

Announcement of Brain Pool (BP) Program for inviting outstanding scientists from overseas 2020

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 Program (BP Program). This program is designed to invite overseas outstanding scientists for the enhancement of research competence through joint research in R&D fields in Korea, and build a global cooperative research network more efficiently. Interested applicants are requested to file a Brain Pool 2020 application in accordance with the relevant procedures.

January 20th, 2020

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Minister, Ministry of Science and ICT

Roe, Jung-Hye

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.

※ Possible to apply for this program in the case that the host institute is planning to hire the invited scientist (brain pool candidate) as a "full-time (permanent) employee" (When invited as a full time employee, the host researcher of the BP program will be switched to the invited scientist as a principal investigator by the agreement amendment after program selection)

2. Outline

A. Fields of Research: All fields in science and technology with the necessity of joint research with overseas high end scientists.

- Preference fields: high correlation fields related to 8 leading industry technology fields, 3 strategic investment fields and 13 Key innovation growth engines

* (3 Key Strategic Investment Industries) ① Data Economy (Big Data/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 Fin-tech, 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, ⑪ Advanced Materials, ⑫ Innovative New Drugs, ⑬ New and Renewable Energy

B. Eligibility of Brain Pool Candidates (Invited Scientists): ① Outstanding overseas scientists who have five years or more of on-site R&D experience overseas after a conferred doctoral degree ② In the case of corporate research institutes being the host organization, Brain Pool candidates who have five-years or more of on-site R&D experience in the overseas industry may apply regardless of his/her possession of a doctoral degree

C. Program period: (Type 1) 6-12 months*, (Type 2) 3 years (2+1)**

* (Type 1) 3-12 months for industrial bodies

**For Type 2, it will be decided whether to be continued or not the last year (3rd) based on the research achievement evaluation (progress evaluation) for the first 2 years.

※ The possibility of being awarded a Brain Pool Program up to 3 times in a row, a maximum of 5 years including Type 1・2

D. Details of Support: Personnel costs and expenses incurred for inviting the Brain Pool fellow.

- **Personnel costs of the Brain Pool 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 Brain Pool fellow)

※ For corporate research institutes, only 70% of personnel costs will be supported.

- **Invitation Expenses:** Airfare, moving expenses, insurance premiums, business travel expenses (domestic/overseas), child education subsidies (Nuri course), and subsidies for assigned staff

Type	Program Duration	Personnel Costs	Invitation Expenses
【Type 1】 Short Term Support	6~12 months ※ for industrial bodies: possible for 3-12 months	Based on the level of annual salary to his/her original affiliate of the Brain Pool fellow) <u>Min. KRW 5~ Max. KRW 25 million per month</u>	Airfare, moving expenses, insurance premiums, business travel expenses(domestic/overseas), child education subsidies (nuri course, etc.), subsidies for assigned staff
【Type 2】 Long Term Support	3 years (2+1) ※ The possibility of being awarded a Brain Pool Program extension up to 3 times in a row, a maximum of 5 years including Type 1・2	※ For corporate research institutes, only 70% of personnel costs to his/her original affiliate will be supported. ※ In the case of full time (permanent employees), this can be used other than “personnel costs” such as subsidies for research activities, etc.	※For type 2, housing allowances can be supported based on the actual expenses (Max. KRW 12 mil./year/fellow) from 2nd year

3. Quota and Eligibility

A. Quota (Scheduled): around 75

B. Eligibility

- **Host Institution:** Government-funded research institutes, national/public research institutes, universities, research institutes affiliated with universities, corporate research institutes, and nonprofit research institutes.
- **Host Researcher (Brain Pool 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 (corporate research institute).

※ Host researcher cannot apply for Type 1 and Type 2 simultaneously with the same Brain Pool candidate.

- Invited Scientist (Brain Pool Candidate):

- ① Outstanding overseas scientists who have five years or more of on-site R&D experience overseas after a conferred doctoral degree ② (For corporate research institutes) five-years or more of on-site R&D experience in the overseas industry regardless of his/her possession of a doctoral degree

* Brain Pool candidates with Korean nationality must be residing abroad when applying for this program (except for reapplying).

※ In the case of corporate research institutes being the host organization, Brain Pool candidates who have five-years or more of on-site R&D experience in the overseas industry may apply regardless of his/her possession of a doctoral degree

C. Others

- Due to possible health concerns and research capabilities, we strongly encourage the participation of Brain Pool candidates who are younger middle age than advanced age. Also, for inviting diverse nationalities from around the world, more than 20% of total selection quota for one national (except for Korean national) can be limited
- 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.

4. How to apply and what documents to submit.

A. Recruitment Announcement Period: January 20th (Mon.) 2020 ~ August 28th (Fri.) 2020

B. Application Submission Period

- **1st Call : Feb. 10th (Tue.) 2020 ~ Feb. 28th (Fri.) 2020 by 18:00 (Application submission and confirmation of host institution)**
- **2nd Call (Scheduled) : Mar. 9th (Mon.) 2020 ~ Apr. 24th (Fri.) 2020 by 18:00 (Application submission and confirmation of host institution)**
- **3rd Call (Scheduled): May 4th (Mon.) 2020 ~ Jun. 26th (Fri.) 2020 by 18:00 (Application submission and confirmation of host institution)**

- **4th Call (Scheduled):** July 6th (Mon.) 2020 ~ Aug. 28th (Fri.) 2020 by 18:00 (Application submission and confirmation of host institution)

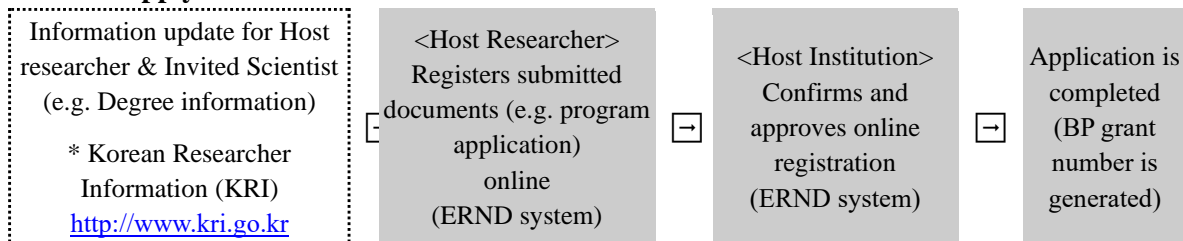
※ Approval from their host institutions on ERND by **6 p.m.**

(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**)

※ **Date/Time is based on Korea Local Time (UTC/GMT +9 hours)**

※ The application call may be closed earlier depending on the selection results (possibility of not opening the 2nd to 4th call if maximum selection quota is reached in the previous call(s)).

C. How to apply: Online



- 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>)

※ Information of Host Researcher & Invited Scientist (mandatory) must be updated three to four days in advance as when and how the updates are reflected to the KRI system differs according to the applicant's affiliate.

※ 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.

D. Documents To Be Submitted

Necessary Documents When Applying
<ul style="list-style-type: none"> - Brain Pool application Form (choose one between [Appendix 1-1] to [Appendix 1-2]) <ul style="list-style-type: none"> ① Appendix 1-1 (for Type 1-2 new application), ② Appendix 1-2 (for Type 1 re-application), ※ Please select appropriate application form based on whether it is a new application or a re-application for an existing project. - Agreement to personal information utilization - Pledge agreement of executing contract of integrity

Necessary Documents After Final Selection (Only for Selected Brain Pool Projects)
<ul style="list-style-type: none"> - Paystub of Brain Pool fellow (invited scientist under BP program) for the entire recent year (For reapplication, please submit a paystub of the BP fellow's most recent affiliate) - Latest degree certificate/proof of work of Brain Pool fellow - Invitation acceptance letter from Brain Pool fellow

5. Evaluation Methods

A. Evaluation procedures

Reviewing Requirements		Evaluation by Expert Committee		Comprehensive Evaluation		Final Selection
Screening qualifications (review of submitted documents) ※excluding screening qualifications for reapplication, - Submit research achievement report of the previous BP project.	→	Project Evaluation+ Evaluation of BP candidates (documentation evaluation by panel) ※scheduled to select projects with an average score of 80 or higher for comprehensive review	→	Selecting projects for Brain pool grants	→	Confirmed by MSIT → Notify to the host institution
National Research Foundation of Korea(NRF)		Selection Evaluation Committee		Steering Committee		National Research Foundation of Korea

- 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 through discussion/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.

※ The details of the selection evaluation shall be developed and implemented separately.

B. (Type 1·2) Evaluation Items and Distribution of Points for a New Application

Evaluation Item		Evaluation Criteria	Allotted Score
Evaluation Of Host Institution (50)	Excellence and necessity for support	▪ Excellence and concreteness of research project ▪ Necessity for government support and utilization of the Brain Pool candidate in the area and the research project	20
	Utilizing the capabilities of the host researcher and the support system	▪ Capabilities of the host institution(host researcher) to utilize the Brain Pool candidate (e.g., research capabilities, network, research budget, and others) ▪ The system of the host institution(host researcher) for supporting the Brain Pool candidate (e.g., support for research, equipment, research expenses)living, and others) ▪ The system of the host institution(host researcher) for supporting life settlement of the Brain Pool candidate(accommodation, living in Korea, Family support, etc.)	20
	Level of utilization and expected impact of the research project	▪ Possibility of a domestic/international linkage and cooperation in a research project	10

Evaluation of the Brain Pool Candidate (50)	Roles and Capabilities of the Brain Pool candidate	<ul style="list-style-type: none"> ▪ Concreteness of the roles and the utilization plan of the Brain Pool candidate ▪ Whether the Brain Pool candidate possesses technologies that are needed for the research project (Research career and achievements of academic activities made for the recent 5 years, excellence in commercialization achievements (Theses published in SCI-enlisted journals, patents, etc.)) ▪ Validity and viability of the objectives and indicators of a joint research 	40
	Expected impact and volition for job fulfillment	<ul style="list-style-type: none"> ▪ Ripple effects as the results of joint R&D ▪ Activeness of the Brain Pool candidate's motivation for applying to the BP program 	10
Total			100

(Type 1) Evaluation Items and Distribution of Points for Re-application

Evaluation Item	Detailed Item	Detailed Evaluation Criteria	Allotted Score
Research Performance of the Previous BP Project (70)	Level of achievement of objectives with regard to the research plan	<ul style="list-style-type: none"> ▪ Whether the objective of the research plan has been achieved ▪ Whether the research result and performance have been utilized 	25
	Details of research implementation and level of utilization of the brain pool candidate	<ul style="list-style-type: none"> ▪ Excellence and ripple effects of research performance including theses, patents, and technical developments ▪ Adequacy of research method and budget spending ▪ Adequacy of the utilization of the Brain Pool candidate, faithfulness of the Brain Pool candidate, level of utilization/cooperation, and others 	30
	Status of support for the Brain Pool candidate	<ul style="list-style-type: none"> ▪ Status of the support provided by the host institution and the host researcher for the Brain Pool candidate (e.g., support for research, living, and others) 	15
Extended Research Plan (30)	Future research plan and operating policy	<ul style="list-style-type: none"> ▪ Plan for an extended research, details, and operating policy ▪ Linkage with the previous research details 	15
	Research objectives and methods	<ul style="list-style-type: none"> ▪ Adequacy and concreteness of the objectives of the extended research and the research methods for achieving the objectives ▪ Adequacy and other matters of budget compilation and spending 	10

	Volition for research fulfillment	▪ Volition of the host institution, host researcher, and the Brain Pool candidate for research fulfillment	5
Total			100

※ For reapplication of projects that have benefitted from the program, the evaluation shall be conducted with a separate evaluation criteria apart from new application projects

※ For reapplication, extra scores will be added up to the following year for the applicants and candidates (host researchers/ Brain Pool fellows) who have received excellent grades on evaluation results

6. Schedule for the Brain Pool (2020) Recruitment

Schedule	Contents
January 20, 2020 (Mon.)	Recruitment Announcement of 2020 (from January ~ August, 2020)
February 28 , 2020 (Fri.)	1st Call Application deadline for program plans (18:00)
March, 2020	Selection evaluation of the 1st call (requirements evaluation, evaluation by experts, comprehensive evaluation) and Final selection
April, 24, 2020 (Fri.)	2nd Call Application deadline for program plans (18:00)
May, 2020	Selection evaluation of the 2nd call (requirements evaluation, evaluation by experts, comprehensive evaluation) and Final selection
June 26, 2020 (Fri.)	3 rd Call Application deadline for program plans (18:00)
July, 2020	Selection evaluation of the 3rd call (requirements evaluation, evaluation by experts, comprehensive evaluation) and Final selection
August 28, 2020(Fri.)	4th Call Application deadline for program plans (18:00)
September 2020	Selection evaluation of the 4th call (requirements evaluation, evaluation by experts, comprehensive evaluation) and Final selection

7. Application and participation restrictions

A. Brain Pool Fellows are required to enter the Republic of Korea and commence research within four months from the date of final selection.

※ Failure to enter Korea within the time limit will lead to the cancellation of selection

B. Researchers under sanctions to participate in National R&D programs can neither apply for nor participate in the program.

C. This program is excluded from the projects subject to the restrictions (The number of R&D projects that can be simultaneously conducted by a host researcher shall not exceed five, among which the number of R&D projects that can be simultaneously conducted as a principal investigator (PI) shall not exceed three) referred to in Article 32 of the Regulations on Management, etc. of National Research and Development Projects.

D. In the event that the selection is abandoned by the applicant without any special reason after the notification of selection, penalty can be applied such as 3-year restriction for the future Brain Pool application by the same applicant and candidate (host researcher & invited scientist).

※ Close consultation with invited scientists (Brain Pool candidates) on personnel costs and timing of the invitation are required before applying for the BP program.

8. Others

- Priorities will be given for inviting researchers who are at the preferred ages to perform research
 ※ For type 2, housing allowances can be supported based on the actual expenses (Max. KRW 12 mil./year/fellow). For type 1, in principle, the residence of Brain Pool Fellows is provided by host institutions (institution that host the Brain Pool fellows).
 - Unclear research purpose or contents, or missing information in the application form may lead to disadvantages for the screening evaluations.
 - For more information, please visit the website of National Research Foundation of Korea* or refer to the Brain Pool Guidelines
- * (Visit www.nrf.re.kr (in Korean)- by selecting Program Information on Menu – Program Classification – Training and Human Resources Development – Global Researcher Invitation Programs -> Brain Pool Program -> Notice)

[Contact]	
Program Inquiry	International R&D Collaboration Team National Research Foundation of Korea(NRF) (For Korean) ☎ 02-3460-5624, 5629 / E-mail: yokang@nrf.re.kr (For English) ☎ 044-866-6381 / E-mail: jenny@krf-help.net ※ If the line is continuously busy, please send us your inquiries via email
Inquiries for Online Application	Research Advisory Center (Call Center) National Research Foundation of Korea ☎ 1544-6118

[Reference] **List of Documents to be Submitted**

Necessary documents when applying
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<List of documents to be submitted>

- ※ Please select an application form between [1-1] to [1-2] based on whether it is a new application or a re-application (within 30 pages excluding cover, summary, appendix and instruction)
- ※ Acceptance letter of Brain Pool candidates-**no fixed form**. Exchange of letters (e.g. e-mail) including signature can also be accepted.
- ※ The **paystub for the entire recent year** is a **mandatory document** for the calculation of the personnel costs when selected as a Brain Pool fellow, so **the failure of the paystub submission can possibly lead to the cancellation of the selection.**
- ※ **Documents must be written in Korean or English. Other languages should be translated into Korean or English, and the translation should be notarized.** The translated notarial documents should be attached.
- * In principle, the application form should be written in Korean by the host researcher (academic parts like research contents can be written in English as to share research plans with overseas researchers). “General Information of Invited Scientist (Brain Pool candidate)” shall be written by Brain Pool candidate in Korean or English.
- ※ **Any false information in the documents submitted may lead to withdrawal of selection even after the final evaluation.**

※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 points to 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.