



OSAKA UNIVERSITY

## Collaborative Research Agreement

### 1. Purpose of the Agreement

**Department of Microbiology of Faculty of Medicine - Hasanuddin University and Virology Division of Department of Microbiology and Immunology of Faculty of Medicine - Osaka University** have agreed to work together to collaborate in research specifically related to hepatitis virus topics. This agreement describes their understandings and commitments to this collaborative effort.

### 2. Scope and Duration

**Department of Microbiology of Faculty of Medicine - Hasanuddin University and Virology Division of Department of Microbiology and Immunology of Faculty of Medicine - Osaka University** will work together in the study of viruses. This agreement will guide the collaboration for the period beginning 5<sup>th</sup> of July 2017 until 30<sup>th</sup> of June 2022. The scope and duration of the collaboration may be amended and/or extended through the joint agreement of Faculty of Medicine - Hasanuddin University and Faculty of Medicine - Osaka University to amendments to this agreement.

### 3. Decision-making structure & authority

All significant decisions regarding the collaboration will require agreement by both collaborative partners. Significant decisions will include decisions regarding eligibility for services provided through collaboration, the nature of the services to be provided, and decisions regarding seeking and using funding to carry out collaboration activities. Department of Microbiology of Faculty of Medicine - Hasanuddin University represented by Rizalinda Sjahril, MD, Ph.D and Virology Division of Microbiology and Immunology Department of Faculty of Medicine - Osaka University represented by Professor Keiji Ueda, MD, PhD, are the Leadership Committee for the collaboration. Each member of the Leadership Committee will be authorized to represent their organization in joint collaborative decision-making. Each organization will be responsible for ensuring that the person granted authority to represent their organization is kept informed regarding the operation of the collaboration and the identification of issues for joint discussion. Each participating organization will make all parties to the collaboration aware of any limits in the authority of their representative to bind their organization to collaborative decisions and will establish a clear process for their representative to use to become fully capable of committing the organization. The Leadership Committee will agree upon an effective structure for operational management of collaborative activities and efforts. Each member of the Leadership Committee will keep their organization informed of collaborative progress and actively seek feedback regarding the collaboration from within their organization. Leadership Committee members will regularly discuss the progress of the collaborative effort and regularly share feedback from their respective organizations in order to ensure clear communication, issue identification, and problem resolution.

### Legal & financial structure

Funding is sought and received for the collaboration from Hasanuddin University or the Ministry of Education, Research and Technology of Indonesia. Department of Microbiology of Faculty of Medicine - Hasanuddin University and Virology Division of Department of Microbiology and Immunology of Faculty of Medicine - Osaka University agree that Department of Microbiology of Faculty of Medicine - Hasanuddin University will serve as a lead party for the purposes of seeking, receiving, and managing funding for collaborative activities which are mainly done in Indonesia. Department of Microbiology of Faculty of Medicine - Hasanuddin University and Virology Division of Microbiology and Immunology Department of Faculty of Medicine - Osaka University further agree that if proposals for collaborative funding are only partially funded, the Leadership Committee of the collaboration will determine priorities for the use of

funds awarded. Both parties agree that Virology Department of Microbiology and Immunology Department of Faculty of Medicine - Osaka University will provide expertise/knowledge, services, facilities and research materials, as required, to support this collaboration. Recognizing that Department of Microbiology of Faculty of Medicine - Hasanuddin University will be responsible to the funder for the management of funds and achievement of collaboration goals, Virology Division of Microbiology and Immunology Department of Faculty of Medicine - Osaka University agree that Department of Microbiology of Faculty of Medicine - Hasanuddin University must have final authority over the administration of the subcontract agreements. However, Department of Microbiology of Faculty of Medicine - Hasanuddin University agree that to the greatest extent feasible, will consult with and abide by the joint decisions of the Leadership Committee.

5. Resource Commitment to the Collaboration

Department of Microbiology of Faculty of Medicine - Hasanuddin University and Virology Division of Department of Microbiology and Immunology of Faculty of Medicine - Osaka University have agreed to commit resources to the collaboration. All participating organizations will contribute:

- a) The time and effort required for consistent representation of and participation by the organization on the Leadership Committee.
- b) Careful attention to risk assessment and risk mitigation including maintaining appropriate insurance coverage and ensuring appropriate supervision for staff, and volunteers, and use of facilities and equipment contributed to the collaboration.
- c) The resources of their organization required to ensure fulfillment of specific commitments described below;

Specifically, each organization agrees to provide the resources described below:

- i. Department of Microbiology of Faculty of Medicine - Hasanuddin University will provide for direct virological examinations such as antigen detection, serological tests, Polymerase chain reaction tests, real time Polymerase chain reaction tests, and other nucleic acid techniques.
- ii. Virology Division of Microbiology and Immunology Department of Faculty of Medicine - Osaka University will provide for electron microscopy, gene sequencing, analysis of antigenicity, cell culture for viral gene expression, phenotypic/genotypic resistance tests, and virus isolation.

6. Risk management strategies

Department of Microbiology of Faculty of Medicine - Hasanuddin University and Virology Division of Department of Microbiology and Immunology of Faculty of Medicine - Osaka University agree that the Leadership Committee will complete an initial risk assessment for the work to be carried out through the collaboration, and will regularly update the assessment as the collaboration is expanded or changed, and review both the analysis and the risk mitigation strategies at least annually. Insurance coverage related to risks due to the works done in collaborative agreement is the responsibility of each party. The collaborative risk assessment will include, at a minimum, consideration of risks relating to serving program participants, facilities and equipment, employment, volunteers, financial management, and compliance with funder requirements and applicable law and regulation.

7. Accountability process and problem solving

The Leadership Committee will meet regularly to jointly evaluate the collaborative, including its progress toward meeting collaborative goals. Department of Microbiology of Faculty of Medicine - Hasanuddin University and Virology Division of Department of Microbiology and Immunology of Faculty of Medicine - Osaka University are committed to open communication with each other with regard to strengths and limitations in the collaboration. The Leadership Committee will work together to address weaknesses and to improve outcomes.

8. Addition of new participating organizations

The Leadership Committee may from time to time invite other organizations or governmental bodies to the collaboration, at which time amendmend will be made to this agreement.

9. Transfer of Biological Materials

Department of Microbiology of Faculty of Medicine - Hasanuddin University and Virology Division of Department of Microbiology and Immunology of Faculty of Medicine - Osaka

University agree to undertake as much as possible research and experiments in Indonesia. In the event that certain experiments are not possible or practical in Indonesia, Department of Microbiology of Faculty of Medicine - Hasanuddin University and Virology Division of Department of Microbiology and Immunology of Faculty of Medicine - Osaka University agree to facilitate transfer of research materials for expert analysis outside Indonesia. Request for the transfer of materials will be processed accordingly to abide to the legal regulations in both countries.

10. Authorship of joint publications

Joint publications are expected to generate from this collaboration. The order of authors will be determined based on the burden of work put into and other further agreements.

11. Termination of this agreement

Department of Microbiology of Faculty of Medicine - Hasanuddin University and Virology Division of Department of Microbiology and Immunology of Faculty of Medicine - Osaka University each retains the right to withdraw from the collaboration upon giving the other participating organizations at least 30 days notice of its decision to withdraw. The withdrawal of any participating organization from the collaboration shall result in termination of this collaboration agreement. The remaining organizations may choose to enter into a new agreement to guide their continuing work together.

12. Extension or amendment of this agreement

This agreement may be extended or amended only through unanimous agreement by Department of Microbiology of Faculty of Medicine - Hasanuddin University and Virology Division of Department of Microbiology and Immunology of Faculty of Medicine - Osaka University. The decision to amend or extend the agreement, and language describing the agreed upon changes, shall be documented in writing, including the date of the amendment/extension, and the signatures of the dean/chief operating officers of each participating organization. This agreement was unanimously adopted by designated representatives of Department of Microbiology of Faculty of Medicine - Hasanuddin University and Virology Division of Department of Microbiology and Immunology of Faculty of Medicine - Osaka University on 16<sup>th</sup> February 2017.

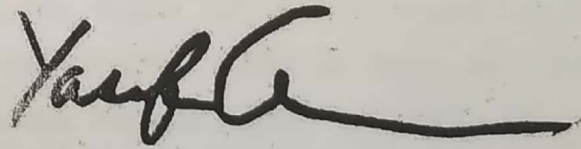
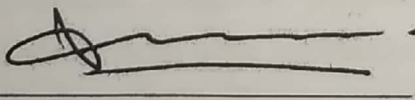
The signature of Dean and Leadership committee of each participating organization below, represents the full commitment of their organization to participate actively in the collaboration and implement fully all elements in this agreement.

Makassar, 5<sup>th</sup> July 2017

Osaka, 5<sup>th</sup> July 2017

Professor Andi Asadul Islam, MD, Ph.D  
Dean  
Faculty of Medicine - Hasanuddin University

Professor Yasufumi Kaneda, MD, Ph.D  
Dean  
Faculty of Medicine - Osaka University



Rizalinda Sjahril, MD, Ph.D  
Microbiology Department  
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