

12 May 2022

## **RERF Holds 49<sup>th</sup> SAC Meeting by Zoom March 16–18**

The 49<sup>th</sup> meeting of the Scientific Advisory Committee (SAC) — a body of outside scientific experts representing different scientific disciplines that reviews the research programs of the Radiation Effects Research Foundation (RERF) and makes recommendations to RERF’s Board of Directors and Board of Councilors with respect to adoption of new research programs and continuation or alteration of programs under progress — was held over three days, March 16–18, 2022 (Japan time). This year, again, against the backdrop of the ongoing coronavirus pandemic, the meeting was held remotely centered on RERF’s Hiroshima Laboratory.

During the three days, nine regular SAC scientific advisors participated from the United States and Japan, added to which were four special scientific advisors, for a total of 13 participants. Eight observers, members of the RERF Board of Councilors, and auditors also viewed the proceedings.

The department undergoing extensive SAC review rotates each year. This time, the Statistics Department was the subject of the detailed assessment. Besides the other departments of Clinical Studies, Epidemiology, and Information Technology, discussions at the meeting involved the Research Resource Center (RRC), a unit tasked with integrating scientific and biosample data and supporting use of such information in collaborative research, creating and managing the entirety of archived records at the institute, and constructing an integrated system using which RERF researchers can search and access the organization’s research materials and scientific data; the Biosample Research Center (BRC), an office that manages and preserves in freezers the urine, blood, and other biosamples donated by survivors and their children and consolidates databases of such biosample information; the Molecular Biosamples Department (MBS), which handles research into genetics (heredity/DNA) and genomics (life sciences for the study of the genome and genes), among other work; and RERF’s Strategic Plan, a blueprint for future science and operations.

Dr. Ohtsura Niwa, RERF Chairman, opened the meeting on March 16 by explaining, among other topics, RERF’s Strategic Plan, which highlights the importance of understanding not only radiation risks in populations but also such risks in individuals, as well as how to go about giving back RERF’s research in some form to A-bomb survivors and their children. The previously mentioned intensive review of the Statistics Department took place that first day.

The second day, March 17, was spent explaining and discussing the RRC’s status and progress, as well as the work of other departments such as Epidemiology and Clinical Studies. On the morning of March 18, the final day, the activities of MBS were discussed including the topic of “trio” studies using 1,000

three-person, parent-child groups to clarify genetic effects from the atomic bombings based on parental radiation dose by investigating whether chromosomal mutation numbers are increased in children of the atomic bomb survivors. Discussions also took place about the BRC, including its role in future collaborative studies using biosamples provided by A-bomb survivors and their children, and about the Information Technology Department, which will work closely with the RRC to provide the technological expertise to help achieve that center's aims.

SAC members then entered into deliberations about their recommendations from the three days of meetings. Following the discussions, a press conference with eight media members from seven organizations was held online. To begin, Dr. Michiaki Kai, Professor, New Department Preparatory Office, Nippon Bunri University, summarized the three days of discussions in his role as SAC Co-chair. Dr. Nilanjan Chatterjee, the other SAC Co-chair and Bloomberg Distinguished Professor, Department of Biostatistics, Bloomberg School of Public Health and Department of Oncology, School of Medicine, Johns Hopkins University, was unable to participate in the event due to the time difference.

Dr. Kai reported to the media the following points from the SAC meeting:

- With the pre-meeting presentation videos advisors were able to submit questions and comments ahead of the online meeting;
- That because of the meeting's focus, four special scientific advisors with expertise in biostatistics and informatics also participated;
- That RERF reported on the progress made in its Strategic Plan based on the recommendations made at last year's SAC meeting;
- That the high-priority development of the RRC had made significant progress and, because the RRC is essential for archiving and integrating all data provided by RERF study participants, further progress was required;
- That the Statistics Department was of exceptional quality and had fulfilled its role of providing advice to research departments about study design and independent research, with the department's plans for collaborative research with universities in Japan and overseas encouraged and the importance of the department in leading the work of incorporating data science techniques for sophisticated data analysis and enhancement of the transparency and reproducibility of RERF's science emphasized;
- That life-science and bioinformatics specialists, including young researchers at the graduate-school level, be hired and collaborative research conducted with outside organizations;
- And, finally, that genome sequencing analysis of the trios of atomic bomb survivor parents

and their children designed to investigate radiation's genetic effects be emphasized as having the highest priority.

Below is a list of SAC meeting participants:

#### SCIENTIFIC ADVISORS

**Dr. Michiaki Kai**, Professor, New Department Preparatory Office, Nippon Bunri University (Co-chairperson)

**Dr. Nilanjan Chatterjee**, Bloomberg Distinguished Professor, Department of Biostatistics, Bloomberg School of Public Health and Department of Oncology, School of Medicine, Johns Hopkins University (Co-chairperson)

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

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

**Dr. Andrew Feinberg**, Director, Center for Epigenetics, Bloomberg Distinguished Professor of Medicine, Johns Hopkins School of Medicine

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

**Dr. Curtis Harris**, Chief, Laboratory of Human Carcinogenesis, and Head, Molecular Genetics and Carcinogenesis Section, Center for Cancer Research, National Cancer Institute, National Institute of Health

**Dr. Fumihiko Matsuda**, Director, Center for Genomic Medicine, Kyoto University Graduate School of Medicine

**Dr. Chisato Nagata**, Professor, Department of Epidemiology and Preventive Medicine, Gifu University Graduate School of Medicine (Absent)

**Dr. Gen Suzuki**, Professor and Director, International University of Health and Welfare Clinic

#### SPECIAL SCIENTIFIC ADVISORS

**Dr. Giovanni Parmigiani**, Professor, Department of Biostatistics, Harvard T.H. Chan School of Public Health, Department of Data Sciences, Dana-Farber Cancer Institute

**Dr. Satoshi Hattori**, Professor, Biomedical Statistics, Graduate School of Medicine, Osaka University

**Dr. Melissa Haendel**, Chief Research Informatics Officer, Marsico Chair in Data Science, University of Colorado Anschutz, Director of the Center for Data to Health

**Dr. Soichi Ogishima**, Professor, Department of Health Record Informatics, Department of Informatics for Genomic Medicine, Tohoku University Advanced Research Center for Innovations in Next-

Generation Medicine/Medical Megabank Organization

AUDITORS

**Mr. Takashi Kohno**, Certified Public Accountant and Tax Accountant, Hiroshima All-In Law and Accounting Office

**Mr. Paul D. Preziotti**, Certified Public Accountant/ Partner, Johnson Lambert LLP

OBSERVERS

**Mr. Hiroyuki Yamamoto**, Director, Office for Atomic Bomb Survivors, General Affairs Division, Health Service Bureau, Ministry of Health, Labour and Welfare

**Dr. Kazuo Minamikawa**, Deputy Director, Office for Atomic Bomb Survivors, General Affairs Division, Health Service Bureau, Ministry of Health, Labor and Welfare

**Mr. Kevin Dressman**, Director Office of Health and Safety, Office of Environmental, Health, Safety and Security, U.S. Department of Energy

**Dr. Isaf Al-Nabulsi**, Japan Program Manager and Health Scientist Administrator, Office of Domestic and International Health Studies, Office of Health and Safety, Office of Environmental, Health, Safety and Security, U.S. Department of Energy

**Mr. Benjamin Foster**, Energy Attaché and DOE Director, U.S. Department of Energy, Japan Office, Embassy of the United States of America

**Dr. Elizabeth Eide**, Executive Director, Division on Earth and Life Studies, National Academies of Sciences, Engineering, and Medicine

**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 Academy of Sciences, Engineering, and Medicine

RERF BOARD OF COUNCILORS (Observers)

**Dr. Jonathan M. Samet**, Dean, School of Public Health, University of Colorado

**Dr. Ryugo Hayano**, Emeritus Professor, The University of Tokyo

**Dr. Angela L. Bies**, Endowed Associate Professor of Global Philanthropy and Nonprofit Leadership, School of Public Policy, University of Maryland

**Dr. Joe W. Gray**, Professor and Gordon Moore Endowed Chair, Department of Biomedical Engineering, School of Medicine, Oregon Health & Science University

**Dr. Kenji Kamiya**, Vice-President and Specially Appointed Professor, Hiroshima University

**Dr. Keith R. Yamamoto**, Professor, Vice Chancellor for Science Policy and Strategy, Director UCSF Precision Medicine

**Dr. Yoshiharu Yonekura**, Specially Appointed Professor, Division of Science, Institute for Radiation Sciences, Osaka University

RERF

**Dr. Ohtsura Niwa**, Chairman/Representative Director

**Dr. Robert Ullrich**, Vice Chairman and Chief of Research

**Dr. Kazunori Kodama**, Executive Director

**Dr. Eric Grant**, Associate Chief of Research

**Dr. Osamu Tanabe**, Chief Scientist/Director of Biosample Research Center

**Mr. Shigetoshi Hayashi**, Chief of Secretariat