

| . Overview of Brain Pool Program

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 a long term international cooperation network.
- Balancing the scientific and technical standards in the field of national research institutes, universities, and industries by focusing on compensating for the insufficient number of outstanding researchers.

2 | Outline

- Building an international cooperative network with leading international scientists
- Improvement of the level of science technology in the industry, academia, and institute by focusing on compensating for the insufficient number of outstanding researchers.
- Creating synergetic effects by interacting with Korean and overseas high-level scientists, creating an open research environment for improving the level of globalization.

3 | Eligibility of Invited Scientist (Brain Pool Fellow)

- Foreign or overseas Korean scientists* living abroad and holding a doctoral degree with 5-years or more of R&D experience outside of Korea.

***Korean nationals - limited to those who are residing overseas when applying for the Brain Pool program**
(excluding for reapplication).

※ In the case that a corporate research institute is 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

※ Possibility of re-applying with the same project (same PI, Brain Pool fellow)

※ Possibility of re-applying within 3 years after completing the Brain Pool program for up to a maximum of 3 times (including the first term)(Type 1).

※ Post KRF fellows who have completed the KRF (Korea Research Fellowship) program successfully and received a higher rank for the final evaluation, are eligible as a Brain Pool candidate.

○ Preferences

- Minimum selection quota (30%) for ethnic Koreans or Korean nationals residing overseas.

- Preferences for Type 1 (newly selected project) in the case where the hosted Brain Pool candidate is full time (Permanent employee) by the institutions which are selected as a Global R&D Center (GRCD)

4 Target projects and Fields

○ Target Projects: Those which need outstanding scientists and engineers from overseas and are strategically necessary for Korea to advance its science and technology.

○ Fields of Research: All fields in science and technology

* Provide strategic preferential support in areas where the country's private sector lacks R&D capabilities and where the government's role as a technology provider is critical in 8 innovation growth engine* and 3 strategic investment** technology fields

* Smart factory, smart farm, smart city, fintech, new energy industry, drone, future car, bio health

** Data economy(big data, bloc chain, sharing economy) artificial intelligence(AI), hydrogen economy

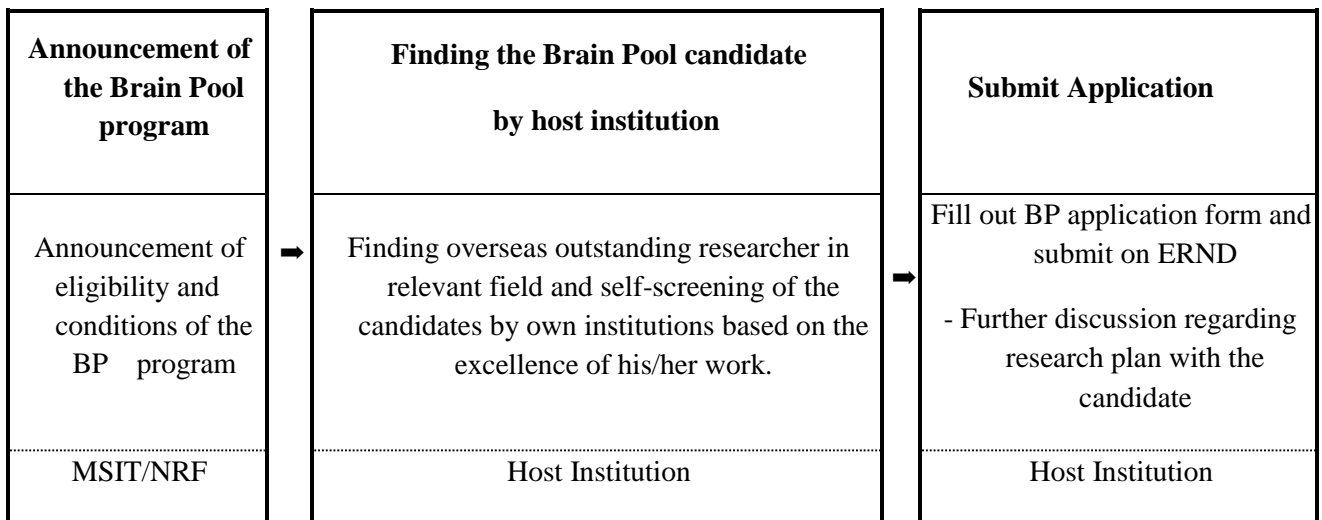
5**Host Institution**

- Government-supported research institutes, national and public research institutes, universities and university-affiliated research institutes, corporate research institutes, and nonprofit research institutes.

6**Utilizing Brain Pool Program**

- **Host institutions discover and search for their Brain Pool candidates and apply for the Brain Pool program**

- Host institutions are required to verify the necessity of hosting Brain Pool fellows, the capabilities of the candidates, and the likelihood of their further development
- Host institutions are required to manage the support system for the Brain Pool fellows (e.g., support for research, living in Korea, administration duties)

<Procedures>

○ **Program period:** (Type 1) 6 to 12 months * (Type 2) 3 years (2 +1)

- For companies' affiliate research institutes, the program period can be from 3 to 12 months.(Type 1) , Possible to reapply maximum 3 years (Type 1)

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

- **(Program period for Type 2)**

Year	Program Period	Remark
First Year	2019.4.1.~2019.12.31. (Max. 9 Months)	Commence BP program within 3 months of the selection notification
Second Year	2020.1.1.~2020.12.31. (12 months)	Project Evaluation (second half of the year)
Third Year	2021.1.1.~2021.12.31. (12 months)	Additional funding year based on the result of the evaluation

○ **Level of Funding: Personnel costs of Brain Pool fellow and Invitation expenses**

- In accordance with the calculation standards stated in the following

< Level of Funding >

Classification	Personnel Costs	Invitation Expenses
Newly Selected (Type 1, Type 2)	KRW 3 ~ 17 Million/ Month (Relevant level of salary to the fellow's original affiliate)	KRW 3.4 ~ 17.6 Million / Year (airfare, moving expenses, Child education subsidies, insurance premiums, etc.)
Re-appointed (Type 1)		

※ Personnel costs are supported in accordance with the calculation standard, which reflects the researcher's salary, and research achievements of Brain Pool fellow (minimum 3 million won / month / maximum of 17 million won / month) including the four major insurances (contributions for the fellow and the host), income tax, severance pay, and other statutory contributions.

※ However, for company-affiliated research institutions of small/medium enterprises, Only 70% of personnel costs for Brain Pool fellows will be supported.

○ **Brain Pool Grants**

- **Providing Brain Pool grants:** Following the conclusion of the agreement with the host upon confirming the fellow's certificates of entry (passports, etc.), Brain Pool funds will be deposited into the host institutions' account, and the program will then start accordingly.
- **Execution of Brain Pool grants:** The host institution pays the fellow's salary at a flat rate every month after completing the employment contract between the fellow and the host institution, and invitation expenses shall be paid based on the actual expenses, in accordance with the Brain Pool guidelines.

① **Personnel costs : KRW 3~17 Million per Month**

- To be set consistent with the level of personnel costs for BP fellows with his/her level of salary, research achievements experience reflected on the calculation criteria below

< Criteria for Calculating the Personnel Costs >

- **KRW 3~17 Million per Month** based on the level of annual salary at Former BP fellow's Affiliate when invited.
- **※ Max. KRW 200 Million a year, including four major insurances (individual (fellow) and institutional (host) contributions), income tax, severance pay, and other statutory contributions.**

<Criteria for Calculating the Research Achievements>

-In the case that the total exceed 30 points, an additional 5% of the personnel costs a month will be provided

Calculation Criteria	Points	
	Subtotal	Total
① Published on SCI-enlisted journals (Total of 25 points) . SCI Journal: 2 points per thesis . SCI Journal-E: 1 point per thesis -----	However, the sum of the scores of ① and ② may not exceed 30 points	30
② Number of patent acquisitions: 2 points per case (total of 25 points)		

② **Invitation Expenses** (Airfare, Moving expenses, child education subsidies, insurance premiums, etc.) : **Max. KRW 17.6 Million (Actual expenses)**

※ Airfare, insurance premiums, moving expenses can be paid within the scope of the each criteria.

- **Airfare and insurance premiums:** To be paid for actual expenses upon the proof of payment within the scope of the following criteria

(Unit: KRW 1,000)

Area	Airfare (applicable 12 months or more) + Insurance Premiums		
	3-5 Mos	6-9 Mos	10-12 Mos
Japan, China, Taiwan	3,400	5,300	6,200
Southeast Asia	3,600	5,700	6,600
India, West Asia, Middle East	4,100	6,700	7,600
North America (western region), Australia, Europe, Russia	5,100	8,700	9,600
North America (middle and eastern regions)	5,600	9,700	10,600
Latin America, Africa	6,600	11,700	12,600

※ Airfare: Airfare shall be paid for the Brain Pool Fellow and one accompanying family member to arrive in South Korea, and will be reimbursed upon proof of payment and provided once (for the projects 12 months or more).

※ Injury/disease compensation insurance: Host institutions may purchase appropriate plans for the BP fellow from private insurance companies

- **Moving expense (Relocation Expenses):** To be paid for actual expenses upon the proof of payment within the scope of the following criteria

(Unit: KRW 1,000)

Region	Support Amount
Japan, China, Taiwan	500
Southeast Asia	600
India, West Asia, Middle East	800
North America (western region), Australia, Europe, Russia	1,100
North America (middle and eastern regions)	1,300
Latin America, Africa	1,600

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To be paid for actual expenses for child education subsidies for BP fellows max. KRW 5 Million a year

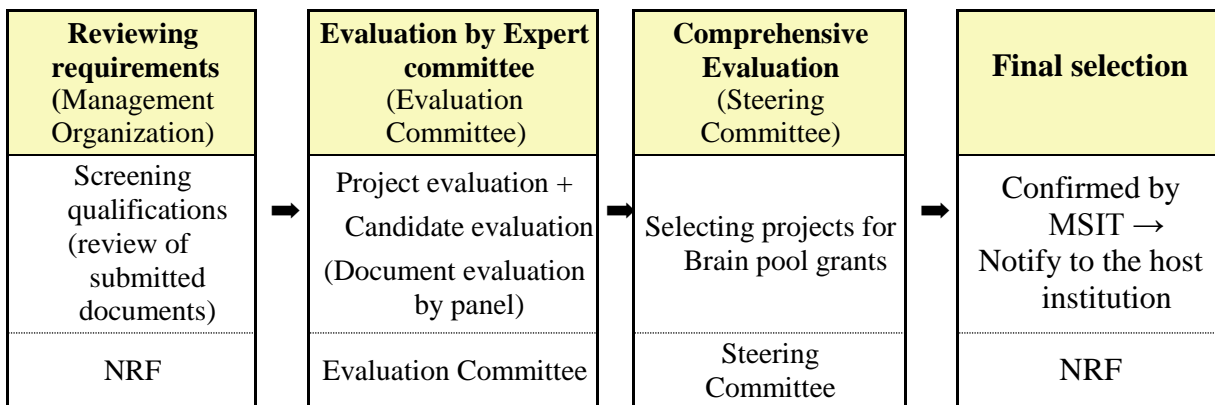
- ※ If BP fellows' immediate child(s) is/ are under Nuri course at kindergarten or daycare, part of the tuition fees of kindergarten children aged 3–5 or the subsidies of daycare center children aged 3–5 can be covered, if applicable
- ※ Support child education fees for elementary to high school course (Foreign (private) School: Enrollment fees (Registration fees), Annual Tuition Fees

- **Expenses for domestic travel and for attending academic conferences or seminars (within Korea)** can be set for domestic travel and for attending academic conferences expenses with remaining balances from airfare, moving expenses, insurance premiums, child education subsidies.

8

Selection Evaluation

A. Procedures



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

Evaluation Item		Evaluation Criteria	Allotted Score
Project Evaluation (40)	Excellence and necessity for support	<ul style="list-style-type: none"> ▪ Excellence and concreteness of research project ▪ Necessity for government support and utilization of the Brain Pool candidate in the area and the research project 	15
	Utilizing the capabilities of the host researcher and the support system	<ul style="list-style-type: none"> ▪ Capabilities of the host researcher to utilize the Brain Pool candidate (e.g., research capabilities, network, research budget, and others) ▪ The system of the host researcher and the host institution for supporting the Brain Pool candidate (e.g., support for research, living, and others) 	15
	Level of utilization and expected impact of the research project	<ul style="list-style-type: none"> ▪ Possibility of a domestic/international linkage and cooperation in a research project 	10
Evaluation of the Brain Pool Candidates (60)	Roles 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 desperately needed for the research project ▪ Validity and viability of the objectives and indicators of a joint research 	25
	Capabilities of the Brain Pool candidate	<ul style="list-style-type: none"> ▪ Diploma and research career ▪ Theses published in SCI-enlisted journals, patents, and achievements of academic activities made for the recent six years ※ In the case of industrial bodies, they can be substituted with achievements of technologies and businesses including patents, technical transfers, and technical commercialization. 	25
	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 motive for applying to the program 	10
Total			100

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

Evaluation Item	Detailed Item	Detailed Evaluation Criteria	Allotted Score
Research Performance of the Existing 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 and methods of research implementation	<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 	20
	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
	Level of utilization of the Brain Pool candidate	<ul style="list-style-type: none"> ▪ Adequacy of the utilization of the Brain Pool candidate, faithfulness of the Brain Pool candidate, level of utilization/cooperation, and others 	10
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 existing 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	<ul style="list-style-type: none"> ▪ Volition of the host institution, host researcher, and the Brain Pool candidate for research fulfillment 	5
Total			100

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

.※ For a reapplication of BP projects, 3-5 percent of selection evaluation scores will be added or deducted depending on evaluation results

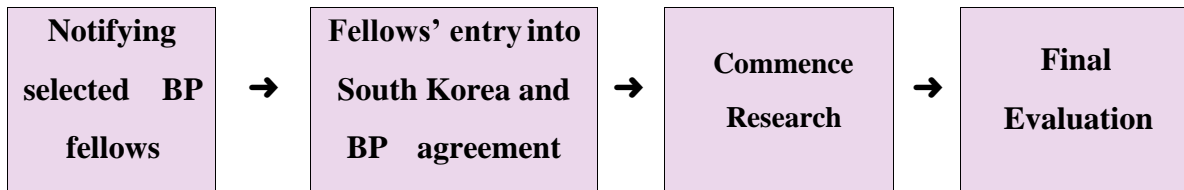
C. (Type 2) Evaluation items and Distribution of Points

Evaluation Item		Evaluation Criteria	Allotted Score
Project Evaluation (30)	Excellence and necessity for support	<ul style="list-style-type: none"> ▪ Excellence and concreteness of research project ▪ Necessity for government support and utilization of the Brain Pool candidate in the area and the research project 	10
	Utilizing the capabilities of the host researcher	<ul style="list-style-type: none"> ▪ Capabilities of the host researcher to utilize the Brain Pool candidate (e.g., research capabilities, and others) 	10
	Level of utilization and expected impact of the research project	<ul style="list-style-type: none"> ▪ Possibility of a domestic/international linkage and cooperation in a research project 	10
	Subtotal		30
Research Plan of Brain Pool Candidates (30)	Research plan of Brain Pool candidates	<ul style="list-style-type: none"> ▪ Research Plan of Brain Pool Candidates ▪ Continued networking plan with Brain Pool candidate after completing the Brain Pool program 	15
	Host institution's intention to support	<ul style="list-style-type: none"> ▪ Plan for supporting the Brain Pool candidate (Supporting research funding from host institution, office space, research environment, administrative assistance, etc.) ▪ Plan to support the settlement of the Brain Pool Candidate (Housing, etc.) 	15
	Subtotal		30
Evaluation of the Brain Pool Candidates (40)	Roles 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 desperately needed for the research project ▪ Validity and viability of the objectives and indicators of a joint research 	15
	Capabilities of the Brain Pool candidate	<ul style="list-style-type: none"> ▪ Diploma and research career ▪ Theses published in SCI-enlisted journals, patents, and achievements of academic activities made for the recent six years ※ In the case of industrial bodies, they can be substituted with achievements of technologies and businesses including patents, technical transfers, and technical commercialization. 	15
	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 motive for applying to the program 	10
	Subtotal		40
Total			100

11 . Management of Brain Pool Program

1

Procedures of BP program



2

Major details

•Notification of selection results and discussion of invitation requirements:

Within 7 days from the date selection results are notified, host institutions shall submit the results of the final discussion to NRF regarding invitation conditions between the host institutions and fellows (Host institutions →NRF)

※Within 7 days from the announced date selection results.

•Submission of the necessary documents after selection:

- Paystub of Brain Pool fellow (invited scientist under BP program) for the entire recent year.

- Latest degree certificate of Brain Pool fellow

- Invitation acceptance letter from Brain Pool fellow (for host institution)

※Within 1 month from the announced date selection results.

•Submission of the agreement report and concluding agreement:

Contract between fellows and host institutions following the fellows' entry into South Korea, and concluding agreement with NRF.

※ Agreement Report- the contract between the fellows and host institutions, and the fellows' certificates of entry (passports, etc.) must be attached at the time the agreement with NRF is concluded.

•BP funds and commencement of the BP Program :

Following the conclusion of the agreement, BP funds will be deposited into host institutions' account, and the BP program will start accordingly

※ Entry into South Korea and the initiation of the BP program must be commenced within 3 months from the date selection results are notified (Delay of initiation research over 3 months will lead to the withdraw of the program.).

•Conducting the BP program and managing & executing research expenses:

The BP program will be conducted in accordance with program guidelines and research plans.

※ Should any important changes in the plans occur, they must be reported to the NRF for approval.

•Adjustment of research expenses:

The records of research expenditures used shall be reported to NRF and adjust costs **within 3 months after the BP agreement ends.**

•Reporting and evaluation outcomes:

Host institutions and fellows will submit outcome reports within one month after the BP agreement ends, and NRF will evaluate the outcomes.

3 Roles and Responsibilities of Each Party

Each party is obligated to observe the following **roles** and **responsibilities**.

Classification	Roles and responsibilities
Host institutions	<ul style="list-style-type: none">• Supervise overall affairs, including support for and achievements of fellows.<ul style="list-style-type: none">- Retrieve and return BP funds in the case of the BP Program renunciation or agreement cancellation.• Obligation to manage supporting fellows' research and achievements under BP Program<ul style="list-style-type: none">- Supporting fellow's settlement by providing housing, etc.• Confidentiality of BP project and compliance of research ethics

Host Researchers	<ul style="list-style-type: none"> •Manage the diligence, attendance, working attitude, progress, and achievements of BP fellows. •Manage research costs, and overall research performance. •Support joint research systems with Korean researchers and enhance their capabilities.
Managing Organization (NRF)	<ul style="list-style-type: none"> •Examine and manage the BP Program progress, PR activities, and support the BP Program policy. -Conduct final evaluations and follow-up management of fellows and their achievements.

4 Management, etc. of BP Fellows

•Work Conditions:

Fellows are required to engage in full-time research at host institutions during BP tenure.

•Lecture and Research Performance:

Upon obtaining approval from the head of the competent host institutions and host researchers, fellows may undertake a university lecture (1 subject) or in another R&D project related to the research project under the BP program (Up to 30 % of participation rate).

• Paid Leave:

Up to 20 days per year (Based on the BP program period (12months) set under the agreement)

※ The number of days for paid leave only includes business days (excluding national holidays and host institutions' holidays), and if the number of days used as paid leave exceeds the allowable number, personnel costs corresponding to the amount exceeded, calculated on a daily basis, must be returned.

※ If the BP program is withdrawn during the period of the BP program tenure, the number of days for paid leave will be recalculated based on the actual period of the program.

•Overseas Business Trips: Up to 10% of the grant's duration

-If the accumulated number of days spent for overseas business trips exceeds 10% of the grant's duration or if the number of days for one business trip exceeds 10 days, it shall be approved in advance by the head of the host institution, which, in turn, shall submit the details of the approval and the business trip plan to the NRF. If the number of days for one business trip does not exceed more than 10 days, it can be reported after the business trip.

-A report on each business trip must be submitted to the head of the host institutions upon the end of the overseas business trip (within 7 days from the trip's conclusion).

※ The duration of any overseas business trip that is not recognized as an official business trip will be deducted from the number of days for paid leave: If the duration exceeds the maximum number of days for paid leave, personnel costs corresponding to the excess will be retrieved.

• **Research Performance:**

No gap should be created in research performance: should any gap in research performance be created for one month or longer, the BP program will be withdrawn and BP funds must be retrieved.

5 Matters to be Observed for the BP Program

•The BP program may be withdrawn, or requests for the reimbursement of money already paid if it judges any of the following circumstances to pertain:

-Where it is deemed to have caused an obvious disadvantage to national interest.

-Where any inconvenience is caused to the program progress, or where any grave setbacks are caused intentionally.

-Where any false information is submitted in the application forms, the BP Program plans, etc.

- Where the fellows do not enter Korea nor commence research within three months from the date of the grant award notification.

-Where any host institutions or fellows cease performing the project.

-Where the fellows have been employed by the host institution or another institution

-Where any fellows have caused, or is likely to cause, a gap in research performance from one month or longer, except for unavoidable circumstances such as sick leave or maternity leave.

-Where any other reasons for a termination of the agreement (such as on-site inspection results).

•When the BP program is withdrawn, the host institution is obligated to retrieve BP funds.

※ When the BP program is withdrawn due to any grounds attributable to host institutions or fellows, all or some of the BP funds that was already paid must be retrieved, and sanctions can be implemented where necessary.

- All tangible and intangible rights obtained from the program, such as intellectual property rights, are owned by their respective host institutions, subject to the institution's regulations or mutual agreement.

- Any publication of research outcomes must indicate the following acknowledgement.

- ※ 국문표기 : 이 논문은 0000년도 정부(과학기술정보통신부)의 재원으로 한국연구재단의 지원을 받아 수행된 해외고급과학자초빙(BP, Brain Pool)의 연구 임(No. 한국연구재단에서 부여한 과제 관리번호)

- ※ English: This work was supported by Brain Pool Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Science and ICT (grant number)

III. Application

1. How to apply

Host researchers file an online application via the NRF website (ernd.nrf.re.kr).



Discover

BP candidate

by host(PI)

Further discussion and preparation regarding research plan & required documents to be submitted with the candidate

Submit applications to ERND(online) system

by PI's account



2. Required documents

Necessary documents when applying	Necessary documents after final selection
<p>-Brain Pool application form (choose one between [Appendix 1-1] to [Appendix 1-3])</p> <p>① Appendix 1-1 (for Type 1 new application),</p> <p>② Appendix 1-2 (for Type 1 re-application),</p> <p>③ Appendix 1-3 (for Type 2)</p> <p>※ Please select appropriate application form based on whether it is a new application or a re-application for an existing</p>	<p>- Paystub of Brain Pool fellow (invited scientist under BP program) for the entire recent year (for reapplication, please submit paystub of former affiliate before joining the BP program)</p> <p>- Latest degree certificate of Brain Pool fellow</p> <p>- Invitation acceptance letter from Brain Pool fellow (for newly-selected project)</p>

3. Qualifications

Classification	Qualifications
Host institutions	<p>Government-supported research institutes, national and public research institutes, universities and university-affiliated research institutes, corporate research institutes* , and nonprofit research institutes.</p> <p>* Corporate research institutes are those established as SMEs and venture businesses under Article 14 (1) of the Basic Research Promotion and Technology Development Support Act and Article 16 (1) of the Enforcement Decree of the same Act</p>
Host researchers (BP Applicant)	<p>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) and satisfy the following requirements: individuals who have guaranteed employment for the program’s duration and are able to concentrate on performing the relevant project</p> <p>※ This BP program will be excluded from the projects subject to the restrictions (the number of R&D projects that can be simultaneously conducted by a researcher shall not exceed five, among which the number of R&D projects that can be simultaneously conducted as a principal investigator shall not exceed three) referred to in Article 32 of the Regulations on Management, etc. of National Research and Development Projects.</p>
Invited Scientists (BP Candidates)	<p>○ Foreign or overseas Korean scientists* living abroad and holding a Doctoral degree with 5-years or more of R&D experience outside of Korea.</p> <p>*Korean nationals - limited to those who are residing overseas when applying for the Brain Pool program(excluding for reapplication).</p> <p>※ In the case of that corporate research institute is 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</p>

4. Contact Information

NRF Global R&D Cooperation Team

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5. Schedule for the 1st round of Brain Pool, 2019

Schedule	Details
Dec. 27th(Thur.), 2018	Announcement of the 1st-round BP program of 2019
Mar. 5th (Tues.), 2019	Applications closed (18:00, Korea time)
Mar. 6th(Wed.), 2019	Approval from host institutions on ERND closed (18:00, Korea time)
In March , 2019	Selection evaluation (Reviewing requirements, Evaluation by Expert, Comprehensive evaluation)
In Early Apr.,2019	Final selection

※ 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.