

WHO CENTRE FOR HEALTH DEVELOPMENT

Organized by WHO Kobe Centre in cooperation with WHO Kobe Centre Cooperating Committee

Innovation for Healthy Ageing - Examples of current trends in research -

5 March 2014

Programme

Mr Loic Garcon 14:00-14:10 **Opening remarks**

Technical Officer

Innovation for Healthy Ageing

WHO Kobe Centre

14:10-15:30 **Presentations**

> "Accessible innovations on pharmacological treatment and health management for older people"

Professor Kiyomi Sadamoto Department of Clinical Pharmacy Yokohama College of Pharmacy

Yokohama, Japan

"Health engineering for aging using

robotics"

Professor Zhiwei Luo Department of Computational Science Graduate School of System Informatics

Kobe University Kobe, Japan

"Steps to ageing well – Home and community-based technologies for

older adults"

Dr Hyuntae Park Chief Investigator

Section of Motor Function Activation Center for Gerontology and Social Science National Center for Geriatrics and Gerontology

Obu City, Japan

15:30–15:55 **Discussion** Moderator:

Dr Teiji Takei

Director, R&D Promotion Department National Institute of Biomedical Innovation (NIBIO), Ibaraki City, Osaka, Japan

15:55-16:00 **Closing remarks** WHO Kobe Centre

Backaround:

In perhaps the greatest public health achievement of the last century, human beings in most parts of the world added thirty years on average to their lives. Everywhere in the world, increasing numbers of people live into their 70s and 80s, and beyond. Indeed, for the first time in human history, the number of older adults will exceed the number of children in the world. The contemporary challenge then becomes not just living long, but living in good health and maintaining a high quality of life. In order to meet this challenge, the WHO launched a new program from its Kobe Centre ("WKC") to identify and encourage new innovations to support healthy ageing around the world. Together, with its global network of partners, the WKC also seeks to share the best research on healthy ageing with the world, as well as with its local community. At this Forum, three of Japan's leading innovators will present their work to improve healthy ageing through robotics, cutting-edge elderfriendly medicine, and innovations to keep older adults mobile and independent.

Speakers: Short bio sketch

(in order of the programme)

Professor Kiyomi Sadamoto

Professor, Department of Clinical Pharmacy Yokohama College of Pharmacy Yokohama, Japan



Graduated from Pharmacy and Medicine at Toho University. Rheumatology at University Hospital and obtained Doctor's degree in the area of Rheumatoid Arthritis at Toho University. After clinical activities in Japan, studied at Birmingham University postgraduate course, and obtained Masters of Social Science Health Management. In Birmingham, she also studied Rheumatology (clinical activity) as an honorable research fellow. Continued clinical activity as a rheumatologist from Toho University to Tokai University. After returning from UK, she also did hospital management at faculty of Medical in Toho University. Since she studied pharmacy (pharmacist), she started to teach clinical pharmacy at faculty of pharmacy in Toho University. And now she is teaching clinical pharmacy at Yokohama College of pharmacy. During working in Toho, she stared research of clinical pharmacy including patients' drug taking, devices, and universal design of drug packaging, the topic is closely rerated burden of patients with Rheumatoid Arthritis, handicapped and elderly. She is the board of director in the society of packaging science & technology, Japan. And member of council in Japan college of Rheumatology. She is member of other medical and pharmaceutical society including Japanese society of Internal Medicine and The Japanese society of Quality and Safety in Healthcare. Currently also engaging Rheumatology examination in Tokai University Oiso Hospital as a Visiting Professor.

Professor Zhiwei Luo

Professor, Department of Computational Science Graduate School of System Informatics Kobe University Kobe, Japan



Born in Suzhou, People's Republic of China. Completed his undergraduate studies at Huazhong University of Science and Technology. Through his research studies in Japan, obtained a Doctorate in Engineering at Nagoya University. Leaded basic researches in the field of bio-mimetic control systems and developed the world first human care robot RI-MAN, which was selected by TIME magazine as the Best Invention of 2006. Professor Luo is promoting wide researches on health engineering, such as robots for human rehabilitation and virtual reality technologies for evaluating human high order cognitive functions in everyday life. He proposes to use computer simulation technology to design and evaluate the human interactive robots and is now pushing new research field called computational robotics which will introduce supercomputer in studying super redundant biologic motor control functions and human-robot interface. He is also a Guest Professor of Zhejiang University.

Dr Hyuntae Park

Chief Investigator Section of Motor Function Activation Center for Gerontology and Social Science National Center for Geriatrics and Gerontology Obu City, Japan



Graduated from the Dong-A University, College of Sports Science in Republic of Korea with his undergraduate degree and a M.A. Sc. degree. He moved to the Japanese National Institute Health and Nutrition to further his research training. He obtained a Ph.D. degree in Education at the University of Tokyo, Graduate school of Education. Exercise physiologist and applied gerontologist. After two-year's working as a research/academic assistant to pursue postgraduate training at the University of Tokyo, Dr Park moved to the Tokyo Metropolitan Institute of Gerontology as a research scientist. His research focus is to enable the elderly to lead a healthy independent life without declining to a state that requires long-term care, particularly on the prevention of disuse syndrome and development of new systems for independent life. He also held a research position as visiting research scientist at the Tokyo Metropolitan Institute of Gerontology, Research team for Genomics for Longevity and Health, and at the Research Institute of Nippon Sport Science University, he further serves as the External Committee Member of the Japan Society of Fall Prevention.

Dr Teiji Takei

Director R&D Promotion Department National Institute of Biomedical Innovation (NIBIO) Ibaraki City, Osaka, Japan



Graduated from National Defense Medical College in 1991 (MD). After his medical residency in surgery at the Yale University, USA in 1994–1997, earned a Ph.D. in 1999 (Signal transduction of the protein kinase C in epidermal cells). Joined in the Japanese Ministry in 2000. Served first as Assistant Director, Risk Assessment Unit, Environmental Health Department of the Environment Agency (risk assessment of dioxin, etc.). While servicing in Ministry of Health, Labour & Welfare, held positions of: Assistant Director, Life-style related Disease, Health Service Bureau (Health Promotion) in 2004; and Assistant Director of Policy Planning Division, Department of Health and Welfare for Persons with Disabilities (Services and Supports for Persons with Disabilities) in 2005. Appointed as Senior Adviser for Monitoring & Evaluation at UNAIDS in 2006 and contributed to development of the global report. Became in 2009 Director of the International Cooperation Office, International Affairs Division, Minister's Secretariat, and took the current post at NIBIO in 2012. As Director of R&D Promotion Department at NIBIO, Dr Takei is engaged in promoting R&D of medicinal products and equipment in order to contribute to the creation of the innovative pharmaceuticals and the improvement of the national health.