

# **Shizuoka Cancer Conference 2012**

**The Promotion of Innovation  
in Medical Care Related Special Zones**

**March 9, 2013 (Saturday)**

**Shizuoka Cancer Center Research Institute**

Sponsored by Shizuoka Prefecture and the Shizuoka Cancer Center

## Purpose of the Program

The Pharma Valley Project, launched by Shizuoka Prefecture in 2002, is an initiative to promote health of the residents of the Prefecture and support local health and pharmaceutical industries.

In December 2011, the Cabinet Office of the Japanese Government designated the "Shizuoka Prefecture Comprehensive Special Zone for State-of-the-Art Medical Care" as a comprehensive special zone for local revitalization. The objectives of the zone are to develop new modalities for cancer diagnosis and treatment, and to revitalize the local community by supporting industry, academia and the public sector.

Medical innovation is given high priority as an important part of Japan's growth strategy. For this reason there are thirteen such special zones spread all around the country.

At this conference, representatives of these zones will come together for mutual information exchange in order to deepen the relationships between the zones and enable them to bear even greater fruits in the future.



**Ken Yamaguchi**

President, Shizuoka Cancer Center

## Program

**Shizuoka Cancer Conference 2012** | **March 9, 2013 (Saturday)**  
Shiosai Hall, Shizuoka Cancer Center Research Institute

### Theme: **The Promotion of Innovation in Medical Care Related Special Zones**

10:00	Opening Address	Heita Kawakatsu	Governor of Shizuoka Prefecture
10:10	Introduction of the Conference	Ken Yamaguchi	President, Shizuoka Cancer Center
10:30	Special Address I	The Comprehensive Special Zone System Takaki Tsujimoto	Assistant Counselor, Regional Revitalization Bureau (Cabinet Secretariat)
11:00	Special Address II	Medical Equipment Industry Policy of the Ministry of Economy, Trade and Industry Takafumi Kakudo	Director, Medical and Assistive Device Industries Office, Commerce and Information Policy Bureau, METI
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Session I: Initiatives to Promote Health and Improve Medical Care in Local Communities			
11:30	Lecture 1	The Kashiwa-no-ha Campus Special Zone for "Public-Private-Academic Autonomous Urban Management" Katsuya Iijima	Associate Professor, Institute of Gerontology, the University of Tokyo
11:45	Lecture 2	The Onomichi Special Zone for Fostering Cooperation in Medical Services Yoshimasa Kanemitsu	Project Team Director, Project Team for Special Zone Planning, Office of General Affairs, Hiroshima Prefectural Government Office
12:00	Lecture 3	The Kagawa Medical and Welfare Special Zone Hironori Shiota	Deputy Chief, Medical Affairs and National Health Insurance Division, Health and Welfare Department, Kagawa Prefectural Government Office
12:15	Lecture 4	Comprehensive Special Zones for Leading Revitalization of Regional Medical Services (Life Innovation): Helping Regional Medical Services through the Comprehensive Medical Zone Concept Masayoshi Tojo	Head of Comprehensive Medical Zone Promotion, General Affairs Division, Prefectural Hospitals Bureau, Tokushima Prefecture
12:30	Lecture 5	Comprehensive Special Districts, Smart Wellness Cities for Creating a Wellness and Longevity Society Takayuki Fukubayashi	Director, Manager of Wellness Promotion Department and Chief of Management Strategy Office, Tsukuba Wellness Research Co., Ltd
12:45	Comprehensive Discussion I		
13:15	Lunch (60 minutes) -----		
Session II: Initiatives to Develop State-of-the-Art Pharmaceuticals and Medical Equipment			
14:15	Lecture 1	The Development and Application of a Next-Generation Cancer Treatment in Tsukuba Hiroaki Kumada	Associate Professor, Faculty of Medicine, University of Tsukuba
14:30	Lecture 2	Developing Simplified Micro Blood Collection Equipment Equipped with Minimally Invasive Needles and Future Issues Masafumi Shimoda Hiroshi Hanauchi	Advisor, Operation Planning Department, DNA Chip Research Inc. Chief in charge of the Comprehensive Business Promotion Zone Initiative, Emerging Industry Development Division, Economic Affairs Bureau, Yokohama Municipal Government Office
14:45	Lecture 3	What We Are Doing in The Kansai Innovation International Comprehensive Special Zone Kenji Shinjo	Assistant Director, Bio-Industry Promotion Division, Department of Commerce, Industry and Labor, Osaka Prefectural Government Office
15:00	Break (15 minutes) -----		
15:15	Lecture 4	Shizuoka Prefecture Comprehensive Special Zone for State-of-the-Art Medical Care Mitsuhsa Kozakura	Division Director, Research and Development Management Division, Commerce and Industry Bureau, Economy and Industry Department, Shizuoka Prefectural Government
15:30	Lecture 5	The Eastern Kyushu Medical Valley Concept Zone Yasumichi Tanaka	Director, Industrial Support Division, Commerce, Industry, Tourism and Labor Department, Miyazaki Prefectural Government Office
15:45	Lecture 6	The Mie Life Innovation Comprehensive Special Zone Yasushi Takamura	Deputy Counselor and Deputy Division Chief, Pharmaceutical Affairs and Infectious Disease Response Division, Health and Welfare Department, Mie Prefectural Government Office
16:00	Comprehensive Discussion II		
16:55	Closing Address -----		

\* Please note that lecture topics may change.



# Speaker Profiles / Overview of Lectures

## Special Address I

## The Comprehensive Special Zone System

Speaker

**Takaki Tsujimoto** Assistant Counselor, Regional Revitalization Bureau (Cabinet Secretariat)



### Curriculum Vitae

1997	Entered the Ministry of International Trade and Industry (MITI—current Ministry of Economy, Trade and Industry (METI))
2010	Assistant Division Chief, Business Environment Promotion Division, METI
2011-present	Assistant Counselor, Regional Revitalization Bureau (Cabinet Secretariat)

The Comprehensive Special Zone system was launched in 2011. In this talk, I will explain its purpose, objectives, the nature of the system itself, and what the local and national governments perform under it. Additionally, I will also discuss what the prospects and expectations are for the designated zones.

## Special Address II

## Medical Equipment Industry Policy of the Ministry of Economy, Trade and Industry

Speaker

**Takafumi Kakudo** Director, Medical and Assistive Device Industries Office, Commerce and Information Policy Bureau, METI



### Curriculum Vitae

1992.3	Graduated from School of Engineering, The University of Tokyo
1992.4	Entered the Ministry of International Trade and Industry (MITI)
1997.7-1999.6	Graduate School, Massachusetts Institute of Technology (MITI) restructured into Ministry of Economy, Trade and Industry (METI)
2001.1	Overseas posting (Brussels, Belgium): JETRO Brussels Center
2001.6-2004.6	Director, Iron and Steel Technology Office, Manufacturing Industries Bureau, METI
2008.7	Director, Medical and Assistive Device Industries Office, Commerce and Information Policy Bureau, METI
2012.4	Director, Medical and Assistive Device Industries Office, Commerce and Information Policy Bureau, METI

The medical equipment industry is expected to grow further in the future. Currently, the imports of medical equipment to Japan exceed the exports from it by 600 billion yen, and to modify this situation, it is necessary to enhance competitiveness of the domestic medical equipment industry. To accomplish this, it is crucial to apply Japan's excellent manufacturing technologies, so-called "monozukuri technologies" to the field of medical equipment; and the Ministry of Economy, Trade and Industry (METI) promotes the development of medical equipment by using those technologies to meet the needs of medical practitioners. Furthermore, METI is trying to create a better institutional environment under which newly developed or improved medical equipment is marketed as smoothly as possible, and also implement necessary policies for capturing the overseas market, where even greater growth is expected.

## Session I

## Initiatives to Promote Health and Improve Medical Care in Local Communities

## Lecture 1

## The Kashiwa-no-ha Campus Special Zone for "Public-Private-Academic Autonomous Urban Management"

Speaker

**Katsuya Iijima** Associate Professor, Institute of Gerontology, The University of Tokyo



### Curriculum Vitae

1990	Graduated from Jikei University School of Medicine Entered the Department of Cardiovascular Medicine, Chiba University Hospital
1991	Entered, in succession, Kameda Medical Center (Cardiology), Kimitsu Chuo Hospital (Department of Cardiovascular Medicine), and Tobu Chikai Hospital (Department of Cardiovascular Medicine)
1997	Medical staff, Department of Geriatric Medicine, The University of Tokyo
2001	Instructor at the same department as above
2002	Post-doctoral fellow, Cardiovascular Medicine, Stanford University School of Medicine
2005	Returned to Instructor position at the Department of Geriatric Medicine, The University of Tokyo
2006	Assistant Professor at the same department as above Assumed, in succession, the positions of chief of the medical office, chief of the ward and chief of outpatient care at the Division of Geriatric Medicine
2011	Associate Professor, IOG: Institute of Gerontology, The University of Tokyo

Work is being done in Kashiwa City, Chiba Prefecture, that brings together industrial, government, university, and private participants across diverse fields for a project to create cities whose residents lead healthy and long lives. It is intended to come up with a town-planning approach for the future that draws inspiration from "health" and will establish a new lifestyle brand that is distinctly Japanese. Specifically, it will be founded on the three requisites for healthy cities in the future of "walking/moving, eating, and social participation" along with the "living places combined with home care and nursing" needed for secure cities of the future to embody a town-planning approach that generates health. The goal is to create secure, safe, and sustainable cities where anyone would want to live.



## Lecture 2

# The Onomichi Special Zone for Fostering Cooperation in Medical Services

Speaker

**Yoshimasa Kanemitsu**

Project Team Director, Project Team for Special Zone Planning, Office of General Affairs, Hiroshima Prefectural Government Office



### Curriculum Vitae

1984.4 Entered Hiroshima Prefectural Government Office  
1995.4 Chief, Commerce Policy Division, Commerce, Industry and Labor Department  
1999.4 Project Planner, Regional Development Division, Regional Development Department  
2006.4 Chief Administrator, Office of Support for Persons with Disabilities, Health and Welfare Department  
2009.4 Project Coordination Supervisor, Policy Planning Division, Office of Planning and Promotion  
2011.4 Deputy Director, Project Team for Special Zone Planning, Office of General Affairs  
2012.4 Project Team Director of the same department as above

Work is being done at the Onomichi Special Zone for Fostering Cooperation in Medical Services based on a collaboration with healthcare and nursing professionals to enhance home care by using ICT, with the goal of making it possible for people to live in security in the places to which they have grown accustomed. In concrete terms, work is being done to accumulate and share diagnostic information using ICT with the goal of further developing a model for collaboration between various professions using the Onomichi method. In addition, efforts are also being made to develop model initiatives in the areas of remote medical care and remote medication counseling to provide care to individuals residing in less advantageous areas such as isolated islands. This presentation traces the broad outlines of these efforts.

## Lecture 3

# The Kagawa Medical and Welfare Special Zone

Speaker

**Hironori Shiota**

Deputy Chief, Medical Affairs and National Health Insurance Division, Health and Welfare Department, Kagawa Prefectural Government Office



### Curriculum Vitae

1992.3 Graduated from Okayama University  
1992 Entered Kagawa Prefectural Government Office  
2009.3 Completed Master's Program, National Graduate Institute for Policy Studies  
2009.4 Chief, Budget Coordination Office, Policy Department  
2012.4 Group Leader, Medical Affairs and National Health Insurance Division, Health and Welfare Department

The concept behind the Kagawa Medical and Welfare Special Zone is primarily to provide telemedicine and remote medication counseling services through active use of medical ICT to areas where medical providers are in short supply or the population is aging with striking rapidity, such as on islands in the Seto Inland Sea and back country areas in the corridors along and among the Sanuki Mountains. The goal is to create environments where local residents can live with a sense of security. This presentation covers the background to the concept, the efforts undertaken so far, and the issues it faces going forward.

## Lecture 4

# Comprehensive Special Zones for Leading Revitalization of Regional Medical Services (Life Innovation): Helping Regional Medical Services through the Comprehensive Medical Zone Concept

Speaker

**Masayoshi Tojo**

Head of Comprehensive Medical Zone Promotion, General Affairs Division, Prefectural Hospitals Bureau, Tokushima Prefecture



### Curriculum Vitae

1985.4 Entered Tokushima Prefectural Government Office  
2012.5 Head of Comprehensive Medical Zone Promotion, General Affairs Division, Prefectural Hospitals Bureau

Tokushima Prefecture faces two major issues when it comes to medical services. First, while the number of in-prefecture physicians and hospitals is amongst the highest per capita in Japan, medical services in certain localities are breaking down owing to reduced numbers of medical professionals in less-populated areas and reduced access to certain clinical specialties such as obstetrics. Second, the prefecture needs to free itself from its long-held status as having the country's worst diabetes mortality rate. This presentation introduces one initiative being undertaken to resolve these issues, a cooperative effort by prefectural and university hospitals to revitalize regional medical services centered on the concept for the comprehensive medical zone.

## Lecture 5

# Comprehensive Special Districts, Smart Wellness Cities for Creating a Wellness and Longevity Society

Speaker

**Takayuki Fukubayashi**

Director, Manager of Wellness Promotion Department and Chief of Management Strategy Office, Tsukuba Wellness Research Co., Ltd.



### Curriculum Vitae

1999 Completed Master's Program in Landscape Architecture, Graduate School, Tokyo University of Agriculture (Earned Ph.D. in Landscape Architecture)  
Joined Pacific Consultants Co., Ltd.  
2004.1 Joined Tsukuba Wellness Research Co., Ltd.  
2012.6-present Manager of Wellness Promotion Department and Chief of Management Strategy Office  
Engaged in development of e-wellness system and consulting service for health promotion projects of municipalities and corporate health insurance societies

A society that pursued convenience and built cities and the structure of city has stunted the health of the population and generated a variety of social problems, as the confirmed evidence base. Japan needs to muster up some sort of prescription that can deal with these, but at present the social technology is not accumulating enough to make it possible. This presentation will suggest some possible directions, including the results of a social experiment which is underway in comprehensive special districts, smart wellness cities for creating a wellness and longevity society.



# Speaker Profiles / Overview of Lectures

## Session II Initiatives to Develop State-of-the-Art Pharmaceuticals and Medical Equipment

### Lecture 1

#### The Development and Application of a Next-Generation Cancer Treatment in Tsukuba

#### Speaker

**Hiroaki Kumada** Associate Professor, Faculty of Medicine, University of Tsukuba



#### Curriculum Vitae

1996.4 Researcher, Japan Atomic Energy Research Institute  
Engaged in R&D relating to BNCT  
2005.3 Completed the Doctorate Course at University of Tsukuba (Earned Ph.D.)  
2006.7 Deputy Chief Researcher, Japan Atomic Energy Agency  
2009.5 Associate Professor, Faculty of Medicine, University of Tsukuba  
Engaged in R&D in the areas of proton therapy and medical physics relating to BNCT

Work has been proceeding on a project to develop and achieve practical application of boron neutron capture therapy (BNCT), one of the cutting-edge projects being undertaken at the Tsukuba International Strategic Comprehensive Special Zone. BNCT is a next-generation radiation treatment that combines neutrons with DDS technology to selectively destroy only cancerous cells. Thus far, competitive funds of various sorts have been obtained mainly at the University of Tsukuba to develop therapy equipment with a compact accelerator base that can also be used at hospitals, and work has been done by Ibaraki Prefecture to fit out treatment research sites. This presentation introduces the work that has been done so far and future business plans.

### Lecture 2

#### Developing Simplified Micro Blood Collection Equipment Equipped with Minimally Invasive Needles and Future Issues

#### Speaker

**Masafumi Shimoda** Advisor, Operation Planning Department, DNA Chip Research Inc.

#### Speaker

**Hiroshi Hanauchi** Chief in charge of the Comprehensive Business Promotion Zone Initiative, Emerging Industry Development Division, Economic Affairs Bureau, Yokohama Municipal Government Office



#### Curriculum Vitae

1967.3 Graduated from Faculty of Science and Technology, Sophia University  
1967.4 Joined Yoshizawa Business Machines Co., Ltd.  
1970.9 Developed Hitachi's general-purpose computer, HITAC 8000 series OS  
Joined Hitachi Software Engineering Co., Ltd. (worked on software R&D)  
1984.4 Transferred to Hitachi America, Ltd. (San Francisco)  
1987.4 Manager, R&D Division, Hitachi Software Engineering Co., Ltd.  
1998.1 General Manager, Life Science Promotion Division  
2001.4 Executive Director, DNA Chip Research Inc.  
2008.4 Advisor, DNA Chip Research Inc.

The objective at the Keihin Coastal Area Life Innovation Comprehensive Special Zone for International Competitiveness Development is for global corporations to develop and manufacture innovative medicines and medical instruments, and create new health-related industries to satisfy the demands of this era of individualized and preventive treatment. Various projects are now being pursued in the Zone. In this presentation, we will report on the development of simplified micro blood collection equipment equipped with minimally invasive needles. We will also discuss a plan to build a clinical research platform (a database of healthy human subjects, etc.) in order to search out diagnostic markers and drug design targets for use in preemptive treatment for cancer that makes use of this blood collection equipment as well as trial experiments in preemptive treatment.



#### Curriculum Vitae

1983.4 Entered Yokohama Municipal Government Office  
2012.2 Chief in charge of the Comprehensive Business Promotion Zone Initiative in the International Strategy, Growth Strategy Department, Economic Affairs Bureau of Yokohama Municipal Government Office

### Lecture 3

#### What We Are Doing in The Kansai Innovation International Comprehensive Special Zone

#### Speaker

**Kenji Shinjo** Deputy Division Chief, Bio-Industry Promotion Division, Department of Commerce, Industry and Labor, Osaka Prefectural Government Office



#### Curriculum Vitae

1987.3 Graduated from Faculty of Law, Kansai University  
1987.4 Entered Osaka Prefectural Government Office  
1999.7 Temporarily transferred to Japan Fair Trade Commission  
2010.4-present Assistant Director, Bio-Industry Promotion Division, Department of Commerce, Industry and Labor

Three prefectures (Kyoto, Osaka, and Hyogo) and three ordinance-designated cities (Kyoto, Osaka, and Kobe) in the Kansai region collectively applied and the Kansai Innovation International Strategic Comprehensive Special Zone was designated in December 2011. Universities, research institutes, private enterprises, economic organizations, and local governments have been working to revitalize the Kansai economy and regional industries beyond the prefectural boundaries. I will explain how we have been working to speed up the process that leads from R&D to practical application and production with a focus on the life sciences and new energy fields that are a strength of Kansai, and how we have been promoting new innovations to the world.



## Lecture 4

# Shizuoka Prefecture Comprehensive Special Zone for State-of-the-Art Medical Care

Speaker

**Mitsuhisa Kozakura**

Division Director, Research and Development Management Division, Commerce and Industry Bureau, Economy and Industry Department, Shizuoka Prefectural Government



### Curriculum Vitae

1980	Graduated from Faculty of Humanities, Chiba University Entered Shizuoka Prefectural Government Office
1996	Member, Establishment Project of Shizuoka Cancer Center
2003	Manager, Pharma Valley Center
2007	Assistant Director, Urban Planning Division, Construction Department
2010-present	Division Director, Research and Development Management Division, Commerce and Industry Bureau, Economy and Industry Department

Shizuoka Prefecture has pursued its Pharma Valley Project in the eastern part of the prefecture through a collaborative effort among industry, academia, government, and financial institutions. The Pharma Valley Initiatives were formulated 10 years ago on the occasion of the opening of the Shizuoka Cancer Center in a region that was already home to numerous research institutions related to pharmaceuticals, medical equipment manufacturing, and other fields. Thanks to R&D projects joining medical practitioners and caregivers with industry, product development done in collaboration with major companies, and efforts by local companies to advance into the medical services and health industries, the value of both pharmaceutical and medical instrument production here has been the highest in Japan for two years in a row. Furthermore, Shizuoka received approval in December 2011 to create the Shizuoka Prefecture Comprehensive Special Zone for State-of-the-Art Medical Care. Work has begun on this initiative, whose aim is to develop cancer treatments and revitalize local companies.

## Lecture 5

# The Eastern Kyushu Medical Valley Concept Zone

Speaker

**Yasumichi Tanaka**

Director, Industrial Support Division, Commerce, Industry, Tourism and Labor Department, Miyazaki Prefectural Government Office



### Curriculum Vitae

1982	Graduated from Faculty of Law, The University of Tokyo
1982.4	Entered Miyazaki Prefectural Government Office
2006	Participated U.S. Department of State IVL Program
2010.4	Vice Councillor, Prefectural Policy Department and Deputy Director, General Policy Planning Division
2012.4	Director, Industrial Support Division, Commerce, Industry, Tourism and Labor Department

The eastern Kyushu region encompassing Miyazaki and Oita prefectures is home to a major collection of industries that handle medical equipment related to blood and blood vessels, such as dialyzers and apheresis products. The two prefectures have come up with the Eastern Kyushu Medical Valley Concept to take advantage of this accumulation and hope to bring even more medical equipment companies here, stimulate the area, and make a contribution to Asia in the medical services field. The concept zone was designated as one of the first comprehensive special zones for local revitalization. This presentation will discuss four sites in the concept zone that are being developed respectively for research and development, medical equipment industries, human resources development, and blood and arterial treatment.

## Lecture 6

# The Mie Life Innovation Comprehensive Special Zone

Speaker

**Yasushi Takamura**

Deputy Counselor and Deputy Division Chief, Pharmaceutical Affairs and Infectious Disease Response Division, Health and Welfare Department, Mie Prefectural Government Office



### Curriculum Vitae

1981.3	Completed Master's Course in Pharmacy, Meijo University
1982.4	Joined a pharmaceutical company
1983.4	Entered Mie Prefectural Government Office
	Engaged in pharmaceutical and food sanitation work, and the Medical Valley Project at the headquarters and the public health institute
2007.4	Deputy Chief, Pharmaceutical Affairs and Food Office (in charge of Medical Valley)
2009.4-present	Deputy Counselor and Deputy Division Chief, Pharmaceutical Affairs and Food Office (former Pharmaceutical Affairs and Infectious Disease Response Division) (in charge of Medical Valley)

The Mie Life Innovation Comprehensive Special Zone is a comprehensive special zone for local revitalization so designated by the national government on July 25, 2012. The zone initiative is grounded in the industry-academia-government cooperative structures established through the Mie Medical Valley Concept that Mie Prefecture has pursued since 2002 to develop and build up the medical services, health, and human services industries. The initiative has taken advantage of the treatment network in place throughout Mie Prefecture to build an integrated treatment information database that brings together treatment data (treatments used, medications, tests, etc.) for some 300,000 patients. It has also established Mie Life Innovation Promotion (MieLIP) Centers at seven locations around the prefecture to assist with R&D. By taking advantage of this database and the MieLIP centers, as well as the easing of various regulations, through the initiative we have sought to help companies in Japan and overseas to create revolutionary new pharmaceuticals and medical devices, to encourage companies and research institutions to locate in Mie Prefecture, and to expand local employment. The initiative has helped to revitalize companies and universities in the prefecture as well as the local economy. Today's talk will discuss the progress made so far in the special zone and its future prospects.