

CITY

UNIVERSITY

Osaka City University Official Magazine



Vol. 19
October 2015

CONTENTS

● Page 1 **Special Feature I**

At the Forefront of Urban Disaster Management Research

A Close-up of the Center of Education and Research for Disaster Management

● Page 3 **Special Feature II**

Report on Innovation Japan 2015

OCU TOPICS

● Page 5 **Research**

Professor Masanori Kohda, Graduate School of Science
Education

Faculty of Medicine Celebrates its 70th Anniversary

● Page 6 **Researcher**

Associate Professor Takeshi Hieda,
Graduate School of Law

@Campus

Concert Band Holds Exchange Event with
Osaka Prefectural Sakai School for
Special Needs Education

OCU Opens Bangkok Office

14th Homecoming Day!

● **Back cover**

International Student Profiles





Special Feature 1

At the Forefront of Urban Disaster Management Research

– A Close-up of the Center of Education and Research for Disaster Management –



Outline of CERD (Center of Education and Research for Disaster Management)

The Center of Education and Research for Disaster Management was established on March 1, 2015, with the goal of building an Osaka-based community disaster management system that places the highest priority on saving lives. In preparation for complex, high-consequence disasters, it combines features of advanced disaster science, information technology, and citizen science.

The “Formation of a Community Disaster Management Network through Collaboration among Disaster Research Centers of Public Universities” was a project proposed by OCU. It was adopted as a network-development project under an initiative sponsored by the Japan Science and Technology Agency (JST) titled “2015 Science and Technology Communication Promotion Business: Supporting Problem-Solving Science and Technology Communication.” Of 36 “network development” applications submitted from across Japan this year, only two proposals were adopted, and ours was the only project adopted from an educational institution. We also intend to implement various disaster management initiatives in cooperation with Osaka Prefecture University, the University of Hyogo, and Iwate Prefectural University.

Below are the activities of the Center of Education and Research for Disaster Management that are now gaining significant attention.



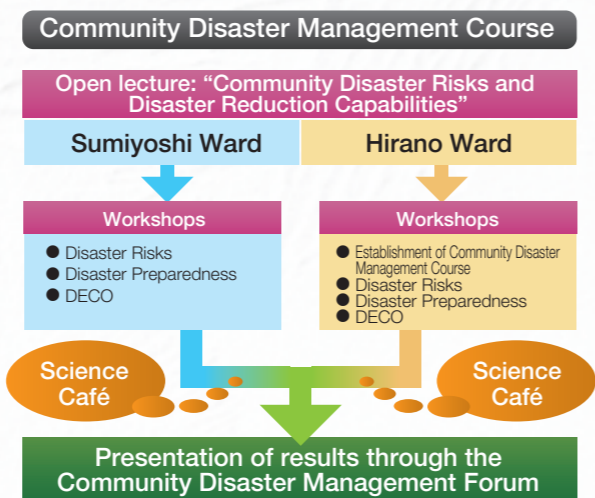
Kazuhiko Mori
Professor, Graduate School of Human Life Science
Director, Center of Education and Research for Disaster Management

The Community Disaster Management Network, a proposal by CERD, will function as a disaster management education system focused on community self-help and mutual assistance. As part of this effort, we will offer a Community Disaster Management Course this year with an active learning style that will include social experimentation along with diverse disaster management education.

One of the advantages of the Community Disaster Management Course is the fact that many workshops are offered. This year it will focus on Hirano Ward and Sumiyoshi Ward, where OCU is located.

The course begins with an introduction to the disaster risks present in the various areas as revealed through geographical and social data as well as an explanation of how the community must deal with these risks in order to minimize disasters. The course then expands the discussion with a panel of local residents. The workshops include walking tours of the town to increase recognition of aspects not readily visible on maps as well as identification of risks such as collapsed buildings, road closures, and fires, in addition to signs and evacuation routes to shelters.

An essential aspect of disaster response is saving lives. We offer a workshop for testing one’s evacuation ability by measuring the physical fitness required for an actual evacuation, and a workshop for experiencing and learning how to use wheelchairs and carts to assist those requiring



support during an evacuation.

In the last section of the workshop, we offer Disaster Evacuation Coaching (DECO), a practical disaster drill that incorporates the use of electronic tablets and applies the knowledge and expertise gained from the workshop.

The achievements recorded and information shared through this program will be reported in the Science Café, a disaster management round-table, and in the Community Disaster Management Forum, a presentation of the results. Both gatherings will encourage an exchange of opinion regarding future challenges.



Eisuke Ikuta
Lecturer,
Graduate School of Human Life Science

I am Eisuke Ikuta, Unit Leader in Disaster Management Education.

The Disaster Management Education Unit offers COC* Field Practice Seminar II and COC Agora Seminar Ib for OCU students and Community based Disaster Management Course for members of the community. In addition, the Community and Disaster Management General Education Program is offered to both OCU students and members of the community. All these offerings are organized mainly by members of CERD, a cross-sectoral organization, in order to provide both theoretical and practical training. One feature of our various programs is the active learning style of education they employ, which enables all to learn practical disaster management in a real community and not simply the knowledge required for community disaster management. *“Center of Community” program by MEXT



Muneki Mitamura
Professor,
Graduate School of Science

I am Muneki Mitamura, Deputy Center Director in charge of the Urban Disaster Management Museum.

For the Urban Disaster Management Museum, the Center is planning to provide self-explanatory exhibits that are clear and effective at imparting the history of disasters and disaster management. These will introduce the equipment and foods required for disaster preparedness as well as ways the items we use in our daily lives can be used to provide shelter in a disaster. We will also compile records of different natural disasters in Kansai and other regions and present materials that can be used to easily confirm images of the ground and structures of the city superimposed on a GIS*. The collected materials will be used in disaster risk training and emergency drills through field exercises for university and community disaster management courses to be offered in collaboration with various communities. *Geographic Information System



Hitoshi Watanabe
Professor, Research Center for Urban Health and Sports

I am Hitoshi Watanabe, Disaster Preparation Unit Leader.

To improve our disaster management capabilities, it is necessary to improve the comprehensive disaster management capabilities of the local community through self-help and mutual aid. It is essential that individuals acquire the skills and capabilities necessary to correctly judge and respond to the various events that could occur in a disaster. This Unit is committed to enhancing disaster response capabilities by addressing the issues from a variety of perspectives. These include the development of life protection drills; medical care in a disaster and health issues at shelters (medical and nursing science); skills and the physical and evacuation strengths required in an evacuation (health & sports, occupational therapy); shelters giving welfare consideration (social welfare); use of information and telecommunications technologies in a disaster (information & telecommunications engineering); and fire fighting and rescue methods (fire departments).



Daisuke Saeki
Associate Professor,
Graduate School of Literature and Human Sciences

I am Daisuke Saeki, Unit Leader of Social Implementation Management.

The Social Implementation of Disaster Management Knowledge seeks to increase community disaster mitigation capabilities by raising awareness of the disaster management education program developed by members of the Center. As part of this effort, we are seeking to certify elementary and junior high schools and community associations that actively promote disaster management training as disaster management hubs called “Inochi*-Labo.” Another project under development is the activity of the Sumiyoshi Act Company, a community theater group managed by faculty members of the Graduate School of Literature and Human Sciences in collaboration with local residents. It is important to build good relations with one’s neighbors through efforts such as this theater project in normal times in order to improve the disaster management capabilities of the community. *Japanese word means “life”



Special Feature II

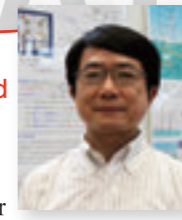
Report on Innovation Japan 2015

OCU presented exhibits on 5 themes.

Celebrating its 12th anniversary this year, Innovation Japan is one of the largest university exhibitions in Japan. Arranged by two National Institutes — the Japan Science and Technology Agency (JST) and the New Energy and Industrial Technology Development Organization (NEDO) — it functions as a bridge between industry and academia.

Held on August 27 and 28, 2015, at Tokyo Big Sight, this event drew more than 20 thousand attendees. Below we introduce you to some highlights of our exhibits and presentations.

Pulsed power network for accelerated propagation of distributed generations in power systems



Hisayoshi Sugiyama, Associate Professor
Graduate School of Engineering

We experienced a renewed motivation for our research after having received inquiries from power-related companies and the household appliance industry and various traders, manufacturers, and start-ups as well as other universities. It is likely this is partly attributable to electric power deregulation being a hot topic. Visitors showed a great deal of interest in our demonstration and asked many specific questions regarding costs, advantages, and mounting. Our participation in this event proved fruitful.

- Photos: ① Professor Hisayoshi Sugiyama in front of his booth
⑤ Demonstrating a power supply
⑬ Adjusting the simulation exhibit

Comments from exhibiting professors



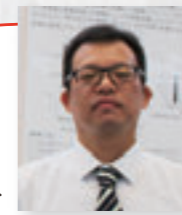
Servo motor control by super multichannel power line communication using magnetic functional thin film device

Hiroaki Tsujimoto, Professor
Graduate School of Engineering

Always interested in contributing to technologies that can solve problems in the field, reduce costs, and improve operability, we were approached by manufacturers of electric motors and companies focusing on industrial machinery at this event. As a result, we felt we had received a very good response. At this kind of exhibition, we need to attract the interest of those who are not technical specialists, such as sales representatives. It is also a good opportunity to train graduate students.

- Photos: ③ Professor Hiroaki Tsujimoto in front of his booth
④ A graduate student provides an explanation
⑪ Equipment demonstration

A novel drug screening method using in vitro neural migration assay



Masami Yamada, Associate Professor
Graduate School of Medicine

This exhibition, which was my first experience as an exhibitor at an event for industry and academia, gave me encouragement in my research thanks to the many inquiries I received. Unlike delivering presentations to researchers at an academic conference, this event required me to provide explanations to visitors using a less specialized vocabulary. In a way, this is similar to explaining technical terms in an understandable way to students of lower grades who have less medical knowledge. It was a good experience overall.

- Photos: ⑦ Presentation in progress
⑩ Exhibition panel in the booth

Innovative search and development of functional food components for anti-dementia



Akiko Kojima, Associate Professor
Graduate School of Human Life Science

After receiving inquiries from food and pharmaceutical companies and from people in a variety of areas such as nursing facilities, who we rarely have contact with at academic meetings, I realized anew that dementia is a major social problem of extreme interest. The inquiries I received revealed a similar opinion, that this is an urgent issue to which many are expecting an early resolution. I feel that this exhibition has been a good opportunity for us to return the fruits of our research to society.

- Photos: ② Professor Akiko Kojima in her booth
⑧ Giving presentation

Fatigue and stress measurement system



Yasuyoshi Watanabe, Director
Center for Health Science
Innovation (CHSI)

The CHSI is located in "Grand Front Osaka" - a town and a center for intellectual creation spreading out at the gateway to Osaka. At this exhibition, we were successful in making visitors aware of our strengths and results, as we were able to take advantage of our experience of introducing and informing CHSI activities to people of diverse backgrounds in some holding events. We expect that new partners for our collaborating research and idea exchanges will be found among many companies and research institutes that took interests in our activities, at this events.

- Photos: ⑥ Presentation by Professor Hiroshi Hori, Deputy Director of CHSI
⑨ Fatigue measurement in the exhibition booth
⑫ Explaining the measurement results



See our digest at OCU's official YouTube channel.

<https://www.youtube.com/user/ocuchannel>



RESEARCH

Confirming the Ability of Fish to Think Logically:

An Experiment Overturns Conventional Wisdom



Professor Masanori Kohda

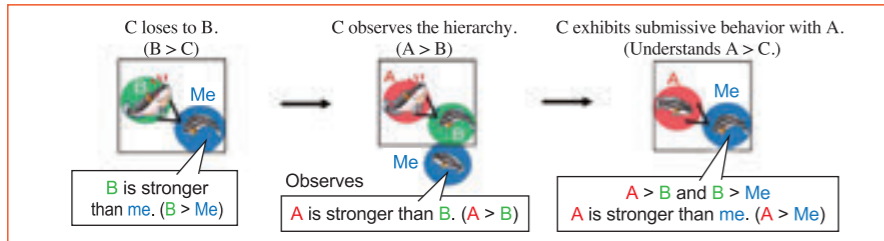
The research group of Professor Masanori Kohda of the Graduate School of Science reported an extraordinary finding: they have confirmed that some types of fish can think logically, deducing that if $A > B$ and $B > C$, then $A > C$.

The experiment was conducted with 3 *Julidochromis* (Cichlid fish) of similar size, which were placed in an aquarium two at a time. First, fish B and C fought for dominance. After fish C lost, fish A and fish B were brought into confrontation, with fish C observing the match. When fish A defeated B, fish C concluded that $A > C$ because $A > B$ and $B > C$; fish C then sought to escape from A when they the two were placed in the same aquarium. However, when fish C was not able to observe the battle between A and B,

fish C would confront A. Therefore, it is assumed that fish have the ability to use logic. In the experiment, 11 of 12 C fish showed similar behavior.

The same research method had been used previously for mammals and birds, but it had never before been used for fish. The finding overturns our conventional wisdom about fish.

Julidochromis contending for dominance



Researchers in Focus

Professor Masanori Kohda, Graduate School of Science

As we had expected, Dr. Kohda acknowledged that he has been intrigued by living creatures since he was a child. When other children were fascinated with radio assembly and plastic scale models, he spent his boyhood observing nature in nearby reservoirs and fields. He often visited the beach in Wakayama with his father, who loved to fish.

"I still make a new discovery every time I dive in the sea!" said Dr. Kohda with a twinkle in his eye.



RESEARCHER

Associate Professor Takeshi Hieda, Graduate School of Law



Another Side

Dr. Hieda noted the biggest reward from his 12-month paternal leave last year was "a higher level of enlightenment." He experienced the sense of isolation from society that many mothers often say they feel, as reflected in the days he had meaningful conversations with only his wife, even though he wrote textbooks and papers on weekends and on weekday evenings after his wife returned home from work. He said he was glad to have taken childcare leave because he was able to see his child learn to talk, eat, and walk along with other many precious "first-ever" moments.

Although we often associate the Graduate School of Law with the legal profession, Associate Professor Hieda actually teaches political science. He earned his Ph.D. in political science and specializes in the study of comparative politics. In the course of his study of elder care and other welfare policies in Japan, he became interested in the reasons behind the country's diverse social welfare and social security programs and began to focus his research on the political determinants of the welfare states.

Not satisfied with studying only Japan's situation, he conducted a comparative study of elder care policies in other countries, including the U.S.A. and Sweden, for a total of five years abroad. He spent two years at the University of Colorado at Boulder in U.S.A. and three years at the European University Institute in Florence, Italy, where he compared various policies with

the situation in Japan. Dr. Hieda analyzes the relationship between electoral systems, political party systems, and policies, and compares the situations in various countries. His research is notable for its comparative approach using econometrics. The results of his research in institutes outside Japan were compiled in the English-language publication, "Political Institutions and Elderly Care Policy: The Comparative Politics of Long-term Care in Advanced Democracies."

Using his own experience when taking childcare leave last year, he is now focusing on childcare support policies in addition to the nursing care system. He plans to use statistical approaches to study the political institutions that incentivize the dominant party as well as the relation between restructuring of party systems, government partisanship and family-related policies.

@CAMPUS

Concert Band Holds Exchange Event with Sakai School for Special Needs Education



Students of Sakai School for Special Needs Education enjoy a concert band drill performance.

On September 8, 2015, an exchange event was held with students of Osaka Prefectural Sakai School for Special Needs Education. This university concert band visits the school every September, with this event marking the 33rd consecutive year. The students very much look forward to this annual event.

A luncheon was held following the stage and drill performances. Before the event concluded, the band gave a small ensemble performance. Students clapped to the beat during the performance and applauded wildly at the end, calling for an encore.

OCU Opens Bangkok Office

On April 30, 2015, Professor Shin Nakagawa of the Graduate School of Literature and Human Sciences and Director of the OCU Global Exchange Office signed an agreement with Chulalongkorn University in Thailand to officially establish the OCU Bangkok Office within that university's Faculty of Fine and Applied Arts.

Chulalongkorn University is the oldest and most competitive national university in the Kingdom of Thailand. Since 2002, the university has concluded academic exchange agreements with various graduate schools of OCU, and in 2013 the two universities signed a university-wide exchange agreement.

The OCU Bangkok Office will also serve as a hub for exchange projects with other universities in Thailand. Its mission is to attract talented exchange students, to support the OCU alumni network, and to facilitate academic exchanges and collaboration projects between the university and industry.



Dr. Shin Nakagawa, Director of the Global Exchange Office at Osaka City University (right) with Dr. Suppakorn Disatapundhu, Dean of the Faculty of Fine and Applied Arts of Chulalongkorn University

14th Homecoming Day! Welcoming old familiar faces at your alma mater

On November 3, 2015, OCU will hold the 14th Homecoming Day with the theme "Connections 2015 — Let's return to the renewed OCU campus." This year marks the 135th anniversary of the foundation, a significant milestone for the university. Faculty members are working together to add excitement to Homecoming Day to ensure this will be a memorable event for students, parents, and alumni.

The opening event will be started by the address made by President Yoshiaki Nishizawa. Next, Ms. Keiko Matsunaga, Associate Professor of the OCU Graduate School for Creative Cities, will deliver a speech. Following that, Mr. Ryuzo Setoyama, an OCU graduate and Executive Officer and General Manager of the Orix Buffaloes, will deliver a special lecture and share experiences from his years in the world of baseball.

During the Campus Tour that starts at 10:00 a.m., students will take alumni on a guided tour of the campus including the roof garden of Media Center.

In addition, you'll have an opportunity for reunions, events held by alumni of clubs and various circles, a welcome party hosted by the president of OCU, and much more.

At the same time, you can visit the 65th Ginnan Festival (October 31–November 3).

Note: Be sure to visit the various websites of OCU and Alumni Associations for the latest information. <http://www.osaka-cu.ac.jp/en>

EDUCATION

Faculty of Medicine Celebrates its 70th Anniversary

On June 7, 2015, the Faculty of Medicine commemorated its 70th anniversary with an event at the Hotel New Otani Osaka.

The precursor to the Faculty of Medicine was Osaka City Medical College, which was founded in April 1944 in Nishiogimachi, Kita Ward and Municipal Minami Hospital in Asahimachi, Abeno Ward. It became an academic hospital under the Medical School in the same year. In 1948, Osaka City Medical School was founded under the old education system; in 1952, Osaka City Medical School was opened under the new education system. The Medical School was eventually incorporated into Osaka City University in 1955. Over 70 years that extended through postwar chaos to the present date, the university produced many excellent medical doctors and researchers.

The 70th anniversary celebration started at four o'clock in the afternoon in the Otori Banquet Room of Hotel New Otani Osaka, with more than

400 guests in attendance. The opening addresses were presented by Dr. Tetsuo Arakawa, Dean of the Faculty of Medicine, and Dr. Hiromichi Ikuno, Chairman of the Faculty of Medicine Alumni Association. Congratulatory speeches were delivered by Dr. Yoshitaka Okamura, President of Wakayama Medical University, and Mr. Takao Kodama, Chairman of the OCU Alumni Association. The commemorative lecture that followed was chaired by Professor Katsuyuki Miura of the OCU Faculty of Medicine, Applied Pharmacology and Therapeutics, and delivered by Nobel Prize Laureate, Professor Shinya Yamanaka, an OCU Alumnus and current Director of the Kyoto University Center for iPS Cell Research and Application. Speaking on the theme "iPS Cells Expand the Potential of Medicine," Professor Yamanaka spoke enthusiastically about how he came to study medicine, his first encounter with iPS cells, and the outlook for the future, while recalling episodes from his days at OCU.

During the latter half of the party, guests delivered congratulatory messages following opening remarks by Dr. Yoshiaki Nishizawa, President of OCU. The ceremony was an excellent opportunity for fellowship, retelling of memories, and visions for the future of the faculty.



Guests of the ceremony



Dr. Hiromichi Ikuno, Chairman of the Alumni Association



Opening Address by Dr. Tetsuo Arakawa, Dean of the Faculty of Medicine



Commemorative Lecture by Nobel Prize Laureate, Professor Shinya Yamanaka

International Student Profiles



Audi Cahya, 21
Nationality: Indonesia

Faculty of Economics,
1st year student

Just having finished her first semester at OCU, we interviewed Audi Cahya, an international student in the Faculty of

Economics. After graduating high-school in Indonesia she decided to opt for a higher education in Japan, starting off at a language school to gain a sufficient level of Japanese. She entered OCU on recommendation of the Consulate of the Republic of Indonesia, on a special admission track that OCU developed in cooperation with the diplomatic missions of a number of Asian countries in Osaka in order to attract talented and outstanding international students.

Not only does Audi have an excellent command of Japanese, she also speaks English fluently, so we could do the whole interview in English. Audi says she first came to Japan when her high-school choir was invited to do a performance here and immediately fell in love

with the country. So far Japan has lived up to its expectations, although the first year at university proved to be hard work. "For me taking notes during class or writing papers in Japanese simply takes more time than for my Japanese fellow students. That means I am probably spending much more hours studying, and leaves me less time for club activities." Fortunately, true to OCU's reputation, her professors are always prepared to help her and answer her questions, during as well as after classes. She also experienced the same friendliness of Osaka residents in a funny episode, when she got lost on an assignment for her Geography of Osaka class. For the assignment she had to find her way around modern-day Osaka based on a Meiji-era map. Apparently looking lost, a friendly lady tried to help her figure out where she was on the map of Meiji-era Osaka. It must have been a very funny and interesting experience for both of them.



Elliot Conti, 25
Nationality: United States

Graduate School of Literature and Human Sciences,
Department of Human Behavioral Science,
1st year of Master Course

Elliot Conti is in the first year of his Master's degree course in the Graduate School of Literature and Human Sciences. He started at OCU

as a research student and passed the entrance exam for the Master course in the summer of 2014. We asked him what brought him to OCU.

"I wanted to do research into issues like urban poverty and discrimination of groups within Japanese society. In this field, OCU is clearly the strongest university, with research centers like the Research Center for Human Rights and excellent specialists. So I fully concentrated on entering OCU."

Elliot found a supervisor and passed the selection for a scholarship of the Japanese Ministry of Education. "My supervisor has been really

supportive, giving me very useful advice on how to quickly build up my knowledge in the Sociology field".

Elliot is now doing research into the lives of foreign residents of Osaka's Nishinari-ward, speaking with people from various nationalities about their experiences, prejudices that they might encounter from living in this infamous neighborhood and the way they perceive that issue themselves. He even set up base in Nishinari, by moving there and says he greatly likes Osaka and spends much of his free time exploring the entire city by bicycle.

It is great to see a talented student like Elliot, having a deep understanding of the city of Osaka and contributing to the research in one of OCU's most important urban research fields. We already look forward to his Master thesis.

Osaka City University Official Magazine

CITY
X
UNIVERSITY
vol.19

Published by: Osaka City University
Planned and edited by: Corporation Management Division, Public Relations Office
Designed by: desk
Publication date: October 2015

Contact us if you have any questions or comments related to this publication.
Osaka City University, Corporation Management Division, Public Relations Office
3-3-138 Sugimoto, Sumiyoshi-ku, Osaka-shi, 558-8585 JAPAN
Email: t-koho@ado.osaka-cu.ac.jp

Reusing the photographs and text in this publication without permission is strictly prohibited.



大阪市立大学
OSAKA CITY UNIVERSITY

Sugimoto Campus

Faculties, Graduate Schools, and Headquarters of Business, Economics, Law, Literature and Human Sciences, Science, Engineering, and Human Life Sciences
3-3-138 Sugimoto, Sumiyoshi-ku, Osaka-shi, 558-8585 JAPAN

Abeno Campus

Faculty and Graduate School of Medicine, Graduate School of Nursing, and University Hospital
1-4-3 Asahimachi, Abeno-ku, Osaka-shi, 545-8585 JAPAN

Umeda Satellite

Graduate School for Creative Cities and Academic Extension Center
1-2-2-600 Umeda, Kita-ku, Osaka-shi, 530-0001 JAPAN

<http://www.osaka-cu.ac.jp/en>