

Preface

Nagasaki University has been designated as the "21st Century Center of Excellence (COE) of Radiation Life Science" by the Japanese Ministry of Education, Culture, Sports, Science and Technology, and has been conducting international projects in this field since 2002. The third international meeting of the COE program entitled "Young Scientist Organizing Nagasaki Symposium" was held on March 7-8, 2005 at the Pompe van Meerdervoort Hall, Nagasaki University School of Medicine, Nagasaki, Japan. We are delighted at having an opportunity to publish the symposium proceedings as a supplement of *Acta Medica Nagasakiensia*.

One of the important purposes of our COE program is to educate young scientists including post-graduate students for leaders of radiation life sciences in the next generation and to promote academic collaboration and joint research with leading universities and institutes around the world. This symposium was organized by young scientists from our consortium members to provide unique opportunities them present and discuss their latest data with total 22 up-and-coming young scientists around world.

Sixty years have passed since the two atomic bombs devastated Hiroshima and Nagasaki in August 1945, and there have been many researches revealing important features of health effects of radiation exposure by atomic bombing. However, molecular mechanisms regarding such health consequences by radiation exposure have not yet been fully elucidated. We, all of young scientists studying radiation life sciences, have to keep it in our minds that a lot of the survivors are still alive and suffering from chronic diseases, including cancers, as the late effects of atomic bomb radiation, and are required to consider how basic researches on radiation biology and epidemiology can

contribute to the health and medical care of Hibakushas. Furthermore, the Chernobyl accident, which will commemorate the 20th anniversary next year, reminds us that unexpected radiation accidents may occur anytime and anywhere in the world. We may be required to prepare and respond to such accidents in near future. In the symposium, Professor Shunichi Yamashita, who is one of the project leaders in our COE program and an expert scientist of Radiation and Environmental Health at WHO/HQ, Geneva, kindly gave us the special lecture, and introduced the WHO programs on radiation and health, and also mentioned about the possibility for collaboration on the radiation and environmental health between the COE program and WHO.

Many young scientists from various fields of radiation research, such as medical care of Hibakushas, radiation epidemiology, regenerative medicine, radiation biology, and molecular cellbiology, met and presented their recent data at Nagasaki. The present volume, a collection of papers presented at the symposium, is entitled "Radiation Research at the Crossroad." I am confident that the title is suitable for the present proceedings, because all participants may think about the significance of their ongoing studies in the field of radiation life sciences at Nagasaki which should be the last place on the Earth to suffer the horror of nuclear destruction. Furthermore, I hope the symposium has successfully provided young scientists, including post-graduate students, a good opportunity to inspire them to greater efforts on their future studies.

Finally, I would like to express my sincere thanks to all the contributors for these interesting and valuable papers and, especially, to Professor Yoshisada Shibata for his great help in editing this publication.

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