

**2022 Call for “Fundamental Research State Grants”
Winner Projects**

N	Project ID	Project Title	Host Institution	CoParticipant Institution
1	FR-22-3307	Characterizing the microorganisms decontamination efficiency of plasma activated water	Ivane Javakhishvili Tbilisi State University	
2	FR-22-1932	Morphological and genetic polymorphism by the surnames of Samegrelo	Ivane Javakhishvili Tbilisi State University	
3	FR-22-254	The Georgian Sign Language Nominal Morphology	Ilia State University	
4	FR-22-971	Preparation and application of polysaccharide-based advanced materials for liquid-phase separation of enantiomers	Ivane Javakhishvili Tbilisi State University	
5	FR-22-7504	Holy Week Chants in Georgian Church Tradition	Giorgi Mtatsmindeli Higher Educational Institution of Ecclesiastical Chant	
6	FR-22-4466	Georgian Competition Law and Policy in the times of the Digital Economy	European University Institute of Law	
7	FR-22-6782	Landscape Planning and Garden Design in Georgia (1801-1918)	Giorgi Chubinashvili National Research Centre for Georgian Art History and Heritage Preservation	
8	FR-22-2543	Cholesteric Liquid Crystal Mirror-Based Hyperspectral Imaging Device for Medical Application	Georgian Technical University	

9	FR-22-969	Humanitarian relief logistics' fuzzy model for the shelters' location in the disaster-stricken zones and evacuation of population	Ivane Javakhishvili Tbilisi State University	
10	FR-22-1933	Strategic Planning of Human Resources for Health in Georgia	David Tvildiani Medical University	
11	FR-22-7764	Why do people get impoverished from health spending, when the universal health care program covers 90% of the population?	Curatio International Foundation	
12	FR-22-2771	An investigation into the impacts of high-frequency electromagnetic fields utilized in 5G technology on some biological species	Georgian Technical University	
13	FR-22-7056	"Ethno-Linguistic Aspects of Svan Religious Vocabulary"	Ivane Javakhishvili Tbilisi State University	
14	FR-22-6700	Polyhedral Semantics for modal and intuitionistic logic	Ivane Javakhishvili Tbilisi State University	
15	FR-22-21407	Incidence and Character of Sleep Disorders in the Georgian Population of Children and Adolescents with Autism Spectrum Disorder (ASD) – EEG/Polysomnography Study	LEPL IVANE BERITASHVILI CENTER OF EXPERIMENTAL BIOMEDICINE	
16	FR-22-20496	Georgian morphosyntactic computational analysis and tools for the annotation of universal syntactic dependencies	Iliia State University	

17	FR-22-8768	Kvemo Kartli - Southern Gate of the Kingdom of Iberia in the Classical and Middle Ages (According to the archaeological sites from the Middle Kura Valley and written sources)	The Georgian National Museum	
18	FR-22-8174	Implementation of Ecomusicology Research Methodology for the Study of the Georgian Music Ecosystem	V. Sarajishvili Tbilisi State Conservatoire	
19	FR-22-6666	Interdisciplinary study of fluid flow in porous material through multiphase numerical simulation and experiment	The University of Georgia	
20	FR-22-2855	Characterize the ecology and evolution of avian paramyxoviruses (APMVs) in wild bird species' in Georgia	Ilia State University	
21	FR-22-21464	Practical grammar of Megrelian and Laz	Ivane Javakhishvili Tbilisi State University	
22	FR-22-1720	Issues of relationships between the state and church in medieval Georgia (6th – 18th c.)	Korneli Kekelidze Georgian National Centre of Manuscripts	
23	FR-22-4093	„Environmental, Social and Governance Indicators of Sustainability Reporting: An Emerging Country Context“	Caucasus University	
24	FR-22-21517	Sociolinguistic Picture of Georgia in the Press of the Georgian Emigrants of the First Half of XX Century	Akaki Tsereteli State University	

25	FR-22-19681	Volcanic facies architecture of lava flows and associated interflow horizons from Javakheti Volcanic Province (South Georgia)	Ivane Javakhishvili Tbilisi State University	
26	FR-22-253	Georgia and the UK in the late 19th c: Based on the Personal Correspondence between Marjory and Oliver Wardrop (Publication and Georgian Translation of the Letters)	Free University of Tbilisi	
27	FR-22-354	Problem of factorization and invariants of holomorphic bundles on Riemann surfaces	Ivane Javakhishvili Tbilisi State University	
28	FR-22-793	The Representation of the Soviet Past in the Georgian Prose Fiction of the Post-Soviet Era	Ilia State University	
29	FR-22-2778	Study of problems related to the fallen and/or detached wall paintings and development of the methodological approach for their protection	Apollon Kutateladze Tbilisi State Academy of Art	
30	FR-22-4923	A categorical approach to generalized bialgebras, Hopf algebroids and related structures; descent and term rewriting.	Ivane Javakhishvili Tbilisi State University	
31	FR-22-11993	Development of 3D Biohybrid electrodes for Potential Application in Photoactive Supercapacitors	Ivane Javakhishvili Tbilisi State University	
32	FR-22-5180	Linguistic repertoire of Georgian Jews: migrations, language competencies and hierarchies	Ivane Javakhishvili Tbilisi State University	

33	FR-22-9832	Deportation of the Poles to Georgia and Polish-Georgian Geopolitical Cooperation (1830-1921)	Batumi Shota Rustaveli State University	
34	FR-22-9547	From Fairy tales to Economic Awareness	Batumi Shota Rustaveli State University	
35	FR-22-16379	Algorithmic reducibilities and algebraic structures	Ivane Javakhishvili Tbilisi State University	
36	FR-22-5616	Femicide, Gender and Violence: Systematic Approach	NNLE Georgian Institute of Public Affairs	
37	FR-22-12278	Administrative Governance of Historical South-West Georgia (1878-1921)	Batumi Shota Rustaveli State University	
38	FR-22-529	Online Cartographic Catalog and Geographical - cartometrical Research of 5-Verst Map	Ivane Javakhishvili Tbilisi State University	
39	FR-22-1498	Thermally Treated FeCrAl Alloys as Promising Metal-Ceramic Biomaterial for Osseointegrated Implantology	Georgian Technical University	New Vision University
40	FR-22-24246	Corpus of documents about Georgia stored in the National Library of Russia	Korneli Kekelidze Georgian National Centre of Manuscripts	
41	FR-22-14626	Multidisciplinary study of medieval chased icons from Simon Janashia Museum of Georgia	The Georgian National Museum	

42	FR-22-985	Search of new physics using forward jets at CMS experiment and CMS HGC Silicon Photomultiplier radiation hardness study	Georgian Technical University	
43	FR-22-10840	Building mortar as one of the main factors of sustainability of architectural monuments in Georgia	Ivane Javakhishvili Tbilisi State University	
44	FR-22-18207	Khada Gorge – Interdisciplinary study of unknown spiritual and material cultural heritage monuments	St. Andrew the First- Called Georgian University Of the Patriarchate of Georgia	
45	FR-22-4236	Development of innovative technologies for the valorization of plant raw materials and processing waste to reduce the negative impact on the environment using the principles of a circular economy	Batumi Shota Rustaveli State University	
46	FR-22-3915	Diet and oral health in agricultural and pastoral populations in IV-III Millennium BC, Georgia, South Caucasus	The Georgian National Museum	
47	FR-22-117	The Kingdom of Egrisi in the 1st-8th centuries AD – A multidisciplinary study	The Georgian National Museum	
48	FR-22-14060	Methodology of the development of secure multilayer '5G and beyond' networks for the needs of special groups of subscribers in Georgia	Caucasus University	

49	FR-22-6780	Zoonotic Tuberculosis in TB high-risk regions of Georgia	Scientific-Research Centre of Agriculture	1. National Center for Disease Control and Public Health International Association 2. "Veterinarians Sans Frontiers – Caucasus"
50	FR-22-5790	Relevance of Science Education_Second (ROSES)	Ilia State University	
51	FR-22-199	Homological algebra and new invariants of crossed modules	The University of Georgia	
52	FR-22-1686	Internationalization of research in Georgia (1991-2021) and its influence on the academic activity of the faculty	East European University	
53	FR-22-6797	Inclusive Higher education in the context of sustainable development – central theoretical concepts through cross-case analysis internationally (Georgia and Sweden)	Caucasus International University	
54	FR-22-8261	Support of Psychosocial service effectiveness	Ivane Javakhishvili Tbilisi State University	
55	FR-22-1712	Kinetic effects in plasmoid-induced magnetic reconnection and the generation of Alfvén/kinetic Alfvén waves in solar corona	The University of Georgia	

56	FR-22-4275	Calculation of thermodynamic parameters of the process of high-temperature thermochemical processing of plastic waste and obtaining high-tech nanostructured carbon	Ferdinand Tavadze Institute of Metallurgy and Materials Science	
57	FR-22-7899	Self-assembly synthesis of magnetic nanowires with unique magnetic properties for rare earth free magnet applications	Ivane Javakhishvili Tbilisi State University	
58	FR-22-15054	Study of the Behavioral Attitude of the Target Population and Primary Health Care professionals regarding the National Cancer Screening Program in Georgia.	Georgiab Society of Clinical Oncology	
59	FR-22-21892	Society in an Age of Transition: Social Structure of Contemporary Georgia	Georgian American University (GAU)	Ivane Javakhishvili Tbilisi State University
60	FR-22-2601	Identification of disease modifying factors and genotype-phenotype correlations in Cystic Fibrosis patients from Georgia	Tbilisi State Medical University	
61	FR-22-12949	Study of critical velocity and fire-induced back-layering to save lives in road tunnels.	Georgian Technical University	
62	FR-22-4193	Development of multifunctional system for detection the treats from Explosions, Fires, Toxic gases and gamma and neutron Radiation	Georgian Technical University	LEPL G.Tsulukidze Mining Institute

63	FR-22-8273	Astrophysical Plasma Dynamics in Photon Gas Background	Ivane Javakhishvili Tbilisi State University	
64	FR-22-272	Georgia at the Crossroads of Empires: Politics, Society, Time, Narratives of Georgian Integration	International Black Sea University, LLC	
65	FR-22-6966	Quantitative and qualitative evaluation of phenolic compounds of wheat processed with laser biogrotechnology in order to make a health-improving drug.	Tbilisi State Medical University	Georgian Technical University
66	FR-22-17770	Analysis on Spaces of Homogenous Type	Ivane Javakhishvili Tbilisi State University	
67	FR-22-20715	Upheavals and adaptations in the transitional period from Early to Middle Bronze Age in the south Caucasus: Based on material culture and environmental evidence from Rabati settlement, south-west Georgia	The Georgian National Museum	
68	FR-22-23398	Bilingual catalog of material cultural monuments of historical Meskheti	Research Center of Georgian Culture and Tourism Resources	
69	FR-22-352	Evaluation and Optimization of Antioxidant and Anticancer Potential of Submerged Cultures of Georgian Mushrooms	Agricultural University of Georgia	
70	FR-22-2178	Study of pests and diseases spread in Adjara-Guria citrus plantations and creation of pathogens collection	Batumi Shota Rustaveli State University	

71	FR-22-11295	Thermal controls on melting and metamorphism in the Greater Caucasus (within Georgia)	Ivane Javakhishvili Tbilisi State University	
72	FR-22-1235	Hymenopteran Biodiversity in the Vashlovani National Park	Invertebrate Research Center	
73	FR-22-328	Peculiarities of irradiation induced changes of electrophysical and inelastic properties of the monocrystalline n-SiGe alloys	Ilia Vekua Sukhumi Institute of Physics and Technology	
74	FR-22-3061	Information recording based on the spatial photo-modulation of lasing from a liquid crystal layer	Georgian Technical University	
75	FR-22-18364	Study of pharmacokinetics and pharmacodynamics of bacteriophages with different morphotypes and specificity in the mouse model	Agricultural University of Georgia	G. Eliava Institute of Bacteriophages, Microbiology and Virology
76	FR-22-4153	Visualization of the natural-resource and socio-economic potential of the area using modern web cartography methodology	Ivane Javakhishvili Tbilisi State University	
77	FR-22-365	Development and improvement of a high-resolution regional forecasting system for the Georgian sector of the Black Sea to navigational and environmental safety	Ivane Javakhishvili Tbilisi State University	
78	FR-22-27746	Variety of Good Governance Implementation Mechanisms in Hybrid Democracies - Example of Regulatory Impact Assessment (RIA) Application in Georgia	Ilia State University	

79	FR-22-26190	School related gender-based violence at school and pre-school level: case of Kakheti region	Ilia State University	
80	FR-22-2330	Village of Abkhazia in the XIX-XX centuries (historical and ethnological study)	The University of Georgia	
81	FR-22-15319	The exploration of regularities associated with returnees' (former immigrants') readaptive experiences to heritage society after living abroad	Ivane Javakhishvili Tbilisi State University	
82	FR-22-2882	Study of climatic characteristics of the hazardous meteorological phenomena on the Territory of Georgia	Georgian Technical University	Ivane Javakhishvili Tbilisi State University
83	FR-22-21090	Repressions on Religious Grounds in Soviet Georgia (According to the MIA Archives)	State Agency for Religious Issues	
84	FR-22-2916	Georgia as part of the Transcaucasian Federation - its internal administrative-territorial and republican borders in 1922-1936.	Scientific Centre for Studies and Propaganda of History, Ethnology and Religion	
85	FR-22-1991	Complex Study of Psychophysiological and Psychological Correlates in ADHD Children in Georgia	LEPL IVANE BERITASHVILI CENTER OF EXPERIMENTAL BIOMEDICINE	Ilia State University
86	FR-22-6630	Isolation of Saccharomyces cerevisiae pure yeast strain for appellation of origin (AO) wines produced from Saperavi Vine variety on the territory of Georgia and to study specific properties for their industrial usage	Iakob Gogebashvili Telavi State University	

87	FR-22-8692	Recognition memory of visual imprinting in chicks: single nuclei transcriptome and circular RNA studies	Ilia State University	
88	FR-22-4050	Coded Multidimensional Index Modulation for 6G Wireless Networks	Caucasus University	
89	FR-22-4765	Investigation of the distribution of PM2.5 and PM10 in the atmosphere of Kutaisi city by experimental observations and computer modelling	Georgian Technical University	
90	FR-22-8920	Study of current physical processes in the chromosphere based on simultaneous observations	EVGENI KHARADZE GEORGIAN NATIONAL ASTROPHYSICAL OBSERVATORY	
91	FR-22-3989	Historical landscapes of Samtskhe-Javakheti	Ivane Javakhishvili Tbilisi State University	
92	FR-22-4254	Unranked Probabilistic Theory	Ivane Javakhishvili Tbilisi State University	
93	FR-22-7437	ურო-ფაგების პოტენციის შესწავლა ანტიბიოტიკორეზისტენტული ურინარული ტრაქტის ინფექციების (უტი) განვითარების წინააღმდეგ	G. Eliava Institute of Bacteriophages, Microbiology and Virology	National Center for Disease Control and Public Health
94	FR-22-18172	Keratinolytic Activity of Georgian Basidiomycetes: Biodiversity and Physiological Regulation of Production	Agricultural University of Georgia	
95	FR-22-18445	Study of aeolian dust transport in Georgia and the impact of dust on some risky phenomena under conditions of regional climate change.	Ivane Javakhishvili Tbilisi State University	

96	FR-22-25281	Statistical Survey on Functioning and Foundational Learning Skills of Children Living in Georgian Households	Ivane Javakhishvili Tbilisi State University	
97	FR-22-2188	Study of rare and relict forest species in Georgia and creation of an electronic database	Scientific-Research Centre of Agriculture	
98	FR-22-8306	The study of proton therapy technique accuracy and possibilities of its improvement	LEPL-Kutaisi International University	Georgian Research and Educational Networking Association GRENA
99	FR-22-195	Development of the new infrared imaging method for avoiding of cancer recurrence after radical prostatectomy and partial nephrectomy	Georgian Technical University	
100	FR-22-7506	Flare chromosphere from multi-wavelength observations to radiative hydrodynamic models	EVGENI KHARADZE GEORGIAN NATIONAL ASTROPHYSICAL OBSERVATORY	
101	FR-22-13708	Reconstruction and study neutrino events with the KM3NeT telescope	Ivane Javakhishvili Tbilisi State University	Georgian Research and Educational Networking Association GRENA
102	FR-22-2857	Development of ecologically appropriate, waste-free technological process for treatment of oil-polluted waters	Batumi Shota Rustaveli State University	

103	FR-22-1515	Study of the lower limbs of children with cerebral palsy and correction through the development of multifunctional orthopedic means	Akaki Tsereteli State University	
104	FR-22-1612	The impact of heat and chemical stresses on the production of lignocellulose-degrading enzymes by selected basidiomycetes	Agricultural University of Georgia	
105	FR-22-1319	Electric magnetic stimulation as the therapeutic tool to protect cognitive abilities after early postnatal chronic immobilization stress in female rats	LEPL IVANE BERITASHVILI CENTER OF EXPERIMENTAL BIOMEDICINE	
106	FR-22-9689	CD180 toll-like receptor as a microenvironmental sensor in Chronic Lymphocytic Leukaemia (CLL)	Ivane Javakhishvili Tbilisi State University	
107	FR-22-26152	Studying specific biomarkers of post-traumatic stress disorder associated fear memory in rodents.	Ivane Javakhishvili Tbilisi State University	
108	FR-22-697	Monitoring and Management of Blueberry orchards in Georgia	Scientific-Research Centre of Agriculture	Agricultural University of Georgia
109	FR-22-889	The phylogeography and genetic structure of the most widespread and ecologically essential forest tree species (<i>Fagus orientalis</i> Lipsky) in Georgia, South Caucasus	Ilia State University	
110	FR-22-402	Missing sustained virologic response (SVR) data among patients enrolled in HCV elimination program - barriers to assessment including COVID-19 pandemic's effects	Health Research Union	

111	FR-22-21528	Development of alcohol and opioid abuse related stroke biomarkers	Ivane Javakhishvili Tbilisi State University	
112	FR-22-10650	Study of gender-specific behavioral, structural and molecular alterations across lifespan in an animal model of autism induced by prenatal exposure to valproic acid	LEPL IVANE BERITASHVILI CENTER OF EXPERIMENTAL BIOMEDICINE	
113	FR-22-6827	The aberrant expression of regulatory factors as the stimuli of oncogenesis	P.Shotadze Tbilisi Medical Academy	Ilia State University