12 April 2019

Scientific Advisory Committee Holds Annual Meeting at Hiroshima RERF Over Three Days

The 46th meeting of the Scientific Advisory Committee (SAC), an external body of scientific experts that advises RERF on research, was held March 22–24, 2019, at RERF's Hiroshima Laboratory.

The SAC does not review all departments at RERF each year, since an enormous volume of research results has been generated using long-term follow-up data donated by the A-bomb survivors. The department to be reviewed changes each year, and this year the Department of Molecular Biosciences (MBS) underwent comprehensive review. The planned Research Resource Center (RRC), of which the Biosample Research Center (BRC) will be a major component, underwent special review.

For this purpose, along with 10 regular SAC members from the U.S. and Japan, five Special Scientific Advisors were appointed, two more than were appointed last year: two such experts from the U.S. and one from Japan were requested to facilitate the review of MBS, and one expert from the U.S. and two from Japan with expertise in integrated data resource and biobank operations were appointed for the RRC review. The RRC has been identified as the highest priority activity of RERF for its future success, resulting in the addition to the SAC this time of these experts in those particular fields.

Dr. Ohtsura Niwa, RERF Chairman, opened the meeting, on March 22, with his greetings from RERF. Dr. Robert L. Ullrich, Vice Chairman and Chief of Research, followed with an overview of RERF's responses to the SAC recommendations from the previous year, as well as with highlights of RERF's research activities. He explained the importance of strategic planning, and within such plans, of RERF's continuation of "mission-based studies." These studies are defined as RERF's core research into the late health effects of radiation from the atomic bombings in the A-bomb survivors as well as dosimetry studies.

Dr. Ullrich's presentation also touched on the strategic plans for the RRC and the utilization of biosamples stored at the BRC. He emphasized the importance of the use of RERF's biosamples in both DNA and non-DNA sequencing studies. Later, presentations were made regarding RERF's infrastructure, including the planned RRC and the importance of this center for implementation of collaborative research with other organizations as well as for RERF's future. The Department of Statistics, which underwent comprehensive review last year, gave responses to last year's SAC recommendations as well as an explanation of its current activities. Next, the MBS Department gave detailed presentations on the research it currently conducts.

On March 23, the second day of the meeting, the advisors held discussions with the principals regarding the work of the recently established Research Cluster System, which comprises the three clusters of Cancer, Genetics, and Non-Cancer. The cluster system is designed to group together scientists from different departments to work on shared research projects. The Research Cluster System garnered considerable interest and praise from the SAC members.

To close out the day, Dr. Niwa, Dr. Ullrich, and Dr. Kazunori Kodama, Executive Director, explained RERF's strategic plans for its overall operations in the future.

On the final day, March 24, the SAC deliberated on its recommendations for RERF and discussed their recommendations with RERF leadership. In the late afternoon, following the deliberations, a press conference was held, gathering five media organizations. To start the press meeting, Dr. Kazuo Sakai, Professor, Faculty of Nursing, Tokyo Healthcare University, Co-Chair), summarized the deliberation results from the three-day meeting. Dr. Curtis Harris, Chief, Laboratory of Human Carcinogenesis, and Head, National Cancer Institute, U.S. National Institute of Health, was on hand as the other SAC Co-chair.

Key SAC recommendations were explained at the press conference: The SAC indicated its desire to see continued progress in the work of cataloging and quality testing of biosamples, which continued in 2018 under the leadership of a new BRC Chief. Such work was based on last year's SAC recommendations. Dr. Sakai also reiterated the point that, while animal studies cannot be directly linked to human data, such studies can be an important approach in mechanistic understanding of radiation effects in the children of directly exposed parents. The SAC expressed its desire for RERF's newly established animal testing facilities to be used to the utmost.

In one of the major issues facing RERF, the SAC also hoped for RERF to recruit specialists, as well as new research staff for training, in the field of bioinformatics to engage in research utilizing RERF's important biosamples.

Dr. Sakai reiterated his praise for the new Research Cluster System, given its effectiveness in transcending research-department boundaries and instead grouping research according to theme. In closing, he announced the SAC's expectations for RERF to continue its contributions to the health of humankind through its research activities.

SCIENTIFIC ADVISORS

Dr. Curtis Harris, (Co-chairperson) Chief, Laboratory of Human Carcinogenesis, and Head, Molecular Genetics and Carcinogenesis Section, Center for Cancer Research, National Cancer Institute, National Institute of Health

Dr. Kazuo Sakai, (*Co-chairperson*) Professor, Faculty of Nursing, Tokyo Healthcare University

Dr. Francesca Dominici, Professor of Biostatistics, Department of Biostatistics, Senior Associate Dean for Research, Office of the Dean, Harvard School of Public Health

Dr. Chisato Nagata, Professor, Department of Epidemiology & Preventive Medicine, Gifu University Graduate School of Medicine

Dr. Jonine Bernstein, Attending Epidemiologist, Co-Program Leader Survivorship, Outcomes and Risk Program, Memorial Sloan Kettering Cancer Center

Dr. Shunichi Yamashita, Executive Advisor to the President, Nagasaki University

Dr. Nilanjan Chatterjee, Bloomberg Distinguished Professor, Department of Biostatistics, Bloomberg School of Public Health and Department of Oncology, School of Medicine, Johns Hopkins University

Dr. Yoichi Gondo, Professor, Department of Molecular Life Sciences, Tokai University School of Medicine

Dr. Michiaki Kai, Professor, Environmental Health Science, Department of Health Sciences, Oita University of Nursing and Health Sciences *Dr. Andrew Feinberg*, Director, Center for Epigenetics, Bloomberg Distinguished Professor of Medicine, Johns Hopkins School of Medicine

SPECIAL SCIENTIFIC ADVISORS

Dr. Patrick Concannon, Director, University of Florida Genetics Institute *Dr. Mary Edgerton,* Associate Professor, Department of Pathology, Division of Pathology and Laboratory Medicine, The University of Texas MD Anderson Cancer Center

Dr. Soichi Ogishima, Professor, Department of Health Record Informatics, Tohoku Medical Megabank Organization, Tohoku University

Dr. Yoshiya Shimada, Executive Director, National Institutes for Quantum and Radiological Science and Technology

Dr. John Weinstein, Professor and Chair, Department of Bioinformatics and Computational Biology, Professor, Department of Systems Biology, Hubert L. Stringer Chair in Cancer Research, The University of Texas MD Anderson Cancer Center

AUDITORS

Mr. Takashi Kohno, Hiroshima General Law/Accounting Office (Hiroshima CPA Cooperative Office/Hiroshima General Tax Accountant Corporation) *Mr. Paul Thrasher*, CPA, Financial Consultant

OBSERVERS

Dr. Masaharu Tanto, Deputy Director, General Affairs Division, Health Service Bureau, Ministry of Health, Labour and Welfare

Dr. Atsuko Isozaki, Chief, General Affairs Division, Health Service Bureau, Ministry of Health, Labour and Welfare

Dr. Patricia Worthington, Director, Office of Health and Safety, Office of Environment, Health, Safety and Security, U.S. Department of Energy **Dr. Isaf Al-Nabulsi**, Acting Director, Office of Domestic and International Health Studies, Office of Health and Safety, Office of Environment, Health, Safety and Security, U.S. Department of Energy

Dr. Gregory Symmes, Executive Director, Division on Earth and Life Studies, National Research Council, National Academy of Sciences

Dr. Charles Ferguson, Director, Nuclear and Radiation Studies Board, Division on Earth and Life Studies, National Research Council, National Academy of Sciences

Dr. Rania Kosti, Senior Program Officer, Nuclear and Radiation Studies Board, National Academies of Sciences, Engineering, and Medicine

RERF

Dr. Ohtsura Niwa, Chairman/Representative Director Dr. Robert Ullrich, Vice Chairman/Chief of Research Dr. Kazunori Kodama, Executive Director Dr. Eric Grant, Associate Chief of Research Mr. Shigetoshi Hayashi, Acting Chief of Secretariat

