





MEMORANDUM OF COOPERATION BETWEEN

THE NATIONAL INSTTITUTE OF RADIOLOGICAL SCIENCES OF THE NATIONAL INSTITUTES FOR QUANTUM AND RADIOLOGICAL SCIENCE AND TECHNOLOGY AND

FACULTY OF MEDICINE, CHIANG MAI UNIVERSITY

The National Institute of Radiological Sciences of the National Institutes for Quantum and Radiological Science and Technology (Address: 4-9-1 Anagawa, Inage-ku, Chiba-shi, Chiba 263-8555, Japan; hereinafter referred to as "NIRS-QST"), and Faculty of Medicine, Chiang Mai University (Address: 110 Intravaroros Road, Muang District, Chiang Mai, 50200, Thailand; hereinafter referred to as "MED-CMU") aiming at further strengthening the cooperation between the two organizations in the field of radiation research and cancer research, have made this Memorandum.

NIRS-QST and MED-CMU (hereinafter referred to individually as "Participant" and collectively as "Participants") will conduct the cooperation under this Memorandum in accordance with the laws and regulations of the respective countries.

This Memorandum sets forth the terms and conditions of the framework for the cooperation between the Participants.

Paragraph 1. Areas of Cooperation

The Participants will develop cooperation in the following areas.

- 1.1. Radiation Research
- 1.2. Cancer Research

1.3. Other areas as mutually decided

Paragraph 2. Forms of Cooperation

The Participants will cooperate with each other in the following forms.

- 2.1. Exchanges of scientific information
- 2.2. Exchanges of scientists and specialists
- 2.3. Training of personnel
- 2.4. Mutual use of each other's facilities and equipment
- 2.5. Cooperative research
- 2.6. Other forms as mutually decided

Contents of cooperation will be detailed in a separate arrangement and will be subject to the conditions stated in Paragraph 3, and financial costs and terms, in particular, stated in Paragraph 4.

Paragraph 3. Conditions for the Use of Results from Cooperation

The Participants decide that the conditions regarding the use of results and scientific information acquired through cooperation under this Memorandum of Cooperation (hereinafter referred to as the "Results") will be as follows.

- 3.1. Neither Participant will transfer the Results to any third party without the prior consent of the other Participant.
- 3.2. The Participant providing its own scientific information to the other Participant will retain ownership of such information.
- 3.3. If either Participant applies for a patent based on the Results, the Participant will consult and obtain permission from the other Participant before submission of the patent application, and the Participants confirm who owns such intellectual property rights and how to handle and enforce such intellectual property rights.

- 3.4. When publishing or releasing the Results to any third party, the Participants will negotiate and decide upon in advance such issues as authorship, confidentiality of scientific information, and when and in what manner the Results should be published and released. The Participants will also make clear that Results were obtained from the cooperation under this Memorandum.
- 3.5. Either Participant will protect confidential information relating to the other Participant, which is designated as "Confidential", "Proprietary" or by similar designation by the other Participant. The Participant will also ensure that employees who have access to the information will protect the information. This requirement will not apply if the information is public knowledge, if it is already known to the receiving Participant before being supplied by the providing Participant, or if it is received from a third party without infringement of any requirement to protect confidential information. The above-mentioned requirements will survive the end of the Memorandum for a period of five (5) years thereafter.

Paragraph 4. Financial Arrangement

Cooperation under this Memorandum will be conducted within the assigned budget of Participants and subject to their actual financial conditions.

Paragraph 5. Dispute Resolution

Any differences or disputes arising from or in connection with the implementation of this Memorandum will be settled amicably through consultation or negotiation between the Participants.

Paragraph 6. Legal Nature

This Memorandum consists only of an expression of mutual recognition between NIRS-QST and MED-CMU, and is not intended to constitute a legally binding document or arrangements.

Term and End of this Memorandum Paragraph 7.

- 7.1. The cooperation under this Memorandum will take effect upon the last signature by either of the Participants. Duration of the implementation of this Memorandum will be five (5) years following that date.
- Either Participant may end the cooperation under this Memorandum at any 7.2. time, by providing at least 60 days' written advance notice to the other Participant. The requirement to protect confidential information will survive the end of the cooperation under this Memorandum or the end of this Memorandum, as stated in Paragraph 3.5.
- This Memorandum may be renewed every five (5) years by the written 7.3. consent of the Participants.

NOTICES

NIRS-QST and Faculty of Medicine, Chiang Mai University designate one principal coordinator for each, and notices and requests on the matters related to the cooperation under the MOU will be made through the principal coordinators provided below.

For NIRS-QST

Dr. Teruaki Konishi

Senior Researcher, Department of Basic Medical Sciences for Radiation Damages

National Institute of Radiological Sciences

Address: 4-9-1 Anagawa, Inage-ku, Chiba 263-8555, Japan

Tel: +81- 43-206-4695 E-mail: konishi.teruaki@qst.go.jp

For Chiang Mai University

Dr. Narongchai Autsavapromporn

Department of Radiology, Faculty of Medicine, Chiang Mai University

Address: 110 Intravaroros Road, Muang District, Chiang Mai 50200, Thailand

E-mail: narongchai.a@cmu.ac.th Tel: +66-53-935456 extension 134 For the

National Institute of Radiological Sciences, National Institutes for Quantum and Radiological Science and Technology

Koji Woda

Koji Noda, Ph.D. Managing Director

Date: Sep. 29, 2017

For the

Faculty of Medicine, Chiang Mai University

Bong logue

Prof. Bannakij Lojanapiwat, M.D. Dean

Date: Sep 29, 2017