

MEMORANDUM OF UNDERSTANDING

BETWEEN

**THE INDIAN COUNCIL OF MEDICAL RESEARCH,
DEPARTMENT OF HEALTH RESEARCH,
MINISTRY OF HEALTH AND FAMILY WELFARE OF THE
REPUBLIC OF INDIA**

AND

**THE CENTERS FOR DISEASE CONTROL AND PREVENTION,
DEPARTMENT OF HEALTH AND HUMAN SERVICES OF THE
UNITED STATES OF AMERICA**

ON

COLLABORATION

**IN ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND INJURY
PREVENTION AND CONTROL**

The Centers for Disease Control and Prevention (CDC), an agency of the U.S. Department of Health and Human Services ("HHS"), and the Indian Council of Medical Research ("ICMR") of the Department of Health Research ("DHR") of the Ministry of Health and Family Welfare ("MOHFW"), hereinafter referred to as the "Participants":

Recognizing that the Government of the United States of America and the Government of the Republic of India concluded an Agreement on Science and Technology Cooperation on October 17, 2005 (hereinafter referred to as the "S&T Agreement");

Acknowledging that HHS/CDC and MOHFW/ICMR signed a Joint Statement (hereinafter referred to as the "Joint Statement") for Collaboration on Occupational and Environmental Health (hereinafter referred to as the "Collaboration") on May 14, 2002 which covered a five-year period. The Joint Statement was subsequently extended for another five-year period through May, 2012 and Injury Prevention and Control was added as a focus area for the Collaboration.

Acknowledging that HHS/CDC and MOHFW/DHR/ICMR have a continued commitment to occupational health, environmental health and injury prevention and control and seeking to build upon the success of the previous Collaboration,

The Participants express their intentions in this Memorandum of Understanding (MOU) as follows:

Part One – Purpose and Participants

The Participants expect to develop further cooperation in the fields of environmental and occupational health and injury prevention and control research, education and training,

infrastructure development, and capacity-building for their reciprocal and mutual benefit. The principal government departments and agencies on both sides are:

Government of The Republic of India:

- Indian Council of Medical Research

U.S. Government:

- Centers for Disease Control and Prevention

CDC participation is to be led by its National Center for Environmental Health, National Center for Injury Prevention and Control, and National Institute for Occupational Safety and Health. In addition, CDC has invited participation in the past by other U.S. Government agencies including the National Institutes of Health of the Department of Health and Human Services, U.S. Environmental Protection Agency and the U.S. Geological Survey of the Department of the Interior, and intends to continue to request the participation of these agencies as members of the Joint Working Group (hereinafter referred to as "JWG") for this Collaboration.

In addition to the government departments and agencies identified above, there may be other intermittent participants in the program by invitation. These may include institutions in the public and private sector, State and local governments in both countries, and other entities, as approved jointly by the JWG.

Part Two – Areas of Collaboration

The main areas of cooperation include, but are not limited to, the following:

- The prevention of illness related to toxic chemicals and hazardous substances;
- The development and use of improved tools, technologies and methods for enhancing environmental and occupational public health, and injury prevention efforts, including surveillance;
- Public health effects of ambient and indoor air pollution including a focus on exposures associated with burning of solid fuels for cooking and heating;
- The prevention of illness and injury related to hazards at the workplace and related research;
- Planning, preparedness, and response for chemical releases and radiation events;
- Research into the environmental and occupational causes of illnesses, including the assessment of exposure to, and disposal of, industrial and chemical waste materials;
- Use and application of biomonitoring and biomarkers in environmental and occupational health;
- Prevention efforts and research related to access to water, water quality, sanitation, and hygiene as related to their environmental health impacts;
- The public health effects of urbanization and the built environment;
- Impact of climate variability and climate change on health; and
- Public health approaches for injury prevention and control including the areas of road safety, burn injuries and unintentional injury.

Part Three – Forms of Collaboration

Forms of cooperation between the two Participants may include, but are not limited to, the following:

- Increasing collaboration among scientists of the two countries to conduct research and research training related to environmental and occupational health and injury, including public health, basic science, and clinical studies;
- Promoting information and scientific exchanges;
- Conducting and facilitating professional and scientific meetings;
- Creating direct links between appropriate scientific and public health institutions;
- Increased bilateral cooperation on environmental and occupational health and research at the global level;
- Developing strategic plans for collaboration; and
- Developing priority areas for joint focus on activities likely to result in significant and measurable improvements in public health and/or positive changes in health policy implementation in India and/or the United States, in particular those activities that may provide thrust to translational projects and activities.

Part Four – Joint Working Group (JWG)

The Indo-U.S. JWG is to meet at least annually. The Participants for the JWG should consist of representatives from each of the government departments and agencies, and other individuals, as deemed necessary and appropriate by the Participants. Each side expects to designate an individual to co-chair the JWG, with the names of the co-chairs to be communicated in advance of each meeting. Expenses such as travel, accommodation, insurance and local transport of the JWG members is expected to be borne by the sending Participant, and the organizational expenses of meetings are to be met by the host country. The JWG intends to carry out the following:

- Review program plans and recommend new areas of cooperation, based on recommendations from technical workshops and collaborating scientists;
- Expedite review and clearance of funded bilateral projects;
- Recommend measures to both Participants for the smooth operation of the program; and
- Address issues for joint resolution that the Participants cannot address effectively outside of the JWG.

Part Five – Implementation of Activities

The Participants are to carry out all activities pursuant to this MOU in accordance with the S&T Agreement and in accordance with the respective laws and regulation of the United States of America and the Republic of India, as applicable. This MOU does not create binding/legal obligations between the Participants. The Participants intend to further develop the steps for implementing this MOU through mutual consultations and concurrence. The U.S. Government and the Government of the Republic of India may

provide funding support for activities under this MOU, subject to the availability of resources.

Additional funding and active participation from governmental, non-governmental, private sector, foundation, and other sources, as necessary and consistent with usual and customary practice, to support individual projects may be sought with the mutual concurrence of both Participants. The Participants intend to expend any allocated funds based on the approved budget of specific jointly approved, collaborative research projects and related activities.

Joint workshops are expected to be organized to facilitate interactions between Indian and U.S. scientists in the mutually identified areas of cooperation. For joint workshops, organizational expenses are intended to be borne by the host Participant and travel expenses are intended to be borne by the sending Participant. Expenses for joint workshops may also be borne by other organizations and institutions, with the written concurrence of both Participants.

Part Six – Applicable Laws

The Participants acknowledge the importance of the protection of human and animal subjects in any health program. In recognition of this, both the Republic of India and the United States of America have adopted laws and regulations on the protection of human and animal subjects, and on the transfer of biological material. The Participants intend that matters related to the transfer of biological material and such research projects are to receive prior approval on each side according to the respective existing rules and regulations of each country, as applicable.

Part Seven – Products and Publications

The Participants recognize the work carried out under this MOU may produce patentable results and lead to the publication of scientific findings. It is intended that worldwide rights to any invention created solely by a Participant are to be solely owned by that Participant and those created jointly by more than one Participant are to be jointly-owned by the Participants. The allocation of intellectual property rights may be determined by mutual understandings of the Participants, if they so desire, and on a case by case basis.

The Participants intend to encourage scientists on both sides to publish, both jointly and as individuals, their findings. In any publication specifically related to work undertaken in areas covered by this MOU, the Participants expect to make an appropriate reference to this MOU with due acknowledgement to each other.

Part Eight – Exchanges of Personnel

The Participants recognize that work under this MOU may involve numerous exchanges of administrative and scientific personnel throughout each year. The Participants should facilitate, to the extent possible, the necessary clearances, subject to their respective laws and regulations.

Part Nine- Progress Reviews

The collaborative activities are to be reviewed at annual conference calls or joint meetings of JWG, attended by representatives of the Participants and the collaborating organizations, as necessary. Reports based on these meetings are expected to be submitted to MOHFW/DHR/ICMR and HHS/CDC. Areas for periodic review may include but are not limited to:

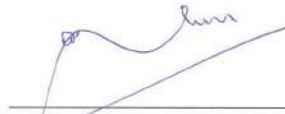
- Scientific progress
- Capacity building activities
- Annual budgets
- Exchange of personnel

Part Ten – Commencement, Modification and Termination

1. Activities under this MOU may commence upon signature and continue for five years. This MOU may be modified and extended by mutual written consent and may be discontinued by either Participant upon written notification of discontinuance to the other Participant with three months' advance notice.
2. The discontinuance of this MOU is not to affect the validity or duration of any arrangements entered into pursuant to this MOU prior to its discontinuance.

In witness whereof the undersigned being duly authorised by the respective Participants have signed this Memorandum of Understanding.

Signed at New Delhi on the 25th day of June, 2015, in two originals, each in the English and Hindi languages. In case of any divergence in interpretation, the English text shall prevail.



B.P.Sharma
Secretary, Department of Health Research
and Director General,
Indian Council of Medical Research
Ministry of Health and Family Welfare
Government of the Republic of India



H.E. Richard R. Verma
Ambassador of the United States
to the Republic of India