

National Cancer Advisory Board (NCAB)
Ad hoc Subcommittee on Global Cancer Research (GCR)

Hyatt Regency Bethesda Hotel
1 Bethesda Metro Center
Bethesda, MD
November 28, 2012
5:00 – 6:30 p.m. EST

SUMMARY

Subcommittee Members:

Dr. Olufunmilayo Olopade, Chair
Dr. Kevin Cullen
Dr. Jonathan Samet
Dr. Edward Trimble, Executive Secretary

NCAB Members:

Dr. Judith Kaur

Other Participants:

Teri Brown	Mostata Nokta
Henry Ciolino	Cassie Norman
Robert Croyle	Isabel Otero
Geraldina Dominguez	Michele Powers
Brenda K. Edwards	Ben Prickril
John Flanigan	Avi Rasoulj
Holly Gibbons	Luis A. Salicrup
Elyse Gillen	Hasnaa Shafik
Jorge Gomez	Sudha Sivaram
Joe Harford	Lisa Stevens
Brenda Kostelecky	Margaret Tucker
Douglas Lowy	Bhadrasain Vikram
Catherine M. Muha	Makeda Williams
Daniel McBrayes	Kimia Rome Zarri
Frances Neges	Erinn Howard, Rapporteur

Welcome and Opening Remarks

Dr. Olufunmilayo Olopade, Subcommittee Chair, welcomed meeting participants. NCAB members introduced themselves.

Data on Eight Countries

Sudha Sivaram

Dr. Edward Trimble, Director, the National Cancer Institute (NCI) Center for Global Health (CGH), said that a Centers for Disease Control and Prevention (CDC) partner was charged with determining the countries most in need of non-communicable disease (NCD) research. The NCI is working to

examine the eight countries that the CDC identified, and Ms. Sudha Sivaram informed participants about this examination.

Ms. Sivaram and colleagues worked to determine the investments that U.S. government agencies have made in global health, identify the scientific areas of overlap between agencies, and identify available infrastructure for cancer control planning. To accomplish this, the National Institutes of Health (NIH) Research Progress Online Reporting Tool (RePORTER), as well as U.S. government agency documents (e.g., annual reports, agency websites) were used. These sources provided ample quantitative and qualitative data.

Ms. Brenda Kostelecky described the RePORTER data processing of three of the eight countries. This processing involved keyword searches for the country of interest in FY2010-FY2012, and was limited to certain project types (e.g., capacity building, cancer). The research projects were further culled to ensure relevancy.

Ms. Kostelecky said that in India, the Fogarty International Center (FIC) and the National Institute of Allergy and Infectious Diseases (NIAID) funded the largest number of projects, and the FIC, NIAID, and the National Institute of Child Health and Human Development (NICHD) provided the largest amount of funding dollars. The total amount of funding, however, includes funding for entire projects which may not be relevant to India specifically. There are cancer and training related projects in India; human immunodeficiency virus (HIV) studies are the largest portion of infectious disease projects.

Working with the Office of Communications and Education (OCE) to determine a country's "hot spots" for research, Ms. Kostelecky pointed out that New Delhi and Mumbai are areas with a large amount of research project awards. Most of these monies and projects have been granted to U.S. researchers with research sites in India, and less to Indian researchers.

Similar to India, Kenya has the largest numbers of projects being funded by NIAID and FIC. The largest dollar amounts being contributed originate from the CDC, NIAID, and NICHD. Less than 10 percent of project types in Kenya deal with cancer; most research is in the area of HIV.

Columbia has substantially fewer research projects than India and Kenya. Of the projects that exist, most are funded by the FIC. The NCI has only one research project being funded in Columbia; however, that project accounts for the majority of funding dollars in Columbia. Cancer-related research is occurring, as well as HIV and *Helicobacter pylori* research. Bogota is a "hot spot" in Columbia for research projects.

Geraldina Dominguez said that she is aware of two grants in India that were not represented in the presentation. Ms. Kostelecky explained that if projects were classified by their city of origin and not country, the keyword search to find projects would have overlooked it. Additionally, 2012 projects are not yet complete in all of the databases and reports.

Ms. Sivaram said that the other five countries that will be examined (i.e., Jordan, China, Thailand, Brazil, and Tanzania) have a significant amount of research occurring and will add to the available information. Analysis of the information centered on determining the scientific foci in each country, the institutions involved in research, and the opportunities available for overlap.

Focusing on India, the NCI portfolio includes 13 research awards awarded to U.S. or Indian principal investigators (PIs). These awards are in the areas of breast and cervical cancers, diet and cancer, and tobacco. This portfolio is small compared to CDC or NIAID. In addition to CDC and NIAID, there are other NIH institutes with work in this country indicating areas for research overlap. FIC has supported a significant amount of work in capacity building, especially regarding HIV and tuberculosis personnel training and infrastructure building.

In southern India, there are many projects being worked on by agencies and institutions that are in close proximity to each other. These projects all are funded by the U.S. government, and it would be beneficial to bring together these research project infrastructures to better leverage resources and enhance collaboration.

A participant indicated that some statistics, such as total project dollars, prevent these data from being useful. The NIH should be able to determine the exact funding that goes to each country, instead of to an overall project. Ms. Sivaram said that the NIH has a foreign awards tracking system that can be helpful in this work. Additionally, a participant said that the NIH representative in the U.S. embassy in India should be able to provide information on the precise monies entering India from U.S. research grants.

Dr. Trimble questioned if it is important to determine the precise quantity of research dollars entering countries or to determine countries with scientific opportunity for the NCI. Thailand, for example, has a significant amount of research occurring; however, very little of the work is supported by NIH. Dr. Olopade additionally questioned whether it is more important to examine opportunities to build capacity in locations with significant investments already in place or to seek out new scientific opportunities.

Dr. Olopade said that it will be important to determine not only how much research money is going to various countries, but also how much actually is spent in those countries versus spent on U.S. researchers who have a research site there.

Dr. Trimble said that the United Nations (UN) charged the World Health Organization (WHO) with making an action plan to reduce premature NCD mortality globally by 25 percent by 2025. Research and outreach on cervical cancer and tobacco control will assist this effort. Dr. Douglas Lowy said that the world generally supports cervical cancer vaccination; however, support is less saturated for screening and treatment.

Charge for the NCAB *Ad Hoc* Working Group on Global Health

Ted Trimble

Dr. Trimble introduced Lisa Stevens. Ms. Stevens said that the Subcommittee should consider inviting individuals with regional expertise in cancer research areas to speak at future meetings or inform the Subcommittee via teleconferences. An expert in India, for example, could inform the Subcommittee about research questions in India, potential infrastructure resources, and other opportunities for the NCI. Drs. Judith Kaur and Kevin Cullen agreed to the utility in gaining such expertise via teleconferences or a series of in-person focused discussions.

Strategic Priorities of the Center for Global Health (CGH)

Ted Trimble

Dr. Trimble said that priorities were determined through a process of gaining input from Drs. Harold Varmus and Lowy, the Subcommittee, an external stakeholders meeting (March 2012), an internal NCI global health strategy meeting (May 2012), and NCI Divisions, Offices, and Centers. The priorities that were determined are:

- (1) Cancer control planning and implementation;
- (2) Research on cancers association with chronic infection;
- (3) Research on modifying common risk factors for NCDs;
- (4) Research on ecological-niche cancers;
- (5) Building capacity for global cancer research;
- (6) Development of low-cost technology for cancer detection and diagnostics; and
- (7) Expanding partnerships.

Ms. Stevens said that, for the first priority, in a recent meeting it was determined that two areas are imperative: advocacy and expert guidance. Dr. Trimble said through partnering with various Cancer Centers, organizations (e.g., WHO), offices, and programs, technical assistance can be offered in control planning. Additional cancer control planning and implementation can be achieved via a global initiative for cancer registries (e.g., supporting registry hubs), improving uptake of HPV vaccines (cost is critical); improving access to anatomical and clinical pathology (many countries have none or only one pathologist); improving access to non-counterfeit and affordable cancer drugs (fake malaria resistance, cancer, and HIV drugs is a problem); and mapping global health programs (e.g., NCI, NIH, non-governmental organizations [NGOs]), among others. Mapping global health programs is critical to identifying and gaining opportunities from the constructive overlap of programs.

Research on cancer with chronic infections includes HPV and cervical cancer; *H. pylori* and stomach cancer; and Epstein-Barr virus and Burkitt's lymphoma, among others. This priority is key because in developing countries, 25 percent of cancers are associated with chronic diseases.

Research on modifying common risk factors for NCDs includes tobacco control, alcohol intake, and obesity and exercise. Dr. Robert Croyle said that measuring the impact of tobacco control funding can be complicated. Many countries discuss and work from the WHO Framework Convention on Tobacco Control Treaty; however, the United States has not ratified this treaty, which makes discussion participation difficult. Dr. Jonathan Samet added that the CDC and WHO have a global tobacco surveillance survey that can assist in understanding the exact component contributions of the NCI; however, it is challenging. There are much data within the United States on tobacco control programs, but using these data to examine differential effectiveness through a range of settings in the world is complicated. Dr. Olopade said that the NCI could examine how other countries handle tobacco control (e.g., tax increases, public smoking bans) and determine the best practices. Advocacy could be targeted towards these learnings. Mr. Croyle said that it will be important to determine the NCI's niche in tobacco control. Tobacco research funding is not highly discussed globally because a substantial body of research already exists; discussions focus on policy.

Research on ecological-niche cancers focuses on certain cancer types found significantly in certain regions of the world, such as Burkitt's lymphoma in the malaria belt of Africa and Latin America. Current research on this ecological-niche cancer has been successful and multidisciplinary, including

research in epidemiology, molecular biology, implementation science, and developing novel treatments.

Building capacity for global cancer research covers various foci, including the molecular epidemiology of breast cancer in Latin America. This is a positive example of building capacity because there has been much work, including bio-banking, epidemiology, and clinical trials. The NCI has held extensive discussions with research partners about future studies, as well. Other areas for building capacity include prevention and screening trials, treatment trials, strengthening the work of NCI-designated Cancer Centers and U.S. universities (e.g., the PATH partnership in Kenya), dissemination of research findings (e.g., OCE has workshops for journalists to learn proper science reporting), and development of new technologies, among others.

Dr. Olopade emphasized that resources should be leveraged and coordination of NCI-designated Cancer Centers can assist in that. Locations where the most impact can be made should be the focus. Dr. Trimble said that there will be an annual meeting of the Consortium of Universities for Global Health in March 2013. Before the meeting, Cancer Centers have been invited to help in meeting planning. Dr. Varmus will attend, and it will provide an optimal opportunity for Cancer Centers to discuss their work and plans. John Flanigan said that the meeting will be similar to “speed dating,” with rapid seat rotations to enhance networking between CGH and Cancer Centers to better align efficiency and increase effectiveness.

Expanding partnerships also is a priority. The partnership with the FIC already is strong and should be further strengthened, as well as partnerships with the NIAID and the National Heart, Lung, and Blood Institute (NHLBI), among others.

Questions, Topics for Future Meetings and New Business

Olufunmilayo Olopade

Dr. Olopade questioned finances, and Dr. Trimble said that a “wish list” has been developed based on discussions with the Subcommittee, Divisions, and Centers, and it yet will be determined how these items will be in the NCI budget (currently being drafted). The NCI will need to leverage with other foundations and already has budgetary contingency plans to handle the possible monetary resources with which they could be provided. If Subcommittee members want to share additional funding priorities or opinions on the presented priorities, they should discuss these concerns following the meeting adjournment.

The Subcommittee meeting adjourned at 6:30 p.m. EST.

Dr. Olufunmilayo Olopade Date
Chair

Dr. Edward Trimble
Executive Secretary

Date