

## International Health Division: Profile of Activities

An Indo-Foreign Cell (IFC) was set up in Indian Council of Medical Research in early 1980s to coordinate collaboration in biomedical/health research between India and other countries/international agencies. The IFC was upgraded to the International Health Division (IHD) in the year 2000.

### 2.1 International Collaboration & Partnerships

The International collaborations are sought under bilateral, multilateral or regional framework modes for facilitating and strengthening interactions among governments, academia, institutions and industries in the areas of mutual interest. Currently, India has several bilateral Science & Technology(S&T) cooperation agreements with other countries to facilitate cooperation in the areas of biomedical research between India and foreign countries. ICMR operates in close cooperation with the Indian Ministry of Health & Family Welfare, Ministry of External Affairs, Indian missions abroad and foreign missions in India for the international collaborations.

By and large, biomedical research / health sciences prominently figures in all bilateral agreements in the field of Science & Technology. In addition, there are few specific agreements signed by the Ministry of Health and Family Welfare with other countries as well as those signed directly by ICMR with International organizations/ Institutions. The Memoranda of Understanding (MoU)/ Joint statements signed between ICMR and various collaborating global bodies are as outlined below.

- An **Indo-German** programme has been running in pursuance of Indo-FRG Agreement on Science & Technology signed in January/March, 1974 and subsequently under ICMR-GSF (now taken over by DLR, BMBF), Special Arrangement for cooperation in biomedical sciences signed in January/February, 1976. The ICMR- GSF cooperation was renewed in May, 1990 and further strengthened by signing of an addendum in November, 2005. The areas of cooperation under this agreement cover infectious diseases including AIDS, oncology, family planning and reproduction with special emphasis on birth control, health for mother and child, prenatal medicine, research on scientific basis of traditional medicine with emphasis on composition and pharmacological properties of natural products, environmental toxicology, drug development related to tropical diseases/infectious diseases, bioethics and other biomedical research aspects related to human health.
- An **ICMR - INSERM**, France MoU has been in place in pursuance of Indo-French Science & Technology Agreement signed in July, 1978. The ICMR-INSERM MoU was signed in February, 1989 and renewed in January, 2000 for cooperation in various areas of

biomedical research and health sciences. The areas of collaboration are infectious diseases (tuberculosis, HIV/AIDS, malaria, leishmaniasis), human genetics/genomics, neurosciences and surveillance/epidemiology using modern techniques, stem cell research, pharmacogenetics, genetics of cancer, polymorphism, viral hepatitis, leptospirosis, epidemiological data base, development of surveillance tools like registries and genetic susceptibility of infectious diseases. Newly added areas are bioethics and clinical research. Further areas of cooperation which are of mutual interest are added from time to time during the Joint Working Group meetings.

- A Memorandum of Understanding was signed between **ICMR and Canadian Institutes of Health Research**, Canada for cooperation in the field of biomedical sciences at New Delhi in January, 2005 wherein areas such as lifestyle diseases, public health & disease surveillance were identified for collaboration.
- An **Indo-US Joint Statement** on Emerging and Re-emerging Infections and Disease Surveillance was signed in June, 2005 (and further expanded in November, 2005) and other three Joint Statements on HIV/AIDS, Maternal & Child Health and Human Development & Research and Environment & Occupational Health were signed in June, 2006 by the Hon'ble Minister for Health and Family Welfare, Govt. of India during his visit to USA.

Various activities have been initiated under these joint statements. During the last five year's period, several workshops on topics of mutual interest have been organised and about 40 collaborative research projects have been funded by ICMR under these Joint Statements. The collaboration has fruitfully led to publication of several research papers as well as transfer of technology and infrastructure strengthening of Indian research institutes. The cooperation is reviewed through annual Joint Working Group meetings organized in India and USA.

- An MoU between **ICMR and Helmholtz Association (HGF)**, Germany for cooperation in Medical Research was signed in April, 2006 at Hannover, Germany during the visit by Hon'ble Prime Minister of India to Germany. ICMR and Helmholtz Association are distinguished research organizations in their home countries with outstanding scientific resources and technical facilities at their disposal. The areas of interest which have been identified for cooperation are infectious diseases, oncology & biomedical research related to health. Under this MoU, a virtual Indo-German Science Centre for Infectious Diseases (IG-SCID) was inaugurated in April, 2007 which is located at the Council's Headquarters and slated to promote research in identified areas of infectious diseases through joint Indian and German funding. The organization of joint workshops, exchange of scientists/ researchers and execution of twinning projects are the modes of cooperation. Five areas of collaborative priority namely Genetic susceptibility, Vaccines & anti-infectives, Viral diseases (HIV/HCV), Animal models of infectious diseases and Zoonoses have been identified under this programme.



An MoU between ICMR & Helmholtz Association (HGF), Germany  
Hannover, Germany, April 24, 2006



Inauguration of  
Indo-German (ICMR-HGF) Science Centre for Infectious Diseases (IG-SCID)  
New Delhi, April 3, 2007

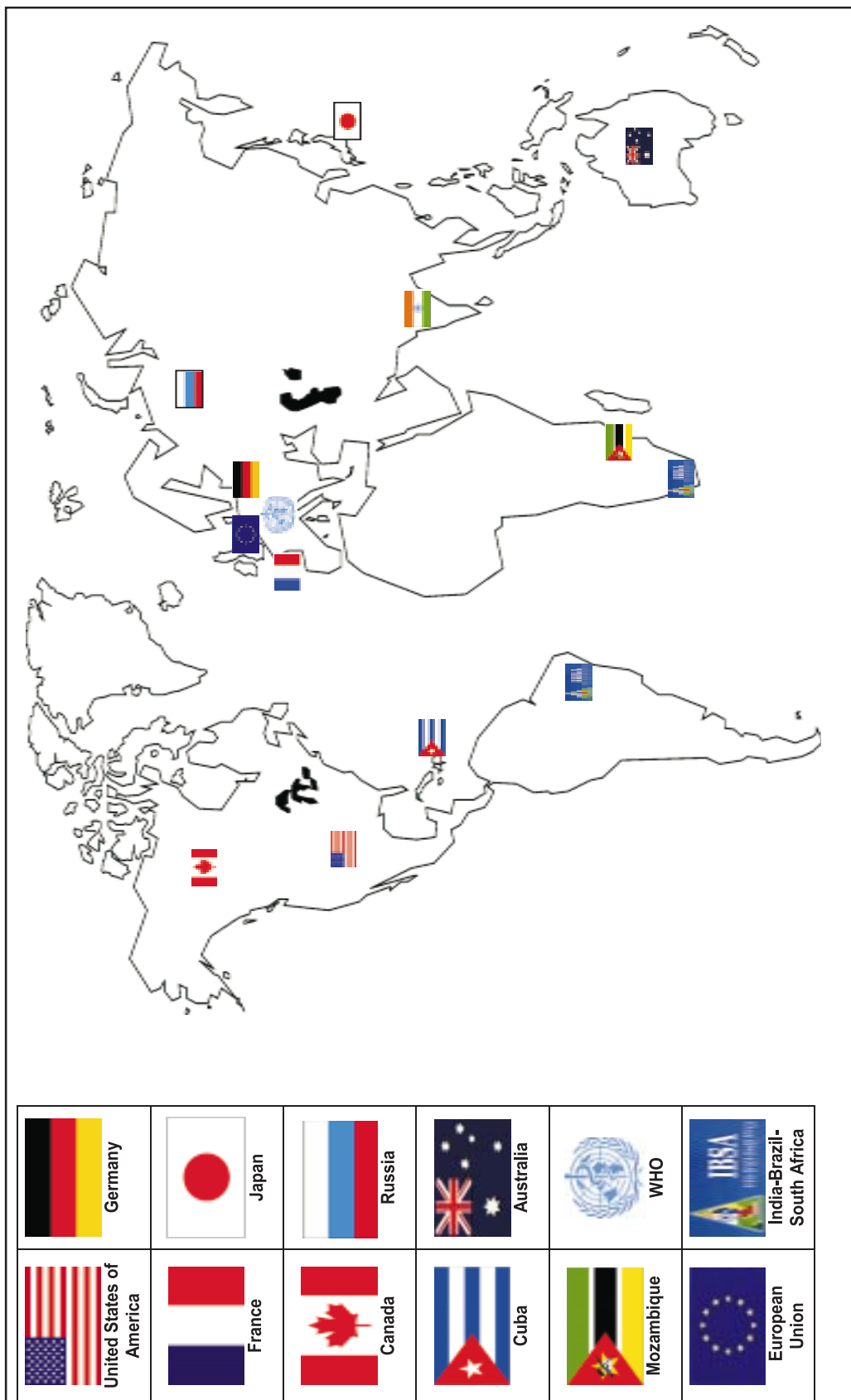


Fig. 2. Collaboration of ICMR with different countries in biomedical research

- An MoU between **ICMR and University of Minnesota**, USA was signed in October, 2006 for the development and expansion of research, medical education and clinical programmes in the areas of medicine and public health. The purpose of this collaboration is to build upon the synergy of expertise on both sides for promotion and conduct of research. The initial research efforts will develop around areas such as field epidemiology, cardiovascular medicine, cancer, infectious diseases, immunology, metabolic diseases, obesity, diabetes and public health initiatives.
- In November, 2006, an MoU between **ICMR and International Clinical Epidemiology Network (INCLIN) Trust International**, Executive Office, New Delhi was signed to collaborate in the areas of health research and capacity building. These efforts would enhance the capabilities of Indian research institutions and enthuse faculty to take up collaborative research activities and projects. This collaboration is dedicated towards improving the health of disadvantaged populations by promoting equitable health care through networking by conducting collaborative interdisciplinary research on high priority health problems and by training future generation of leaders in health care research.
- A letter of intent for collaboration between **ICMR and Boston University**, USA was signed in October, 2007 as a follow up of visit by the President, Boston University and his team to India in September, 2007. This cooperation is likely to enhance the collaboration between the two institutions in the identified areas of emerging infectious diseases and public health training. The collaboration in research and application in other areas of mutual interest in emerging infectious diseases and public health education has additional common interest and synergistic capacity under the proposed MOU. Both sides have also shown interest in developing a clinical trials network, basic and applied cancer research and cardio-vascular disease as well as risk factors such as diabetes, obesity and genetics including the linkage of population based research.
- An MoU between **ICMR and University of California Los Angeles (UCLA)**, USA was signed in October / November, 2007 for collaboration in the areas like education and training programmes in clinical translational research; basic and fundamental health related sciences including immunology, virology, molecular biology, genetics, stem cell, nanotechnology; communicable diseases including HIV /AIDS, tuberculosis, hepatitis, STD, respiratory, diarrhoeal diseases; non-communicable diseases including cancer, CVD, auto-immune diseases, diabetes, neuro-degenerative diseases; social behavioural sciences related to drug abuse, obesity, disease prevention, patient and family care; public health sciences including epidemiology, biostatistics, health services, environmental and community health, public policy and law; international health / economic issues related to health as well as information technology applications for health education and care.

- An MOU between **ICMR & The George Institute for International Health & University of Sydney (Faculty of Medicine)**, Australia was signed in November, 2007 in Hyderabad. The areas of cooperation initially covered under the MoU are in public health and clinical aspects of chronic diseases, HIV / AIDS, road traffic injuries and health systems. Other areas of mutual interest may be explored subsequently.

*The purpose of these agreements & Memoranda of Understanding (MoU) has been for exchange of scientific information; exchange of scientists/technicians; joint execution of scientific projects including support in the procurement of scientific equipments and organization of joint scientific meetings, seminars, workshops and symposia in identified areas of cooperation. Some of the ICMR's collaborating countries/agencies are depicted in **Fig.2**.*

## **2.2 Guidance for International Collaboration**

Rapid advances in science and technology have brought in new technologies to understand the disease process and find strategies for its prevention and cure. A need is felt that researchers working in the core health sectors like diagnostics, vaccines, new drug targets, genomics, epidemiology and surveillance should be exposed to the latest advancements in knowledge and also interact with international scientists in their respective field of work. Hence scientific research and technology development can be greatly benefited through international cooperation and collaboration. Common goals can be effectively addressed by pooling of both national and international resources.

The guidance for international collaboration could be of assistance to the young researchers during the preparation of a research grant application. While nothing can substitute the individual efforts made by a researcher to develop an innovative idea and methodology supported by credible scientific evidence into a sound research proposal, we nevertheless hope that some of the suggestions made as below will help in avoiding certain errors often made by applicants and will enable them to submit an application for international collaboration with the best chances of being successful in today's highly competitive world of research.

Applications for research projects involving foreign assistance and/or collaboration in biomedical / health research are to be submitted by the Indian investigators to ICMR for approval of Govt. of India through Health Ministry's Screening Committee (HMSC). The International Health Division of ICMR acts as the Secretariat for HMSC. The projects are peer reviewed by the concerned Technical Divisions at ICMR and then placed before the HMSC for consideration. The outline for decision making process and concerned processing of international collaborative projects are depicted in **Fig 3**.

The procedures / instructions as well as application format vary from country to country and from agency to agency. The prescribed format of the concerned agency/country is to be used. In absence of prescribed format, proposals can be prepared using ICMR format.

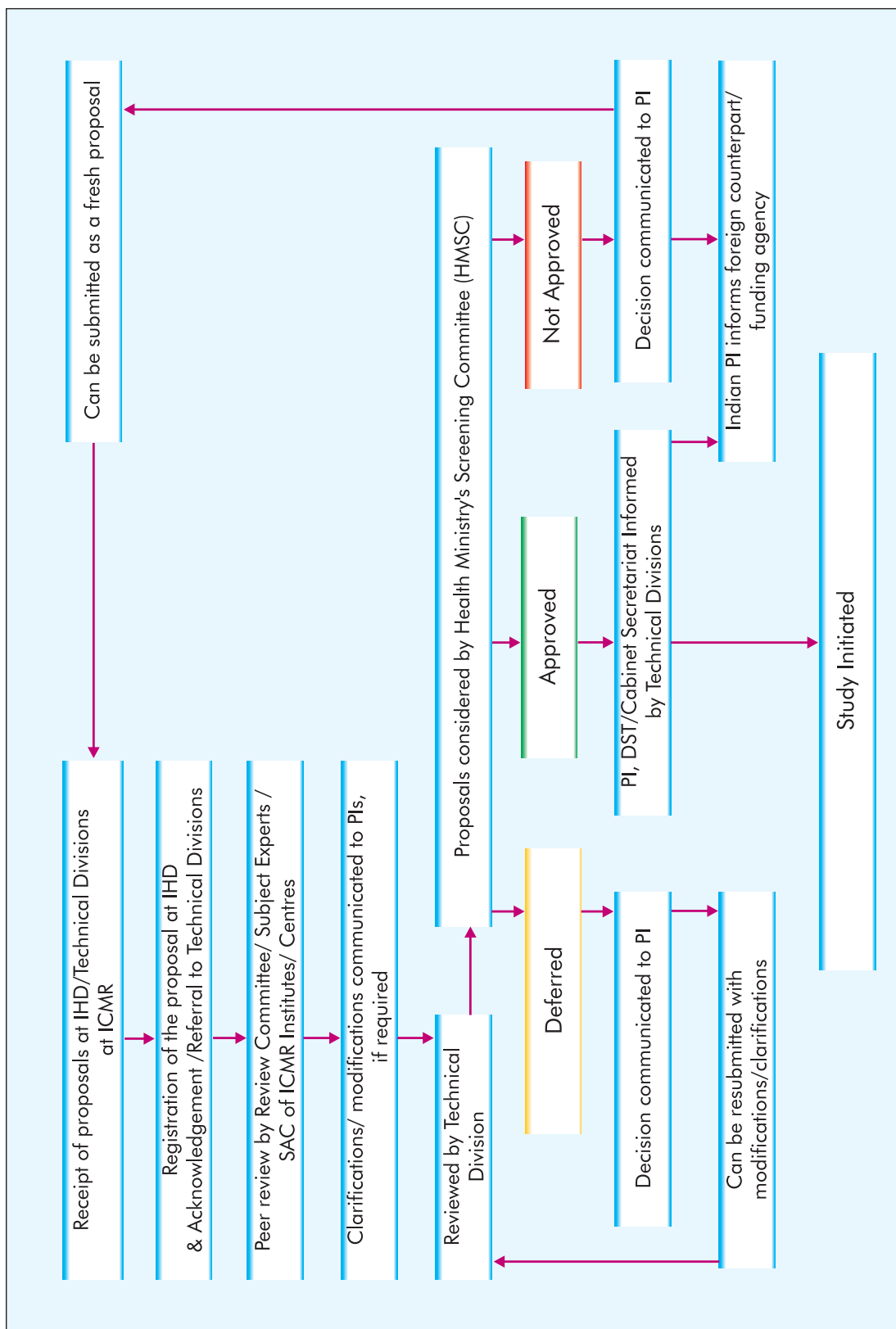


Fig. 3. Flow chart outlining the procedures followed in review of international collaborative projects

Although the guidance/format for international collaborative research in biomedical sciences is available on ICMR website, yet too many applicants skim over these guidelines before plunging in. As a result, they face unnecessary problems during the review procedures. However, some key areas which could be of help are discussed in the guidance for international collaboration available at ICMR website <http://www.icmr.nic.in>

### **Some of the important review criteria for international collaborative projects**

1. Relevance of research work to India's national health priorities.
2. Technical strengths and merits of research proposal.
3. Soundness of proposed research methodologies.
4. Role /Status/Expertise of the Indian & Foreign Principal Investigators.
5. Availability of infrastructure, manpower, nature of work to be done in the Indian and foreign Institutions.
6. Justification for foreign collaboration/funding.
7. Written consent and biodata of foreign collaborator(s).
8. Transfer of technology and capacity building as an outcome of the project.

### **The following points should be taken into consideration by Indian researchers:**

1. With the progress in the area of cellular and molecular biology, the following points become important for careful consideration by scientists during preparation of their proposals, as these may have a bearing on the approval process:
  - (a) Safety during transfer of biological material such as risk of transportation.
  - (b) The research should not lead to development of biological weapons and hence breach of national security.
  - (c) Risk (relative) from the defence and internal security point of view of a country.
  - (d) Mutual agreement on Intellectual Property Rights (IPR) claims and related issues.
  - (e) Potential for commercial exploitation, such as by development of vaccines, diagnostics, therapeutics, drugs, etc.
2. Information pertaining to likely visits (year-wise) by Indian and foreign scientist(s) including duration and purpose of each visit.

### **Important advisory**

1. The research proposals can be submitted throughout the year by the Indian Investigators. Call for proposals in response to various MoU's/ Joint Statements are made from time to time. To avoid delay in peer-review process, it is warranted that Indian PI's submit their project proposals to ICMR for simultaneous processing.
2. In case of any deadlines, it is required that the proposals be submitted to ICMR at least six months in advance.
3. Appropriate clearances for research involving human subjects/ animal experimentation, radio-tagged material (for clinical and/or experimental purposes), recombinant DNA/genetic engineering work.
4. The proposals involving ICMR's Institutes/Centres with the recommendations of the Scientific Advisory Committee (SAC) of the concerned Institute/Centre are required to be submitted along with the proposal.
5. The requisite documents to be submitted for review are listed at ICMR's website as also the additional documentation for Non Governmental Organisations.

### **2.3 Research Involving Human Subjects & Animal Experimentation**

If the research involves human subjects and is not exempt from human subject review, then it is mandatory to have proposed project approved by an Institutional Review Board (IRB) or Institutional Ethics Committee (IEC) along with the approved assurance of compliance (format of which may be available at the parent organization). The application is not placed for consideration of the HMSC without the certificate of ethical clearance. ICMR's Ethical Guidelines for Biomedical Research on Human Subjects, 2006 (available on ICMR's website) may be referred to.

In addition, applicants must provide information pertaining to the characteristics of the subjects, source of research materials, recruitment plans and consent procedures, potential benefits to the subjects and to mankind, any potential risks and procedures for protecting against or minimizing potential risks. If they fail to include this information, the application is likely to be deferred by an international funding agency. The aim should be to include enough information with sufficient clarity so that reviewers may not have to question what the applicant proposes to do.

According to many international funding agencies, if the research involves vertebrate animals, the applicant needs to have an approved Animal Welfare Assurance form, which should be available at the parent organization. And also, the proposed project should be reviewed and duly approved by an Institutional Animal Care and Use Committee. In addition, the applicant must provide information pertaining to items such as a detailed description of the proposed use of the animals, a justification of the choice of species and number of animals to be used, information on the veterinary care of the animals involved, an explanation of the procedures to

ensure that the animals will not experience any unnecessary discomfort, distress, pain or injury and a description and justification for any euthanasia method to be used. If the applicant fails to include this information, the application may be deferred. The guidelines issued by the Committee for the Purpose of Control & Supervision of Experiments on Animals (CPCSEA) for Laboratory Animal Facility; Indian National Science Academy (INSA) Guidelines for Care and Use of Animals in Scientific Research and ICMR Guidelines for Use of Laboratory Animals in Medical Colleges may be referred to (available at ICMR website).

## **2.4 Transfer of Biological Materials**

In case there is transfer of human biological material from India to foreign laboratory or vice-versa, a Material Transfer Agreement (MTA) needs to be provided. The guidelines issued by the Ministry of Health & Family Welfare, Govt. of India, New Delhi vide OM no L19015/53/97 IH (Pt), dated 19 November 1997 are to be followed for proposals involving transfer of human biological material for biomedical research purposes. *These guidelines and the MTA format are available at ICMR's website.*

The above mentioned guidelines enshrine the definition, modalities and mechanism for transfer of human biological materials for biomedical research as well as regulate the exchange of biological material for commercial purpose. It categorically states that if the material transfer is envisaged as a part of a collaborative project, the proposal must be routed through the appropriate authorities for evaluation and clearance. The exchange of human biological materials should be an integral part of a collaborative project, which should have been approved by the IRB (Institutional Review Board) and Ethics Committee and not be a separate activity.

It advocates that in order to protect the rights of the Indian study subjects as well as Indian scientists/organizations, memoranda of understanding and/or agreements on material transfer should be entered into between the collaborating partners (Indian and foreign). This should, according to the requirement of case under consideration, include the items pertaining to identification of the receiving/sending parties, the material to be transferred and its quantity, purpose of the transfer, the research to be carried out using the material, confidentiality, intellectual property rights, filing of patents, arrangements for future commercial exploitation, reporting, publication rights indemnification, termination of agreement, assignation or transfer of agreement / rights, safety norms to be observed, shipping arrangements, 'qualified user' information and any other matter that may be relevant to the particular exchange of material.

The requests for transfer of biological material for research / diagnostic purposes in biomedical research after scrutiny and decision by the respective agencies / departments are to be placed before the Health Ministry's Screening Committee (HMSC) for final endorsement. This would mean that all institutions, agencies and departments (as mentioned in guidelines) would have to send their proposals to the ICMR for obtaining such an endorsement by the HMSC.

## 2.5 Intellectual Property Rights (IPR)

Indian Council of Medical Research is committed to meet its objectives of improving public health through research and hence pursues an active policy of ensuring the most rapid and efficient development of new medical technologies developed by its scientists through seeking IP rights in India and abroad. It ensures that its basic mission is not compromised by the efforts to commercialize new technologies. Further, where research and development is not necessary to realize the technology's primary use and future therapeutic, diagnostic or preventive uses, IP protection may not be sought and instead those technologies can be commercialized through non-patent licensing.

### **Major objectives**

- i. To make scientists aware of the need and responsibility to protect new knowledge generated through IP rights, ownership of biological and other materials and data generated using ICMR funds and facilities.
- ii. To develop procedures at ICMR institutions to capture, assess and protect new intellectual property generated.
- iii. To provide ICMR scientists, information on demand relating to patents in their areas of interest by maintaining appropriate national and international databases.
- iv. To provide appropriate technological, professional and legal expertise and services to assist ICMR scientists to file patents in India and abroad.
- v. To encourage and provide all support to universities and other institutions for protecting and commercializing new knowledge generated with ICMR support.
- vi. To develop a licensing policy that ensures the maximal public health benefit and a fair return on investment from ICMR research.
- vii. To develop and implement a royalty policy at ICMR institutions that encourages innovative scientists and technology generators through a system of royalty sharing and reward system.
- viii. To serve in an advisory capacity to the Indian government on IP related issues concerning public health.
- ix. To forge appropriate strategic alliances with national and international S&T agencies and industry to market its new inventions and develop professional knowledge networks for ICMR's technology management professionals.

The Council promotes its strategic objectives by attempting to create a conducive environment for research and innovation through an IPR-friendly climate by holding regular training workshops, seminars, making scientific community aware of the need for prompt IP protection before public

disclosure through various measures. It is the agency which is involved in regulatory practices of intellectual property rights pertaining to the biomedical sciences and health science research in the global patent scenario protecting the interests of both science and propriety of human welfare.

## **2.6 WHO-Government of India Collaborative Biennium Programme**

The World Health Organization (WHO) is a technical collaborative agency which assists its member states to develop and strengthen their health services by providing technical support. WHO's assistance is formulated in the form of a WHO/Government of India (GoI) collaborative programme, which is implemented by concerned programme managers in the Ministry of Health and Family Welfare (MoH&FW) jointly with the WHO India country office in cooperation with the WHO Regional Office for South-East Asia (WHO/SEARO) and WHO Headquarters (WHO/HQ), if necessary. The programme functions in a two-year cycle, referred to as the biennium, with the financial period running from 1<sup>st</sup> of January of the given year to 31<sup>st</sup> of December of the subsequent year.

The WHO/GoI collaborative programme focuses on the high priority aspects of national health development programme. Recognizing that WHO funds are limited, the collaborative programme acts as a catalyst and is focused on a few selected areas that require technical inputs and are innovative in nature. It is funded through WHO's Regular Budget (RB) and other sources known as Extra Budgetary (EB) funds.

For the priority health programmes of the GoI during the 2002-2003 biennium, WHO helped in mobilizing significant amounts from EB sources. These funds amounted to more than four times the allocation from RB. Major programmes covered under EB funds were poliomyelitis (nearly 50%), tuberculosis, leprosy, HIV/AIDS, disease surveillance, malaria, lymphatic filariasis, emergency preparedness and response, child and adolescent health and health information network.

During the last biennium, 2004-2005, the WHO/GoI country work plan consisted of twenty four Areas of Work (AoW). Each work plan had a linkage to the WHO's Global Expected Result (GER) and provided information on country's issues and challenges, expected contribution of the country to GER, products/services pertaining to each expected contribution, activities to be undertaken for accomplishing the indicated product and planned budget for each activity (both RB & EB, which were already committed over and above the work plan). Over-planning figures were provided that helped WHO to mobilize more funds.

The Programme Budget (PB) for the biennium 2006-2007 contained thirty-six Areas of Work (AoW), which served as common building blocks for programmes and budget across the organization. Some areas of work were covered by the headquarters and regional offices and not by country offices.

For this biennium, SEARO had introduced the Regional Expected Results (RER) as well, which highlighted the regional issues and priorities within programme budget (PB) 2006-2007. This was based on joint planning with country offices and regional offices. It was mandatory to link each Regional Expected Results (RER) to one Organization Wide Expected Result (OWER) but possibilities existed for linking multiple RERs relating to an OWER. At the same time, depending on the regional priorities the RER may not have covered some OWER.

In effect, we have a planning framework wherein we move from a global OWER to specific priorities reflected in RER and then to more focused Office-Specific Expected Results (OSER).

There are twelve different offices in SEAR; eleven in the SEAR country offices and the other is the regional office. In this context it is important to note the distinction between OSER(s) from the regional office and RER(s): the former represents the normative and facilitative role of the regional office, whereas the latter is the consolidated result for the entire region.

### **Priorities for Programme Budget 2006-2007**

WHO's broad strategic directions are set out in the general programme of work, which guide the elaboration of the two-year programme budget.

The programme budget builds on WHO's work over last biennium and sets out new and emerging areas of global concern where greater emphasis is required. The priorities are based on country needs and country cooperation strategies, resolutions of the health assembly and regional committees, other global commitments such as the Millennium Development Goals (MDG) and lessons learnt from past experience. The priorities are enhancing global health security, accelerating progress towards achieving MDG's, responding to the increasing burden of non communicable diseases, promoting equity in health & ensuring accountability.

On the basis of strategic directions and identified priorities, during the last biennium six specific areas of work identified were epidemic alert and response, making pregnancy safer, child and adolescent health, surveillance, prevention and management of chronic and non-communicable diseases, tobacco & planning, resource coordination and oversight.

For one of the identified Areas of Work (AoW) known as Health Information, Evidence and Research Policy (IER), the International Health Division of ICMR, coordinates the activities as a Responsible Programme Manager. This domain is related to the strengthening and reforming of the health information systems in the country to provide adequate and timely strategies for improving sub-national health information system towards attainment of major international goals.

The other key areas under IER are optimizing Knowledge Management (KM) practices through knowledge and evidence based decision making system by collection, analysis and dissemination of health information with a particular emphasis on knowledge generation in priority areas to strengthen human capacity.

The IER also envisages the need for developing and strengthening Health Systems Research (HSR) contextualized with regional priorities engaging civil society within an ambit of WHO programmes, with an adequate emphasis on HSR analysis and capacity building of researchers.

The impetus on improving International cooperation for health research with a focus on advisory roles coordinated by WHO and an integration of national expertise to facilitate interregional work in health care is also covered under IER.

The requisite of an ethical conduct of health research and best practices disseminated within WHO and blending them within public health research is also ratified therein.

## **The Planning Process**

The planning process generally begins six months before the beginning of a biennium so that work may commence by January. During the planning stage, detailed work plans are developed through the discussions between the WHO country office and MoHFW. While preparing the work plan it must be ensured that 75% of activities commence in first year of the biennium and remaining 25% are carried forward to the second year.

According to the recent directives given through WHO/Gol coordination meetings, Local Cost Subsidies (LCS) were discontinued and replaced by Direct Financial Cooperation (DFC) in the 2006-2007 biennium. One of the principal features of DFC is withholding of further DFC funding from recipients with overdue technical reports and financial settlements. In case of non utilization of substantive amounts by 31<sup>st</sup> December of the first year of a biennium, allocation may be shifted to some other priority activity.

## **2.7 ICMR International Fellowship Programme**

The world is now witnessing a rapid change in the way biomedical research is being conducted. The developing countries are in the grip of formidable challenges posed by existing communicable diseases coupled with newer emerging infections as also reemergence of newer strains apart from the subtle but progressive burden of non communicable diseases. On the positive side, rapid advances in science and technology have brought forth newer technologies to understand the disease process and find strategies for prevention and cure. There are areas at the cutting edge of science such as molecular medicine, genomics, immunology etc which have revolutionized knowledge for finding rapid diagnostics, vaccine, new drugs and other therapeutic measures. There is an urgent need that researchers working in core health sectors like diagnostics, epidemiology, surveillance and cure are exposed to the latest advancements in knowledge and interact with international scientists in their respective field of work.

To achieve the objective of building up of skilled pool of biomedical researchers in all aspects of biomedical research including basic, applied, epidemiological and clinical sciences, ICMR has embarked upon an International Fellowship Programme for capacity strengthening of scientists

of our country. There are twelve fellowships per year for young Indian scientists for duration of 3 to 6 months and six fellowships for senior level scientists for a period of 2 weeks to visit the foreign laboratories/institutes for scientific discussions/ training.

To achieve the objective of better south to south co-operation and considering India's excellence and proven leadership amongst the developing countries in several areas of research, ICMR awards five fellowships every year to the scientists from other developing countries to work in Indian laboratories for upto a period of six months.

## **2.8 ICMR Awards/ Prizes**

Indian Council of Medical Research not only encourages and coordinates medical research but also recognizes the contributions made by biomedical scientists in various fields of science by rewarding them with a number of awards and prizes every year.

ICMR offers an array of awards in biomedical sciences. Majority of the awards are annual while a few are being given on alternate years. In addition to the awards given for the meritorious work carried out by scientists in a particular field of science, there are a number of awards to recognize and adorn scientific talent of young scientists. There are specific awards to encourage the scientists working in underdeveloped parts of country and also the scientists belonging to underprivileged communities and championing the cause of their section of society. An exclusive award has been instituted for women scientists to acknowledge the arduous tasks undertaken by them as successful professionals. ICMR awards are advertised in national newspapers and are widely publicized in scientific journals of the country in addition to being displayed on ICMR website.

## **2.9 Scientific Advisory Committee-Overseas**

With an aim of involving Indian diaspora in the healthcare sector of our country, the International Health Division has worked towards constituting a Scientific Advisory Committee-Overseas at ICMR. Through this Committee, the eminent scientists of Indian origin will advise the Indian scientists on issues like utilization of advanced technologies in our country as well as on the mechanism of interactions and collaboration between the scientists of Indian origin and scientific organizations in India. The possibilities of scientific collaborations by writing joint research proposals and hands-on-training opportunities for this purpose may be discussed in order to develop sustained linkages between Non Resident Indian biomedical research professionals and their counterparts in India.

## **2.10 Other Organizational Activities of International Health Division**

International Health Division (IHD) facilitates the organization of workshops, Joint Working Groups or Joint Steering Committees with various international Institutes/Organizations. The meetings are organized to review, develop and finalize joint collaborative programmes, decide future

plans of action and identify priorities for bilateral cooperation. Some of the major active collaborative efforts over the years with countries like Germany, USA, France, Japan, Canada, Italy, Bulgaria and Cuba have materialized into the development of a number of successful collaborative projects.

IHD supports and coordinates the international travel of Indian scientists engaged in approved bilateral research projects under various memoranda of understanding or joint statements with other countries. During the Xth five year plan period with effect from April 2002 to March 2007, 149 exchange visits from foreign countries and 96 exchange visits from India were coordinated for joint discussions and/or undertaking research activity.

IHD is consulted by various technical divisions of Indian Council of Medical Research and its Institutes/ Centres for inputs or comments on preparation of memoranda of understanding between Indian and foreign institutions.

The Division also disseminates information regarding the identified areas, facilities and opportunities available under various collaborative programmes through call for proposals, information brochures and ICMR website.