When Inorganic Chemistry Professor and Vice-Dean for Research Hryhoriy Dmytriv decided to apply for a research management fellowship under IREX’s University Administration Support Program (UASP), his primary goal focused on funding. He was curious to learn how U.S. universities secured diverse revenue streams to fund their research. His own Ukrainian institution, Ivan Franco National University of Lviv, was almost exclusively reliant on federal grants from the Ministry of Education and Science, a pool which is highly limited and thus highly competitive. Hryhoriy perceived a concerning trickle-down effect: limited research funds means fewer or poorly equipped labs; it means the university is engaged in less research activity, and has a less competitive reputation; in turn, it means fewer young people choose science as a career, or alternatively choose to leave Lviv to pursue their research career in other countries.

Through IREX’s UASP research management fellowship, university leaders like Hryhoriy have an opportunity to participate in leadership training and a four-week work placement with counterparts at U.S. host institutions. Fellows complete the program equipped with best practices, a support network, and progressive management techniques to drive administrative reforms and build their institution’s research capacity back home.

Hryhoriy spent his 2017 fellowship at the University of Nebraska Omaha’s Office of Research and Creative Activity. There he observed electronic research administration systems, alumni donations to help with laboratory equipment upgrades, and heavy promotion of the university’s research activity through local TV and radio campaigns. Hryhoriy appreciated how his host university had achieved highly diversified research funds from federal grants as well as revenue from foundations, nonprofits, and local government. More unexpectedly, he was also struck by how the university engaged with its immediate community—both in terms of collaborating with the city government, and through working with local businesses, bringing many benefits beyond funding. This experience sparked an idea that would grow and materialize over the next years of his career.
Indeed, although Hryhoriy has not yet solved his university’s research funding woes (though there has been some modest diversification of funding sources), he has creatively contributed to an exciting new initiative that aims to foster research culture and prevent brain drain of young and talented scientists. “My experience in Nebraska helped me to speak with the vice mayor about my experiences.... on what other countries are doing around innovation.”

“We must be much more open than we were before, we must promote ourselves at any possibility... I became much more productive with communication; before [the UASP], I communicated mainly with faculty; now I also communicate with government and with companies.”

The city government of Lviv, also motivated to retain scientists and rebrand themselves as a “scientific city,” was interested in Hryhoriy’s perspective. They organized an Innovation Spring Forum event, and Hryhoriy was invited to be a speaker, along with several scientific companies from the area. The city government also invited R&D focused companies to engage with Hryhoriy’s department and students, including presentations, discussions, and site visits to the companies. A platform to join forces slowly emerged. Hryhoriy says, “In Nebraska University I saw the model of a university working with the city government.” Now he had a chance to take his seed of an idea and see if it could grow in Ukraine.

Out of relationships developed at the Lviv Innovation Spring Forum, the Lviv “Biotech and Pharma cluster” was born—a collaboration of 26 institutions, including universities, the city council, and local biotechnology and pharmaceutical companies.

Stage 1 of their ambitious plan, nearly complete, is the launch of the Lviv Open Lab. The Open Lab is an open laboratory and educational space for high school students to get hands on experience with scientific research. The physical space was furnished by the city while partner companies funded the lab equipment and salaries of those staffing the lab. As a chemistry professor, one of Hryhoriy’s chief responsibilities has been to oversee development of the Open Lab’s chemical laboratory. Opening in the fall of 2019, the Open Lab will be used for high school students’ biology and chemistry classes in the morning (14 high schools across Lviv will share the space), and open to talented students from across the city in the afternoon. The Lab will be staffed by a combination of university professors and the companies’ R&D managers.

In Stage 2, the Biotech and Pharma cluster will open a more advanced lab that will host postgraduate students for collaborative research projects—the agenda of which will be driven by the participating companies’ current needs. Again, a combination of faculty and company researchers are expected to supervise and mentor the students. The space will also eventually serve as an incubator for startups.
Across all components of the project, the aims are clear: To cultivate among Lviv youth the interest and practical skills for a career in science, hopefully in the Lviv area. Hryhoriy says, “Companies are looking for more qualified employees, [who have] knowledge connected with the main direction of the company.” As the universities work hand in hand with industry, Lviv students have opportunities to build relationships with companies in their own community and to develop research skills that are of most value to those companies. City, industry, and university stakeholders all win if these students get jobs with the biotechnology and pharmaceutical companies following graduation. Diversified relationships turned out to be every bit as important as diversified funding streams.

Others are taking notice of Hryhoriy’s raised profile: In 2018, he was awarded the Lviv City Council Prize for Talented Scientists, and in early 2019 he was elected Dean of the Faculty of Chemistry at his university.