

# Korea's Invitation Programs for Outstanding Overseas Researchers

Brain Pool (BP) Program Korea Research Fellowship (KRF) Program



## **Introducing Korea**

### Korean People

Population 51,000,000

Lowest Illiteracy Rate in the World

The World's 13<sup>th</sup> Longest Average Life Span

81.8 age

### Korean Economy & Exports



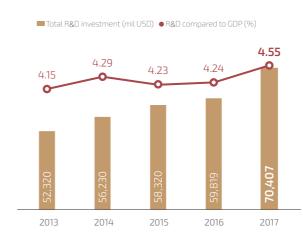
### Korean Culture



## Introducing R&D Environments in Korea

### Overall R&D (Government & Private) Investment

• Korea invested \$70,407 million in R&D, 5th largest in the world.



### Korean Achievements in Science & Technology

- Ranks 1st in the Bloomberg Innovation Index
- · Ranks 7th in the IMD science competency Index



- Innovation Indikator (Deutsche Telecom etc.)

- Ranked 6th in 2015
- Science competency has increased since 2005

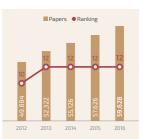
### The R&D Expenditure in Korea

• The R&D expenditure in Korea in relation to its GDP was 4.55%, 1st in the world.



### Korean Achievements in Science & Technology

• The number of SCI journal articles increased to 59,628 in 2016, 12th in the world.





The number of SCI journal articles

The number of citations in scientific journals



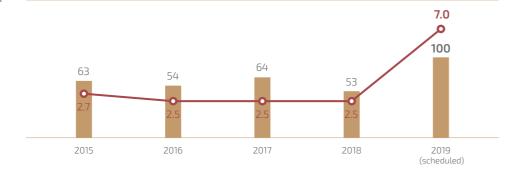
# **Brain Pool Program**

Since 1994, a total of 1,909 mid-career researchers have been invited to research institutions in Korea to perform joint research projects. Maximum amount up to \$177,000 (USD)/person/year are provided for personnel costs and invitation expenses for the invited scientists.

### **Program Details**

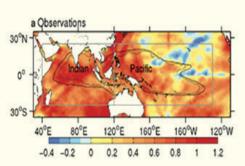
- Eligibility of Invited Scientists (Brain Pool candidates)
   Outstanding scientists in all fields of science and technology who have 'more than five years of experience in R&D outside of Korea after obtaining a Ph.D'.
- Quota for 2019 (Scheduled): Around 100
- Application Submission Period
   (1st) Dec.27, 2018 ~ Mar.5, 2019 18:00 (Korea Local Time)
- (2nd) Scheduled to be announced on May ~ June





### < Representative Achievements from the Brain Pool Program>

(Host PI) Prof. Seung-Ki Min of POSTECH (Brain Pool Fellow) Dr. Evan Weller



In the joint study by Prof. Seung-Ki Min (host PI) & Dr. Evan Weller (Brain Pool Fellow), the cause of ocean warming and its impact on the extreme climate in East Asia was analyzed. This is the world's first research to discover the fact that the cause of warm pool expansion is related with the increase in green house gas emissions due to human activities.

• Title : Human-caused Indo-Pacific warm pool expansion (Journal : Science Advances)



# Korea Research Fellowship

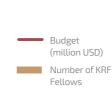
Since 2015, a total of 182 overseas early career researchers have been invited to research institutions in Korea and got long-term growth support. Maximum amount up to \$62,000 (USD)/person/year are provided for personnel costs, living expenses and other expenses for the invited scientists.

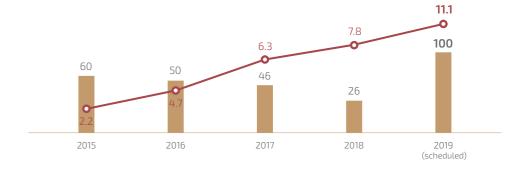
### **Program Details**

- Eligibility of Overseas Ph.D. Researchers (KRF candidates)
   Overseas post-doc researchers or Korean national post-doc researchers
   currently residing outside of Korea who have 'obtained their doctoral degree
- Quota for 2019 (Scheduled): Around 100
- Application Submission Period
   (1st) Feb. 1, 2019 ~ Apr. 12, 2019 18:00 (Korea Local Time)
   (2nd) Scheduled to be announced on June ~ July

within the past five years' starting from May 31, 2019

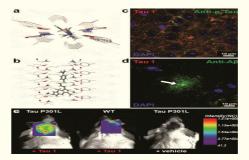
### **Statistics**





### <Representative Achievements of the KRF Program>

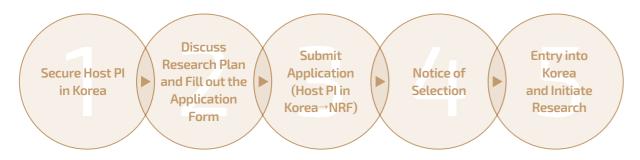
 $\label{thm:post_pot} \mbox{(Host PI) Prof. Kim, Jong Seung of Korea University} \\ \mbox{(KRF Fellow) Dr. Peter Verwilst}$ 



The Joint study by Professor Kim Jong Seung - Dr. Peter Verwilst (KRF fellow) discovered a selective drug delivery system for cancer activation under hypoxia conditions. 2 papers related to this project were published in 'Chemical Society' Journal. (top 2% of the JCR)

- Title: Organic molecule-based photothermal agents: an expanding photothermal therapy universe (Journal: CHEMICAL SOCIETY REVIEWS)
- Title : Shedding light on tau protein aggregation: the progress in developing highly selective fluorophores (Journal : CHEMICAL SOCIETY REVIEWS)

# **Application Procedures for Overseas Researchers**



- ① Secure Host PI in Korea: Secure host PI in Korea via participating in the international conferences for networking or by "Research Host Matching Service" in NRF.
- \* Research Host Matching Service can be provided at www.bpkrf.or.kr
- % You may find information about Korea's R&D research fields at NTIS system (www.ntis.go.kr)
- ② Fill out the Application Form: Discuss the field of joint research and fill out the application form with host PI and invited researcher
- ※ You may find application forms at www.bpkrf.or.kr
- ③ Submit Application: Host PI in Korea shall apply for the program via ERND\* system of NRF (Host PI→NRF) \*Integrated Research Support System
- ④ Notice of Selection: Notice of selection results (NRF→Host PI)
- ⑤ Entry into Korea and Initiate Research: Entry into Korea-Initiation of the program should be made within 3 months from the notice.

