The rapid progress of sequencing technology in recent years has enabled us to decode cancer genetics and epigenetics at the highest resolution, and revealed the hierarchical organization of cancer tissues with a wide diversity of cells in genetic and epigenetic alterations. Cancer tissues are composed of not only cancer cells but also other cellular components, including fibroblastic cells, endothelial cells of blood and lymphatic vessels and immune cells. These complex environments in cancer tissues are indispensable for cancer cell survival and progression. Diagnostic strategy outcome of immune checkpoint inhibitors in a substantial fraction of patients has totally changed the understanding of properties of cancer cells and their microenvironments.

Complex functional interactions of signaling networks along with cell-cell interactions have conferred cells with cancer-specific and heterotypic phenotypes, such as differential susceptibility to various anti-cancer drugs. This characteristic feature of individual cancers originates from a variety of reasons. Direct or indirect interaction with metabolites of intestinal microflora is also important in the initiation and promotion of cancer cells. In addition, various secretory factors, including cytokines and chemokines, are used for cellular communication between cancer cells and remote organs, and contribute substantially to the metastatic process. These facts support our previous comprehensive understanding regarding the biological nature of cancer. In other words, cancer is now defined as a disease that occurs and develops under complex cellular networks. Currently, the understanding of cancer cells alone is not sufficient to fully unravel the biological nature of individual cancers.

We expect new basic and development research will be conducted based on unlimited thinking and novel ideas, which are not constrained by the existing knowledge and notions. We wish to encourage young researchers to participate actively and take this opportunity to make their presence felt throughout this annual meeting.

In light of the importance of various types of cancer networks, we have created a program for the 76th Annual Meeting of the Japanese Cancer Association under the main theme “Prevention and Cure of Cancer through Understanding of the Network.” Taking this opportunity, we would like to seriously discuss the subjects with the participants on the future direction of cancer research in Japan and its social application.

The 5th JCA-AACR Special Joint Conference, scheduled in February 9-12, 2019, will be organized by Dr. Jose Baselga (Memorial Sloan Kettering Cancer Center, NY, USA) and Dr. Hitoshi Nakagama (National Cancer Center, Tokyo, Japan).

Young Scientists Award 2016

Tetsuo Noda
Chairperson

AARC-JCA Joint Conference in Hawaii

The AARC-JCA Joint Conference has been held every three years since 1989, with changing venues in the Hawaiian islands. The 10th Joint Conference was held in Maui, Hawaii, in 2016, cosponsored by Dr. Frank McCormick (CScF Helen Diller Family Comprehensive Cancer Center, CA, USA) and Dr. Tetsuo Noda (Japanese Foundation for Cancer Research, Tokyo, Japan) under the title of “Breakthroughs in Cancer Research: From Biology to Therapeutics.” About 570 participants from US, Japan and other countries attended the conference. Keynote lectures were presented on the first day by Dr. Suzanne L. Topalian (Johns Hopkins Sidney Kimmel Comprehensive Cancer Center, MD, USA) and Dr. Yusuke Nakamura (The University of Chicago, IL, USA). The keynote lectures, 37 talks and more than 300 posters were presented. Participants had fruitful discussions during the conference, and enjoyed their stay in Hawaii. The next AARC-JCA Joint Conference, scheduled in February 9-12, 2019, will be organized by Dr. Jose Baselga (Memorial Sloan Kettering Cancer Center, NY, USA) and Dr. Hitoshi Nakagama (National Cancer Center, Tokyo, Japan).

JCA-AACR Special Joint Conference

The 5th JCA-AACR Special Joint Conference, sponsored by the JCA and AACR, was focused on “The Latest Advances in Hematological Cancer Research: From Basic Science to Therapeutics.” It was held July 15-16, 2016 at the Tokyo Bay Hotel in Tokyo, Japan, and was one of the most successful conferences. The conference was organized by three JCA committee members (Dr. Takuro Nakamura, Joaey Kitabayashi, Shigeru Chiba) and three AACR committee members (Dr. Jonathan D. Licht, Ross L. Levine, and Tanuma H. M. Jamieson). There were 118 participants from 10 different countries, and the program included 25 invited talks and 53 posters. The meeting focused on the following topics: leukemic stem cells and metabolism, aging and epigenetics, genetic alterations of leukemia, myelodysplastic neoplasms/myelodysplastic syndromes novel therapeutics of lymphoma and multiple myeloma, and immunotherapy of hematopoietic neoplasms. There were valuable and exciting discussions on each topic. Meet-the-Expert round table session provided a useful opportunity to young researchers to discuss their own studies with invited speakers. The next JCA-AACR Special Joint Conference, scheduled in the summer of 2018, will be focused on long cancer control. The conference will be organized by three AACR committee members (Dr. Yusuke Nakamura, Seiji Yano, Hiroshi Nakamura) and three JCA committee members.

International Sessions (IS)

One of the most important missions is to stimulate international scientific exchange and collaboration. Towards this goal, we organize several International Sessions (IS) throughout the three-day annual meeting. Twelve hot topics will be selected each year, and two IS will be held each morning and afternoon during the conference. Prominent researchers in the fields of the topics will be invited from both Japan and from overseas. In addition, a few presentations will be selected for IS from general attendees, as stand-alone talks, targeting in particular young researchers. Because all talks and discussions will be given in English, IS will provide the excellent opportunity to become acquainted with scientists from all over the world.