## Brief information about the project

Name of the project	«Potential Botanical Formula against Influenza Virus» TSBICIP-IJCP-001-01
Relevance	The relevance of the topic lies in the search for effective and safe methods of combating the influenza virus, given its high mutability and potential threats to public health. The study of botanical formulas can provide new antiviral agents, complementing existing treatment and prevention methods, and providing additional resources to counter influenza and its possible variants.
Purpose	Development of a potential botanical formula against the influenza virus
Objectives	<ol> <li>Research of various botanical resources to identify potentially effective components against the influenza virus.</li> <li>Determining the optimal proportions and combinations of botanical ingredients to create a formula with high activity against the virus.</li> <li>Conducting laboratory tests to assess the antiviral activity of the botanical formula.</li> <li>Investigation of the mechanisms of action of botanical components on viral particles.</li> <li>Assessment of the toxicity and safety of the formula being developed.</li> <li>Development of methods for the delivery and application of a botanical formula to maximize its effectiveness.</li> <li>Conducting preclinical studies to evaluate the effectiveness and safety of the formula.</li> </ol>
Expected and achieved results	<ol> <li>Identification of botanical components with high activity against the influenza virus.</li> <li>Development of an optimal botanical formula, considering efficiency and safety.</li> <li>Demonstration of the antiviral activity of the developed formula in the laboratory.</li> <li>Understanding the mechanisms of action of botanical components on viral particles.</li> <li>Confirmation of the absence of toxicity and ensuring the safety of the formula.</li> </ol>
Research team members with their identifiers (Scopus Author ID, Researcher ID, ORCID, if available) and links to relevant profiles	1. Jenis J. PhD, Professor ResearcherID – ORCID – https://orcid.org/0000-0002-7148-7253 Scopus Author ID – 54897942000
List of publications with links to them	1. Jenis J. Member of the Technical advisory Committee of COMSATS Joint Center for Industrial Biotechnology, National Center of Technology Innovation for Synthetic Biology (April 14, 2021-Apirl 14, 2024)

	2. Jenis J. International Forum on Innovative
	Development of Biomanufacturing. Tianjin Institute of
	Industrial Biotechnology & COMSATS, 2023.
	https://comsats.org/tib-china-comsats-organize-
	international-forum-on-biomanufacturing/
	3. Amzeeva U.M. from November 1, 2023 to November
	17, 2023, completed the Fourth International training
	course on Industrial synthetic biotechnology "Fourth
	International Training Course on Industrial Synthetic
	Biotechnology (ITC-ISB)" in Tianjin, China, at the
	expense of the project.
	4. Nurlybekova A.K. and Amzeeva U.M. took part in the
	international online training seminar on innovation and
	transformation of advanced medical devices on the topic
	"Physiotherapy and rehabilitation engineering
	technologies" from November 28 to December 7, 2022.
	Suzhou (China), received certificates.
Patents	-