

Service Study Agreement

(For agreement between a hosting or unit research institution and an international collaborative research partner institution)

- **Project name of research and development:** Bio and medical technology development
- **Project name of service study:** International collaborative research on infectious disease
- **Service study development funds:**

(Unit: USD)

Type	1st Year	2nd Year	3rd Year	4th Year	5th Year	Total
Governmental Contributions	130,000\$	130,000\$	130,000\$	130,000\$	130,000\$	650,000\$
Matching fund	94,400\$	94,400\$	94,400\$	94,400\$	94,400\$	472,000\$
Others						
Total	224,400\$	224,400\$	224,400\$	224,400\$	224,400\$	1,122,000\$

- **Total research development period:** from Sep. 1, 2017 to May 31, 2022
- **Research agreement period for the present year:** from Sep. 1, 2017 to May 31, 2018
- **Principal researcher for service**
 - Affiliation: Faculty of Medicine, Chiang Mai University, Thailand
 - Position: Associate Professor Name: Prapan Jutavijittum
- **Contracting parties**
 - (A) Seoul National University R&DB Foundation
 - (B) Faculty of Medicine, Chiang Mai University, Thailand

“A” and “B” shall enter into this Agreement in implementing the above-mentioned task as follows:

Article 1 (Purpose and Content of Research and Development)

The purpose and content of research and development shall be the same as those specified in the Research and Development Task Plan (for Agreement) of the Attachment No. 1.

Article 2 (Implementation of Research and Development)

① "B" and the Principal Researcher for Service shall sincerely implement research and development works according to the Research and Development Task Plan (for Agreement) of the Attachment No. 1 with the authorities and responsibilities pursuant to Article 12 of the Regulations of Research and Development Project in Science and Technology Field under the authority of the Ministry of Science and ICT (hereinafter referred to as "Regulations").

Article 3 (Payment of Research and Development Funds)

① "A" shall pay "B" the following research and development funds of governmental contributions; provided, however, that the content of payments may be changed or this Agreement may be changed depending upon whether the checklist of the Appendix No. 3 is complied with:

(A) First: within fifteen (15) days after this Agreement USD 52,000

(B) Second: within fifteen (15) days after relevant visiting trainers are finalized USD 52,000

(C) Third: within fifteen (15) days after relevant performance materials are executed
(Expected date: April 30, 2018) USD 26,000

However, the content of payments may be changed depending upon financial conditions, etc. of the Ministry of Science and ICT of the Republic of Korea, or where this Agreement is changed or cancelled pursuant to Article 16 or 17 of this Agreement.

② Any interest accrued during the research period shall be used only for re-investments in research and development and any other purposes approved by "A," and the details of criteria and methods shall be as specified in the Regulations.

③ Payment of research and development funds to be borne by participating companies

or any other person shall be as specified in an agreement between "B" and the parties hereto.

Article 4 (Management and Use of Research and Development Funds)

① "B" shall separate the research and development funds of governmental or non-governmental persons' contributions, participating companies' charges, etc. with funds for other purposes and receive such funds, establish an independent account to prove matters for accounting management of use of the funds, and manage the account as described in each of the following items. Interests for account accrued thereon shall be used only for re-investments in research and development and any other similar purposes independently approved by "A":

1. Office works for research and development funds shall be done by a person designated by "B" or the principal researcher for service among from its affiliated employees (hereinafter referred to as "Research and Development Fund Manager").

2. The research and development fund manager shall deposit the research and management funds he or she has received under Article 3 to an adjacent financial institution with "B" or a person appointed among from "B"' affiliated employees under its own rules, etc., and operate the funds with a duty of care as a prudent manager.

3. The research and development fund manager shall have a book of cash receipts and disbursements or any other similar book, and record and manage the conditions of receipts and disbursements by dividing them by general receipts and disbursements and itemized receipts and disbursements.

4. The research and development fund manager shall maintain a written resolution(s) for payment, a receipt, or if necessary, any other documentary evidence necessary to prove the content of payment, including a written estimate, an invoice, an agreement, an inspection report, and divide and bind such documents into months or quarters, and on the covers thereof, specify and impress a relevant seal on total cases, total pages, total amounts, and relevant managers' positions and names.

5. The research and development fund manager shall retain a certificate of deposit operations (a bankbook), a book, documentary evidence, etc. pursuant to "B"'s rules for a period of at least five (5) years after the end year of the research and development task.

6. The research and development fund manager shall manage research and development funds as specified in the operational management guidelines by receiving a corporate card.

7. Customs duties, value added taxes, etc. paid out of the research and development funds shall be reported pursuant to relevant tax laws.

Article 5 (Reporting of the Results of Research and Development)

① When the research and development task is completed, "B" shall provide "A" with a final (phased) report and summary, an introduction to research performance, and electronic documents thereof.

② In the event that the research period of a relevant task is an ongoing task for a period of not less than two (2) years, or that the research period of multi-years' agreement is not less than two (2) years, the principal research for service shall provide "A" with an annual performance and plan for reviewing and evaluating the validity of continuous assistance one (1) month before the end of research and development specified in this Agreement or one (1) month before the end of the research period of a relevant year.

Article 6 (Reporting of Use Performance of Research and Development Funds, etc.)

① "B" shall cause an infectious disease task advisory committee to conduct due diligence regarding the performance of research and development funds on a quarterly basis, and report to "A" within two (2) months after the date when the research and development task ends. In this case, if it is necessary to review and verify such a report, "A" may have "B" to submit a separate account book or documentary evidence and cause its employee to get access thereto or submit the copies thereof.

② As for multiple-years task, "B" shall report the performance of research funds within two (2) months after the research period ends on a yearly basis pursuant to the provision of Section 1, and may carry forward and use any unused balance of research funds occurring within the research period of a relevant year, to the research funds of the following year of the task within the multiple-years agreement period.

- ② In the event that there is a balance of research and development funds after the end of research and development task, as for an amount equal to a share of the governmental contributions out of the amounts, "B" shall report the performance to "A" according to Section 1 and then immediately deposit the amount to a management account designated by "A."
- ③ The details of the collection and use of the balance of research and development funds unreasonable uses thereof under Section 3 shall follow the Regulations.

Article 7 (Evaluation of Research and Development Results)

- ① In the event that the evaluation grade of research and development results are rated below a certain grade, "A" may take disciplinary action against "B" and the principal researcher for service.
- ② In the event that the evaluation grade of research and development results are rated below a certain grade, "A" may discontinue the relevant research and development task and establish a research and development plan of the following phase by reflecting relevant matters specified at the time of the evaluation.

Article 8 (Distribution of Research and Development Report, etc.)

- ① "B" shall provide "A" with a final (phased) report within two (2) months after the end of project.
- ② "B" shall prepare and send to "A" a final report by task according to a form separately specified by "A" until the end of research and development. As for an ongoing task, "B" shall send to "A" an annual performance and plan one (1) month before the end of research.
- ③ Notwithstanding Section 1 or 2, with respect to any matter that Seoul National University R&DB Foundation has placed a restriction on distribution thereof on the ground of national security maintenance or any other ground, or has requested to be confidential on a reasonable ground, the research results shall not be disclosed.
- ④ When "B" finds it necessary to protect advanced sciences and technologies, it shall



place a restriction on distribution of research reports or take necessary actions by obtaining approval from “A.”

Article 9 (Ownership of Intellectual Property Rights and Work Products, etc.)

- ① Any intellectual property right occurring while this project is being implemented or publication rights to tangible work products, trial products, or reports shall be under the ownership of “A” and “B.”

Article 10 (Change of Agreement)

- ① “A” may change or discontinue the content of a research and development plan or agreements if there is a request by “B” or it is necessary to do so.
- ② As for multiple-years’ agreement task, “A” may change agreements according to the government’s budgetary conditions, due to a relevant annual performance and plan, evaluation results, etc.

Article 11 (Termination of Agreement)

- ① In the event that each of the following cases has occurred, “A” may terminate this Agreement:
 - 1. Where it is difficult to continue to do research and development works due to “B”’s serious violation of this Agreement;
 - 2. Where “B” has given up carrying out a research and development task;
 - 3. Where “B” is found to have a difficulty in obtaining research performance expected in the first place or to be unable to accomplish research and development works due to its delay in doing research and development works;
 - 4. Where a researcher has a difficulty in continuing to do research and development works because he or she has seriously violated this Agreement as a results of the use of research funds for other purposes and, therefore, a restriction on his or her participation in the works became final under Article 45 of the Regulations (including the case where a restriction on his or her participation in any other research and development works became final);
 - 5. As for multiple-years’ agreement task, where “A” has taken action to discontinue

research and development as a result of review and phased evaluation of a relevant annual performance and plan;

6. Where “A” finds that it is impossible for “B” to continue to implement the research and development task due to its bankruptcy, legal receivership, business closure, etc. or it is unnecessary to continue to implement the research and development task;

7. Where “A” finds that it is impossible to continue to implement the research and development task because important research information is disclosed to a third party as a result of the lax security management under Article 40 of the Regulations;

8. Where “A” finds that it is impossible to continue to do research and development works for the research and development task because of research misconduct under Article 43 Section 2 of the Regulations;

9. Where “A” finds that it is impossible to continue to implement the research and development task because security measures for laboratories, etc. required to implement the research and development task are insufficient;

10. Where “B” does not pay research and development funds; or

11. Where a research and development task was selected as a result of false or any other wrongful way.

② Where this Agreement is terminated under Section 1, “B” shall immediately transfer to a management account designated by “A” an amount equal to a share of the governmental contributions out of the remaining research and development funds excluding the amounts actually used for research and development; provided, however, that where this Agreement is terminated on the ground specified in Section 1 Paragraphs 2 through 5, 7 through 9, and 11 through 12 of this Article, “A” may collect the contributions given in whole or in part, and if necessary, take disciplinary action under Article 45 of the Regulations.

③ In the event that there are circumstances under which a research institution (a company’s affiliated research center) or a participating company is bankrupt, under legal receivership, or closed for business, or a research institution (or a researcher) improperly managed or used research funds, “B” shall immediately report it to “A,” and sincerely comply with the actions taken under Article 21 Section 2 of the Regulations, including discontinuance of implementation of research funds, due diligence field investigation, etc.



Article 12 (Submission of Relevant Materials, etc.)

"B" and the principal researcher for service shall sincerely comply with the research and development field investigation, access to relevant documents, requests for submission of relevant materials, etc. by "A" or "A"'s designated persons.

Article 13 (Securing Research Ethics and Verifying Integrity)

- ① After this Agreement is entered into, "B" shall prepare its own rules to secure research ethics and verify its integrity.
- ② When there is a wrongful research activity, "B" shall conduct investigation according to its own verification system under Section 1, and report the results to a relevant head of a professional institution.

Article 14 (Security Management)

- ① "B" shall prepare and implement research task security management rules by passing a review of its own research security council.
- ② "B" and the principal researcher for service shall specify security grades classified under Article 40 Section 3 of the Regulations on the application and plan for research task and submit them to "A," and take security measures under the security grades of the research task.
- ③ In the event that there is a security accident, including disclosure of research task related information and materials, hacking of research and development information system, "B" shall immediately report to "A" the date, time, and place of accident, personal information of victims, the content of accident, etc., and take necessary actions.
- ④ "B" shall submit to "A" the current status of security management for research task by the end of October each year.
- ⑤ In the event that "B" and the principal researcher for service fails to use its best effort to manage security for research task or to perform its obligations to take security actions without a reasonable ground pursuant to Article 40 of the Regulations or the security

management guidelines for research and development projects under the authority of the Ministry of Science and ICT, "A" may place a restriction on its participation in national research and development projects.

Article 15 (Other Obligations)

- ① "B" shall cause the principal researcher for service to supplement or correct the content of research and development as required by "A."
- ② When the agreed-upon research and development funds for the research and development task are found to be fixed unreasonably or excessively, "A" may without delay reduce the unreasonably or excessively fixed amount; provided, however, that when the unreasonably or excessively fixed amount was found after the expiration of the term of this Agreement, "B" shall without delay refund the amount to the head of "A" or use the amount for a research and development project designated by the head of "A."
- ③ Out of the content of the research and development plan (for agreement) in the Attachment No. 1, the research and development funds after a relevant year may be adjusted according to the results of evaluation of a research project of the year and the results of review for task selection of the following year.

Article 16 (Interpretation)

The Regulations shall be applied *mutatis mutandis* to any content not included in this Agreement. In the event that there is a question as to proper interpretation, "A's" interpretation shall be applicable. "A" and "B" shall cause this Agreement to be executed in two (2) copies, and each of them shall retain one copy thereof.

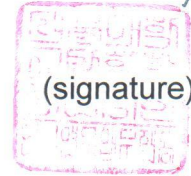
- Attachments:
1. One copy of the Service Project Plan
 2. One copy of bankbook for deposit account
 3. One copy of the checklist

Date:



Date: 22 Nov. 2017

"A": Head of Seoul National University R&DB Foundation



(signature)

Principle researcher for service: In-Jin Jang

A handwritten signature in blue ink, appearing to read 'In-Jin Jang'.

(signature)

"B": Dean of the Faculty of Medicine, Chiang Mai University, Thailand

A handwritten signature in blue ink, appearing to read 'Prapan Jutavijittum'.

(signature)

Principal researcher for service: Prapan Jutavijittum

A handwritten signature in blue ink, appearing to read 'Prapan Jutavijittum'.

(signature)

Attachment No. 3. Checklist (Example)

No.	Content of Checking	Results of Checking	
		Yes	No
1	Research funds use report		
2	Developing SOP to operate the research center		
3	Operating the research center according to the developed SOP		
4	Securing new researchers to be sent to Korea		
5	Providing a place(s) to complete local visiting training programs and provide training		
6	Completing SOP training to operate an advanced infectious disease laboratory		
7	Completing training for developing a research protocol of the infectious disease laboratory		