CHALLENGER SCIENCE AS A PATHWAY TO COMMERCIALIZATION OF RESEARCH

Civitta is an international consulting company in the field of strategies and innovations that aims to support the commercialization and transfer of technologies. This coincides with the principles and activities of the Challenger science program. Martin Veselý, Project Manager at Civitta Slovakia, told us more about it.

What was the intent and focus of the Challenger science program?

Challenger Science is an educational program that supports the development of talented scientists in Slovakia. The program focuses on the development of entrepreneurship and related soft skills and enables participants from various scientific disciplines to recognize opportunities to transfer scientific knowledge into practice. The key ambition is to cultivate an entrepreneurial mindset within the scientific community, support the commercialization efforts of Slovak scientists, and enhance the visibility of Slovak science's societal contributions.

What tasks did CIVITTA perform within this project?

Civitta is the main organizer of the Challenger Science program and covers all its key aspects, from initial concept design and participant selection to expert and mentor coordination, ensuring the program's comprehensive implementation and successful execution.

Civitta, as an innovative consulting company with extensive experience in the field of innovation and entrepreneurship support, has been organizing educational programs for students, startups, and scientists in Slovakia and Europe for several years, such as Challenger Accelerator, HealthCare Lab, and Ajujaht, and innovative events such as Climathon and Startup Awards. Hundreds of students and scientists and over 500 startups have gone through these programs. Successful alumni of our accelerator programs include companies such as MultiplexDX, Glycanostics, Sensoneo (Startup Awards), and Bolt (Ajujaht). In this way, we try to transfer know-how, contacts, and experience from successful scientific entrepreneurs back to those who are at the beginning of the journey and often just need to show direction and motivation.

What platforms, institutions, and organizations have been involved in the project and in what way?

The main partner of the program is the ESET Foundation, which has long been supporting the popularization of science and research through various projects, such as the ESET Science Award initiative. The joint

vision of the ESET Foundation and Civitta aimed at increasing the practical impact of science on society by supporting the commercialization of research, makes the ESET Foundation an ideal partner for this program.

The program is supported by the European Institute of Health Innovation and Technology (EIT Health) with the goal to support innovators in the health sector and thereby improve the provision of healthcare in Europe. It is also thanks to EIT Health that we organized a complementary program for the wider scientific community within the Challenger Science program with activities aimed at raising awareness of the possibilities of commercializing innovations in the field of health. The Faculty of Medicine of the Comenius University in Bratislava is also a key partner of these activities. The Faculty of Medicine is initiating a new wave of innovation support at academic institutions in Slovakia and thereby increase the qualifications of the next generation of researchers in the field of health. The Faculty of Medicine of the Comenius in Bratislava participated in the implementation of the complementary program through content provision of activities, provision of Slovak and international experts, organization of activities, and establishing contacts between innovators, the academic community, MedTech companies, and investors. The public seminars were focused on inspirational stories in healthcare, clinical trials and validation of scientific research, as well as patent processes and strategies. The complementary program culminated in Health Innovation Day, a conference connecting participants with successful, experienced, and emerging researchers, entrepreneurs, educators, and students.

Important Slovak institutions participated in the recruitment of participants to the program, including the Slovak Academy of Sciences, Slovak University of Technology in Bratislava, Comenius University in Bratislava, Alexander Dubček University of Trenčín in Trenčín, Slovak Agricultural University in Nitra, Žilina University in Žilina, Technical University in Košice, Technical University in Zvolen, Matej Bel University in Banská Bystrica and Pavel Jozef Šafárik University in Košice.





Source: Civitta Slovakia & Natália Jakubcová

Please define the project from the point of view of technology transfer and the necessary cooperation between science and practice

Using a systematic approach, Challenger Science contributes to solving two key barriers that prevent effective technology transfer in Slovakia. These are the low awareness of scientists about the potential of translating their research into practice and the insufficient universal skills of scientists in the field of commercialization of their discoveries.

The first key phase is the recruitment of Slovak scientists into the program. Through our network of universities and research institutions, we have identified active researchers and research teams that have the interest, motivation, and potential to commercialize their scientific research.

Subsequently, the selected participants had the opportunity to work on their specific scientific ideas through regular expert-led workshops. The workshops were divided into four key phases: change of mindset and inspiration, identification of opportunities for commercialization, building and validation of the business model, and presentation of the final projects. We design the program in cooperation with foreign experts, adapt it to the needs and skills of researchers, and thus create space for scientists to develop new scientific startups and spinoffs.

What else does the program focus on?

Recognizing the individual challenges of scientists in research commercialization, financing, and establishing networks, the program provides a personalized approach to solving these challenges through individual coaching sessions. Participants benefited from the guidance of six experienced coaches from the startup and technology transfer sectors, enabling them to effectively utilize and implement workshop insights into their scientific projects. Following three months of intensive education in Bratislava, the



Source: Civitta Slovakia & Natália Jakubcová

participants presented their projects to an expert jury from the business, startup, and investor sectors. This public final offered a unique opportunity to showcase their scientific projects and acquired knowledge to a wider Bratislava audience.

What were the results of the project, and how will they be implemented in the process of university technology transfer and cooperation between science and the private sector?

In the first year of Challenger Science 2024, a total of 42 applications (75 applicants) were received from 14 Slovak educational and research institutions, from which 35 doctoral students and senior researchers were selected for the program. At the end of the program, feedback was collected to assess the overall satisfaction of the participants with the course and organization of the program, and the results showed that almost every participant would recommend this program to their colleagues. The participants repeatedly emphasized several key benefits of the program: awareness of one's strengths and weaknesses, identification of potential business opportunities, acquisition of new business tools and skills, acquisition of new professional contacts, and, above all, change of mindset.

What facts have the scientists mastered that they will be able to implement in practice?

In total, the participants completed 12 professional workshops, during which they acquired skills that can be used in various aspects of their careers, as well as in the popularization of science. Professional workshops focused on topics such as entrepreneurial thinking, design thinking in science, building relationships with partners and customers, identifying suitable opportunities for commercialization, building a business model, protecting intellectual property, and obtaining financing, but also preparing presentations for partners and investors.

As part of the program, we also prepared the so-called founder stories, which were delivered by successful Slovak and foreign entrepreneurs: Pavol Čekan (CEO, MultiplexDX), Ján Tkáč (COO, Glycanostics),

Michal Pohludka (CEO, GeneSpector) and Martin Herman (CEO, PowerfulMedical), who told the participants about their experiences in commercializing their scientific research and lessons learned.

During the program, the participants adopted the perspective of innovators and entrepreneurs, gained inspiration from Slovak and foreign experts, recognized opportunities to transfer scientific knowledge into practice, and acquired skills for career development and the popularization of science.

Do you already see the impact of the program in existing success stories?

Yes. We have received information just two months after the end of the program. Some participants have actively started the process of commercializing their research, and notably, one research team has successfully established a company, with at least two more in progress. These individuals are proactively engaging with technology transfer representatives at their institutions to explore opportunities for commercializing their research.

Actors from the academic environment were actively involved in the very process of creating, recruiting, and implementing the program. Our ambition is to support universities to be able to implement such programs independently. We are trying to provide them with a pilot model and show best practices on how to support entrepreneurship and the commercialization of research in Slovakia. Therefore, we can also consider the positive impact of the program on the interest of Slovak institutions in supporting the commercialization of research, which was evident from the feedback of the participants, who mentioned a few examples of how their institution facilitated and helped them on the way to commercialization thanks to the Challenger Science program.

Last but not least, the program successfully enhanced the visibility of Slovak science's contributions to society and increased the emphasis on the commercialization of research and innovation activities at

CIVITTA

Civitta is an international consulting company in the field of strategy, innovation, financing and digital transformation in Central and Eastern Europe. Our mission is to be the catalyst of the new knowledge-based economy in Slovakia. One of our long-term goals is to support commercialization and tech transfer in countries with a lower index of entrepreneurship and commercialization of research, which includes Slovakia. One example is the Startup Awards Slovakia, also known as the Oscars for Slovak startups, whose goal is to improve our country by supporting young and active people. One of the main competition categories is Science, where we look for commercial solutions based on scientific research and thus provide support and connections with investors for startup researchers.

Another example is HealthCare Lab, an international acceleration program for start-up digital health projects in Europe. Our mission is to connect, develop, and support an international community of innovators, researchers, and healthcare providers to bring disruptive healthcare innovations to market faster. Last but not least, Civitta provides strategic support to the Slovak academic institutions themselves, including, for example, through the development program for scientific workers of the Slovak Academy of Sciences, for which we prepared a series of 15 workshops for the development of soft skills. More than 300 participants took part in the training, including doctoral students, senior researchers, and directors of individual institutes.



scientific and research institutions across Slovakia. We managed to get the topic of commercialization and technology transfer to thousands of students and researchers through social networks, press releases, and publications on university websites.

Are you planning similar projects or specific activities in the future?

Driven by the demand from universities, scientific institutions, and scientists themselves, coupled with the positive response and continued support from the ESET Foundation and other partners after the first year's results, motivates us to continue empowering the scientific community towards entrepreneurship and contribute to the growth of entrepreneurial science in Slovakia. We are already planning the second year of the Challenger Science program with the ambition to generate even more success stories that will inspire others to embrace change and actively participate in the commercialization of Slovak science.

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Martin Veselý graduated from the University of Oxford, where he studied Biochemistry and found his passion for innovation and technology transfer. Martin currently works as a Project Manager at Civitta Slovakia, leading innovation consultancy and innovation ecosystem building in Slovakia, where he leads projects focused on creating and accelerating innovative businesses. Martin worked as the Project Lead at HealthCare Lab, an international acceleration program for digital healthcare ventures, where he was in charge of the selection committee choosing the top 9 HealthTech startups from over 200 applications ranging from CEE and Turkey. His responsibilities in the program also included composing and running the acceleration program to accelerate startups and increase the investability of selected HealthTech startups.