

## Report on the outcomes of a Short-Term Scientific Mission<sup>1</sup>

Action number: CA18236

Grantee name: Iryna Gontareva

### **Details of the STSM**

Title: Information ecology in formation and transformation of entrepreneurial activities

Start and end date: 14/07/2022 to 13/10/2022

### **Description of the work carried out during the STSM**

Description of the activities carried out during the STSM. Any deviations from the initial working plan shall also be described in this section.

(max. 500 words)

Grantee enters max 500 word summary here.

*To address the pollution problem, information ecology is applied. This concept implies optimizing the volume of information provided due to improving the level of its readiness for the entrepreneur's perception. It suggests the minimum amount of data provided ensuring their integrity, perceptibility, and interpretability. By the intentional goal we mean a cognitive model of the desired and achieved result of the entrepreneur's activity in relation to the complex of internal motivations encouraging them to act. The desirability of the results suggests the existence of a system of preferences, regulatory parameters and value judgments.*

*The greatest amount of information needs to be collected and processed when choosing innovative development. The main sources of information in the innovation process are universities and government agencies. The main consumers are entrepreneurs, who, from the general flow of data, need to single out those related to their area of interest. As a result, the Triple Helix information space is created. The Quadruple Helix and Quintuple Helix were designed as an innovation system framework to more broadly and accurately describe the complexity and context of production and application of knowledge (innovation). The Quadruple Helix adds as the fourth helix to media-based and culture-based public arts, artistic research, art-based innovation, knowledge democracy, and civil society, referring to a democratic knowledge society and economic actors, such as creators, inventors, innovators, and entrepreneurs. The Quintuple Helix is dimension in the ecological perspective of the natural environment of society and*

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<sup>1</sup> This report is submitted by the grantee to the Action MC for approval and for claiming payment of the awarded grant. The Grant Awarding Coordinator coordinates the evaluation of this report on behalf of the Action MC and instructs the GH for payment of the Grant.

economy, which emphasizes how democracy and the environment influence the development of knowledge and innovation at the university.

*The normative context of the entrepreneur's intellectual choice is the external socio-economic situation. The architectonics of solving development problems by means of entrepreneurship has the form of a pyramid. The information circulating at each level of entrepreneurship differs in type, form and method of transmission, semantic and pragmatic context. Based on the Multi Helix methodology, we singled out the types of information provided to entrepreneurs by universities and government agencies.*

*Currently, universities are becoming increasingly involved in solving social problems of a particular territory, both indirectly (through research and training / retraining of personnel) and directly (through a wide range of volunteer, charitable, educational, social and cultural activities). In view of this, in many cases they play the role of city-forming organizations, being at the center of the infrastructure that ensures the sustainable development of individual regions and cities, including the solution of social problems. V. N. Karazin Kharkiv National University is the main social, educational and scientific center in Kharkiv (Ukraine). The university's motto is "Classics ahead of time". It has 9 sustainable development goals, directly related to components of the Quintuple innovation helix framework.*

*Link on LinkedIn: [https://www.linkedin.com/posts/%D1%96%D1%80%D0%B8%D0%BD%D0%B0-%D0%B3%D0%BE%D0%BD%D1%82%D0%B0%D1%80%D0%B5%D0%B2%D0%B0-b89076245\\_cost-news-cost-activity-6953338109761622016-RXy](https://www.linkedin.com/posts/%D1%96%D1%80%D0%B8%D0%BD%D0%B0-%D0%B3%D0%BE%D0%BD%D1%82%D0%B0%D1%80%D0%B5%D0%B2%D0%B0-b89076245_cost-news-cost-activity-6953338109761622016-RXy)*

### **Description of the STSM main achievements and planned follow-up activities**

Description and assessment of whether the STSM achieved its planned goals and expected outcomes, including specific contribution to Action objective and deliverables, or publications resulting from the STSM. Agreed plans for future follow-up collaborations shall also be described in this section.

*(max. 500 words)*

**Grantee enters max 500 word summary here.**

*The planned goals and expected outcomes were achieved. The STSM main achievements include:*

*1) scientific substantiation of the structure of parameters and quality criteria for assessing entrepreneurial activity of the Universities as comparative characteristics of the Triple, Quadruple and Quintuple innovation helix framework;*

*2) architectonics of solving social problems through entrepreneurship - the information circulating at each level of entrepreneurship differs in type, form and method of transmission, semantic and pragmatic context. Based on the Multi Helix methodology, we singled out the types of information provided to entrepreneurs by universities and government agencies;*

*3) an innovation helix framework, using the example of V. N. Karazin Kharkiv National University, and analyzes the partnerships of Ukrainian higher education institutions to support social change, transformation and impact. V. N. Karazin Kharkiv National University is the main social and educational center in Kharkiv (Ukraine). The university's motto is "Classics ahead of time". It has 9 sustainable development goals directly related to components of the Quintuple innovation helix framework. The seventh goal of sustainable development of V. N. Karazin Kharkiv National University – Partnership for the goals – comprises all components of the Quintuple innovation helix framework: university, industry, government, public, natural environment. The participation of the Karazin University in the project "Innovative University and Leadership" initiated by the Ukrainian-Polish Academic Forum has made it possible for the university to implement a series of micro-projects aimed at: ensuring a high quality and internationalization of higher education; introducing innovations and building a dynamic structure of relations with key stakeholders; developing modern communication technologies; forming university-school relations; providing interdisciplinarity; and elaborating a university development strategy to support social change, transformation and impact.*

*Results of these studies, we published as a working paper on this project website <https://socialchangelab.eu/outcomes/>.*

*Link on LinkedIn: [https://www.linkedin.com/posts/%D1%96%D1%80%D0%B8%D0%BD%D0%B0-%D0%B3%D0%BE%D0%BD%D1%82%D0%B0%D1%80%D0%B5%D0%B2%D0%B0-b89076245-linkedin-job-search-find-us-jobs-internships-activity-6982666836936912896-CTDk?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/%D1%96%D1%80%D0%B8%D0%BD%D0%B0-%D0%B3%D0%BE%D0%BD%D1%82%D0%B0%D1%80%D0%B5%D0%B2%D0%B0-b89076245-linkedin-job-search-find-us-jobs-internships-activity-6982666836936912896-CTDk?utm_source=share&utm_medium=member_desktop)*

*The plans for further cooperation include the continuation of research and the refinement of the contextual analysis of technology transfer based on the developed proposals. The results of the study will be published as materials of the International Conference.*