# Shizuoka Cancer Conference 2018

The Project to Increase Healthy Life Expectancy and Support Independence in a Super-Aged Society

March 2, 2019 (Saturday)

Shizuoka Cancer Center Hospital and Research Institute Sponsored by Shizuoka Prefecture and the Shizuoka Cancer Center

## **Purpose** of the **Program**

Our aim with the Pharma Valley Project is to revitalize the medical health industry and we are promoting the formation of Fujinokuni Medical Town in tandem with the activities of the Shizuoka Cancer Center and the establishment of the Pharma Valley Center base.

The Pharma Valley Center, Shizuoka Cancer Center, and Shizuoka Prefecture have newly launched the Project to Increase Healthy Life Expectancy and Support Independence in a Super-Aged Society. The goal is to develop a guidepost for the people of Shizuoka Prefecture to lead the country to an age where living for a century or more, comfortably, is the norm. We will introduce some of these activities in this session.

Ken Yamaguchi, MD, PhD President, Shizuoka Cancer Center

The Project to Increase Healthy Life Expectancy



**Program** 

Shizuoka Cancer March 2, 2019 (Saturday)
Conference 2018 Shiosai Hall, Shizuoka Cancer Center Hospital and Research Institute

	and	Support Independence in a Super-Aged Society
10:00	Opening Ad Conference	ddress Heita Kawakatsu Governor of Shizuoka Prefecture Introduction Ken Yamaguchi, MD, PhD President, Shizuoka Cancer Center
	Part I: Current Situation and Efforts Concerning the Super-Aged Society	
10:40	Lecture 1	An Action Plan to Implement the Project to Increase Healthy Life Expectancy and Support Independence in a Super-Aged Society  Katsunori Ueda Manager, Pharma Valley Center, The Mt. Fuji Foundation for Healthcare Innovation and Cluster Development
10:55	Lecture 2	Caregiving and Welfare Innovation in Japan, a Developed Country with a Super-Aged Society, and Efforts by the METI  Keiko Hirano Assistant to the Head of the Medical and Assistive Device Industries Office, Healthcare Industries Division, Commerce and Service Industry Policy Group, Ministry of Economy, Trade and Industry
11:25	Lecture 3	Toward Safe, Secure, and High-Quality Care  Teppei Kiuchi Head of the Long-term Insurance Data Analysis Office, Division of Health for the Elderly, Health and Welfare Bureau for the Elderly, Ministry of Health, Labour and Welfare
11:55	Lecture 4	Efforts to Support Self-Reliance of Elderly People and Persons with Disabilities at Nagoya Assistive Technology Plaza  Mitsuru Tomiita Occupational therapist at the Nagoya Assistive Technology Plaza at Nagoya General Rehabilitation Corporation
12:20	Lunch (60 minutes)	
	Part II: Manufacturing Creativity and Research to Support Self-Reliance	
13:20	Lecture 1	Flexible Support and Architecture to Aid the Elderly  Kenji Takemiya Professor in the Department of Architecture, Faculty of Urban Environmental Sciences, Tokyo Metropolitan University
13:50	Lecture 2	Living Assistance for People Taking Care of Themselves Yuko Ohno Professor in the Graduate School of Medicine, Osaka University
14:20	Lecture 3	Considering the Development and Application of Care Equipment and Robot Caregivers in a Super-Aging Society  Kiyokuni Goshima Manager of the Planning Department, Association for Technical Aids
14:50	Lecture 4	Social Security Systems for a Super-Aging Society— The Future of Care Equipment in Supporting Life at Home Hirofumi Hidaka Assistant Block Manager for the Shizuoka Block for the Association of Care Goods Providers and Assistant to the Head of the Chubu Region Sales Department at FranceBed Medical Services Busines
15:20	Question and Answer Session	
15:30	Break (10 minutes)	
	Part III: Case Studies of Local Companies and Those from Further Afield	
15:40	Lecture 1	Introducing the Latest Developments in the Use of Care Equipment from Overseas Yoshinobu Miyake West Japan Sales Manager, Hill-Rom Japan
16:10	Lecture 2	Development of Welfare Equipment by Manufacturing Companies in a Super-Aged Society Ichiyu Abe Chairman of Kyowa Kougyou
16:30	Lecture 3	Development of the Foot-Operated Mouse, "Footloose" Hideaki Nagashima Representative Director at BeAlive
16:50	Question and Answer Session	
16:55	Closing Address Ken Yamaguchi, MD, PhD President, Shizuoka Cancer Center	

Lecture 4

## Efforts to Support Self-Reliance of Elderly People and Persons with Disabilities at Nagoya Assistive Technology Plaza

Speaker

Mitsuru Tomiita Occupational therapist at the Inagoya Assistive at Nagoya General Rehabilitation Corporation Occupational therapist at the Nagoya Assistive Technology Plaza



#### Curriculum Vitae

Graduated from the Kitasato University School of Allied Health Sciences Rehabilitation Department Occupational Therapy Course Nagoya General Rehabilitation Corporation Nagoya General Rehabilitation Center

Worked in rehabilitation, in the health insurance, nursing care insurance, and self-support fields, as well as in producing training manuals for those working with patients with higher brain dysfunctions 2010 Nagoya General Rehabilitation Corporation Nagova Assistive Technology Plaza

Worked as a compatibility consultant for assistive technology Member of the Japanese Association of Occupational Therapists and the Aichi

Association of Occupational Therapists Specialist Assistive Technology Consultant, Housing Environment Coordinator for Elderly and Disabled People, Long-Term Nursing Care Support Specialist

Nagoya Assistive Technology Plaza acts as a welfare facility and consulting organization to support self-reliance for the elderly and the disabled. Since July 1997, the center has operated as a nursing classroom and education center where care equipment is exhibited and consultations provided. A workshop was also added to allow the manufacture and remodeling of such equipment and the training of volunteer engineers. Starting in 2013, the plaza has been entrusted with providing support services for the practical use of care equipment and care robots, and are looking at new forms of caregiving. This lecture will introduce examples of consultation and utilization of care equipment and robot caregivers, and cover its current support for development companies as a consultant.

# Part II: Manufacturing Creativity and Research to Support Self-Reliance

Lecture 1

## Flexible Support and Architecture to Aid the Elderly

Speaker

Kenji Takemiya Professor in the Department of Tokyo Metropolitan University Professor in the Department of Architecture, Faculty of Urban Environmental Sciences,



### **Curriculum Vitae**

Research Resident, Foundation for Promotion of Cancer Research Research Assistant, National Institute of Health Services Management Assistant Researcher, Graduate School of Engineering, Tokyo Metropolitan University

Associate Professor, Graduate School of Urban Environmental Sciences, Tokyo Metropolitan University

2010 Professor, Architecture Course, Faculty of Urban Environmental

Sciences, Tokyo Metropolitan University Professor, Department of Architecture, Faculty of Urban Environmental 2018 Sciences, Tokyo Metropolitan University

Award history

Encouragement Prize of AIJ 1997, Architectural Institute of Japan Recognized as a "Leading Professor" in Architecture and Urban Studies, Tokyo Metropolitan University

services are being constructed to provide care under the long-term care insurance system in Japan. "Small-scale, multifunctional in-home care," introduced in 2006 is a service that responds to the needs of elderly people still living at home by providing a flexible combination of allowing to visit healthcare facilities during the day, staying there overnight, and having caregivers visit them at home.

Elderly care facilities corresponding to various types of caregiver

In this lecture, I will introduce the flexible support that aids the elderly in maintaining their lives, and the buildings where this support is provided with the examples of two facilities that triggered the adoption of this small-scale, multifunctional in-home care service.

Lecture 2

## Living Assistance for People Taking Care of Themselves

Speaker

Yuko Ohno Professor in the Graduate School of Medicine, Osaka University



## **Curriculum Vitae**

Graduated from the Health Sciences Department, Faculty of Medicine, University of Tokyo

Received a PhD from the Institute of Medical Science, Graduate School of Medicine, University of Tokyo

Researched at the University of Tokyo's Institute of Medical Electronics, the Institute of Statistical Mathematics, the National Cancer Center Research Institute, the Tokyo Metropolitan Institute of Medical Science, and others

Professor in the Division of Health Sciences, School of Medicine. Osaka University

2010 Established the Department of Robotics & Design for Innovative

Dean of the Division of Health Sciences, Graduate School of Medicine, Osaka University Representative Director for the Japanese Society for Wellbeing Science and Assistive Technology

Japan is one of the few countries in the world in which any citizen of any age can receive medical care through the Japan National Health Insurance system. Therefore, when thinking about living assistance, it is always necessary to think about disease prevention and post-illness recuperation for those who are taking care of themselves. We require new discoveries able to propose technological and organizational solutions to use relevant information to successively evaluate whether people's health issues are or are not temporary, or age- or diseaserelated.

# **Speaker Profiles / Overview of Lectures**

Lecture 3

Considering the Development and Application of Care Equipment and Robot Caregivers in a Super-Aging Society

Speaker

Kiyokuni Goshima Manager of the Planning Department, Association for Technical Aids



## **Curriculum Vitae**

National Hospital Organization Gifu Hospital Social Welfare and Medical Care Corporation

Health Care Bureau Management Office, Ministry of Health and Welfare

Manager of the Planning Department, Association for Technical Aids Responsible for businesses related to investigative research into, and the development and expansion of, assistive technology and care

Ministry of Health, Labour and Welfare Member of an investigative commission evaluating assistive technology covered

by nursing care insurance, and residential improvements Ministry of the Economy, Trade and Industry and the Japan Machinery

Member of the Robot Award Review Committee

Japan Agency for Medical Research and Development (AMED) Member of an evaluation committee looking into issues concerning the development of robot care devices and industry standardization

Care equipment and robot caregivers that support the independence of elderly people and persons with disabilities and reduce the burden on caregivers play an extremely important role as a means to maintain and improve the physical and mental functioning of the users, and to encourage activities and participation. Further, along with the progressive aging of society and falling birthrates, maintaining the labor force is an urgent issue in Japan. Besides reviewing the current situation of care equipment and robot caregiver development and its issues, we are considering measures for the safe and effective use of care equipment and robot caregivers where elderly patients

Lecture 4

## Social Security Systems for a Super-Aging Society — The Future of Care Equipment in Supporting Life at Home

Speaker

## Hirofumi Hidaka

Assistant Block Manager for the Shizuoka Block for the Association of Care Goods Providers and Assistant to the Head of the Chubu Region Sales Department at FranceBed Medical Services Business



#### **Curriculum Vitae**

Entered FranceBed Medical Services

Sales Manager in the Medical Hamamatsu Office of FranceBed

Sales Manager in the Medical Shizuoka Office 2016

Sales Manager in the Medical Hamamatsu Office

General Manager for the Medical Shizuoka Block Officer for the Tokai & Hokuriku Branch of the Association of Care

Assistant Block Manager for the Shizuoka Block for the Association of Care Goods Providers

Assistant to the Head of the Medical Chubu Region Sales Department

By the time the baby boom generation is over 75 years old in the year 2025, Japan is expected to more elderly people than ever before. Due to the increased number of elderly people, there are concerns about various problems such as increases in social security expenses, a lack of caregivers, and care for elderly people with

In this lecture, I will introduce care equipment for which the roles are expanding, equipment that is now expected to respond to a lack of caregiver personnel and in-home care, taking into account the transition of the caregiver insurance system and the situation in eastern Shizuoka Prefecture.

## Part III: Case Studies of Local Companies and Those from Further Afield

Lecture 1

## Introducing the Latest Developments in the Use of Care Equipment from Overseas

Speaker

Yoshinobu Miyake West Japan Sales Manager, Hill-Rom Japan



#### Curriculum Vitae

Graduated from the Faculty of Engineering , Setsunan University Entered Sanpo Electrical And Mechanical Engineering Corporation

Project manager, responsible for large x-ray machine installation, at Philips Electronics Japan Responsible for both creating hospital radiation equipment-related 2009

drawings in the drawing office and for planning manuals detailing how to fit IEC-standard products to JIS standards

2012 Maguet Japan

CSU/VARIOP Product Manager, in charge of operating room and ICU environment proposals

2018 PSS Marketing Manager at Hill-Rom Japan

West Japan Sales Manager

Hill-Rom was founded in the United States in 1929. Since then the company has broadened the scope of its business from the manufacture of beds for hospitals and other facilities to beds for the home as well as furniture-related products. In recent years, the company's business domain has also expanded from items used for physical assessment at clinics to also cover those used pre- and post-operation and during rehabilitation.

I will present case studies of care equipment being used for rehabilitation both in the hospital ward and at home.

## Lecture 2

## Development of Welfare Equipment by Manufacturing Companies in a Super-Aged Society

## Speaker

## Ichiyu Abe Chairman of Kyowa Kougyou



#### **Curriculum Vitae**

Entered Toshiba Machine

Involved in manufacturing technology for rolling grinder production, the car industry, transfer systems and others

Human Resources Chief and General Affairs Manager 1983 1997 Retired

Representative Director of Kyowa Kougyou Involved in the development of auto-sorting wire mesh washers, and the commercialization of labor-saving and environmentally friendly products for the food industry

2010 Intention of developing medical and welfare devices

Award history

Ergonomics Good Practice Award

(for home fitness equipment designed for wheelchair users)

Shizuoka Prefecture Governor's Award (for the development and commercialization of auto-sorting wire mesh

Our company is a creative manufacturing company in the general machinery and equipment production industry, with 15 employees who manufacture and sell auto-sorting wire mesh washers for the food industry.

The idea for a product in the welfare equipment field began with support for an employee who had experienced a cerebral infarction. Although we allowed the employees to start late or leave early for rehabilitation, their condition had not really improved after about 2 years, and we had some doubts about how effective the rehabilitation was. To assist, we developed a device to aid active, assistive exercise by allowing the user to train their paralyzed side using their healthy side, for rehabilitation at home. As a result, reactions and movements were seen in each finger seven years after the stroke.

The inspiration this recovery and further development provides, helps the user focus on their remaining capabilities, and work to prevent disuse atrophy.

## Lecture 3

## Development of the Foot-Operated Mouse, "Footloose"

## Speaker

## Hideaki Nagashima Representative Director at BeAlive



#### **Curriculum Vitae**

Graduated from Hosei University Faculty of Science and Engineering, Department of Mechanical Engineering

Entered Meitec Worked on mechanical design for printers and other pieces of machinery

Sanyo Technica 2001

Worked in management at a car parts manufacturer

2007 Aritomi Design Corporation

Worked in design management

Established BeAlive, became representative director Runs a contracting business for the design and manufacture of a range of devices, from medical equipment to car parts

By utilizing the foot-operated mouse "Footloose," jointly developed by the Shizuoka Cancer Center and BeAlive Co., Ltd., surgeons can operate a personal computer by using their feet during surgery in which both of their hands are occupied, making it now possible to smoothly select and confirm images they wish to view.

More recently, alongside IVR (interactive voice response), this tool is gaining attention as a useful instrument for improving the quality of daily living for disabled people with impaired upper limbs, or for improving their ability to work.