

# Announcement of New Basic Research Projects for the First Half of 2022 by the Ministry of Science and ICT

The Ministry of Science and ICT announces the plan of selection and support for new basic research projects in the first half of 2022 as follows.

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<Competent Ministry>

Minister of the Ministry of Science and ICT

Hyesook Lim

<Specialized Organization>

President of the National Research Foundation of Korea

Kwangbok Lee

## 1. Overview of Program

Program Objective

- Contribution to the expansion of future capabilities of science and technology by strengthening creative and challenging basic research and by fostering outstanding researchers.

Application Procedure: Free application

Support Plan

- Full transition to the support system for each individual field

Academic Category	Support System for Individual Field (CRB Field)	
Natural Science	① Mathematics	
	② Physics	
	③ Chemistry	
	④ Earth Science	
Life Science	⑤ Basic-Molecular Biology ※ The CRB field for basic biology or molecular biology is categorized as a single field of the basic · molecular biology.	
	⑥ Basic Life Science	
Medical Science and Pharmacology	⑦ Medical Science and Pharmacology 1	Basic-Applied Medical Science ※ The CRB field for basic medical science or applied medical science is categorized as a single field of the medical · applied medical science.
	⑧ Medical Science and Pharmacology 2	⑧-1 Nursing Science
		⑧-2 Pharmacology
		⑧-3 Dental Medical Science
	⑧-4 Traditional Korean Medical Science	
Engineering	⑨ Engineering : Mechanical Engineering, Construct/Transportation, Materials Engineering, Chemical Engineering	
ICT-Convergence	⑩ ICT.Convergence : Electrical/Electronic Engineering, Telecommunication, Computer-Software, Bio-Medical Convergence, Energy-Environment Convergence-Integration, Multidisciplinary Convergence-Integration	

※ Please refer to page 4–8 for the individual Field support system.

※ Please refer to the application guidelines (Attachment 4) for the detailed field (RB field) within the CRB fields.

## ○ Individual Research

Program		Program Objectives and Descriptions	Eligible Individuals		
Out standing Grants	Leader Grants	To provide focused support for the world-class level researchers to conduct in-depth studies for the development of novel scientific achievements and new technologies for the future.	Faculty members (Tenure track, non-tenure track also known as full-time/ non-full-time) at colleges or universities, and researchers at National (public), government-funded or private research institutes.		
	Consolidator Grants	Type 1			To support individual researches with high creativity by cultivating capabilities for the outstanding basic research and by providing the platform for the individual researchers to develop leading researchers.
		Type 2			
	Young Scientist Grants	Young Scientist Grants Outstanding	To foster excellent researchers by inspiring new researchers' creative research motivation and maximizing research capabilities.	Within 7 years after obtaining a final doctoral degree, or under the age of 39. Working at university in the fields of science and engineering (full-time), or national (public), government-funded or private research institutes.	Full-time faculty members or full time researchers.
		First Innovation Laboratory <sup>note1)</sup>	To provide the funds for the research facility equipment to the qualified new researchers at the establishing stage to independently conduct creative researches with rich idea.		
		Sejong Science Fellowship	To promote young scientists including post-doctoral fellows to conduct their own research by focusing on only research through this fellowship, thereby developing and establishing themselves as capable researchers in the core science and engineering fields.	Researchers who are not full-time faculty members, or who are non-regular researchers ※ Foreigners and foreign nationals cannot apply.	
Broadening Opportunities Grants	Bridge Grants	To support researchers who had been conducting outstanding research projects, but who took a break from the research.	University faculty members (full-time or non-full-time), or non-regular researchers of national (public) and government-funded research institutes who meet certain conditions* ※Required to satisfy prerequisite note 2)		
	General Grants	To support individual basic research in the fields of science and engineering to help expand research base and to enhance national research capabilities.	Full-time faculty members in the field of science and engineering, or researchers of national (public) government-funded-private research institutes.		
	Starting Grants	To encourage new researchers with research capabilities to expand research opportunities and to establish themselves as an early stage of researcher.	Full-time faculty members at a university who have not received grant awards from independent basic research project, and within 7 years of obtaining a final doctoral degrees or under 39 years of age.		

Note1) Additional support will be provided for research funding from First Innovation Laboratory grant for university faculty (full-time) (excluding the fields of Medical Science and Pharmacology 1).

(In the first year, 50~100 million won, excluding overhead, is provided. However, the additional First Innovation Laboratory Grant (including previously known as 'expenses for establishing research environment' is limited to only one time, and the provision will be announced separately and later after the awardees are selected).

Note2) Within a year (excluding maternity leaves) from the commencement date of Bridge Grant initiation, those who have not been selected for the first new project in 2022 (Leader, Consolidator, Young Scientist Grants) after the completion of outstanding research project (Leader, Consolidator, Young Scientist Grants) (except for those who are conducting other national R&D projects including group research projects).

※ Please refer to the application guidelines for the follow-up support for the Leader Grants, Consolidator Grants, and Young Scientist Grants project supports.

○ Group research

Program	Program Objectives and Descriptions	Eligible Individuals	Annual research fund budget	Research period (maximum)
Centers of Research Excellence	<b>Scientific Field (SRC)</b> To foster outstanding research groups in the field of science, strengthening national basic research capacity including the development of new theories, solution of scientific challenges and others	Group of the researchers (around 10 researchers) from the university with graduate school in the science and engineering fields	Within 1.56 billion won per year <sup>note 1</sup>	7 years (4+3)
	<b>Engineering Field (ERC)</b> To produce basic research outcomes that enable to transfer basic research to the applied research, and to serve as a founding base for the industry-academia cooperation within universities by fostering outstanding research groups in the field of engineering		Within 2.0 billion won	within 7 years (arbitrary decision)
	<b>Basic Medical Science Field (MRC)</b> To strengthen national bio and health research capabilities by fostering research groups in the fields of medical science, dental science, traditional Korean medical science and pharmacology, and then by promoting investigation of human life phenomena and disease mechanisms, and others	Group of the researchers (around 10 researchers) from the university with graduate school in basic medical science (medical science, dental science, traditional Korean medical science and pharmacology)	Within 1.4 billion won	7 years (4+3)
	<b>Convergence Field (CRC)</b> To produce novel creative results and new world-class knowledge including various social issues, public demands, and others by fostering interdisciplinary convergence research groups	Group of the researchers (around 10 researchers) from the university with Science and Engineering, and Humanities/Social Science/Art Graduate school	Within 1.5 billion won	7 years (3+4)
	<b>Regional Innovation Field (RLRC)</b> To provide supports for sustainable and self-sustaining innovative growth foundations, and to strengthen regional research capabilities by fostering research groups in the area of regional innovation	Group of the researchers (within 8 researchers) from the university with graduate school in the science and engineering fields	Within 1.5 billion won	7 years (4+3)
Basic Research Laboratory	<b>In-depth Track</b> To support various types of research that serve to deepen existing research by systematically fostering small-scale research groups	Research group of 3~4 people including full-time faculty from the university of the Science and Engineering fields	Within 500 million won	3 years
	<b>Convergence Track</b> To support research topics that require convergence research in consideration of global research trends, future values, and national scientific competitiveness enhancement			
	<b>Pioneer Track</b> To support the growth of competent young researchers by supporting creative and challenging research in new fields that are rarely attempted in Korea.			

Note1) The field of Earth Science will be provided within 1.3 billion won as an annual research fund budget

※ Center of Research Excellence (the fields of mathematics and physics) and Basic Research Laboratory (the fields of physics and Engineering) will be supported by the followup support. However, other fields will not be supported with the followup supports according to the supporting system for the individual field (please refer to the application guideline for details).

※ SRC: Science Research Center  
 ERC: Engineering Research Center  
 MRC: Medical Research Center  
 CRC: Convergence Research Center  
 RLRC: Regional Leading Research Center

Support plan for the individual field

※ Refer to the application guidelines for the budgets for new projects by the field.

※ Excluding research budgets and research periods, the contents of support are the same in all fields (the field of Medical Science and Pharmacology 1 will not be supported by First Innovation Laboratory)

① Mathematical sciences

Project		Research expense budget.		Research period		
					(Direct cost)	
Individual Research	Outstanding Grants	Leader Grants*		Annual average appx. 400 million won (Annual average direct cost within 320 million won)	5 year (3+2)	
		Consolidator Grants	Type 1	Annual average appx. 150 million won (Annual average direct cost within 120 million won)	1~5 year	
			Type 2	Annual average exceeding 150 million won appx. 250 million won (Annual average direct cost exceeding 120 million won within 200 million won)	1~5 year	
		Young Scientist Grants_Outstanding Track		Annual average appx. 100 million won (Annual average direct cost within 80 million won)	1~5 year	
		Young Scientist Grants_Sejong Science Fellowship Grants		Annual average appx. 130 million won (Annual average direct cost appx. 100 million won)	5 year (3+2)	
	Broadening Opportunities Grants	Bridge Grants		Direct cost 30 million won, 50 million won (Indirect cost paid separately)	1 year	
		General Grants		Annual average appx. 80 million won (Annual average direct cost within 64 million won)	1~3 year	
		Starting Grants		Annual average direct cost within 30 million won (Indirect cost paid separately)	1~3 year	
	Group research	Centers of Research Excellence	Scientific field (SRC)		Within 1.56 billion won	7 year (4+3) (follow-up 3 year)
		Basic Research Laboratory	In-depth Track		Within 500 million won	3 year
Convergence Track						
Pioneer Track						

\* There is no plan to select new Leader Grants from Individual research from the field of mathematics in 2022.

## ② Physics

Project		Research expense		Research period		
		(Direct cost)				
Individual research	Outstanding Grants	Leader Grants		(Phase 1) Annual average appx. 900 million won (Phase 2) Annual average appx. 600 million won	(Phase 1) Annual average direct cost within 720 million won (Phase 2) Annual average direct cost within 480 million won	6 years (3+3)
		Consolidator Grants	Type 1	(Type 1-1) Annual average appx. 150 million won (Type 1-2) Annual average exceeding 150 million won appx. 250 million won	(Type 1-1) Annual average direct cost within 120 million won (Type 1-2) Annual average direct cost exceeding 120 million won within 200 million won	1~5 years
			Type 2	Annual average exceeding 250 million won appx. 400 million won	(Annual average direct cost exceeding 200 million won within 320 million won)	1~5 years
		Young Scientist Grants_Outstanding Track		Annual average appx. 100 million won	(Annual average direct cost within 80 million won)	1~5 years
		Young Scientist Grants_Sejong Science Fellowship Grants		Annual average appx. 130 million won	(Annual average direct cost appx. 100 million won)	5 years (3+2)
	Broadening Opportunities Grants	Bridge Grants		Direct cost 30 million won, 50 million won (Indirect cost paid separately)		1 year
		General Grants		Annual average appx. 70 million won	(Annual average direct cost within 56 million won)	1~3 years
		Starting Grants		Annual average direct cost within 30 million won (Indirect cost paid separately)		1~3 years
	Group research	Centers of Research Excellence	Scientific field (SRC)		Within 1.56 billion won (follow-up 1 billion won)	7 years(4+3) (follow-up 3 years)
		Basic Research Laboratory	In-depth Track		Within 500 million won	3 years (follow-up 3 year)
Convergence Track						
Pioneer Track						

### ③ Chemistry

Project			Research expenses		Research Period		
			(Direct cost)				
Individual research	Outstanding Grants	Leader Grants	Annual average appx. 800 million won		(Annual average direct cost within 640 million won)	9 years (3+3+3)	
		Consolidat or Grants	Type 1	(Type 1-1) Annual average appx. 100 million won (Type 1-2) Annual average exceeding 100 million won appx. 200 million won		(Type 1-1) Annual average direct cost within 80 million won (Type 1-2) Annual average direct cost exceeding 80 million won within 160 million won	1~5 years
			Type 2	Annual average exceeding 200 million won appx. 300 million won		(Annual average direct cost exceeding 160 million won within 240 million won)	1~5 years
		Young Scientist Grants_Outstanding Track	Annual average appx. 100 million won		(Annual average direct cost within 80 million won)	1~5 years	
		Young Scientist Grants_Sejong Science Fellowship Grants	Annual average appx. 130 million won		(Annual Average direct cost appx. 100 million won)	5 years (3+2)	
	Broadening Opportunities Grants	Bridge Grants	Direct cost 30 million won, 50 million won (Indirect cost paid separately)			1 year	
		General Grants	Annual average appx. 70 million won	(Annual average direct cost within 56 million won)		1~3 years	
		Starting Grants	Annual average direct cost within 30 million won (Indirect cost paid separately)			1~3 years	
	Group research	Centers of Research Excellence*	Scientific field (SRC)	Within 1.56 billion won		7 years(4+3)	
		Basic Research Laboratory	In-depth Track	Within 500 million won		3 years	
Convergence Track							
Pioneer Track							

\* There is no plan to select new Centers of Research Excellence (SRC) of Group Research from the field of Chemistry in 2022.

④ Earth sciences

Project		Research expense budget		Research period		
		(Direct cost)				
Individual research	Outstanding Grants	Leader Grants		Annual average appx. 800 million won (Annual average direct cost within 640 million won)	6 years (3+3)	
		Consolidator Grants	Type 1	Annual average appx. 150 million won (Annual average direct cost within 120 million won)	1~5 years	
			Type 2	Annual average exceeding 150 million won appx. 300 million won (Annual average direct cost exceeding 120 million won within 240 million won)	1~5 years	
		Young Scientist Grants_Outstanding Track		Annual average appx. 100 million won (Annual average direct cost within 80 million won)	1~5 years	
		Young Scientist Grants_Sejong Science Fellowship Grants		Annual average appx. 130 million won (Annual average direct cost appx. 100 million won)	5 years (3+2)	
	Broadening Opportunities Grants	Bridge Grants		Direct cost 30 million won, 50 million won (Indirect cost paid separately)	1 year	
		General Grants		Annual average appx. 50 million won (Annual average direct cost within 40 million won)	1~3 years	
		Starting Grants		Annual average direct cost within 30 million won (Indirect cost paid separately)	1~3 years	
	Group research	Centers of Research Excellence	Scientific field (SRC)		Within 1.3 billion won	7 years (4+3)
		Basic Research Laboratory	In-depth Track		Within 500 million won	3 years
Convergence Track						
Pioneer Track						

⑤ Basic-Molecular biology

Project		Research Expenses		Research Period		
		(Direct cost)				
Individual research	Outstanding Grants	Leader Grants		Annual average appx. 800 million won (Annual average direct cost within 640 million won)	9 years (3+3+3)	
		Consolidator Grants	Type 1	Annual average appx. 150 million won (Annual average direct cost within 120 million won)	1~5 years	
			Type 2	Annual average exceeding 150 million won appx. 300 million won (Annual average direct cost exceeding 120 million won within 240 million won)	1~5 years	
		Young Scientist Grants_Outstanding Track		Annual average appx. 150 million won (Annual average direct cost within 120 million won)	1~5 years	
		Young Scientist Grants_Sejong Science Fellowship Grants		Annual average appx. 130 million won (Annual average direct cost appx. 100 million won)	5 years (3+2)	
	Broadening Opportunities Grants	Bridge Grants		Direct cost 30 million won, 50 million won (Indirect cost paid separately)	1 year	
		General Grants		Annual average appx. 70 million won (Annual average direct cost within 56 million won)	1~3 years	
		Starting Grants		Annual average direct cost within 30 million won (Indirect cost paid separately)	1~3 years	
	Group research	Centers of Research Excellence	Scientific field (SRC)		Within 1.56 billion won	7 years (4+3)
		Basic Research Laboratory	In-depth Track		Within 500 million won	3 years
Convergence Track						
Pioneer Track						

⑥ Basic Life Science

Project		Research Expenses		Research Period		
		(Direct cost)				
Individual research	Outstanding Grants	Leader Grants*		Annual average appx. 500 million won (Annual average direct cost within 400 million won)	9 years (3+3+3)	
		Consolidator Grants	Type 1	Annual average appx. 150 million won	(Annual average direct cost within 120 million won)	1~5 years
			Type 2	Annual average exceeding 150 million won appx. 300 million won	(Annual average direct cost exceeding 120 million won within 240 million won)	1~5 years
		Young Scientist Grants_Outstanding Track		Annual average appx. 150 million won	(Annual average direct cost within 120 million won)	1~5 years
		Young Scientist Grants_Sejong Science Fellowship Grants		Annual average appx. 130 million won	(Annual average direct cost appx. 100 million won)	5 years (3+2)
	Broadening Opportunities Grants	Bridge Grants		Direct cost 30 million won, 50 million won (Indirect cost paid separately)		1 year
		General Grants		Annual average appx. 60 million won	(Annual average direct cost within 48 million won)	1~3 years
		Starting Grants		Annual average direct cost within 30 million won (Indirect cost paid separately)		1~3 years
	Group research	Centers of Research Excellence	Scientific field (SRC)		Within 1.56 billion won	7 years (4+3)
		Basic Research Laboratory	In-depth Track		Within 500 million won	3 years
Convergence Track						
Pioneer Track						

\* There is no plan to select new Leader Grants from Individual Research and Centers of Research Excellence (SRC) of Group Research from the field of Basic Life Science in 2022.

⑦ Medical Science and Pharmacology 1 (Basic-Applied Medical Science)

Project		Research Expenses		Research Period		
		(Direct cost)				
Individual research	Outstanding Grants	Leader Grants		Annual average appx. 800 million won (Annual average direct cost within 640 million won)	9 years (3+3+3)	
		Consolidator Grants	Type 1	(Type 1-1) Annual average appx. 120 million won (Type 1-2) Annual average exceeding 120 million won appx. 200 million won	(Type 1-1) Annual average direct cost within 96 million won (Type 1-2) Annual average direct cost exceeding 96 million won within 160 million won	1~5 years
			Type 2	Annual average exceeding 200 million won appx. 400 million won	(Annual average direct cost exceeding 160 million won within 320 million won)	
		Young Scientist Grants_Outstanding Track		Annual average appx. 100 million won	(Annual average direct cost within 80 million won)	1~5 years
		Young Scientist Grants_Sejong Science Fellowship Grants		Annual average appx. 130 million won	(Annual average direct cost appx. 100 million won)	5 years (3+2)
	Broadening Opportunities Grants	Bridge Grants		Direct cost 30 million won, 50 million won (Indirect cost paid separately)		1 year
		General Grants		Annual average appx. 60 million won	(Annual average direct cost within 48 million won)	1~3 years
		Starting Grants		Annual average direct cost within 30 million won (Indirect cost paid separately)		1~3 years
	Group research	Centers of Research Excellence	Basic medical science field (MRC)		Within 1.4 billion won	7 years (4+3)
		Basic Research Laboratory	In-depth Track		Within 500 million won	3 years
Convergence Track						
Pioneer Track						

⑧ Medical Science and Pharmacology 2 (Nursing Science, Pharmacology, Dental Science, Traditional Korean Medical Science)

Project		Research Expenses		Research Period		
		(Direct cost)				
Individual research	Outstanding Grants	Leader Grants*		Annual average appx. 800 million won (Annual average direct cost within 640 million won)	9 years (3+3+3)	
		Consolidator Grants	Type 1	(Type 1-1) Annual average appx. 100 million won (Type 1-2) Annual average exceeding 100 million won appx. 200 million won	(Type 1-1) Annual average direct cost within 80 million won (Type 1-2) Annual average direct cost exceeding 80 million won within 160 million won	1~5 years
			Type 2	Annual average exceeding 200 million won appx. 400 million won	(Annual average direct cost exceeding 160 million won within 320 million won)	1~5 years
		Young Scientist Grants_Outstanding Track		Annual average appx. 100 million won	(Annual average direct cost within 80 million won)	1~5 years
		Young Scientist Grants_Sejong Science Fellowship Grants		Annual average appx. 130 million won	(Annual average direct cost appx. 100 million won)	5 years (3+2)
	Broadening Opportunities Grants	Bridge Grants		Direct cost 30 million won, 50 million won (Indirect cost paid separately)		1 year
		General Grants		Annual average appx. 60 million won	(Annual average direct cost within 48 million won)	1~3 years
		Starting Grants		Annual average direct cost within 30 million won (Indirect cost paid separately)		1~3 years
	Group research	Centers of Research Excellence**	Basic medical science field (MRC)		Within 1.4 billion won	7 years (4+3)
		Basic Research Laboratory	In-depth Track		Within 500 million won	3 years
Convergence Track***						
Pioneer Track						

- \* There is a plan to select new Leader Grants from Individual research in the field of Pharmacology in 2022
- \*\* There is a plan to select a new Centers of Research Excellence (MRC) grant of Group Research from the fields of Pharmacology and Traditional Korean Medical Science in 2022.
- \*\*\* There is no plan to select new Basic Research Laboratory (Convergence Track) of Group Research from the fields of Medical Science and Pharmacology 2 in 2022.
- ※ There is no plan for the new Leader Grants and Consolidator Grant Type 2 in the field of Traditional Korean Medical Science, and no plan for Basic Research Laboratory in the field of Nursing Science.

⑨ Engineering

Project		Research Expenses		Research Expenses		Research Period	
				(Direct cost)			
Individual research	Outstanding Grants	Leader Grants		Annual average appx. 800 million won	(Annual average direct cost within 640 million won)	9 years (3+3+3)	
		Consolidator Grants	Type 1	(Type 1-1) Annual average appx. 100 million won (Type 1-2) Annual average exceeding 100 million won appx. 200 million won	(Type 1-1) Annual average direct cost within 80 million won (Type 1-2) Annual average direct cost exceeding 80 million won within 160 million won	1~5 years	
			Type 2	Annual average exceeding 200 million won appx. 400 million won	(Annual average direct cost exceeding 160 million won within 320 million won)	1~5 years	
		Young Scientist Grants_Outstanding Track		Annual average appx. 150 million won	(Annual average direct cost within 120 million won)	1~5 years	
		Young Scientist Grants_Sejong Science Fellowship Grants		Annual average appx. 130 million won	(Annual average direct cost appx. 100 million won)	5 years (3+2)	
	Broadening Opportunities Grants	Bridge Grants		Direct cost 30 million won, 50 million won (Indirect cost paid separately)		1 year	
		General Grants		Annual average appx. 70 million won	(Annual average direct cost within 56 million won)	1~3 years	
		Starting Grants		Annual average direct cost within 30 million won (Indirect cost paid separately)		1~3 years	
	Group research	Centers of Research Excellence*	Science Field (ERC)		Within 2 billion won		within 7 years (arbitrary decision)
		Basic Research Laboratory	In-depth Track		Within 500 million won		3 years
Convergence Track							
Pioneer Track							

\* There is a plan to select a new Centers of Research Excellence (ERC) grant of Group Research in the field of Chemical Engineering and Materials Engineering in 2022.

⑩ ICT-Convergence

Project			Research Expenses		Research Period	
			(Direct cost)			
Individual research	Outstanding Grants	Leader Grants	Annual average appx. 800 million won	(Annual average direct cost within 640 million won)	9 years (3+3+3)	
		Consolidator Grants	Type 1	(Type 1-1) Annual average appx. 100 million won (Type 1-2) Annual average exceeding 100 million won appx. 200 million won	(Type 1-1) Annual average direct cost within 80 million won (Type 1-2) Annual average direct cost exceeding 80 million won within 160 million won	1~5 years
			Type 2	Annual average exceeding 200 million won appx. 400 million won	(Annual average direct cost exceeding 160 million won within 320 million won)	1~5 years
		Young Scientist Grants_Outstanding Track	Annual average appx. 150 million won	(Annual average direct cost within 120 million won)	1~5 years	
		Young Scientist Grants_Sejong Science Fellowship Grants	Annual average appx. 130 million won	(Annual average direct cost appx. 100 million won)	5 years (3+2)	
	Broadening Opportunities Grants	Bridge Grants	Direct cost 30 million won, 50 million won (Indirect cost paid separately)		1 year	
		General Grants	Annual average appx. 60 million won	(Annual average direct cost within 48 million won)	1~3 years	
		Starting Grants	Annual average direct cost within 30 million won (Indirect cost paid separately)		1~3 years	
	Group research	Centers of Research Excellence*	Science Field (ERC)	Within 2 billion won		within 7 years (arbitrary decision)
		Basic Research Laboratory	In-depth Track	Within 500 million won		3 years
Convergence Track						
Pioneer Track						

\* There is a plan to select a new Centers of Research Excellence (ERC) grant of Group Research in the field of Bio-Medical Convergence, Energy-Environment Convergence-Integration and Telecommunication in 2022.

## 2. Scale of support for new projects in 2022 (draft)

### Support of programs by detailed project

- New projects are divided into 'Initial support' selected in 2022 and 'Follow-up project' with excellent performance among the projects that reached completion in 2022.
- **Application for new project are limited to "Initial Support,"** and guidelines for "Follow-up project" will be provided separately to the principal investigator for submission, evaluation and selection.
- ※ All new projects other than 'Follow-up project' is categorized as 'initial support' regardless of the beneficiary status.

Project		The number of project selection	
Outstanding Grants	Leader Grants	Appx. 13 projects	
	Consolidator Grants	Type 1	Appx. 1,504 projects (including first/second half)
		Type 2	Appx. 171 projects
	Young Scientist Grants_Outstanding Track		Appx. 700 projects
	First Innovative Laboratory		Appx. 100 projects
Young Scientist Grants_Sejong Science Fellowship Grants		Appx. 300 projects	
Broadening Opportunities Grants	General Grants	Appx. 1,960 projects	
	Starting Grants	Appx. 600 projects (including first/second half)	
Centers of Research Excellence	Scientific field (SRC)	Appx. 5 projects	
	Engineering field (ERC)	Appx. 5 projects	
	Basic medical science field (MRC)	Appx. 5 projects	
	Convergence field (CRC)	Free application: 0 (To be determined)	
		Determined application: 1	
Regional innovation leadership research center (RLRC)		Appx. 4 projects	
Basic research laboratory	In-depth/Pioneer Tracks	Appx. 93 projects	
	Convergence Track	Appx. 20 projects	

- ※ This item may be modified once the National Assembly budget is completely confirmed, and the number of new grants may be changed, depending on the budgetary situation.
- ※ Bridge Grants is supported separately by considering the results of applications.
- ※ Leader Grants and Consolidator Grants include the number of follow-up projects. (1 Leader Grants and around 238 Consolidator Grants).
- ※ The number of Centers of Research Excellence grants is based on the number of new projects supported and the number of the Convergence field (CRC) may be changed depending the budget situation.
- ※ The number of Basic Research Laboratory (In-depth/Pioneer Tracks) grants includes the follow-up projects and considering the results of follow-up projects, the final number for each field will be announced early January, 2022. The allocation of In-depth and Pioneer tracks will be decided based on the factors including the number of application for each track.
- ※ Only 9 months of research expenses are paid for the first year of a multi-year research project for Leader Grants, General Grants, Centers of Research Excellence and Basic Research Laboratory.(12 months of research expenses are paid for a year research project of General Grants.)
- ※ For more details, be sure to check the attached project application guidelines.

### 3. Eligibility for application (performing) and restrictions on participation

#### □ Number of applications and assignments

- (Application) As a Principal Investigator for individual research or as a Principal Investigator or a Joint Researcher, you may apply according to the following principles.

- ※ The joint researcher in individual research is exception from this principle (including the joint researchers in ongoing 2022 projects)

#### < First half of year >

- (Individual research, 1st application, early December of 2021) Only one of Individual research (Leader, Consolidator, Young Scientist Grants\_Outstanding Track, Sejong Science Fellowship Grants or Starting Grants)
  - ※ However, it is possible to apply to both Leader Grant and Consolidator Grant at the same time.
  - ※ In case of Consolidator Grant, it is allowed to apply to the same type (type 1 or type 2) only once a year.
  - ※ In case of Starting Grant, it is allowed to apply only once a year during the first and second half.
- (Group research, 1st application, late January of 2022) Only one of Group research (One research project among group research)
- (Individual research, 2nd application, early March of 2022) Individual research (General Grants)
  - ※ Those who are selected to the Bridge Grants program, or those who applied to Balanced Academic Development Program or support programs for academic future generations(Postdoctoral international training program) or Ph.D. student research scholarship program of the Ministry of Education are not allowed to apply to a General Grant project.

#### < Second half of the year >

- (Individual research, 3rd application, June of 2022) One of Individual research (Consolidator Grant-type 1 or Starting Grants)
  - ※ In the case of Consolidator Grant, it is allowed to apply to the same type (type 1 or type 2) only once a year.
  - ※ In the case of Starting Grants, it is allowed to apply only once a year during the first and second half.
  - ※ Those who applied to Support for the Next Generation of Academics (Postdoctoral domestic training program) of the Ministry of Education are not allowed to apply to 3<sup>rd</sup> Individual Research grants (Consolidator Grant-type 1 or Starting Grants)
- (Selection) Only one individual research project as a principal investigator, and/or one group research project as a principal investigator or a joint researcher among the applied research programs.
  - (Individual research) Outstanding Grants(Leader Grants, Consolidator Grants, Young Scientist Grants\_Outstanding Track, Sejong Science Fellowship), Broadening Opportunities Grants(General Grants, Starting Grants), balanced academic development program(of the Ministry of Education), support programs for academic future generations(of the Ministry of Education)
  - (Group research) Center of Research Excellence, Basic Research Laboratory, University-based Research Center(of the Ministry of Education)
    - \* **If an applicant is selected to different programs simultaneously, the higher-grade program will automatically be advanced as the first priority.** (Group research > Leader Grants, Group research > Leader Grants > Consolidator Grants · Young Scientist Grants\_Outstanding Track · General Grants · Starting Grants, balanced academic development program of the Ministry of Education)

**<The number of programs for application and selection in basic research projects>**

Programs			Application				Selection <small>note3)</small>
			※ Deadlines for submission are given in the brackets ().				
			Individual, 1st (Early December 2021)	Group, 1st (Late January 2022)	Individual, 2nd (Early March 2022)	Individual, 3rd (June 2022)	
Individual research	Outstanding Grants	Leader Grants	1 <small>note2)</small>	-	-	-	1
		Young Scientist Grants_Outstanding Track		-	-	-	
		Young Scientist Grants_Sejong Science Fellowship Grants		-	-	-	
		Consolidator Grants		-	-	1	
	Broadening Opportunities Grants	Starting Grants	1	-	-	1	
		Bridge Grants <small>note1)</small>		-	-	1	
		General Grants		-	-	1	
Group research		Centers of Research Excellence	-	1	-	-	1
		Basic research laboratory					

Note1) Only those who apply to outstanding Grants (Leader, Consolidator, Young Scientist Grants\_Outstanding Track) are allowed to simultaneously apply to Bridge Grants with the first application. Only those who cannot apply Consolidator Grants due to the Consolidator Grant Type 1 application at the first half year (but no application of Bridge Grants at the first half year) can apply to the second half year Bridge Grants.

Note2) It is allowed to apply to only one program among Leader, Consolidator, Young Scientist\_Outstanding Track, Sejong Science Fellowship and Starting Grants.

However, it is possible to apply to both Leader Grants and Consolidator Grants.

Note3) **Only one individual research program as a principal investigator and one group research program as a principal investigator or a joint researcher can be selected. (including the program from the Ministry of the Education).**

※ The application due dates can be changed depending on the project processes.

※ The project from the Ministry of Education will be noticed and announced separately.

## □ Restriction on application and fulfillment

### ○ Restriction on application from researchers conducting ongoing projects

- The principle investigator who are conducting an ongoing individual research project can not apply to a new individual research project as a principle investigator.
- The principle investigator or joint researcher who are conducting the group research project cannot apply to new group research project as a principle investigator or joint researcher.

(Exceptions for Regional Leading Research Center (RLRC) are found on page 7 of RLRC application guidelines.)

- ※ **Individual research:** Outstanding Grants (Leader Grants, Consolidator Grants, Young Scientist Grants\_Outstanding Track, Sejong Science Fellowship), Broadening Opportunities Grants (General Grants, Starting Grants), basic individual science & engineering, balanced academic development program, support program for academic future generations.
- ※ **Group research:** Centers of Research Excellence, Basic research laboratory (including global research laboratory), university-based research laboratory.

#### Exceptions

- ▶ In the case that the ongoing project terminates within 10 months from the commencement date of the new project
  - ※ The initial application to the second half year Consolidator Grant type 1(2022.9.1 starts) is allowed only if the ongoing project terminates by 2022.12.31.
- ▶ The principle investigator of Bridge Grants can apply and conduct the Outstanding Research Grant (individual research) within the same year when the Bridge Grant is selected.

### ○ Limitation on one project per one researcher

- The researcher can conduct only one project as a principle investigator in the individual research program.
- The researcher can conduct only one project as a principle investigator or joint researcher in the group research program.

#### Exceptions

- ▶ In the case that the ongoing project terminates within 10 months from the commencement date of the new project

### ○ Allowance of the number of projects that one person can simultaneously participate

- ※ the same rule is applied to the 2022 ongoing projects
- **(Common)** Application of limitation on one person one project(**existing minimum participation rate is abolished**)
- **(Leader Grants)** The principal investigator can conduct only 1 additional project of other national R&D projects (prohibiting conducting other basic research projects) as a principal investigator.
  - ※ Exception: The ongoing project terminates within 10 months from the commencement date of the new project
- **(Research Center of Excellence)** The principal investigator can conduct only 1 additional project of other national R&D projects (including basic research projects) as a principal investigator (prohibiting conducting other group research projects or leader grant project).
  - ※ Exception: The ongoing project terminates within 10 months from the commencement date of the new project
- **(Sejong Science Fellowship)** Minimum 50% of personnel expense (based on personnel expense as a principal investigator)

○ **Common regulation for national R&D**

- **(Limitation on the number of R&D project)** The maximum number of projects that researchers can conduct simultaneously is 5, and the researcher can conduct projects as a principle investigator up to 3 projects among the aforementioned 5 projects.

**Major contents of limitations and exception for the number of R&D projects**

▶ **Article 64 of the Enforcement Decree of the National R&D Innovation Act  
(Limitation on the number of R&D projects)**

- ① The head of central administrative agency can limit the maximum number of R&D projects that researchers can conduct simultaneously is 5, and the researcher can conduct projects as a principle investigator up to 3 projects among the aforementioned 5 projects according to Article 35 Paragraph 1 of the Act.
- ② When the head of central administrative agency calculates the number of R&D projects under Paragraph 1, the head of central administrative agency can exclude any of the following R&D projects for calculating total number of the projects
  1. The R&D projects that terminate within 6 months after the R&D application due dates according to Article 9 Paragraph 2 or Article 10 Paragraph 2.
  2. The R&D projects related to preliminary investigations, planning • evaluation studies, or test • examination • analyses
  3. The R&D projects that aim at adjustment and managements of the R&D projects
  4. The R&D projects that are related to the projects for infrastructure building, higher education support, personnel training, or academic activities, and that do not directly aim at R&D.
  5. The R&D projects related to Article 4 Paragraph 1
  6. The R&D projects that are conducted by R&D institutes under any of following conditions with collaboration with small- and medium-sized enterprises and that the Minister of the ministry of Science and ICT assigned the R&D expenses separately after the consultation with the head of the relevant central administrative agency.
    - a. The R&D institutes that are applied to Article 2 (3) Na to Ba.
    - b. Specialized production and technology institute under Article 42 of the 「Industrial Technology Innovation Promotion Act」
  7. In addition, the R&D projects that are reviewed by the National Science and Technology Advisory Council, because they need to be calculated without being included in the number of R&D projects for the promotion of R&D or other reasons.

※ According to the Enforcement Decree of the National R&D Innovation Act Article 64 Paragraph 2 (7), the individual grants (Leader Grants, Consolidator Grants, Young Scientist Grants\_Outstanding Track, Sejong Science Fellowship, Bridge Grants, General Grants, Starting Grants) that are less than average annual research budget 50 million won (direct + indirect) will not counted as the total number of R&D projects.

- **(Restriction on participation)** The researcher who has previously received punishment for issues relating their previous participation in national research development projects can apply or participate to new projects only when the sanction period is finished by the day before the application due date.

## 4. Application procedure

- Log in to the integrated research support system of NRF (ernd.nrf.re.kr) as a principal investigator, fill out online information, upload and research proposal, and get the approval from the principal host institution (affiliated institute).



※ Check the attached detailed project application guidelines for details.

## 5. Evaluation process

Program		1st evaluation	2nd evaluation
Leader Grants		Discussion	Overseas peer review + presentation
Consolidator Grants	Type 1 (including Type 1-1 and Type 1-2)	Online evaluation	-
	Type 2	Discussion	Presentation
Young Scientist Grants_Outstanding Track		Online evaluation	-
First Innovative Laboratory		Panel Discussion	
Young Scientist Grants_Sejong Science Fellowship Grants		Online evaluation	-
General Grants		Online evaluation	-
Starting Grants		Panel discussion	-
Centers of Research Excellence		Discussion	Presentation
Basic research laboratory		Discussion	Presentation

※ It can be changed by detailed evaluation plan.

※ Discussion and presentation can be conducted via either face-to-face or non-face-to-face means.

## 6. Application period

### ※ Notice

- Applicants should check that the application is marked as “Completed” on the NRF web site before the deadline.

(Please note that the application cannot be completely submitted if it is still listed as “In Process” on the web site).

### < First half >

**[Individual research, 1st]** Leader · Consolidator · Young Scientist Grants\_Outstanding Track · Sejong Science Fellowship · Starting Grants

○ Researcher Application/receipt period : 2021. 11. 26. (Fri) 09:00:00 ~ **2021. 12. 6. (Mon) 18:00:00**

○ Approval from host institute : 2021. 11. 26. (Fri) 09:00:00 ~ **2021. 12. 9. (Thur) 18:00:00**

※ Those who applied to Outstanding Grants(Leader/Consolidator/Young Scientist Grants\_Outstanding Track) can apply to Bridge Grants simultaneously if the applicant satisfies the qualification requirement.

※ Additional support for the beginning First Innovation Laboratory will be announced separately after the selection of the Young Scientist Grants\_Outstanding Track.

**[Group research, 1st]** Centers of Research Excellence · Basic research laboratory

○ Researcher Application/receipt period : 2022. 1. 17.(Mon) 09:00:00 ~ **2022. 1. 28.(Fri) 18:00:00**

○ Approval from host institute : 2022. 1. 17.(Mon) 09:00:00 ~ **2022. 2. 4. (Fri) 18:00:00**

**[Individual research, 2nd]** General Grants

○ Researcher Application/receipt period : 2022. 2. 25.(Fri) 09:00:00 ~ **2022. 3. 7. (Mon) 18:00:00**

○ Approval from host institute : 2022. 2. 25.(Fri) 09:00:00 ~ **2022. 3. 10. (Thur) 18:00:00**

### < Second half >

**[Individual, 3rd]** Consolidator Grants · Starting Grants· Bridge Grants

○ Researcher Application/receipt period : Scheduled in May, 2022

※ Those who applied to Outstanding Grants (Leader/Consolidator/Young Scientist Grants\_Outstanding Track) can apply to Bridge Grants program simultaneously if the applicant satisfies the qualification requirement.

## 7. Timeline (Draft)

Timeline	Contents
November 2021	<ul style="list-style-type: none"> <li>Announcements of applications for new projects for 2022</li> </ul> (First half) Beginning receipt of the applications for the first individual research (Leader / Consolidator type 1, 2/ Young Scientist Grants_Outstanding Track / Sejong Science Fellowship / Bridge Grants / Starting Grants)
January 2022	(First half) Beginning receipt of the applications for the group research (Centers of Research Excellence/ Basic research laboratory)
February 2022	(First half) Beginning receipt of the applications for the second individual research (General Grants)
March 2022	(First half) Commencement of the first individual research (Consolidator type 1, 2 / Young Scientist Grants_Outstanding Track / Sejong Science Fellowship / Bridge Grants / Starting Grants)
May 2022	(Second half) Beginning receipt of the applications for the third individual research (Consolidator type 1 / Bridge Grants / Starting Grants)
June 2022	(First half) Commencement of the first individual research (Leader Grants) (First half) Commencement of the first group research (Centers of Research Excellence / Basic research laboratory) (First half) Commencement of the second individual research (General Grants)
September 2022	(second half) Commencement of the third individual research (Consolidator type 1 / Bridge Grants / Starting Grants)

※ The timeline may be subject to change.

## 8. Other Information

### Guideline for acknowledgement

- When the outcome of the project is published in a research journal, the paper should include the acknowledgement as shown below.

▶ In Korean

이 성과는 정부(과학기술정보통신부)의 재원으로 한국연구재단의 지원을 받아 수행된 연구임  
(No. 한국연구재단에서 부여한 과제 관리번호).

▶ In English

This work was supported by the National Research Foundation of Korea (NRF) funded by the Korean government (MSIT) (No. project management number granted from NRF).

※ MSIT : Ministry of Science and ICT

※ The phrase “This work” can be replaced with the title to be published in the research journal or registered in the patent document.

### Dispatch of researchers to domestic or overseas research institutes

- If a principal investigator is dispatched to a domestic or an overseas research institute over 6 months from the commencement date of the project, a prior approval is necessary for dispatch.
  - However, the principal investigator of Sejong Science Fellowship is allowed to be dispatched to overseas research institute for maximum 1 year during the full fellowship period (5 years), considering the objective and goal of the project.
- ※ If a principal investigator has already been dispatched on the commencement date of the project, an approval should be acquired from the host institute immediately after the arrangement.

### Mandatory online research ethics course

- From 2018, the principal investigator of a basic research project should mandatorily complete the online research ethics course after the commencement of the project. (If the principal investigator fails to complete the course, the principal investigator cannot submit various reports).
  - Designated institute of education operation : Korea Institute of Human Resources Development in Science and Technology (KIRD, [www.kird.re.kr](http://www.kird.re.kr)).
  - Inquiry call about education : KIRD E-learning (1588-5834).

### Guide for mandatory employment of young people in proportion to the government's contributions

- If the main research institute is an enterprise (company), check the contents of ‘Guidelines for the mandatory recruitment of young people in proportion to the governments contributions’ in the application request.

### Creating an evaluation culture with Korean researchers

- Considerations will be taken for the selection of the followup supports by assessing whether the principal investigators of the basic research programs participate the reviewing processes for other grant application, or whether they carry on this as their duties.

## 9. Inquiries

- Inquiries related to system and policy: Basic research promotion division, Ministry of Science and ICT (044-202-4534, 4536, 4531)
- Inquiries regarding project application process: Individual research support team and group research support team, NRF

<b>Division</b>		<b>Contacts information</b>
Outstanding Grants	Leader Grants	042-869-6806
	Consolidator Grants	042-869-6804
	Young Scientist Grants_Outstanding Track (First innovation laboratory)	042-869-6813, 6808
	Sejong science fellowship	042-869-6808
Broadening Opportunities Grants	Bridge Grants	042-869-6804, 6812
	General Grants	042-869-6805
	Starting Grants	042-869-6811
Group Research	Centers of Research Excellence	042-869-6826
	Basic Research Laboratory	042-869-6825, 6821