

Announcement of 2021 Outstanding Overseas Scientist Invitation Program Plus (Brain Pool+)

The Ministry of Science and ICT (MSIT) and National Research Foundation of Korea (NRF) are now accepting applications for new projects under the 2021 Outstanding Overseas Scientist Invitation Program Plus (Brain Pool+) to support research institutes in Korea to attract outstanding overseas researchers in emerging industries in order to promote innovative growth by facilitating joint research in related fields, securing core technologies, and fostering excellent human resources. Interested applicants are kindly requested to file their applications in accordance with the relevant procedures.

January 25, 2021

Choi Kiyong
Minister, Ministry of Science and ICT
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President, National Research Foundation of Korea

1. Purpose

- To enhance research and development (R&D) capabilities and promote innovative growth by attracting outstanding overseas researchers in emerging industries to research institutes in Korea, as a key factor in securing new growth engines for Korea
- To attract outstanding researchers for strategic research in emerging industries led by Korean research institutes and establish a long-term support system to lay the foundation for the future influx of outstanding talent overseas

2. Overview

A. Research areas: Projects related to new industrial fields including 3 strategic investment fields, 8 leading industries and 13 innovative growth engines

- (3 Strategic Investment Industries) 1. Data Economy (Big Data / Blockchains / Sharing Economy), 2. Artificial Intelligence (AI), 3. Hydrogen Economy
- (8 Leading Fields in Industrial Technology) 1. Smart Factories, 2. Smart Farms, 3. Smart Cities, 4. Fintech, 5. New Energy Industries, 6. Drones, 7. Future Automobiles, 8. Bio-Health
- (13 Innovative Growth Engines) 1. Big Data, 2. Next Generation Communications, 3. AI, 4. Autonomous (Driving) Vehicles, 5. Drones, 6. Customized Healthcare, 7. Smart Cities, 8. Virtual Reality and Augmented Reality (AR), 9. Intelligent Robots, 10. Intelligent Semiconductors, 11. Advanced Materials, 12. Innovative New Drugs, 13. New Renewable Energy

B. Invitation eligibility: Overseas-based researchers in emerging industries with outstanding research capabilities (e.g., an overseas Korean resident, ethnic overseas Korean, foreign national, etc.) that a research institute in Korea wishes to hire as a full-time employee

C. Program duration: Up to 10 (2+3+3+2) years

D. Support content: Provision of about 600 million won per year, including personnel costs, living expenses, research expenses, and other expenses

* In the first year, government contributions will be prorated on a monthly basis for the actual research period (including indirect costs).

Program Duration	Direct Costs					Indirect Costs
	Personnel Costs		Research Activity Expenses			
	Internal	Other	Research Expenses	Living Expenses	Other Expenses	
Up to 10 (2+3+3+2) years	Additional personnel costs, excluding personnel costs for full-time employees borne by the research institute	Outsourced staff, student staff, research support staff, etc. ※ It is necessary to assign staff in charge of the relevant administrative work, and the personnel costs incurred will be provided.	Initial cost of laboratory construction, material costs, etc.	Up to KRW 12 million per year per person for monthly rent, <i>jeonse</i> (a lump-sum deposit on a rental space), interest, etc.	Child education expenses (actual expenses of up to 10 million won will be provided per child attending the Nuri Course, or an elementary or secondary school, or an international school where students' academic background is recognized in Korea in accordance with the Elementary and Secondary Education Act), insurance premiums, relocation expenses, domestic and overseas business travel expenses	Limited to a maximum of 10 percent of the research budget, excluding research expenses classified as personnel costs such as personnel costs for postdoctoral researchers and research allowances
Up to a total of KRW 600 million per year						

* For personnel costs, additional government contributions may be provided according to the agreement between the host institution and the invited researcher (amount presented by the institution to the

researcher at the time of recruitment, etc.). **It is advised that the total personnel costs (amount borne by the research institute + additionally incurred personnel costs) should total at least 100 percent of the salary that the invited researcher would receive overseas.**

- * Living expenses and other expenses may be provided for participating researchers accompany the invited researcher to Korea.
- * The personnel costs borne by the research institute must be equal to or higher than the salary of the institute's full-time employees.
- * Corporate research institutes are subject to the government funding scheme for R&D projects outlined in Attached Table 1 of the Enforcement Decree of the National R&D Innovation Act: Up to 50 percent of the total R&D expenses including cash and in-kind support for companies that do not constitute middle-standing enterprises and small- and medium-sized enterprises (SMEs), up to 70 percent for middle-standing enterprises, and up to 75 percent for SMEs.

3. Quota and Eligibility

A. Quota (planned): Around 5 projects in total

B. Eligibility

- R&D institutes: Government-funded research institutes, national and public research institutes, universities and university-affiliated research institutes, corporate research institutes, research institutes run by non-profit incorporated foundations, etc.
- Principal investigator: A university employee holding a position equivalent to dean of academic affairs (or head of faculty human resources), or an employee at a non-university research institute holding a position equivalent to head of the human resources department
 - * The principal investigator described above is not subject to the provision limiting the maximum number of R&D projects that can be carried out simultaneously by a researcher (3 as a principal investigator and 5 as a regular researcher).
 - * After the final selection is confirmed, the invited scientist should submit the research proposal as the principal investigator and sign the agreement (subject to the provision limiting the maximum number of R&D projects that can be carried out simultaneously by a researcher).
- Invited scientist: An overseas-based researcher in an emerging industry with outstanding research capabilities (e.g., an overseas Korean resident, ethnic overseas Korean, foreign national, etc.) that a domestic research institute wishes to hire as a full-time employee.
 - * A doctorate-holder residing abroad (proof such as a certificate of employment at a research institute is required) or an R&D researcher without a doctorate degree with more than 5 years of industry experience overseas as of the date of the announcement.
 - * The invited scientist must not be formally hired by the host institution (program applicant) until the scheduled final selection date (those under suspended employment are also ineligible).

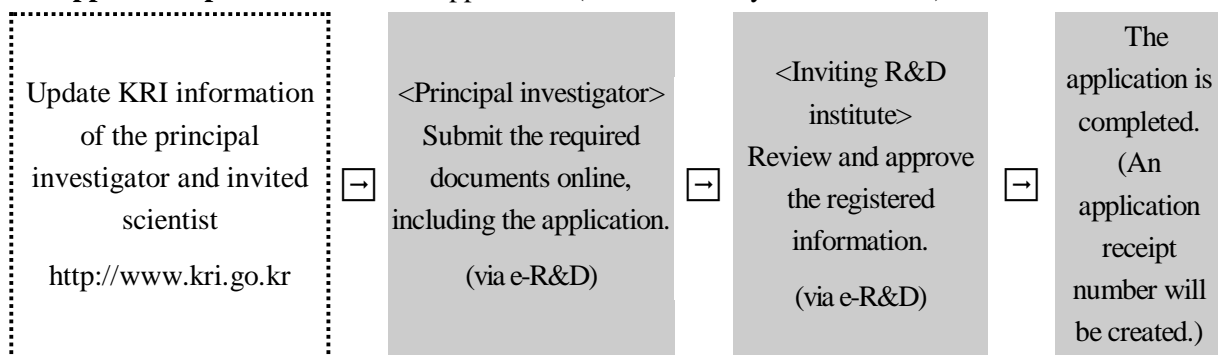
4. Application Procedure and Document Submission

A. Announcement period: January 25 (Mon)-August 31 (Tue), 2021

B. Application submission period

- **1st call:** February 15 (Mon) – **February 26 (Fri), 2021, 6PM (researcher application and institute approval)**
 - **2nd call (scheduled):** February 27 (Sat) - **April 30 (Fri), 2021, 6PM (researcher application and institute approval)**
 - **3rd call (scheduled):** May 1 (Sat) - **June 30 (Wed), 2021, 6PM (researcher application and institute approval)**
 - **4th call (scheduled):** July 1 (Thu) - **August 31 (Tue), 2021, 6PM (researcher application and institute approval)**
- * Approval from the inviting research institute must be completed by 6PM on the application due date. **(Applications not approved by the inviting institution will be treated as not accepted.)**
- * It is highly advisable to submit the application prior to the application due date since the e-R&D system of the National Research Foundation of Korea may not operate smoothly on the due date due to increased traffic.
- * Depending on the project selection status, recruitment may end early (the scheduled 2nd-4th calls may be canceled).

C. Application procedure: Online application (via the e-R&D system of the NRF)



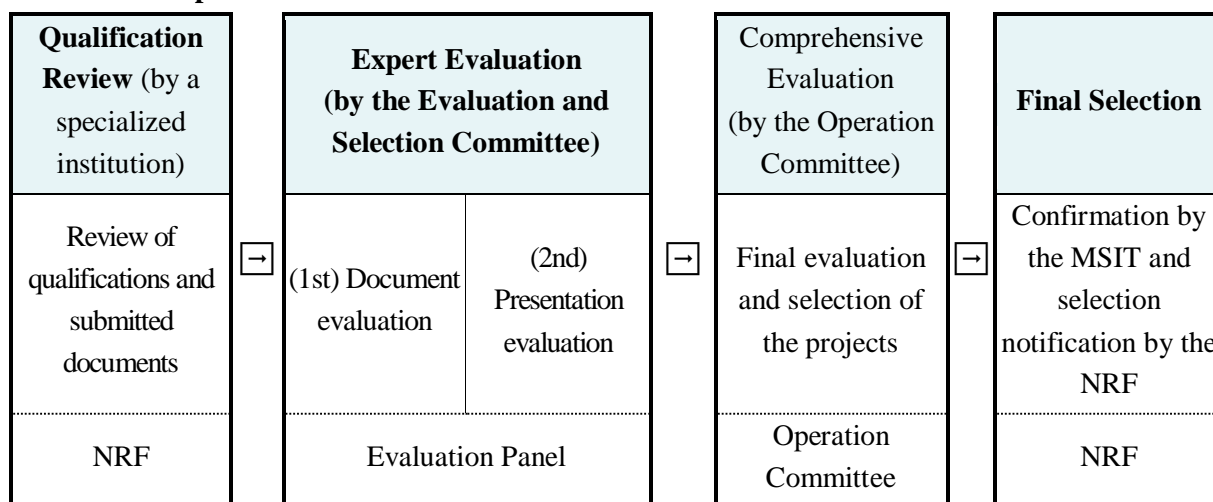
- * The principal investigator of the inviting research institute must be registered in the Korean Researcher Information (KRI) system as the head (or working-level manager) or the highest decision-maker of the human resources department. As a rule, the application for each project by a research institute should be submitted by the head of the human resources department.
- * When two or more projects are applied for by a single research institute, the principal investigator should file the applications as the head or working-level manager of the human resources department registered in the e-R&D system (ernd.nrf.re.kr). (However, the title of the principal investigator must be specified as the head of the human resources department in the application.)

D. Document submission

Document Submission for Applications
<ul style="list-style-type: none"> - An application for the Outstanding Overseas Scientists Invitation Program Plus (BP+) - An agreement for the Outstanding Overseas Scientists Invitation Program Plus (BP+) - Proof of employment (or proof of employment history) for the invited outstanding overseas scientist - Documented proof of research achievements of the invited scientist ※ Submission of the first page of each thesis and the bibliographic information of each patent is mandatory, but submission of other documents is optional. - A certificate of recognition of a corporate research institute or confirmation on the classification of a business enterprise (only applicable for a project applied for by a business enterprise)
Document Submission after the Final Selection and Prior to the Agreement
<ul style="list-style-type: none"> - A research and development (R&D) proposal - A copy of the labor contract (or an official internal notice of personnel appointment) - An agreement to the provision and utilization of personal information and taxation information - A statement of compliance with ethical standards of research

5. Project Evaluation

A. Evaluation procedure



* The above procedure is subject to change depending on the application results.

- Qualification review: Qualifications of the inviting research institute and the invited scientist will be reviewed.
- When the application is filed, all required documents must be submitted and all information in the documents must be accurate. A serious error in the documents or failure to submit any of the required documents (including documented proof of research achievements) will result in the rejection of the application at the qualification review stage.

- (1st) Document evaluation
 - Submitted documents will be reviewed and evaluated according to the field of research and technology.
 - The Evaluation Committee members will review the submitted documents, and the evaluation will be conducted through discussions among the Evaluation Committee members.
- (2nd) Presentation evaluation
 - The Evaluation and Selection Committee composed of experts (possibly including members who will also participate in the document evaluation) will conduct evaluation on the project presentation.
 - * During this face-to-face evaluation, Evaluation Committee members may request changes such as addition or deletion of certain areas of the application, and the inviting research institute may reveal whether it has been accepted or not.
 - The face-to-face presentation will be directly given by the principal investigator from the research institute (or a person delegated by the principal investigator), and a Q&A session will be conducted.
 - * If a face-to-face evaluation is not possible, the evaluation may be conducted through a video conference.
- Comprehensive evaluation
 - The selection and order of priority will be decided after a comprehensive review of prospective support for the research institute (including support for personnel costs, permission of concurrent industry employment, support for family settlement, support for the initial costs of laboratory construction, etc.); utilization plan (in connection with the institute's development plan to nurture talent and to establish an R&D cluster in collaboration with outstanding business enterprises, etc.); the necessity of the invitation; and the research capabilities of the candidate.
- Final selection: The finally selected projects will be confirmed by the MSIT, and the selection results will be notified by the NRF.
- **(For selected projects)** Review of the research proposal and conclusion of the agreement
 - After the hiring of the invited scientist is confirmed, the scientist is required to prepare and submit a research proposal.
 - A special committee consisting of experts will conduct an in-depth review of the research proposal and appropriateness of the calculated research budget to determine matters to be revised and supplemented.
 - After the research proposal is revised and supplemented, the agreement will be concluded and the research budget will be provided.

B. Evaluation items and scoring

Evaluation Item	Evaluation Criteria	Score
Necessity of support	<ul style="list-style-type: none"> • Necessity of inviting the overseas scientist and excellence of the inviting research institute 	20

	<ul style="list-style-type: none"> • Necessity of government support for the field of the project applied by the inviting research institute 	
Capabilities of the research institute to utilize the invited scientist	<ul style="list-style-type: none"> • Research capabilities of the inviting research institute to utilize the invited scientist (e.g., key research field, capabilities, standard of research in related fields, etc.) • Expected impact of inviting the overseas scientist based on the analysis of the strengths and weaknesses of the research institute • Likelihood of the overseas scientist to accept the invitation 	20
Support plan for the invited scientist	<ul style="list-style-type: none"> • Economic support plan such as treatment of the invited scientist (e.g., status-related matters such as maximum salary and allowance for concurrent industry employment, salary, and welfare benefits), matching support for research expenses, and the project budget utilization plan, and the soundness of the plan • Settlement support system (e.g., designated administrative staff, child education and spouse settlement support, etc.) • Physical research environment (laboratory, equipment, etc.) support plan and the soundness of the plan • Other support plans such as a network support plan in related fields 	20
Capabilities of the invitation candidate	<ul style="list-style-type: none"> • Theses, patents, research achievements, technology commercialization, R&D experience, awards, etc. (5 major research accomplishments such as thesis publications and technology commercialization over the recent 5 years) 	30
Expected impact	<ul style="list-style-type: none"> • Expected impact of the project execution on the national economy 	10
Total		100

○ **(For selected projects)** Appropriateness evaluation prior to the agreement

Evaluation Item	Evaluation Criteria
Excellence of the R&D proposal	<ul style="list-style-type: none"> • Necessity and importance of the research, appropriateness of the research methods and calculation of the research budget • Ingenuity (originality) and daring spirit of the research topic and content • Excellence and appropriateness of the research goals • Difference from existing research or potential for further development
Excellence of the talent development plan	<ul style="list-style-type: none"> • Excellence and concreteness of the talent development plan • Excellence of the curriculum, if there is an education (training) program planned.

Excellence of the researcher (and research team)	<ul style="list-style-type: none"> • Excellence and appropriateness of the research capabilities of the principal investigator (and research team)
Utilization of the research achievements and expected impact	<ul style="list-style-type: none"> • Expected academic and technological impact on the research field or related fields • Possibility of social contribution through integration with applied research and commercialization

6. Schedule (Planned)

Schedule	Description
January 25 (Mon), 2021	<ul style="list-style-type: none"> • 2021 BP+ Project Recruitment Announcement (January-August 2021)
February 26 (Fri), 2021	<ul style="list-style-type: none"> • Deadline for the 1st call for project proposals (6PM)
March-April, 2021	<ul style="list-style-type: none"> • 1st call evaluation (review of qualification requirements, expert evaluation, and comprehensive review) and final selection
April 30 (Fri), 2021	<ul style="list-style-type: none"> • Deadline for the 2nd call for project proposals (6PM)
May-June, 2021	<ul style="list-style-type: none"> • 2nd call evaluation (review of qualification requirements, expert evaluation, and comprehensive review) and final selection
June 30 (Wed), 2021	<ul style="list-style-type: none"> • Deadline for the 3rd call for project proposals (6PM)
July-August, 2021	<ul style="list-style-type: none"> • 3rd call evaluation (review of qualification requirements, expert evaluation, and comprehensive review) and final selection
August 31 (Tue), 2021	<ul style="list-style-type: none"> • Deadline for the 4th call for project proposals (6PM)
September-October, 2021	<ul style="list-style-type: none"> • 4th call evaluation (review of qualification requirements, expert evaluation, and comprehensive review) and final selection

* The above schedule is subject to change depending on the performance and progress of the program.

7. Notes on Application and Participation

A. Once the selection is notified, the inviting research institute must complete the hiring of the invited overseas scientist by the end of October 2021 and report to the specialized institution (and by the end of the year. Subsequently, the invited scientist must enter Korea and submit a research proposal.

* However, the schedule may be subject to change and specified separately, depending on the inviting research institute's hiring and appointment procedures, or in the event of a global disaster or natural disaster.

- B. The indirect costs of the research institute are limited to a maximum of 10 percent of the research budget, excluding research expenses classified as personnel costs (e.g., personnel costs for participating researchers, research allowances, etc.).
- C. Pursuant to the National Research and Development Innovation Act and the Enforcement Decree of the same Act, the principal investigator is not subject to the provision limiting the maximum number of R&D projects that can be carried out simultaneously by a researcher (3 as a principal investigator and 5 as a regular researcher). However, **if the invited overseas scientist changes position to that of the principal investigator after the final selection, the principal investigator will be subject to the said limitation.**
- D. If the selection is abandoned without any special reason after the project selection is confirmed, the invited scientist and the research institute may receive a penalty in any future application for the program.
- E. The lack of clarity of the research purpose or content, or the presence of any errors or omissions may be disadvantageous in the evaluation.

【Contact】	
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