

EUROPEAN COMMISSION INITIATIVES TO SUPPORT SCIENTIFIC ENTREPRENEURSHIP AND INNOVATION

Dmytro Zherlitsyn, Dr.Sc, Professor, Researcher
University of National and World Economy Sofia, Bulgaria
Sofia, Bulgaria
ORCID ID 0000-0002-2331-8690
e-mail: d.zherlitsyn@unwe.bg

The European Commission has placed startups and research-driven innovation among the key priorities of its mandate, aiming to close the innovation divide with global competitors and boost Europe's competitiveness [1]. Scientific entrepreneurship is based on leveraging research expertise and systematic methodologies to create new ventures or enhance existing businesses. Its central aim is to drive widespread innovation adoption and facilitate the commercial use of scientific findings. Achieving this involves collaboration in research and development among universities, corporate research and development departments, and research agencies; the commercialization of scientific results through market-oriented solutions; efficient allocation of financial and human capital; knowledge transfer through mentorship, workshops, and specialized training programs; and active fundraising from venture capital, grants, and institutional investments. EURAXESS Researchers in Motion [1] is an example for supporting such a comprehensive initiative.

Several key stakeholders contribute to the advancement of scientific entrepreneurship. Academic and research institutions such as universities and independent research centers play a vital role. The business sector, which encompasses small and medium enterprises, startup incubators, and accelerators, creates an environment for transforming scientific discoveries into viable ventures. Financial institutions supply essential capital, including venture capital firms, funding agencies, and investors. Public and private support programs further facilitate innovation by promoting knowledge transfer and implementing policies that bolster research-driven entrepreneurship. The EURAXESS Startup Hubs [2] are initiatives that unite these diverse actors.

EURAXESS is a pan-European program to support researchers by offering career development services, mobility assistance, and funding opportunities [1]. A sub-network of national hubs operates under EURAXESS, guided by calls like the ERA Talent Call, which seeks to scale the impact of the EURAXESS network across Europe [3]. Within this structure, dedicated programs such as Science4Refugees, ERA Talent Circulation, and Scientific Entrepreneurship Hubs focus on specific needs, from integrating refugee researchers into European science ecosystems to nurturing interdisciplinary collaborations.

One of the significant contributions of EURAXESS is its mentoring program, which connects early-career and mid-career researchers with experienced professionals who guide scientific career progression, grant opportunities, and strategic networking. This support is closely linked to recognized frameworks for achieving commercial and societal impact from research. A commonly cited approach comprises five steps for turning scientific outputs into market-ready products and services [4]. EURAXESS also maintains an extensive Jobs and Funding portal, enabling researchers to seek academic and industry positions, locate relevant grants, and identify potential collaboration opportunities. The portal offers practical information on visas, taxation, healthcare, and social security to facilitate international mobility [5].

Local scientific entrepreneurship hubs further reinforce these efforts at the institutional level. At the University of National and World Economy in Bulgaria, a Scientific Entrepreneurship Hub in Bulgaria, for example, offers practical support to emerging scientists and refugee researchers. This hub provides training and mentorship programs, assists in transforming research findings into promising business models, and provides guidance in securing financial support through grants and venture capital [6].

Therefore, the EURAXESS Startup Hub initiative is a collaborative platform that assembles research organizations, investors, and innovation networks across multiple European countries. By

uniting leading scientific entrepreneurs, venture capitalists, and technology incubators, it advances the commercialization of high-value research outputs and strengthens local startup ecosystems.

The pathway from discovery to concrete innovation typically requires a structured and methodical progression. According to widely known practices [4], the initial step is identifying market potential by assessing scientific discoveries' feasibility and commercial interest. This is followed by developing viable business models and ensuring that financial resources are available to support growth. Collaboration with stakeholders in diverse sectors amplifies the impact of new solutions. Once partnerships are in place, the emphasis shifts to scaling and market expansion, positioning the innovation for broader adoption and long-term sustainability.

Overall, European support for scientific entrepreneurship is reshaping the research and innovation ecosystem into one that is more dynamic, application-oriented, and globally competitive. European Commission initiatives are cultivating a new generation of innovators who operate at the intersection of academia and industry by equipping scientists with entrepreneurial skills and providing avenues to translate research into products. These efforts have a compounding effect: they accelerate the conversion of lab discoveries into real-world innovations, contribute to economic growth, and help address pressing societal challenges while reinforcing Europe's position in a competitive technological landscape world. The broader significance cannot be overstated: initiatives in this arena are building and applying innovation, which is deeply ingrained in its fabric, from research institutions to startup communities.

Thus, Scientific entrepreneurship is a crucial link between academic research and practical applications that stimulate economic progress. Programs like EURAXESS and local initiatives, such as the Scientific Entrepreneurship Hub in Bulgaria, offer essential mentorship, training, and financial resources to help researchers translate their discoveries into profitable ventures. Persistent challenges, including the need for more substantial alignment between academia and industry, robust and accessible funding, and well-formulated policies that support sustainability, remain. Addressing these obstacles seeks strengths to fortify collaborations among universities, businesses, and governmental stakeholders. This supports the scientific breakthroughs that result in tangible benefits for the economy and society while preserving Europe's competitive edge in global research and innovation.

References:

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