FOREWORD

J-PAND and Nagasaki University

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Introduction

It is a historical leap for Nagasaki University (NU) to launch the Journal for Peace and Nuclear Disarmament (J-PAND) edited by the Research Center for Nuclear Weapons Abolition, Nagasaki University (RECNA). This new challenge is part of our enduring endeavor based on scientific studies of both theoretical and practical approaches to furthering nuclear disarmament and peace. On this memorable occasion, let me start this message by briefly describing the history and previous scientific efforts of NU that have led to the publication of J-PAND.

Nagasaki University (NU)

Nagasaki is located at the western edge of Japan and directly faces the East China Sea. The port of Nagasaki has been the focus of the city’s exchanges with other countries for a long time. Nagasaki was Japan’s only open port city in a closed country during the Tokugawa era from the early 17th century thru the mid-19th century. Nagasaki became a name that will never be forgotten in world history on 9 August 1945, at which time the city and its people suffered apocalyptic devastation. Three days after Hiroshima, an atomic bomb nicknamed “Fat Man” was dropped over a populated area in Nagasaki.

For the last 73 years, Nagasaki and Hiroshima have been the only two cities in the world that have suffered the tragedies of atomic bombings. The two atomic bombs immediately killed 100,000 people, and nearly the same number died during the next few months. From the experiences of the people of these two cities, the world began to learn about the inhuman nature of nuclear weapons and the word “Hibakusha,” which literally means “a victim of bombing.”

NU also experienced horrific destruction. A single atomic bomb completely destroyed the Nagasaki Medical College (the present NU School of Medicine), its campus and hospital, and killed approximately 900 faculty members, students, medical workers, and other staff. The College was located approximately 600 yards from ground zero of the atomic explosion.

However, we never gave up. Huge efforts by the surviving college members combined with the strong support of the local community and national government helped the Medical College rapidly revive, and in 1949, the Medical College was renewed as the current NU by combining with other specialized schools. Currently, NU has developed...
into an important and indispensable national university of Japan and consists of nine faculties, seven graduate schools, two research institutes, and a hospital, with 9000 students and 1200 faculty members. The care and cure of Hibakushas and research on radiation health risks have been crucial missions of our School of Medicine, which stands on ground so closely associated with the tragic atomic bomb disaster, and the common wish of NU has been the abolition of nuclear weapons and realization of eternal world peace.

**Atomic Bomb Disease Institute (ABDI)**

In retrospect, our scientific efforts to achieve a nuclear weapons-free world started from medical research and analysis. In 1962, NU established the ABDI to focus on universal basic and clinical research regarding radiation medicine and the late effects of radiation on the human body, especially on the atomic bomb survivors, the Hibakushas.

The first striking late effect of atomic bomb radiation was the dramatic increase in the incidence of leukemia, and many epidemiological studies on leukemia were conducted in the very early years of the ABDI (Ishimaru et al., 1971). In addition to leukemia, researchers in Nagasaki and Hiroshima also noticed the increased incidence of solid tumors, including breast cancer and skin cancer (Sadamori, Mine, and Hori, 1989). These observations were later confirmed by the studies conducted by collaborating with the Radiation Effect Research Foundation in a prospective large cohort of survivors (approximately 100,000 survivors) called the “Life Span Study” (Hsu et al. 2013; Grant et al., 2017).

Knowledge accumulated following the course of the radiation exposure of the Hibakushas became the gold standard for evaluation of health effects of radiation exposures and is widely used as a proven basis for radiation protection systems in all countries of the world. In particular, knowledge and experiences accumulated in NU have made a great contribution to radiation health risk management of people exposed to radioactivity in disasters at the nuclear power plants in Chernobyl in 1986 (Shibata et al., 2001) and, more recently, in Fukushima in 2011 (Takamura et al., 2016).

Moreover, recent studies by the ABDI have revealed that atomic bomb radiation exposure has had life-long health effects on Hibakushas and caused a wide range of disorders, such as mental disorders, myelodysplastic syndrome, multiple primary cancers, and heart diseases after prolonged incubation periods >50 years (Honda et al., 2002; Iwanaga et al., 2011).

Together, the ABDI has made a great contribution during its history of 56 years, not only to health risk management of Hibakushas but also to the reasoning behind the abolition of nuclear weapons by continuously providing relevant scientific evidence of the terrible inhuman nature of nuclear weapons.

**Research Center for Nuclear Weapons Abolition, Nagasaki University (RECNA)**

In contrast, NU has made far less of a contribution to social scientific approaches toward nuclear disarmament, mainly because of the lack of a research core with expertise in politics, law, sociology, and humanities. Subsequently, we reached another historical turning point. On 5 April 2009, Mr Barack Obama, who was then the US
president, gave a memorable speech regarding a nuclear weapons-free world in Prague. Many of us believed that his speech opened the door to a new era in which a nuclear weapons-free world might be achieved. Although Mr Obama unfortunately could not achieve many of the goals in his agenda during his presidency, his speech prompted NU to reconsider its responsibility as the academic institution that experienced an atomic bomb disaster and decide to become an active participant in the global challenges toward nuclear disarmament.

Eventually, RECNA was established in April 2012 as the first research center in the world to bear the phrase “Nuclear Weapons Abolition” in its name. The objectives of RECNA are (1) through academic research and analysis, to redefine the significance of Hiroshima and Nagasaki experiences in the light of current world trends, disseminate information, and make proposals from various aspects toward abolishing nuclear weapons; (2) to make best use of such a process and the outcomes of its research and analysis to contribute to university education; and (3) as a think tank open to the local community longing for nuclear weapons abolition, to operate in close cooperation with partners, including the local governments of Nagasaki city and Nagasaki Prefecture.

The activities and outcomes of RECNA over the last 6 years have been outstanding and meaningful in the world trend toward nuclear disarmament. In the review conference of the Treaty on Non-Proliferation of Nuclear Weapons in 2015, Professor Hiromichi Umebayashi, the first Director of RECNA, proposed a new political concept called “A comprehensive approach to a Northeast Asia nuclear weapon-free zone” that provided a powerful political option that could lead to a sustainable and peaceful future in Northeast Asia, which currently faces a real risk of nuclear war (RECNA, 2015). Following Umebayashi, Professor Tatsujiro Suzuki became the second Director in 2015 and took over leadership to establish the Panel on Peace and Security of Northeast Asia (PSNA) to facilitate political process toward the Northeast Asia nuclear weapons-free zone. PSNA consists of experts in academics and civil society as well as policy makers from various countries, in particular, those of Northeast Asia. PSNA has so far held a series of workshops and dispatched political statements and recommendation regarding the political situation surrounding nuclear weapons in Northeast Asia. Furthermore, RECNA had an integral role in the success of the Pugwash Conference 2015 in Nagasaki that published the Nagasaki Declaration entitled “Let Nagasaki Be the Last” (Pugwash Conferences on Science and World Affairs, 2015).

Another important contribution of RECNA has been its efforts in education and capacity building of the younger generation who may wish to inherit testimonies of the Hibakushas and who have key roles in realizing a nuclear weapons-free world in the future. RECNA has developed and conducted an undergraduate general education program named the “Road to a Nuclear Weapons-free World.” In addition, a new postgraduate master program is starting this academic year. Beyond those interested in its regular courses, RECNA has also attracted and encouraged young people to participate in other activities. Many students have been getting together at RECNA and have conducted various voluntary activities regarding issues surrounding nuclear weapons in many aspects via learning, discussion, and field searches. We call them “RECNA

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1 http://www.recna.nagasaki-u.ac.jp/recna/en-about.
2 http://www.recna.nagasaki-u.ac.jp/recna/psna.
Their activities are expanding outside of Japan and include attendance at UN meetings and communicating to exchange ideas with world leaders, policy makers, and young people in many countries.3

**Crucial role of J-PAND**

The last year was quite memorable because the world movement toward nuclear disarmament took a giant step. On 7 July 2017, the United Nations conference adopted the Nuclear Weapons Ban Treaty, which is the first legally binding international agreement to comprehensively prohibit nuclear weapons, with votes in favor by 122 nations, although all of the nuclear-armed nations and some non-armed nations, including Japan, under the nuclear umbrella were absent. Following this progressive step forward, the International Campaign to Abolish Nuclear Weapons, a coalition of non-governmental organizations in >100 countries, was awarded the Nobel Peace Prize in 2017 for their major contribution to achieve the adoption of the Ban Treaty.

However, it is also true that we have been confronting a harsh reality. The world, in particular Northeast Asia, is facing a real risk of nuclear war. North Korea has repeated nuclear and missile tests regardless of cautionary advice and sanctions by the United Nations and has presumably succeeded in the development of hydrogen bombs, currently the most destructive nuclear weapons, and intercontinental ballistic missiles. As a deterrent to North Korea, the US and South Korea continuously repeat joint military exercises. Moreover, the US Department of Defense recently announced a change in its nuclear policy to loosen constraints on the use of nuclear weapons so that the US could employ nuclear weapons in response to “significant non-nuclear strategic attacks” on not only the US but also “partner civilian populations or infrastructure” (US Department of Defense, 2018, 22). This is clearly against the common goal of many nonnuclear weapon states of reducing the role of nuclear weapons and pursuing nuclear disarmament. Consequently, the risks of nuclear war in Northeast Asia have increased.

The world now may be at a crossroads between the path toward a sustainable and peaceful future without nuclear weapons and the path toward a higher risk of nuclear war. How do we minimize nuclear risks and redirect global politics and diplomacy toward nuclear disarmament? How can we highlight the message “Let Nagasaki Be the Last” to every corner of the world? As president (2008–2017) of the NU, an academic institution that has undergone an atomic bombing, I am firmly convinced that NU must play a crucial role by exerting its academic influence to reduce the persistent risk of nuclear war. For instance, NU has to inherit and pass on the university’s own experience and testimony given by Hibakushas to world leaders and policy makers as well as to the younger generation with the goal of providing vivid descriptions concerning what could happen if nuclear weapons are ever used again. Of course, the research potential and influence of RECNA should be further strengthened and deepened, but most importantly, NU should provide scientific platforms where world experts join together, share new information and findings, exchange ideas, and encourage young researchers and students to progress toward nuclear disarmament and

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3[http://www.recna.nagasaki-u.ac.jp/recna/pcu-nagasaki-council/nagasaki-youth-delegation](http://www.recna.nagasaki-u.ac.jp/recna/pcu-nagasaki-council/nagasaki-youth-delegation).
global peace and security. The PSNA directed by RECNA is one such challenge. However, there appears to be a critical need for additional and intellectually over-arching endeavors. From this standpoint, I had decided that the launch of J-PAND was urgently needed, so we concluded a contract with our publisher, Taylor & Francis Group in September 2017.

J-PAND represents an important milestone in our university’s 73-year efforts since the atomic bombing. J-PAND is an open access, international, peer-reviewed journal that publishes high-quality articles in various fields, including the humanities, social sciences, and natural sciences, in accordance with its aims and scope and welcomes submission from any countries of the world. In the future, J-PAND aims to propose a new frame of global nuclear governance toward a world without nuclear weapons by (1) contributing to the consideration, development, and utilization of policy tools embodying a humanitarian approach toward nuclear elimination; (2) analyzing the utility, limitations, risks versus benefits of nuclear deterrence, and highlighting the risks of excessive dependence on nuclear deterrence; (3) and by considering the future security environment accompanying advancements in new technologies, such as artificial intelligence and robotics in relation to nuclear weapons. I expect that J-PAND will substantially function as a scientific platform that is indispensable for promoting nuclear disarmament and peace throughout the world.

In memory of the late Dr Hideo Tsuchiyama

I cannot complete this writing without touching upon Dr Hideo Tsuchiyama (1925–2017). On 2 September 2017, Nagasaki and NU lost a great all-time leader of the movement for peace and abolition of nuclear weapons. Dr Tsuchiyama was born in Nagasaki and experienced the atomic bomb disaster in August 1945 when he was a student at the Nagasaki Medical College. After participating in education and research as a pathologist in the School of Medicine, he served as the president of NU from 1988 to 1992. Thereafter, he had spent his life as a leader of the peace movement in the civil society of Nagasaki. He was a fair and moral leader independent from any political party or specific ideology, and he had served for a long time as the Chairperson of the Nagasaki Global Citizens’ Assembly for Elimination of Nuclear Weapons. Based on his academic background, he always emphasized that scientific and logical reasoning for an intellectual argument against nuclear weapons should be encouraged to synergize with the emotional impact of testimonies given by Hibakushas to keep the world from the scourge of nuclear war. Actually, he was the person who had the idea to create RECNA and eventually led the effort to publish J-PAND. Therefore, I dedicate this short article to the late Dr Tsuchiyama and to the first issue of J-PAND. Finally, on behalf of NU, I express my heartfelt appreciation for every effort made by the Taylor & Francis Group and the editorial members and colleagues of RECNA who were instrumental in establishing this new journal. I wish

4Ex-Nagasaki Univ. President Exposed to Radiation from A-bomb Dies at 92,” The Mainichi, 3 September 2017. [https://mainichi.jp/english/articles/20170903/p2a/00m/0na/022000c; “Testimony of Hibakusha by Mr. Hideo Tsuchiyama (in English),” https://www.youtube.com/watch?v=nUokFl0EyGE.]
for great success of J-PAND and hope that it achieves its goal of becoming one of the strongest advocates for nuclear disarmament in the world.

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