### MEMORANDUM OF UNDERSTANDING AMONG THE

NATIONAL CANCER INSTITUTE OF THE ALL INDIA INSTITUTE OF MEDICAL SCIENCES,
MINISTRY OF HEALTH & FAMILY WELFARE

MINISTRY OF HEALTH & FAMILY WELFARE, GOVERNMENT OF THE REPUBLIC OF INDIA.

AND

THE INDIAN COUNCIL OF MEDICAL RESEARCH, DEPARTMENT OF HEALTH RESEARCH,
MINISTRY OF HEALTH & FAMILY WELFARE,
GOVERNMENT OF THE REPUBLIC OF INDIA,

AND

THE DEPARTMENT OF BIOTECHNOLOGY, MINISTRY OF SCIENCE & TECHNOLOGY GOVERNMENT OF THE REPUBLIC OF INDIA

AND

NATIONAL CANCER INSTITUTE OF THE NATIONAL INSTITUTES OF HEALTH, DEPARTMENT OF HEALTH AND HUMAN SERVICES, GOVERNMENT OF THE UNITED STATES OF AMERICA,

FOR

COOPERATION ON CANCER RESEARCH, PREVENTION, CONTROL AND MANAGEMENT

The National Cancer Institute ("NCI"), a part of the National Institutes of Health, an agency of the Department of Health and Human Services of the Government of United States of America; the National Cancer Institute, part of the All India Institute of Medical Sciences ("AIIMS"), Ministry of Health and Family Welfare, Government of the Republic of India; the Indian Council of Medical Research ("ICMR"), under the Department of Health Research, Ministry of Health & Family Welfare, Government of the Republic of India; and the Department of Biotechnology ("DBT"), Ministry of Science & Technology, Government of the Republic of India (hereinafter referred to as the "Participants");

Recalling the Agreement on Science and Technology Cooperation between the Government of the United States of America and the Government of the Republic of India, signed on October 17, 2005 that encourages cooperation to promote advances in science and technology;

In pursuance of the Joint Statement made during the visit of the Prime Minister of India to the USA in September 2014, which endorsed the first "Vision Statement for the Strategic Partnership" and agreed in principle to initiate cooperative activities to increase capacity in cancer research and patient care delivery, including by developing collaborative programs for and with India's upcoming AIIMS-National Cancer Institute;

Taking note of the strengthening relations of the two countries and recognizing the need to encourage co-operation in promoting advances in cancer research as well as broadening the scope of joint research activities and academic interchanges on the basis of equality, reciprocity and mutual benefit;

Convinced of the importance of furthering this collaboration, as part of the agenda on non-communicable diseases, with particular focus on cancer, under the Indo-US Health Initiative, being an inter-agency umbrella mechanism between India and the USA on health collaboration and program implementation;

Intending to provide the structure and basis for implementing and expanding such collaborative activities;

Have reached the following understanding:

### Section 1 GENERAL SCOPE

- 1. This Memorandum of Understanding (MOU) establishes the general framework of intended collaboration for promoting and conducting high-quality research to strengthen the evidence base necessary for cancer prevention, treatment and management.
- 2. The Participants intend to strengthen their collaboration, in conformity with the mission and objectives of each Participant, to cover, inter-alia, the following:
  - Promotion and development of cooperation in the fields of clinical cancer research and patient care delivery;
  - (ii) Infrastructure development, training, and capacity building;
  - (iii)Collaboration in cancer research including basic, translational and survivorship research, epidemiology, prevention, diagnosis, screening, treatment and control;
  - (iv)Direction of increased collaboration between appropriate Centers of Excellence and Institutions in both countries, as recommended by the Participants; and
  - (v) Assessment and application of new and cost effective cancer diagnostic technologies for public health benefits, and the translation of technologies for global health.
- 3. The Participants may collaborate in any other manner as by mutual arrangement (or as determined jointly).
- 4. The activities under this MoU may be pursued by the NCI and one or more of the other Participants either individually or severally or jointly, as may be decided by the respective Participants.
- 5. All activities described in and/or pursued by the Participants under this MoU are subject to the availability of personnel, resources and funds.
- 6. The Participants intend to develop steps for implementing this MoU through consultations. For this purpose, they intend to establish a schedule of telephone and/or video conferences, and other interactions, which may include, but not be limited to (i) discussing new opportunities, (ii) assessing progress on existing activities, (iii) sharing information about the availability of expertise and infrastructure resources and (iv) planning for scientific conferences and other joint activities.

- 7. The Participants recognize that the work pursuant to this MoU may involve exchange of administrative and scientific personnel and transfer of equipment for carrying out activities. As such, subject to their respective laws and regulations, the Participants intend to facilitate the necessary clearance for personnel and equipment involved in such exchange/transfer on a priority basis.
- 8. This MoU imposes no obligations on the Participants, including funding obligations.

#### Section 2 Applicable Laws

The Participants intend to perform all activities conducted pursuant to this MoU in accordance with the respective laws and regulations of India and the USA, as applicable, including laws on the protection of human and animal subjects as well as transfer of biological material in any research.

#### Section 3 Implementing Agencies

- 1. The Participants intend to implement activities under this MoU through the following agencies:
  - (i) For the Government of India
  - a. National Cancer Institute, All India Institutes of Medical Sciences, Jhajjar Haryana Campus, Ministry of Health and Family Welfare (lead agency)
  - b. Indian Council of Medical Research, Department of Health Research, Ministry of Health & Family Welfare
  - c. Department of Biotechnology, Ministry of Science & Technology
  - d. Department of Health & Family Welfare, Ministry of Health & Family Welfare
  - (ii) For the Government of the United States of America
    - a. National Cancer Institute, National Institutes of Health, DHHS (lead agency)
  - b. Department of Health and Human Services (DHHS)
- 2. In addition to the Participants, other individuals and institutions may contribute to the collaborative efforts intended to be conducted under this MOU. These contributors may include individuals and institutions in the public, private and academic sectors, state and local Governments in both countries, and other entities, as identified and mutually decided upon by the Participants.

### Section 4 Areas of Cooperation

The Participants intend the following to be the main areas of cooperation under this MoU, in all cases subject to the availability of personnel, resources and appropriated funds:

- 1. Increased bilateral cooperation on cancer research, prevention, control and management;
- 2. Development of collaborative research projects on population-based cancer control and implementation science;
- Development of projects in the areas of basic and epidemiological research, pre-clinical model development, clinical research and oncology care delivery;
- Collaboration for conducting research and training on development of low-cost technologies, diagnostics and combination of existing medications against common cancers and development of existing therapies for novel indications related to oncology;
- 5. Discovery and development of new anti-cancer agents;
- 6. Research on cancer screening and early detection;
- 7. E-health, M-health and telehealth approaches to cancer education, early detection and treatment;
- 8. Health systems research to strengthen cancer care delivery mechanism and build public health capacity for cancer care;
- 9. Development of Cancer Registries;
- 10. Organization of joint conferences, symposia and other scientific meetings of mutual interest;
- 11. Information and scientific exchanges, and the sharing of experiences;
- 12. Participation in professional and scientific meetings conducted in both countries; and
- 13. Any other area as mutually decided between the Participants if and to the extent consistent with applicable statutes, regulations and policies.

### <u>Section5</u> <u>Establishment of Joint Steering Committee</u>

1. The Participants intend to establish a Joint Steering Committee (JSC) to further elaborate the details of cooperation and to oversee the implementation of this MoU. The JSC is intended to develop strategic plans for collaboration, recommend areas and topics for joint workshops, develop collaborative research project solicitations, facilitate the expedited review and clearance of collaborative proposals, and foster other joint activities to advance research on cancer. The Indian and U.S. members of the JSC may be identified by the Participants, and a co-chair may be chosen by each side. The JSC may meet regularly via videoconference, teleconference, web-assisted conference, or in face-to-face meetings when both Participants agree.

2. The Participants intend the JSC to meet at least once a year, or at any time agreed upon by the Participants, alternately in India and in the USA, to review the implementation of this MoU. In certain circumstances if a meeting cannot be held, the Participants intend that JSC members expect to exchange documents in lieu of such meeting. The composition of the JSC and venue for its meeting may be mutually decided upon by the Participants.

# Section 6 Protection of Intellectual Property

Both Participants intend to ensure adequate and effective protection of Intellectual Property generated or shared in the course of cooperative activities in furtherance of the objectives of this MOU. Rights to any such intellectual property are to be allocated as negotiated on a project by project basis.

# Section 7 Settlement of Disputes

The Participants intend to resolve any disputes or differences arising under this MoU amicably through mutual consultations and negotiations.

#### Section 8 Modifications

The Participants may review or modify any part of this MoU by mutual consent in writing.

## Section 9 Commencement of Cooperation

This MoU may commence upon signature of the Participants and may continue for a period of five years. The MoU may be extended for successive periods of five years through written consent of the Participants. Should a Participant wish to discontinue its participation under this MoU, that Participant should endeavour to give the other Participants six months written notice.

Signed on 25 June 2015 at New Delhi, in two originals each in Hindi and English languages

For the National Cancer Institute, For the National Institutes of Health All India Institutes of Medical Sciences Department of Health and Human Services (AIIMS), Ministry of Health & Family Government of the United States of America: Welfare Government of the Republic of India; (Richard Verma, Ambassador of the USA to (Professor Mahesh C. Mishra) (Director, AIIMS) India) For the Indian Council of Medical Research For the Department of Health and Human Department of Health Research Services, Government of the United States of Ministry of Health & Family Welfare Government of the Republic of India; America (B. P. Sharma) (Richard Verma, Ambassador of the USA to (Secretary, Department of Health Research) India) For Department of Biotechnology Ministry of Science & Technology Government of the Republic of India: (Prof. K. Vijay Raghavan) (Secretary, Department of Biotechnology) For Department of Health & Family Welfare Ministry of Health & Family Welfare Government of the Republic of India

(Secretary, Department of Health & Family Welfare)