Announcement of Brain Pool Program for inviting outstanding scientists from overseas 2022

The MSIT (Ministry of Science and ICT) and NRF (National Research Foundation of Korea) welcome applications from host researchers in South Korea who wish to invite outstanding scientists to join the Brain Pool (BP) Program. This program is designed to invite overseas outstanding scientists to domestic research institutions in Korea, required by domestic industry, academia and research sites, for the enhancement of research competence through joint research in R&D fields in Korea, in which he or she produces high level of R&D performance and to contribute to the internationalization of the domestic research environment, securing new growth engines, nurturing new researchers, and establishing a global network. Interested applicants are requested to file 2022 BP application in accordance with the relevant procedures.

January 28th , 2022

Lim Hyesook Minister, Ministry of Science and ICT

Lee Kwang Bok President, National Research Foundation of Korea

1. Goals

 To enhance the R&D level of Korea by attracting outstanding overseas scientists through various joint research activities in R&D fields in Korea, and to establish long term international cooperation networks.

2. Outline

- A. Fields of Research: All fields in science and technology
- **XEXIST 2018** X Preference fields: high correlation fields related to 8 leading industry technology fields, 3 strategic investment fields and 13 Key innovation growth engines, national essential strategic technology fields
- * (3 Key Strategic Investment Industries) ① Data Economy (Big Date/Block Chain/Sharing Economy), ② Artificial Intelligence (AI), ③ Hydrogen Economy

 * (8 Key Lead Industries) ① Smart Factory, ② Smart Farm, ③ Smart City, ④ Fintech, ⑤ New Energy Industry, ⑥ Drone, ⑦ Future Automobile, ⑧ Bio-health

 * (13 Key innovation growth engines) ① Big Data, ② Next Generation Communications, ③

 Artificial Intelligence, ④ Autonomous (Driving) Vehicles, ⑤ Drone, ⑥ Customized Healthcare,
 ⑦ Smart City, ⑧ Virtual and Augmented Reality, ⑨ Intelligent Robot, ⑩ Intelligent Semiconductor,
- ① Advanced Materials, ② Innovative New Drugs, ③ New and Renewable Energy

(National Essential Strategic Technology field): Semiconductors and displays, storage batteries, 5G and 6G, advanced robots and manufacturing, advanced bio, Cybersecurity, space and aviation, hydrogen, artificial intelligence, quantum

- **B.** Eligibility of Brain Pool Candidates (Invited Scientists): ① Ph.D. conferred scientist who is living overseas (outside of South Korea); or ② in the case of corporate research institutes being the host organization, scientist with five-year or more of on-site R&D experience in the industry overseas (outside of South Korea) regardless of his/her possession of a doctoral degree.
- C. Program Period: (Type 1) 6-12 months*, (Type 2) Max. 3 years
 - * (Type 1) 3-12 months for industrial bodies.
 - X (Type 1) 6~12 months within three-year duration for "Flexible Research Duration research"
 - X (Type1,2) Re-application available X (Type1,2

D. Details of Support:

- Personnel costs for the BP Fellow: Min. KRW 5 Mil./month ~ Max. KRW 25 Mil./month
 - ** Based on the level of the **annual salary (including severance pay)** to his/her original affiliate of the BP Fellow.
- **Invitation Expenses:** Airfare, insurance premiums, moving expenses, child education subsidies (Nuri course) and, business travel expenses (domestic/overseas), Conference attendance fees/Paper publication fees, etc.

Туре	Program Duration	Personnel Costs *Housing allowance included	Invitation Expenses	Indirect costs
【Type 1】 Short Term Support	6~12 months % for industrial bodies: possible for 3-12 months % 6~12 months with in three-year duration for "Flexible Research Duration"	Based on the level of annual salary to his/her original affiliate of the Brain Pool fellow (Min. 5~Max. 25Mil. KRW per month)	Airfare, insurance premiums, child education subsidies(Nuri course) and other invitation expenses.	Max. 5 Mil. KRW per year (including subsidies for assistant staff)
Long Term Support	Max. 3 years	※ For type 2, housing allowance of Max.12Mil.KRW per year can be supported		,

^{*}Other invitation expenses: Korean language courses fee, Quarantine fee, visa issuance fee and etc.

E. Quota and Eligibility

- Quota (Scheduled): Approx. 105 projects

F. Eligibility

- **Host Institution:** Government-funded research institutes, national/public research institutes, universities, research institutes affiliated with universities, corporations, corporate research institutes, and nonprofit research institutes.
- -Host Researcher (BP Applicant): Full-time employees of the respective host institutions who have the rank of at least assistant professor, senior researcher, or chair of a research institute or corporation (corporate research institute).
- * Host researcher cannot apply for Type 1,2 with the same BP applicant

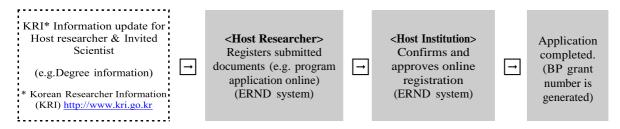
^{}** In case of corporation and corporate research institutes, only 50-70% of personnel costs to his/her original affiliate will be supported (following National Research Development Innovation law)

- Invited Scientist (BP Candidate):
- ① Ph.D. conferred scientist who is living overseas (outside of South Korea); or
- ② In the case of corporate research institutes(or corporation) being the host organization, scientist with five-year or more of on-site R&D experience in the industry overseas (outside of South Korea) regardless of his/her possession of a doctoral degree.
 - * Provisional degree holders or temporary overseas residents throughout the application period are not eligible for BP application.

G. Application Period and Submission

- Recruitment Announcement Period: Jan. 28th (Fri.) 2022 ~ Aug.31st (Wed.) 2022
- Application Submission Period:
- ① 1st Call (Scheduled): Feb.14th(Mon.) 2022 ~ Feb. 28th(Mon.) 2022 by 18:00(application submission and approval of host institution)
- ② 2nd Call (Scheduled): Mar.1st (Tue.) 2022 ~ Apr. 29th (Fri..) 2022 by 18:00(application submission and approval of host institution)
- (3) 3rd Call (Scheduled): Apr. 30th (Sat.) 2022 ~ June. 30th (Thu.) 2022 by 18:00(application submission and approval of host institution)
- 4th Call (Scheduled): July 1st (Fri.) 2022 ~ Aug. 31st (Wed.) 2022 by 18:00(application submission and approval of host institution)
 - ** Approval from their host institutions on ERND should be done by 6 p.m. (Unconfirmed applications will be unapproved.). Applications will only be accepted for projects that obtain approval from their host institutions within the application period, and will be closed at 6 p.m. of the deadline automatically).
 - * You may encounter with systematical error on e-R&D system on the deadline due to increased access, therefore please submit before the deadline
 - **X** Date/Time is based on Korea Local Time (UTC/GMT +9 hours)

H. How to apply: Online (e-R&D system)



- Host research institutes seek out Brain Pool candidates and apply through the Integrated Research Support System of the National Research Foundation of Korea (NRF) (https://ernd.nrf.re.kr)
 - * KRI Information of Host Researcher & Invited Scientist (mandatory) must be <u>updated three</u> to four days in advance as when and how the updates are reflected to the KRI system differs according to the applicant's affiliate.
 - * For the update of KRI Information, please follow the steps of 'Issuance of National Researcher Number and Register a Researcher on KRI' manual.
 - ** Application should be uploaded on the ERND system by the host researcher (BP applicant)'s ERND account not by the BP candidate's. The application shall be prepared within the deadline and made certain the BP application and necessary documentation required is uploaded in time.

I. Documents To Be Submitted

Document to Submit When Applying

- Brain Pool Application Form(form)
- Scanned Copy of a final degree certificate/proof of employment of Brain Pool Fellow*
 * Proof of employment is required only for projects request by corporation.
- An invitation acceptance letter written by the Brain Pool fellow
- Consent to the Provision and the Use of Personal and Tax Information(form)
- Pledges of Research Ethics, Integrity and Confidentiality(form)
- (if necessary) Participation commitment of corporation, proof of eligibility(corporation's registration certificate/accounting audit report for latest 2 years OR financial statement/type of corporation(conglomerate, medium or small sized corporation))

Additional Documents to Submit

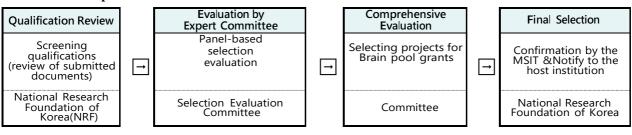
- Salary stubs for the Brain Pool Candidate for the past one year (For reapplication, please submit a paystub of the BP fellow's current affiliate in Korea)
- A Pledge of confidentiality (form)
 - **X** If necessary, might have to submit additional documents before the selection

Notes on Document Submission

- ****** The R&D plan that includes cover, summary, attached documents, and information should be submitted
- ** There is **no designated format** for the invitation acceptance letter written by the Brain Pool fellow. An e-mail containing an electronic signature is also acceptable.
- * The pay stub for the past one year is a mandatory document for the calculation of personnel costs upon the final selection of the project for the BP program. Failure to submit the pay stub may result in the cancellation of the selection.
- ** Required documents* must be written in Korean or English. Documents written in other languages should be translated into Korean or English and notarized, and a notarial certificate should be attached.
 *The R&D proposal must be written in Korean by the principal investigator as a rule, but academic content including research details may be written in English so that the research proposal can be shared with the Brain Pool fellow. The "Outstanding Overseas Scientist Overview" section should be written in Korean or English by the Brain Pool fellow.
- **X** Inclusion of any false information in the documents submitted may result in the cancellation of the final selection.

J. Evaluation Methods

- Evaluation procedures



- * Reviewing Requirements: Screening qualifications of host institutions, host researchers, and invited scientists
- * Evaluation by Expert Committee: Selecting the recommended projects for comprehensive review with an average score of 80 or higher throughdiscussion/evaluation by a panel of experts in each field.

- * Comprehensive Evaluation: Selecting the final projects supported with consideration to policies through comprehensive review by the steering committee of global researcher invitation programs.
- * Final Approval: Final Approval by MSIT and confirming notification to host institution

K. Basic Direction of Selection

- In order to diversify the nationality of attracting scientists, it is possible to limit more than 20% of the total number of candidates for each selection period in one country (excluding Korea).
- Minimum selection quota (30%) for ethnic Koreans or Korean nationals residing overseas in order to strengthen the invitation and build a better global Korean research network.

L. Evaluation Criteria and Score

Evaluation Criteria		Note	Score
Evaluation on BP Project (30)	Excellence and creativity ofresearch project	Excellence and creativity of research projects and plans The need for government support and utilization of BPCandidate for BP project and in relevant field	
	Competence of Host Researcher	Host Researcher's ability to utilize BP Candidate (research capacity, etc.)	10
	Degree of project utilizationand the expected outcome	Domestic-International linkage and cooperation of R&D projects	10
Research Plan of BP Candidate (30)	Research Plan byBP Candidate	Research Plan of BP Candidate Continuous network planning after research period	15
	Volition for support by HostInstitution	Fidelity of the research support plan of the Host Researcher/Institution (funding, research space, research environment, administrative support, etc.) Plan for residential support for BP Candidate (housing, etc.)	15
BP Candidate Compe- tency(40)	Responsibility of BP Candidate	Responsibility of BP Candidate and Specific Plan for Utilizationof BP Candidate by the Host Institution BP Candidate's possession of skills and knowledge for bottleneck techniques in R&D field etc. Validity and achievability of joint research goals and indicators	15
	Competency of BP Candidate		
	Expected Results and BP Candidate's volition	Possible Effect of joint research results and BP Candidate's volition for job fulfillment through BP program	10
Total			

<sup>Extra scores will be added up to the following year for the applicants and candidates
(hostresearchers/ Brain Pool fellows) who have received excellent grades on evaluation
results (applied to BP projects only)</sup>

M. Schedule Planned for the Brain Pool Recruitment in 2022

Schedule	Description
January 28(Fri), 2022	2022 BP Project Recruitment Announcement (January-August, 2022)
February 28(Mon), 2022	Deadline for the 1st call for project proposals (6PM, KST)
March-April, 2022	1st call evaluation (review of qualification requirements, expert evaluation, and comprehensive review) and final selection
April 29 (Fri.), 2022	Deadline for the 2nd call for project proposals (6PM, KST)
May-June, 2022	2nd call evaluation (review of qualification requirements, expert evaluation, and comprehensive review) and final selection
June 30 (Thu.), 2022	Deadline for the 3rd call for project proposals (6PM, KST)
July-August, 2022	3rd call evaluation (review of qualification requirements, expert evaluation, and comprehensive review) and final selection
August 31 (Wed), 2022	Deadline for the 4th call for project proposals (6PM, KST)
September-October, 2022	4th call evaluation (review of qualification requirements, expert evaluation, and comprehensive review) and final selection

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

N. Application and participation restrictions

- Brain Pool fellows are required to enter Korea within 4 months from the selection date and begin research.
- * In cases of global crises, natural disasters, etc., the duration may be subject to change and specified separately.
- Pursuant to the National Research and Development Innovation Act, researchers under participation restrictions are neither eligible for apply for nor participate in the program.
- Pursuant to the Article 64 of the National Research and Development Innovation Act and the Enforcement Decree of the same Act, the program 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).
- If the Brain Pool fellow (domestic principal investigator or overseas scientist) fails to enter Korea and withdraws from the agreement without any justifiable cause, they may receive a penalty of a 3-year restriction when applying for the same program.
- * The Brain Pool fellow is required to have a close consultation with the host institution before applying for the BP program.
- If the Brain Pool fellow (principal investigator or overseas scientist) abandons the selection without showing any justifiable cause, they may receive a penalty of a 3-year restriction when applying for the same program from the date of next program recruitment announcement.
- * The host institution is required to have a close consultation with the Brain Pool fellow on personnel costs and invitation period before applying for the BP program.
- Following project selection, an individual agreement shall be concluded according to the commencement date for each research project and research expenses will be subsequently paid in order to prevent the need to reimburse R&D expenses incurred in cases where the Brain Pool fellow fails to enter Korea.
- In the event that the research period is shorter than the minimum length of the program (12 months), excess

housing allowances and moving expenses must be returned (* Applicable for Type 2 projects).

- For Type 1 projects, in principle, the Brain Pool fellow is provided with accommodation by the research and development institute.
- For more information, please visit the website of National Research Foundation of Korea* or refer to the Brain Pool Guidelines.
- * (Visit <u>www.nrf.re.kr</u> and select the following menu items in order. Program Information > Program Classification
- > Training and Human Resources Development > Outstanding Overseas Scientist Invitation Program > Outstanding Overseas Scientist Invitation Program (Brain Pool) \rightarrow Notice)

[Contact]				
Program Inquiry	International R&D Collaboration Team			
	National Research Foundation of Korea(NRF)			
	(For Korean) 🕮 +82-2-3460-5629, 5637, 5639			
	E-mail: yokang@nrf.re.kr, joohyenam@nrf.re.kr			
	(For English) E-mail: bpkrf@nrf.re.kr			
	* If the line is continuously busy, please send us your inquiries via email.			
Inquiries for Online	For inquires for Korea Researcher Information (KRI), e-R&D system			
Application	please contact			
(KRI, e-R&D system)	2 +82-42-869-7744			

- * This guideline has been translated from original Korean documents with regards to Korean research. Therefore, this translation has focused on providing the main contents and pointsto brain pool overseas candidates for better understanding and subject to change without prior notice. The actual details will follow the "Guidelines for the Management of the Brain Pool (BP) Program" and "BP agreement".
- * In the event of any discrepancy between the Korean original and this English translation, the Korean original shall prevail.