donor, Ukrainian diaspora organization, Publisher or scholarly infrastructure provider

Estimated scale of support: USD 50,000–100,000

Available to pitch (June 12): Yes, in person in Lviv

Proposed presenter: Hanna Chemerys; it is also possible Anna Rashevska

Project goal: The aim of the study is to establish the theoretical foundations and develop practical recommendations for the use of visual communications, feminist artistic strategies and design-based educational approaches as tools for decolonisation, commemoration and the preservation of Ukraine's cultural identity in the context of war and post-war reconstruction.

Summary: The project aims to comprehensively study the role of visual narratives, war commemoration, graphic representation and resistance strategies in the formation and preservation of Ukrainian identity during the war and post-war reconstruction. Since the beginning of the full-scale rf invasion, visual narratives have gained particular importance as tools of decolonisation and construction of a national grand narrative that resists hostile information and cultural influences. Poster and digital graphics, strategic narratives in the information space, as well as the influence of historical archetypes on the national consciousness are subject to analysis. A separate area is the study of feminist strategies of "soft resistance" developed by women artists and activist groups through protest graphics, digital media, and performative interventions. At the same time, the project focuses on the interdisciplinary combination of art historical and educational approaches as a mechanism for the sustainable development of Ukrainian identity: the project involves the integration of intercultural and national aspects into curricula, the development of methodologies to avoid cultural appropriation and stereotypes, and the formation of ethical and culturally sensitive practices.

Current status and key results: The project will involve the systematic dissemination of results to the academic community, the general public and the business sector, ensuring that the knowledge and practical tools generated are utilised to the full. Dissemination to the academic community will be carried out through the publication of at least thirty articles in Category B specialist journals indexed in Index Copernicus and six publications in international or Ukrainian journals indexed in Web of Science or Scopus, as well as one collective monograph. The topics of the publications will cover the analysis of visual narratives, cases of war commemoration,

graphic representations and strategies of ‘soft resistance’, in particular feminist practices and cultural initiatives by women activists. To present the results, presentations will be organised at international conferences such as ‘Design & Visual Art & Creativity: Modern Trends and Technologies’, the ‘International Visual Culture Conference’ and the ‘European Network for Cultural and Memory Studies’, as well as at Ukrainian academic forums and seminars for early-career researchers.

At the time of drafting the project proposal, seven articles had already been published in specialist journals, which enabled a preliminary study of the current state of the issue to be carried out.

What the project brings: Our team can contribute interdisciplinary expertise at the intersection of visual culture, graphic design, memory studies, and digital communication. We offer experience in researching visual narratives of war, strategies of symbolic resistance, and the role of graphic representation in constructing contemporary Ukrainian identity.

The project team has access to academic and professional networks within Ukrainian higher education institutions, cultural organizations, and the design community, enabling field research, expert interviews, and collaborative dissemination activities. We can provide analytical materials on Ukrainian wartime visual culture, including case studies of posters, digital campaigns, memorial graphics, social media communication, and identity-driven design practices developed during the Russian-Ukrainian war.

Additionally, the team has practical expertise in visual communication design, UI/UX systems, branding, and digital storytelling etc, which can support the development of exhibitions, digital archives, educational platforms, and public engagement strategies related to war commemoration and cultural resilience.

What the project asks: The project seeks international interdisciplinary partners for collaboration in the fields of visual war culture, memorialization, and the construction of national identity. We are particularly interested in joint research initiatives, academic mentorship, and cooperation in international publications and conferences.

We seek partners willing to provide access to research infrastructure, archives, visual material collections, digital humanities platforms, or datasets related to war memory, cultural heritage, and visual communication. An important aspect of cooperation would include joint workshops, summer schools, residencies, or short-term academic exchanges for early-career researchers and designers.

The project is also interested in partnerships for the co-development of digital archives, exhibitions, educational platforms, and public humanities initiatives aimed at documenting and interpreting the Ukrainian wartime experience through visual practices. We are open to co-funded research positions, collaborative grant applications, and academic mobility programs supporting long-term international cooperation.

Existing international cooperation: The team already has experience in international academic cooperation, particularly with Indiana University Bloomington.

46. Intangible Cultural Heritage and Identity: Challenges of the Russian-Ukrainian War and the Experience of Diasporas

Social sciences, Humanities, Interdisciplinary · Concept / early planning · Ready within 3–6 months

Lead institution / team: Zaporizhzhia National University

City: Zaporizhzhia

Website: https://www.znu.edu.ua/ https://sites.znu.edu.ua/cms/index.php?action=news/view_details&news_id=37560&lang=ukr&news_code=pavlenko---rina-yakivna

Project lead: Pavlenko Iryna Yakivna, Professor, Head of the Department of Slavic Philology, ZNU

Contact: irynapavlenko@np.znu.edu.ua irinaznu@gmail.com

Cooperation sought: Joint research, Data collaboration, Publications and scholarly communication

Preferred partner(s): U.S. university, Ukrainian diaspora organization

Estimated scale of support: Not yet estimated

Available to pitch (June 12): Yes, online

Proposed presenter: Iryna Pavlenko

Project goal: 1. Preservation / popularization of the intangible cultural heritage of Ukraine, primarily the territories of historical Zaporizhzhia, a significant part of which is now occupied or located near the front line, as a means of preserving national identity.

2.Research

- the nature of the functioning of the ICH during the war and mass internal and external migration,

- the connection of the ICH with identity and the nature and methods of actualization of the ICH in the crucial periods of the nation's existence.

3. Study and analysis of the experience of integration into a new environment with the preservation of national identity through the preservation of language, folklore, customs, elements of everyday culture, etc., the place of individual elements of the ICH in the economic life of families in the Ukrainian diaspora of previous migration waves.

4. Development of effective tools, in particular legal ones, preservation of identity in new (hopefully temporary) communities displaced as a result of the war inside Ukraine and abroad.

Summary: In the context of a hybrid war, the problems of preserving intangible cultural heritage and national and civic identity are becoming more relevant.

In the project, the focus is on

– traditional and new forms of ICH, their functioning in Ukraine and abroad, their fixation and research;

- experience of integration into a new society and at the same time preservation of intangible heritage and national identity in diasporas;

- appeal to the ICH and its role in preserving identity in the conditions of modern displacement, taking into account the difference in the experience of focus groups;

- comparison of the experience of the diaspora and the practices of preserving Ukrainianness among modern refugees,

- dissemination of knowledge about the experience of the Ukrainian diaspora among those who have now changed their place of residence,

- development of proposals for improving the legal mechanisms of institutional fixation of the ICH during the war, legal instruments for its protection in war zones and mechanisms for protecting the rights of migrants.

- normative support of the integration of the ICH into the educational process and the state policy of cultural diplomacy as a tool for the consolidation of society.

Current status and key results: An archive of elements recorded in Zaporizhzhia, Dnipropetrovsk and Kherson regions (a significant part of this territory is now occupied, located in the war zone or is frontline) over the past three decades s been created, systematized and partially made public.

The dynamics of the functioning of the folklore tradition of the Lower Dnieper region (Iryna Pavlenko), the formation and current state of dialects of the region (Oksana Merkulova), female forms of the ICH (Iryna Savchenko) are investigated. Problems related to the topic of the project were solved in the projects led by Iryna Pavlenko.

A methodology of collective interdisciplinary research is being developed, taking into account the peculiarities of the experience of appealing to the ICH of the main focus groups: the military, the population of frontline communities, communities far from the contact line, temporarily displaced persons, Ukrainians who went abroad.

What the project brings: 1. Experience in the preservation of intangible cultural heritage and accumulated material, in particular the archive of records of dialects and folklore of the Lower Dnieper region, created by project participants and students of ZNU since the beginning of the new century.

2. Experience in field and research work with ICH in frontline territorial communities and hubs relocated from the temporarily occupied territories to Zaporizhzhia territorial communities.

3. Experience in publishing the results of fixation and research of ICH (traditional axiology, language and folklore in particular) in collections of folklore texts, monographs, articles, speeches at international and all-Ukrainian scientific conferences and seminars.

4. Development of an interdisciplinary methodology for working with ICH of local and displaced communities.

5. Primary studies of new forms of implementation of ICH in the economic life of families and communities during the war.

What the project asks: 1. Exchange of experience in fixing, preserving and researching intangible cultural heritage.

2. Recording and analyzing the experience of the Ukrainian diaspora in preserving the national intangible cultural heritage, its role in adapting to life in new socio-cultural and geoclimatic conditions and preserving identity, appealing to various forms of national ICH in creating their own business and well-being.

3. Participation in comparative studies of the preservation of ICH. The work involves fixing and systematizing the preserved elements of the Ukrainian ICH among representatives of the second and third generations of Ukrainians living in the United States within the Ukrainian diaspora community in the United States and among Ukrainians of the last wave of refugees caused by the Russian-Ukrainian war.

3. Participation in a joint comparative analysis of the state of the ICH among representatives of different waves of emigration and in new communities created as a result of external and internal movements of Ukrainians during the Russian-Ukrainian war, established forms of work with ICH and new phenomena determined by the war and forced resettlement.

4. Participation in the development of a manual for the preservation of intangible cultural heritage in the conditions of war and post-war reconstruction.

Existing international cooperation: Scientific and pedagogical staff of ZNU take an active part in scientific and grant work, has a stable practice of cooperation with EU programs, primarily Erasmus +. To date, there are 12 projects under the Erasmus + cooperation program (Horizon Europe, KA2 and Jean Monnet Modules). Most of the existing projects are carried out in cooperation with partners from European countries and beyond. The project team has now submitted an application for the Erasmus + Jean Monnet Modules competition "SAFEGUARDING INTANGIBLE HERITAGE: EUROPEAN EXPERIENCE IN PRESERVING IDENTITY". The manager and executor of three Jean Monnet Module projects was and is the coordinator of the proposed project Oleksandr Bondar, the executor of one is the head of the proposed project Iryna Pavlenko.

Cooperation in the field of humanities with universities in Poland, Bulgaria, the Czech Republic, Germany, Great Britain, etc. is stable.

Zaporizhzhya National University is a member of the international inter-university network at the UNESCO Center in Sofia (Bulgaria), which is engaged in the development of a joint concept for the implementation of the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage in the educational process of universities in the South and East of Europe. The representative from the university is the project manager Iryna Pavlenko.

The "Strategy of Internationalization of ZNU" was approved, in the process of implementation of which the circle of partner universities from different countries of the world is expanding.

Group 9 — Media, Memory & Social Resilience

47. The Basics of Investigative Journalism (Educational Program)

Social sciences, Journalism · Concept / early planning · Ready to begin cooperation now

Lead institution / team: Zaporizhzhia National University

City: Zaporizhzhia

Website: https://www.znu.edu.ua/frontpage/3594.eng.html

Project lead: Myroslava Chabanenko, Docent of Journalism Department

Contact: 108mir@gmail.com

Cooperation sought: Co-funding or grant partnership, Student or doctoral exchange, Mentorship and advisory, Equipment, infrastructure, or data access, Training and capacity building, Joint educational program development

Preferred partner(s): U.S. university, Foundation or donor, Company or industry partner

Estimated scale of support: Not yet estimated

Available to pitch (June 12): Yes, online

Proposed presenter: the project lead

Project goal: Creating a course on investigative journalism using the latest international experience.

Summary: An educational project aimed at training specialists in the field of investigative journalism. The idea is to combine the efforts of journalism faculties with the capabilities of the Global Network of Investigative Journalists, which has accumulated significant professional experience, has a lot of educational materials and connections with the best representatives of the industry. The educational program that we are creating is designed for senior students of journalism faculties located in Ukraine. It will consist of two cycles: the first - a series of webinars from invited trainers (from GIJN, Ukrainian and foreign universities), the second - internships in media organizations that are members of GIJN (Ukrainian and foreign). Regarding the first part, we intend to provide the widest possible range of topics related to the work of an investigative journalist. In particular, the mandatory topic should be the investigation of schemes of corrupt state structures. We are also going to look at the aspect of war crimes investigation and hope to invite the authors of "A Journalist's Guide to War Crimes Investigation" from the GIJN team as guest lecturers.

Current status and key results: Our faculty has been teaching a course on investigative journalism for many years. Our professors have relevant scientific publications. We invite practicing journalists, including investigative specialists, to meet with students.

What the project brings: Foreign partners should be interested in teaching specifically to Ukrainian students, since our country today is in dire need of specialists in this field. We can

provide an audience, and we can also conduct lecture on the peculiarities of the development of investigative journalism in Ukraine over the years of independence.

What the project asks: Mentoring from GIJN representatives, lectures by professors from other journalism departments, assistance in organizing internships for students in investigative media, financial assistance for organizing trainings and internships.

Existing international cooperation: No

48. Socio-Communicative Mechanisms of Decolonization Discourse under Wartime Conditions: Ukrainian and Global Contexts

Social sciences, Humanities, Interdisciplinary · Active implementation · Ready to begin cooperation now

Lead institution / team: Zaporizhzhia National University

City: Zaporizhzhia

Website: https://dir.ukrintei.ua/view/ok/da00f6d0fc74b91e4a3bcb7385c808d8 / https://dspace.znu.edu.ua/xmlui/discover?scope=%2F&query=Соціальнокомунікаційні+механізми+дискурсу+деколонізації+в+умовах+війни%3A+український+та+глобальний+контексти&submit=>>%20/

https://www.znu.edu.ua/cms/index.php?action=news/view&site_id=27&lang=ukr&start=0&keywords=деколонізац&ordering=weight%20ASC%2Cdate%20DESC&%20/

https://www.znu.edu.ua/cms/index.php?action=news/view_details&news_id=67285&lang=ukr&news_code=na-fakulteti-zhurnalistiki-pidbili-pidsumki-studentskoyi-infokampaniyi

Project lead: Viktoriia Kovpak, Doctor of Sciences in Social Communications, Professor at the Department of Social Communications and Information Activity, Faculty of Journalism, Zaporizhzhia National University

Contact: Kovpak.viki@ukr.net

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Student or doctoral exchange, Joint laboratory or research infrastructure, Mentorship and advisory, Training and capacity building, Joint educational program development, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Ukrainian diaspora organization, Publisher or scholarly infrastructure provider

Estimated scale of support: Not primarily financial

Available to pitch (June 12): Yes, in person in Lviv

Proposed presenter: Viktoriia Kovpak, Doctor of Sciences in Social Communications, Professor at the Department of Social Communications and Information Activity, Faculty of Journalism, Zaporizhzhia National University (I previously selected the in-person format.

However, due to the current security situation in Zaporizhzhia, I would appreciate the opportunity to switch my presentation format to online)

Project goal: The project aims to expose and deconstruct the hidden mechanisms of consciential and info-cognitive warfare that embed colonial narrative traps across the humanitarian sphere, facilitating a strategic transition toward the systemic engineering of national agency and reimagined commemorative practices. By integrating global decolonial methodologies with the anti-imperial intellectual capital of the Ukrainian diaspora, the project seeks to develop actionable, interdisciplinary models and ethical toolkits for media outlets and think tanks. Ultimately, the objective is to establish a proactive cognitive security framework while positioning Ukraine as a definitive global hub for post-colonial transitions in Eastern Europe.

Summary: This interdisciplinary project exposes the mechanisms of consciential and info-cognitive warfare, which embed insidious traps of colonial narratives across media, art, economy, and education. Integrating global decolonial practices with the anti-imperial intellectual capital of the global Ukrainian diaspora, the research moves beyond passive reflection. It drives proactive decolonial engineering to deconstruct imperial heritage in the media sphere, fundamentally rethink commemoration, and transition toward the systemic engineering of national agency. The project is highly mature, anchored by around 40 publications—including Web of Science articles and collective monographs—alongside registered copyrights and proven traction within elite European grant ecosystems (House of Europe, FNP). By delivering actionable toolkits for media and think tanks, this initiative establishes a practical framework for cognitive security. For US and international partners, it offers an elite opportunity to analyze authentic wartime data, leverage diaspora heritage, and co-author high-impact research. We are ready for immediate integration into joint research, grant partnerships, and policy networks, positioning Ukraine as the definitive global hub for post-colonial transitions and cognitive defense in Eastern Europe.

Current status and key results: The synergy between both research stages demonstrates a seamless transition from empirical analysis of socio-communicative and urban spaces to the design of state-level strategic narratives. Stage I diagnosed a critical cognitive gap: strong public support for decolonization was practically hindered by a lack of expert commentary, commercialized Soviet nostalgia, and enemy propaganda in occupied territories. The identified triad of toponymic cleansing highlighted key zones for immediate communication intervention. Stage II conceptualized these empirical challenges, transforming data into practical cognitive security tools and updated commemoration practices. By shaping the comprehensive architecture of decolonization narratives, the study bridged media gaps, neutralized imperial myths, and provided guideposts for national identity engineering. Ultimately, both stages form a closed loop, moving directly from identifying cognitive threats to overcoming them in contemporary nation-building dialogue.

What the project brings: Our team brings to the partnership a unique set of applied and scientific tools in the fields of cognitive security and decolonization discourse:

Data: Results of critical discourse analysis of media in temporarily occupied territories, Brand24 monitoring datasets on urban toponymy decolonization, and analytical frameworks for tools countering manipulation in documentary filmmaking.

Infrastructure & Models: The established architecture of strategic decolonization narratives, conceptual models of long-term economic decolonization strategies, and evaluation models for commercial historical narratives in business ("entrepreneurship of memory").

Networks & Experience: The research framework of Zaporizhzhia National University, alongside well-established connections with the media community, field experts, and representatives of the interdisciplinary scientific community. We possess a proven track record of successfully executing contract-based research and development (R&D) projects.

This comprehensive toolkit serves as a ready-to-use foundation for deploying joint, high-impact security and communication initiatives.

What the project asks: To scale research results and achieve a global impact, the project requires the following specific forms of collaboration from potential partners:

Joint Academic Mobility: Organizing research fellowships (post-doc) or visiting scholar programs for ZNU researchers at partner universities (EU/USA) to directly integrate the Ukrainian context into Western security studies.

Access to Analytical Data & Infrastructure: Providing access to international disinformation monitoring databases and advanced NLP tools for semantic analysis of large datasets to conduct comparative studies of Russian influence operations in Ukraine and partner countries.

Expert Mentorship: Guidance from leading Western strategic communications specialists for early-career researchers to co-author policy papers aimed at international security institutions.

Grant Co-funding: Submitting joint applications for international grants (e.g., Horizon Europe, Erasmus+) to secure equipment for a joint laboratory and expand the analytical capacity of the research.

We are seeking partners ready for active intellectual exchange, joint publishing in Q1/Q2 Scopus-indexed journals, and institutional support in advocating Ukrainian decolonization discourse on the international stage.

Existing international cooperation: Our team already possesses an extensive and active network of international cooperation with partners from the USA and the EU:

• Cooperation with the USA: ZNU Associate Professor Kateryna Sirinyok-Dolharieva is a doctoral student at the School of Journalism and Advertising at Southern Illinois University (USA). Additionally, with the support of the United States Agency for International Development (USAID) via the ISAR Ednannia consortium, a project was successfully implemented to research information resistance against hostile narratives in regional micromedia (led by V. Kovpak). https://home.ednannia.ua/profile/86?sk=analytics

• European Integration Initiatives: On May 28–29, 2026, at the Erasmus+ Jean Monnet Module EUROPEACE international conference, the team presented its model of decolonizing narratives within the solutions journalism system through the lens of cognitive security.

• EU Grant & Networking Activity: V. Kovpak and K. But co-developed a grant proposal for the COST project "CONSTELLATIONS: European Network Examining Coloniality-Related Frameworks" (2025). Furthermore, K. But secured a grant from the Foundation for Polish Science (FNP) under the "For Ukraine" program for the project "Making memory in the times of war". Individual research components have also been supported by the House of Europe program.

49. Voices of Resilience: Oral History, War Memory, and Future Imaginaries of Frontline Communities in Ukraine (Zaporizhzhia)

Social sciences, Humanities, Education and pedagogy, Interdisciplinary · Active implementation · Ready to begin cooperation now

Lead institution / team: Faculty of Sociology and Public Administration", Zaporizhzhia National University (Ukraine), in partnership with the NGO Center for Strategic Forecasting and Project Design and the NGO YES (Community Development of Eastern and Southern Ukraine), with the participation of members of the National Union of Journalists of Ukraine in the Zaporizhzhia Region.

City: Zaporizhzhia

Website: https://www.youtube.com/@resiliencevoices_zp

Project lead: Maksym Lepskyi, Doctor of Philosophical Sciences, Professor, Faculty of Sociology and Public Administration, Zaporizhzhia National University; Dmytro Ivanov, Journalist, Editor, Producer, and Co-Founder of the Voices of Resilience Initiative; Graduate of the Deutsche Welle-supported UMESchool Program; Nataliia Lepska (PhD in Political Science, Associate Professor , Faculty of Sociology and Public Administration, Zaporizhzhia National University

Contact: lepskanv@znu.edu.ua

Cooperation sought: Joint research, Co-funding or grant partnership, Mentorship and advisory, Data collaboration, Training and capacity building, Policy and advisory collaboration

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Ukrainian diaspora organization, Publisher or scholarly infrastructure provider

Estimated scale of support: USD 10,000–50,000

Available to pitch (June 12): Either is possible

Proposed presenter: Dmytro Ivanov, Journalist, Editor, and Documentary Producer (Project Lead), together with Maksym Lepskyi, Doctor of Philosophical Sciences, Professor of Sociology at Zaporizhzhia National University and Research Lead of the project.

Project goal: Voices of Resilience aims to document, preserve, and interpret civilian experiences of the Russian-Ukrainian war in frontline Zaporizhzhia through oral history, biographical research, and qualitative sociology. The project seeks to create an ethically grounded archive of civilian testimonies while examining how people adapt to prolonged

wartime conditions, maintain social ties, reconstruct everyday life, and imagine postwar recovery. Beyond documentation, the initiative contributes to research on war memory, social resilience, community cohesion, conflict transformation, and future-oriented thinking. The project combines oral history methodology, qualitative sociological research, and responsible documentary communication to preserve lived experience for future scholarship, education, public reflection, and postwar recovery initiatives.

Summary: Voices of Resilience is an interdisciplinary oral history and qualitative research initiative documenting how civilians in the frontline city of Zaporizhzhia experience war, resilience, social change, and future-oriented thinking under conditions of prolonged uncertainty. Combining oral history methodology, qualitative sociology, the biographical method, and trauma-informed interviewing, the project collects and preserves personal narratives of residents, internally displaced persons, volunteers, educators, and community members who have lived through the transformations of the Russian-Ukrainian war.

Through in-depth semi-structured interviews and biographical narratives, the project explores how individuals reconstruct everyday life, maintain social ties, develop coping strategies, reinterpret their identities, and imagine postwar recovery and peace. Beyond documenting wartime experiences, the initiative examines the relationship between war memory, social resilience, community cohesion, and future imaginaries.

The project aims to create a structured archive of civilian testimonies while generating research relevant to qualitative sociology, oral history, memory studies, community resilience, conflict transformation, and peacebuilding. It is designed as a platform for international academic cooperation, including joint research, comparative studies, scholarly publications, methodological exchange, and the development of digital oral history resources. We welcome partnerships with universities, research institutes, foundations, and organizations working on war, memory, resilience, and postwar recovery.

Current status and key results: The project has already been initiated through the development of a comprehensive sociological research program, interview guide, ethical framework, and analytical model focused on oral history, war memory, resilience, and future imaginaries. A public platform, Voices of Resilience, has been launched to support the dissemination and preservation of civilian testimonies. The interdisciplinary team combines expertise in journalism, oral history, qualitative sociology, biographical research, conflict studies, and social resilience. Preparatory work has included methodological design, pilot documentation activities, network building, and the establishment of partnerships among Zaporizhzhia National University, civil society organizations, and media professionals. The project is currently expanding its documentation effort and preparing for broader international cooperation, comparative research, and development of a structured archive of wartime civilian testimonies.

What the project brings: The project offers a unique combination of frontline access, qualitative sociological expertise, oral history methodology, and documentary fieldwork. The team brings extensive experience in biographical research, in-depth interviewing, conflict studies, social resilience research, and ethical documentation of sensitive experiences. Through Zaporizhzhia National University and partner organizations, the project provides access to local

research networks, community contacts, and diverse civilian perspectives from a frontline region directly affected by war and displacement. The initiative contributes a developed methodological framework, trauma-sensitive interviewing protocols, qualitative analytical capacity, and an emerging archive of civilian testimonies. The project also offers opportunities for comparative international research, collaborative publications, student engagement, digital archiving initiatives, and interdisciplinary studies connecting war memory, resilience, social recovery, and peacebuilding.

What the project asks: We seek partnerships with U.S. universities, research institutes, peace and conflict research centers, oral history programs, and foundations for joint research, comparative studies, scholarly publications, and capacity building. Specific areas of cooperation include methodological exchange in oral history, biographical research, qualitative sociology, conflict studies, and resilience research; collaborative analysis of civilian wartime testimonies; development of digital archives; co-authored publications; visiting scholar opportunities; student engagement; and joint grant applications.

We are particularly interested in collaboration with institutions specializing in Peace and Conflict Studies, Conflict Transformation, Peacebuilding, Community Resilience, Oral History, Memory Studies, Forced Migration, Democratic Recovery, and Postwar Reconstruction. Potential cooperation may include comparative research on civilian resilience in conflict-affected societies, international workshops, research seminars, archive development, summer schools, and dissemination of findings to academic, policy, and practitioner communities.

Support for interview documentation, transcription, digital preservation, research dissemination, and international networking would significantly strengthen the project's long-term sustainability, international visibility, and contribution to understanding civilian experiences, resilience, memory, social recovery, and future-oriented thinking in wartime societies.

Existing international cooperation: The project team has experience participating in international academic, research, and civil society networks and has collaborated with scholars and practitioners working in conflict studies, social resilience, qualitative sociology, and peacebuilding. The initiative is currently seeking to establish its first formal international partnerships specifically dedicated to the Voices of Resilience project, with a focus on U.S.-Ukrainian academic and research cooperation.

50. Seven Forces of Mediation: Peacebuilding and Conflict Resolution in Wartime and Postwar Contexts

Social sciences, Humanities · Pilot or proof-of-concept · Ready to begin cooperation now

Lead institution / team: Zaporizhzhia National University – Faculty of Sociology and Public Administration; NGO Center for Strategic Forecasting and Project Design

City: Zaporizhzhia

Website: https://www.znu.edu.ua/ukr/university/depart https://socforecast.org.ua/ ments/fsu

Project lead: Maksym Lepskyi – Doctor of Philosophical Sciences, Professor at the Faculty of Sociology and Public Administration, Zaporizhzhia National University; sociologist specializing in mediation, negotiation, conflict studies, peacebuilding, strategic foresight, and qualitative research methods. Nataliia Lepska – PhD in Political Science, Associate Professor and Vice Dean for Research at the Faculty of Sociology and Public Administration, Zaporizhzhia National University; researcher specializing in public governance, political institutions, conflict analysis, qualitative methodology, and democratic transformation

Contact: lepskanv@znu.edu.ua

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Mentorship and advisory, Data collaboration, Training and capacity building, Joint educational program development, Publications and scholarly communication, Policy and advisory collaboration

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Government or public institution, Publisher or scholarly infrastructure provider

Estimated scale of support: Not primarily financial

Available to pitch (June 12): Either is possible

Proposed presenter: Maksym Lepskyi, Doctor of Philosophical Sciences, Professor at the Faculty of Sociology and Public Administration, Zaporizhzhia National University; with Nataliia Lepska, PhD in Political Science and Vice Dean for Research

Project goal: The project aims to conceptualize and empirically investigate mediation, negotiation, peacebuilding, and conflict resolution processes in wartime and postwar environments. By examining the interplay of institutional, informational, economic, coalitional, narrative, coercive, and psychological forces, the project seeks to identify the structural conditions that facilitate, constrain, or prevent dialogue, conflict transformation, and sustainable peacebuilding. The initiative develops analytical frameworks and practical diagnostic tools for researchers, mediators, policymakers, peacebuilding practitioners, and international organizations working in conflict-affected societies.

Summary: Seven Forces of Mediation is an interdisciplinary research initiative focused on understanding how mediation, negotiation, peacebuilding, and conflict resolution become possible under different wartime and postwar conditions. The project develops and applies an original analytical framework that examines how institutional, informational, economic, coalitional, narrative, coercive, and psychological forces interact to shape opportunities for dialogue, mediation, and sustainable peace.

Rather than focusing solely on mediation techniques, the project investigates the structural conditions that enable, constrain, or prevent peace processes. The framework has been developed through research in sociology, conflict studies, negotiation analysis, international relations, and peacebuilding and is designed to support both academic research and practical policy applications.

The project combines theoretical development, comparative case studies, and applied analysis of conflict environments. It aims to provide researchers, mediators, peacebuilding organizations, governments, and international institutions with evidence-informed tools for diagnosing mediation environments and designing more effective peacebuilding strategies. The initiative seeks international cooperation in comparative research, policy engagement, scholarly publications, and the development of practical analytical resources for conflict transformation and postwar recovery.

Current status and key results: The project developed the Seven Forces of Mediation framework as an original interdisciplinary model integrating sociology, political science, mediation studies, conflict transformation, peacebuilding, and negotiation research. The framework has been theoretically elaborated and operationalized through comparative case studies of negotiation, mediation, and peacebuilding environments. The project has produced diagnostic models, analytical indicators, conceptual tools, and teaching materials designed for research, higher education, and policy analysis. A major outcome is the development of a structured approach for diagnosing the conditions that facilitate, constrain, or prevent mediation and peace processes. Current work focuses on comparative validation of the framework, international research collaboration, and its application to wartime, postwar, and transitional contexts, including conflict resolution, recovery, and peacebuilding environments.

What the project brings: The project contributes an original analytical framework for diagnosing mediation, negotiation, conflict transformation, and peacebuilding environments. The research team brings expertise in sociology, public governance, political science, mediation, conflict studies, strategic foresight, scenario analysis, peacebuilding, and qualitative and mixed-methods research. Through the Faculty of Sociology and Public Administration at Zaporizhzhia National University and the Center for Strategic Forecasting and Project Design, the project offers methodological innovation, comparative case-study experience, academic publishing capacity, educational resources, and interdisciplinary research networks. Partners gain opportunities for collaborative research, comparative conflict analysis, co-authored publications, policy engagement, educational initiatives, and the co-development of analytical tools applicable to conflict prevention, mediation, postwar recovery, and peacebuilding practice.

What the project asks: We seek partnerships with universities, peace and conflict research centers, mediation institutes, public policy schools, think tanks, and international organizations working in conflict prevention, negotiation, peacebuilding, and postwar recovery. We are particularly interested in collaboration with centers specializing in Peace and Conflict Studies, Mediation and Negotiation Research, Conflict Transformation, Transitional Justice, Democratic Recovery, Community Resilience, and Postwar Reconstruction.

Potential areas of cooperation include comparative research projects, joint grant applications, faculty exchanges, visiting scholar opportunities, co-authored publications, policy-oriented research, methodological development, and collaborative case-study analysis. We welcome partnerships aimed at testing and refining diagnostic tools for mediation environments, applying the framework to different conflict settings, and developing educational and policy resources for researchers, practitioners, and decision-makers.

We are also interested in building international research networks connecting scholars, mediators, peacebuilding practitioners, governments, and international organizations working on conflict resolution and sustainable peace.

Existing international cooperation: The project builds upon ongoing international academic engagement in sociology, mediation, negotiation, conflict studies, and peacebuilding research. Team members have participated in international conferences, scholarly collaborations, peer-review activities, and academic networks involving researchers from the Europe, and Ukraine. The project is currently seeking institutional partnerships with U.S. universities, peace and conflict research centers, mediation institutes, and public policy schools to advance comparative research, scholarly publications, educational initiatives, and the development of analytical tools for conflict resolution and peacebuilding in wartime and postwar contexts.

51. Peace and solution journalism in war-time Ukraine

Social sciences, Education and pedagogy · Active implementation · Ready to begin cooperation now

Lead institution / team: Zaporizhzhia National University

City: Zaporizhzhia

Project lead: Katerina Sirinyok-Dolgaryova, Associate Prof. of Journalism Department, Zaporizhzhia National University

Contact: sirinyok.dolgaryova@gmail.com

Cooperation sought: Joint research, Co-funding or grant partnership, Faculty exchange, Student or doctoral exchange, Mentorship and advisory, Equipment, infrastructure, or data access, Training and capacity building, Publications and scholarly communication

Preferred partner(s): U.S. university, Foundation or donor

Estimated scale of support: USD 10,000–50,000

Available to pitch (June 12): Yes, online

Proposed presenter: Pavlo Miroshnychenko, Associate Professor, Journalism Department of ZNU

Project goal: - updating the study course "Peace and Solution Journalism" in accordance with the best American and international practices;

- sharing experience of Ukrainian peace journalism (PJ) and solution journalism (SoJo) cases and best practices;

- conducting a joint research with American PJ and SoJo media labs and producing scholarly publications in the topic;

- supporting production of student independent content in PJ and SoJo formats (audiopodcasting and multimedia content);

- developing and conduct training for local media (Zaporizhzhia hyperlocal media and those relocated from territories temporarily occupied by Russia);

- developing and realize public awareness campaigns for citizens to promote quality media consumpton (mediafests, promo evemts etc.).

Summary: The project is aimed at updating the study course "Peace and Solution Journalism" in accordance with the best U.S. practices of PJ and SoJo for undergraduate and graduate students of journalism departments in Ukraine. Its scholarly component includes preparing scholarly articles, conference papers, and other publications co-authored with American scholars. The practical component includes producing independent student media content for the radio podcast show "Unconditionally" at Zaporizhzhia National University. The project aims to hold practical trainings for media practitioners seeking to grow skills and knowledge in democratic principles of journalism, specifically solution-based types of war and post-war coverage, and create public awareness campaigns for educating responsible media consumption through public events and informational activities etc.

Current status and key results: The study course "European Peace and Solution Journalism" for 3 credit hours is developed and piloted at the Journalism Department of ZNU. The study materials (coursebook) is published.

The first media festival of student media was held in 2025, and 24 episodes of the audiopodcast "Unconditionally" were produced.

What the project brings: A team of 4 scholars (associate professors, PhDs with experience in journalism and media).

The resources of the Journalism Department of ZNU (new media lab with TV and radio equipment for producing video and audio content). However, due to ongoing Russian aggression and closeness to the frontline, physical access to this equipment is often restricted.

What the project asks: - faculty mentorship on developing study resources and didactical materials for the course "Peace and Solution Journalism";

- co-funding and co-authorship of the study on the practices and cases of PJ and SoJo in the U.S. and Ukraine during wartime and beyond;

- co-funding the production of the student media content (podcasts, multimedia materials) for two years;

- access to library materials, full-text databases and other research materials;

- co-funding and co-organizing outreach materials, online courses and trainings for local media professionals in Zaporizhzhia.

Existing international cooperation: The project started as an Erasmus+ Jean Monnet Module EUROPEACE, during which the pilot course on PJ and SoJo was developed and research was conducted. At the moment, no additional funding or cooperation is established.

52. Identity politics as a tool for building national resilience in the face of internal and external challenges: experiences from Ukraine and abroad.

Social sciences · Concept / early planning · Ready within 3–6 months

Lead institution / team: Zaporizhzhia National University

City: Zaporizhzhia

Website: https://www.znu.edu.ua/

Project lead: Natalia Horlo, Professor of the Department of Political Science

Contact: ngml.1010@gmail.com

Cooperation sought: Joint research, Mentorship and advisory, Data collaboration, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory

Estimated scale of support: Not yet estimated

Available to pitch (June 12): No, but I would still like to be included in the catalogue

Proposed presenter: -

Project goal: Project objective: to identify specific ways and means of implementing identity politics as a tool for fostering national resilience in the face of contemporary internal and external challenges. The project aims to highlight the role of identity politics as an important internal resource of the state, through which national resilience is achieved. The project is aimed at studying the experience of various countries, primarily Ukraine and the USA, regarding the implementation of identity politics and its role in ensuring national resilience. The project involves the following tasks: a comparative analysis of national models of identity politics; the development of a model of multi-level identity politics (vertical and horizontal dimensions); and the formulation of proposals for improving strategic communication between actors in identity politics with a view to further modelling a strategy for national resilience.

Summary: The project aims to establish the theoretical foundations and develop practical recommendations for implementing identity politics as a tool for fostering national resilience in the face of internal and external challenges. Identity politics is considered as a systematic political and communicative activity of state and non-state actors, aimed both at taking into account the interests of various segments of society (ethnic, linguistic, religious) and at consolidating society around shared values and the formation of a political nation. Studying the experiences of Ukraine, the USA and other countries will help to compare approaches to understanding identity politics in these nations and to identify the specific features of its implementation under various domestic and foreign policy conditions. It is proposed to consider identity politics as a multi-level phenomenon, implemented in both vertical (national, regional, local levels) and horizontal (cooperation between state authorities and civil society) dimensions. Research into the proposed topic has practical significance for preventing/resolving domestic political conflicts, countering centrifugal tendencies (separatism, irredentism), and safeguarding

the state's national interests, particularly in the face of external aggression. The focus is on the uniqueness of the Ukrainian experience of building national resilience through identity politics in the context of the Russian-Ukrainian war.

Current status and key results: Researchers at Zaporizhzhia National University have published a series of papers exploring the issues raised by the project:

Khorishko, L., Horlo, N. (2021) National identity in the discourse of political elites of Poland and Hungary. Revista Amazonia Investiga, 10(40), p. 9-16. https://amazoniainvestiga.info/check/40/1-9-16.pdf (WoS)

Horlo N.V. (2023) Osoblyvosti realizatsii bahatorivnevoi systemy polityk identychnostei u prostorovo-terytorialnomu vymiri [Characteristics of the implementation of a multi-level identity politics system in the spatial-territorial dimension]. Rehionalni studii, 32, s. 47-51. http://regionalstudies.uzhnu.uz.ua/archive/32/7.pdf

Horlo, N., Vahina, O. (2025) The Russian-Ukrainian War and the Strengthening of Irredentist Narrative in the Central and Eastern European Countries at the Beginning of the XXI century. Balkan Social Science Review, 26, p. 283-305. https://js.ugd.edu.mk/index.php/BSSR/article/view/7885/6052 (Scopus).

The research findings have been presented at national and international academic conferences.

The findings of these studies have been incorporated into the curriculum at Zaporizhzhia National University: the courses 'Political Culture', 'Ethnopolitics' and 'Ethno-national Policy in Contemporary Ukraine'.

What the project brings: Academics at Zaporizhzhia National University are active researchers with experience of collaborating with government bodies and civil society organisations. In the course of the project, they will demonstrate that identity politics is an effective mechanism for building national resilience in the face of internal and external challenges. For Ukraine, such challenges currently include the incomplete formation of a political nation and armed aggression by the Russian Federation. Based on an analysis of Ukraine's experience in ensuring national resilience in the context of armed resistance to Russian aggression, mechanisms will be identified that enable society to withstand threats and maintain the functional capacity of social institutions, which may be of practical interest to the global academic community. A broad base of empirical data (sociological surveys) is available and can be utilised in the project's implementation. It is planned to conduct sociological surveys and organise focus group studies at Zaporizhzhia National University.

What the project asks: Organising joint academic conferences and round-table discussions to examine the characteristics and approaches to implementing identity politics in the United States and Ukraine as a mechanism for fostering national resilience in the face of internal and external challenges.

Preparation and publication of joint academic works addressing issues of identity politics, ethno-national policy, national resilience and national security.

Organising and conducting a series of scientific and methodological seminars aimed at exchanging cutting-edge research experience in the field of contemporary political analysis (e.g., the use of quantitative methods).

Delivering guest lectures for students at all levels (undergraduate, postgraduate, PhD) on issues of ethno-national policy, identity politics and national resilience. For example, in the 'Ethnopolitics' course for undergraduates, a lecture on ethnopolitics in the US and its evolution would be useful, enabling students to gain a better understanding of the conceptual foundations of ethnopolitics in the US and the practical tools for its implementation.

Existing international cooperation: -

53. Reclaiming Spaces: Public Communications, the Experience Economy, and Creative Industries

Social sciences, Humanities, Arts and design · Concept / early planning · Ready to begin cooperation now

Lead institution / team: Zaporizhzhia National University, NGO Dalekoglyad

City: Zaporizhzhia

Website: https://orcid.org/0000-0001-9461-0536 (research articles presenting the core concepts); https://www.znu.edu.ua/cms/index.php?action=news/view_details&news_id=65131&lang=ukr&news_code=na-treningu-vid-fakultetu-zhurnalistiki-znu-v-tsentri-zhurnalistskoyi-solidarnosti-govorili-pro-publichni-komunikatsiyi-vo--nnogo-chasu

Project lead: Viktoriia Kovpak, Doctor of Sciences in Social Communications, Professor at the Department of Social Communications and Information Activity, Faculty of Journalism, Zaporizhzhia National University

Contact: Kovpak.viki@ukr.net

Cooperation sought: Joint research, Co-funding or grant partnership, Joint laboratory or research infrastructure, Mentorship and advisory, Training and capacity building, Joint educational program development, Publications and scholarly communication

Preferred partner(s): U.S. university, Research institute or laboratory, Foundation or donor, Ukrainian diaspora organization, Publisher or scholarly infrastructure provider

Estimated scale of support: Not primarily financial

Available to pitch (June 12): Yes, online

Proposed presenter: Project Lead and researcher at Zaporizhzhia National University (ZNU), Viktoriia Kovpak. (Can present in person if needed, depending on the security situation in Zaporizhzhia).

Project goal: The project aims to develop an innovative educational module and launch a joint program integrating decolonization studies into the creative industries sector (design, advertising,

PR, publishing), seamlessly merging robust scientific research with the empirical deployment of modern commemorative solutions.

The project focuses on achieving the following core objectives:

• Educational & Institutional: To implement an effective capacity-building and training model for students, civil society actors, and media professionals in strategic public communications.

• Applied & Commemorative: To provide hands-on training in utilizing "soft power" and performative communication tools (installations, happenings, flash mobs, art objects, muralism, and social media campaigns) to decolonize symbolic spaces and advance cutting-edge commemorative practices increasingly vital in wartime.

• Research: To execute a comprehensive scientific track exploring the phenomenon of memory entrepreneurship within the experience economy and organizational imprinting, resulting in the design of competitive social communication products and high-impact peer-reviewed publications (WoS/Scopus).

Summary: The project focuses on developing an innovative educational module and launching a joint program that integrates decolonization studies into the practical sector of creative industries (design, advertising, PR, publishing). Its goal is to empower students and communities to utilize public communications (performances, installations, happenings, flash mobs, art objects) as "soft power" to decolonize symbolic spaces, develop cutting-edge commemorative practices increasingly vital in wartime, and counteract the legacy of economic colonialism.

In times of war, the phenomenon of memory entrepreneurship within the experience economy possesses a powerful arsenal of tools capable of producing, demonstrating, and popularizing historical representations, reinterpreted, reproduced, or alternative narratives through public cultural platforms (e.g., museums) and business industries (specifically, heritage restaurants). As subjects of this entrepreneurial activity, citizens acquire a mechanism for personal identification with these narratives, becoming part of the public reproduction of memory and group identity.

The applied component is anchored in performative communication (art objects, muralism, social media communication campaigns) and organizational imprinting as a systematic mechanism for transmitting national-cultural memory.

Therefore, while the stated framework emphasizes the design of a joint educational program and capacity building, the project is fundamentally driven by a comprehensive scientific research track and a deep empirical, project-based component aimed at delivering high-impact peer-reviewed publications (WoS/Scopus).

Current status and key results: To date, a robust scientific and applied foundation has been established within the R&D projects 1/21, 2/24. Achievements include 4 articles published in Web of Science (2022–2025). The monograph chapter "Pragmatic Potential of Event Communication in the Context of War: Conceptual Content, Spectacle Technologies, Hashtag Activism in the Actualisation of Social Media" (“Baltija Publishing”, 2023) won the 3rd place Diploma at the All-Ukrainian “Yurydyka” security competition. A major milestone is V. Kovpak's individual grant from the Cultural Transformation Lab, supported by House of Europe and EU funding, for the project "Information and Communication Campaign 'DEcolonization

and DEoccupation of Territories and Brains'" (2025). The applied track is further strengthened by the faculty's achievements: student poster designs won top prizes at international and national advertising competitions. This background is fully prepared for integration into the joint educational program and the general research track.

What the project brings: Our team brings a unique, practically tested experience in modern commemoration and the decolonization of symbolic spaces during wartime to the potential partnership:

• Commemorative Expertise & Insights: Developed frameworks for "memory entrepreneurship" and counteracting cognitive threats, backed by two state R&D projects, Web of Science publications, and successful decolonization communication campaigns.

• A Functional Ecosystem: An established collaborative network connecting Zaporizhzhia National University, NGO Dalekoglyad, and creative industry practitioners (design, advertising, PR, and publishing).

• Project & Educational Background: Proven capability in implementing international and EU-funded educational initiatives, including the frameworks of the Jean Monnet Module EUROPEACE.

• Applied Creative Capital: Faculty achievements in visual and advertising project designs, ensuring a strong empirical and creative component for the future joint track.

What the project asks: To ensure the project's success within the Ukrainian-American partnership framework, we are seeking partners for long-term cooperation across the following pillars:

• Joint Educational Program Development: Expert contribution to co-designing an innovative training module on space decolonization and creative industries, including guest online lectures and workshops (up to 24 hours) delivered by US and international experts.

• Mentorship & Capacity Building: Expert counseling and mentorship for early-career researchers at Zaporizhzhia National University (ZNU) and activists from NGO Dalekoglyad and NGO Buty on integrating global, US, and European modern commemoration practices.

• Joint Research & Publications: Comparative analysis of US and Ukrainian cases of "memory entrepreneurship" and commemorative diplomacy in public spaces, with the co-authoring of scientific papers for high-impact journals indexed in Web of Science/Scopus.

• Grant Partnership & Co-financing: Joint preparation of project proposals (e.g., within USAID programs, US institutional frameworks, international foundations, or transatlantic grant tracks) to secure funding for the technical baseline and empirical execution of social communication products.

Existing international cooperation: Our team possesses a proven and successful track record in international research and grant management, fostering a reliable foundation for transatlantic partnerships:

• COST Action Initiatives: Team members have actively contributed to drafting consortium project proposals and completed a series of specialized workshops under the European COST

(European Cooperation in Science and Technology) program in strategic communications and security.

• International Grants: Zaporizhzhia National University (ZNU) currently hosts and implements the 2026 transnational project “Memory in the Making: Early Grassroots Commemorations and Digital Activism in Wartime Ukraine,” supported by the Foundation for Polish Science.

• Institutional & Individual Partnerships: The team’s background is anchored in the successful execution of the Erasmus+ Jean Monnet Module EUROPEACE, alongside individual grants and projects supported by House of Europe and ISAR Ednannia. These initiatives ensure sustainable networks with leading academic and civil society institutions across Europe and the United States.