

## **UCL-IRDR visited Japan for collaborative research and education with IRIDeS (2024/4/16-20)**

Theme : The 2011 Great East Japan Earthquake, the 2024 Noto Peninsula Earthquake

Place : Sendai City and Minami-Sanriku Town, Miyagi Prefecture and Noto Peninsula, Kanazawa Prefecture

Associate Professor Punam Yadav (Institute for Risk and Disaster Reduction, UCL) and Dr. Stephen Roberts (Institute for Global Health, UCL) visited Japan under a support from the Tohoku University-University College London (UCL) Matching Fund under a project title "Significance of Women's Leadership for DRR: a case of Northern Japan post 2011 Tsunami" from the 16 to the 20 April 2024 together with Associate Professor Anawat Suppasri (Tsunami Engineering Lab) and Dr. Miwako Kitamura (International Research Collaboration Office).

On the 16 April 2024, they visited several areas affected by the 2024 Noto Peninsula Earthquake, meet with women leader in each evacuation shelters in Noto Peninsula as well as local government staff in Noto town to investigate the current difficulties and needs in the evacuation shelters as well as future challenge on recovery and reconstruction. On the 17<sup>th</sup> April 2024, they visited IRIDeS to discuss on the ongoing Double Degree on disaster science and other possible collaborative research with IRIDeS's director (Prof. Shinichi Kuriyama), Prof. Fumihiko Imamura (Tsunami Engineering Lab) and Prof. Shinichi Egawa (International Cooperation for Disaster Medicine Lab).

On April 18, 2024, representatives visited the Tohoku University Center for Gender Equality Promotion and met with Dr. Lee to discuss gender equality initiatives between UCL and Tohoku University. On April 19 and 20, the delegation traveled to Minami-Sanriku Town, where they conducted an interview with Ms. Keiko Abe, a hotel owner. Her company has been actively supporting local businesses and community members. Additionally, her company has established 'Inochino Mori', an educational program aimed at enhancing students' understanding of the relationship between nature and disasters in this region. During this visit, we discovered the importance of leadership through a gender lens, informed by lessons from the Great East Japan Earthquake.

Furthermore, there was a meeting with Dr. Seyama from Saitama University to discuss employment and gender inequality in Japan's academic environment.

We hope that the collaboration between UCL and IRIDeS will enhance understanding of best practices and future challenges related to women's leadership in disaster risk reduction. This cooperation is also expected to significantly contribute to the potential and capacity for developing young researchers in the future.

More information

2024 Tohoku University-University College London Matching Fund

<https://web.tohoku.ac.jp/ged/11688?lang=en>

UCL Institute for Risk and Disaster Reduction

<https://www.ucl.ac.uk/risk-disaster-reduction/ucl-irdr>

UCL Institute for Global Health

<https://www.ucl.ac.uk/global-health/institute-global-health>

Text and photos : Anawat Suppasri (Tsunami Engineering Lab)  
Miwako Kitamura (International Research Collaboration Office)



Visit to a local evacuation center in Shunranno-sato



A meeting at IRIDeS



A meeting at Tohoku University Center for Gender Equality Promotion



Visiting at Minami-Sanriku Inochino-mori

## **Survey and workshop conducted by the J-RAPID Türkiye–Japan collaboration project on school and disaster education related to the 2023 Kahramanmaraş earthquake (2024/4/26-29)**

Theme : 2023 Kahramanmaraş Earthquake, School education, Disaster education

Venue : Gaziantep and Hatay Provinces in Türkiye

On 26 April 2024, the J-RAPID project “Survey on the impact of the 2023 Kahramanmaraş earthquakes on schools and the situation of disaster education” (PI: Yo Fukushima, IRIDeS, Tohoku University, and Canay Doğulu, TED University, Türkiye) held a workshop in Gaziantep, Türkiye. The project aims to collect data and findings for the 2023 Kahramanmaraş earthquake disaster, with a particular focus on schools, that can be used in future disaster education. The project members also visited the Gaziantep and Hatay Provincial Education Directorates on 26 and 29 April, respectively. From IRIDeS, Associate Professor Yo Fukushima (Inland Earthquake and Volcano Lab), Assistant Professor Ryo Saito (Cognitive Sciences Lab, concurrent), and Dr. Miwako Kitamura (International Research Collaboration Office) participated in the workshop operation and the visits.

At the workshop, we first introduced the project and the disaster education efforts after the 2011 Great East Japan Earthquake, and presented the results of a survey conducted on school teachers in the areas affected by the 2023 Kahramanmaraş earthquake. Following the presentations, we had three group discussion sessions, each based on a question: 1) “What do you think about the survey results?” 2) “What should be added to textbooks for disaster education?”, and 3) “What could be a good disaster education material reflecting the 2023 Kahramanmaraş earthquake disaster for future teachers?”.

During the visits to the Provincial Education Directorates, we heard about the latest situation on the schools in the disaster affected areas and disaster education in Türkiye, and exchanged ideas.

We plan to leverage the findings obtained through the visits and the workshop for conducting research on the development of disaster training program reflecting the 2023 Kahramanmaraş earthquake disaster.

Report by: Yo Fukushima (Inland Earthquake and Volcano Lab)



Photo during the workshop

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Japan Science and  
Technology Agency



TÜBİTAK



**WORKSHOP ORGANIZED BY A JST J-RAPID PROJECT**  
**“SURVEY ON THE IMPACT OF THE 2023 KAHRAMANMARAŞ**  
**EARTHQUAKE**  
**ON SCHOOLS AND THE SITUATION OF DISASTER EDUCATION”**



**Place: Hotel Novotel Gaziantep, Room Zeugma 1**

**Date and Time: 27 April 2024, 11:00 – 17:00**

**PROGRAM**

AM 11:00-12:45

- Opening introduction

(Yo Fukushima, Tohoku University, Japan, Principal Investigator of the project)

- Disaster education activities in Japan after the 2011 Great East Japan  
Earthquake disaster

(Takashi Oda, University of Tokyo, Japan / Ryo Saito, Tohoku University, Japan)

- Results of the online survey on teachers' opinions and disaster experiences  
(Canay Doğulu, TED University)

- Group Discussion I

- Lunch break (12:45-14:00)

PM 14:00-17:00

- Group Discussion II

- Coffee break (15:10-15:20)

- Group Discussion III

- Summary of the meeting and closing  
(Canay Doğulu, TED University)



Flyer of the workshop



## **Maui County Government and key stakeholders from Hawaii visited IRIDeS and the 2011 Great East Japan Earthquake Tsunami Affected Areas (2024/5/20-23)**

Theme : Disaster countermeasures, town planning, international collaboration

Venue : IRIDeS, tsunami affected areas in Miyagi and Fukushima Prefectures, and Tokyo

In August 2023, a wildfire rapidly spread across the island of Maui in the State of Hawaii, USA. The wildfire is considered to be the deadliest disaster in the history of Hawaii and the 5<sup>th</sup> deadliest wildfire disaster in the US. Funded by the Japanese Ministry of Foreign Affairs and led by the US-Japan Council, a delegation from Hawaii visited Japan in order to learn how Japanese communities rebuilt and recovered from recent disasters, especially in the Tohoku Region. The Hawaii delegation included the Mayor of Maui County, Richard Bissen, the Chancellor of the University of Hawaii Maui College, and several Hawaii based organizations and businesses.

On May 20<sup>th</sup>, members of IRIDeS faculty, Deputy Director Yuichi Ono (2030 Global DRR Agenda Office), Associate Prof. (Specially Appointed) David N. Nguyen (Tsunami Engineering Lab.), Associate Prof. Kanako Iuchi (Regional Resilience Planning Lab), and Associate Prof. Liz Maly (International Research Collaboration Office) provided presentations on Tohoku Disaster recovery to the visitors from Maui. In addition, representatives from Sendai City, Weather News, Pacific Consultants, and Fukuda Sangyo of Higashi-Matsushima, also provided information. The delegation from Hawaii later conducted fieldtrips to tsunami affected cities in Miyagi and Fukushima Prefectures.

On the fourth day, a workshop was held in Tokyo, which also was attended by the US Embassy and the Japanese Ministry of Foreign Affairs. The workshop centered upon group discussions on identifying community needs during the reconstruction process, and which activities to prioritize. The workshop ended with a discussion on future collaborations between Hawaii and Japan. Representing Tohoku University David N. Nguyen was involved in the management of this workshop.



Workshop at IRIDeS



Group photo

(members from Hawaii, IRIDeS, and Sendai City)



Workshop in Tokyo

Report by David N. Nguyen (Tsunami Engineering Lab)

## **Multicultural Disaster Risk Reduction Workshop and Treasure Hunt (DRRT) (2024/6/2)**

Theme: Disaster Education, Disaster Risk Reduction, Bosai  
Place: Sendai Multicultural Center and Katahira Area

On June 2, together with Mr. Masahiro Horino and Mr. Ryo Okazaki of the Sendai Tourism, Convention and International Association (SenTIA) and Sunhee Lee of the Tohoku University Center for Diversity, Equity & Inclusion (DEI), IRIDeS faculty members organized an international Disaster Risk Reduction Workshop and Treasure Hunt (DRRT) that was held at the Sendai Multicultural Center and the Katahira area. Following last year's workshop, this event marked the second multicultural disaster preparedness workshop for foreign residents in Sendai co-organized by IRIDeS. In total 50 people joined the event, including Foreign Resident Disaster Prevention Leaders, interpretation volunteers and 27 regular participants from 13 countries. In addition Risa Yanagiya from Sendai City and Kadan Otemachi Neighborhood Association and IRIDeS faculty members Researcher (Specially Appointed) Miwako Kitamura and Assistant Professor Ryo Saito, Associate Professors Elizabeth Maly and Julia Gerster, and Prof. Takeshi Sato engaged in the overall organization, leading of the groups and disaster preparedness related explanations and demonstrations during the event. Divided in six teams, the participants solved quizzes that they found at various locations in the Katahira Area. Each correct answer would send them to the next location, where they learned about Sendai, various types of evacuation facilities or other useful information on disaster preparedness. At Katahira Shimin Center, Prof. Sato explained about emergency goods stocked at evacuation facilities and the participants could try producing electricity with power generators. After all groups reached the goal at Katahira campus, everyone listened to wrap-up presentations on how to prepare for and react during certain disasters, and the services provided by Sendai City for foreign residents in case of emergencies. Finally, the participants joined group discussions, asked questions regarding disaster preparedness and reflected on the treasure hunt. Although many participants had wished for better weather during the treasure hunt, in the post-workshop questionnaire most replied that they feel better prepared for disasters and received a lot of useful information, such as how to pack an emergency bag or where to turn to during a disaster. More events are planned to be held in the future.

Text and pictures:

Julia Gerster (Disaster Culture and Archive Studies)

Takeshi Sato (Disaster Education Research and Implementation Lab)

Elizabeth Maly (International Research Collaboration Office)

Miwako Kitamura (International Research Collaboration Office)

Ryo Saito (Cognitive Sciences Lab)

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Explanations on the treasure hunt.



Two teams trying to solve a quiz to find the next location.



Prepared for rainy weather!



Prof. Sato explaining emergency stocks and how to use a power generator.



Impressions of the final group discussion.



## IRIDeS presented their research outcomes and contributed for AOGS2024 (2024/6/23-28)

Theme : AOGS2024, Geoscience, Interdisciplinary research

Place : Pyeongchang, Gangwon-do, South Korea

The 21<sup>st</sup> Annual meeting of the Asia Oceania Geosciences Society (AOGS) in 2024 was held in Pyeongchang, Gangwon-do, South Korea during 23-28 June 2024. Some IRIDeS faculty members attended to present their recent research outcomes and give contribution to the society. Prof. Shunichi Koshimura (Disaster Geo-informatics Lab) was invited to give a distinguish lecture to Interdisciplinary Geoscience (IG) section under the title “Catastrophic tsunami disaster – its impact, disaster response and mitigation –”. Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab) is currently vice-president of IG section and will serve as the new IG section president for AOGS in 2025 and 2026 as well as continue his contribution as an editorial board member of AOGS’s official journal “Geoscience Letters”. Dr. Constance Chua (Tsunami Engineering Lab) reported activities of the coastal zone working group including the upcoming work on coastal risk perception in Asia Pacific. Assoc. Prof. Anawat Suppasri and Dr. Constance Chua organized and convened one session in IG section “IG10: Interdisciplinary Research on Coastal Hazards: Advancement in Perspectives, Techniques and Applications” where oral and poster presentations made by IRIDeS faculty members are listed as below (names of IRIDeS faculties and staffs are underlined).

Authors	Title
<u>Anawat Suppasri</u> , Hidetoshi Masuda, Kwanchai Pakoksung, <u>Daisuke Sugawara</u> , An-Chi Cheng, Yoshinori Shigihara, Shuichi Kure, <u>Fumihiko Imamura</u>	The 2024 Noto Peninsula Earthquake: Tsunami Impact in Japan and the Sea of Japan/East Sea
<u>Constance Ting Chua</u> , <u>Anawat Suppasri</u> , Syamsidik Syamsidik, <u>Fumihiko Imamura</u>	A Proposed Approach Towards Developing Continuous Coastal Elevation Data for Tsunami-prone Areas in Indonesia
An-Chi Cheng, <u>Anawat Suppasri</u> , <u>Constance Ting Chua</u> , <u>Fumihiko Imamura</u>	Proposal of Pre-simulated database for Tsunami Warning in Taiwan
Muhammad Rizki Purnama, <u>Anawat Suppasri</u> , Kwanchai Pakoksung, <u>Constance Ting Chua</u> , <u>Fumihiko Imamura</u>	Suggestion on Developing Indonesia Tsunami Observation Networks and Forecasting System Based on Deep Learning
Elisa Lahcene, <u>Anawat Suppasri</u> , Kwanchai Pakoksung, <u>Fumihiko Imamura</u>	Impact of the Coral Reef System on the Tsunami Propagation of the 2004 Indian Ocean Event in North Male Atoll
Shunnosuke Narita, <u>Shosuke Sato</u> , Yudai Mikami, <u>Fumihiko Imamura</u> , Toru Okamoto, Satoshi Chiba	Effectiveness of Balloon-type Sign for Evacuation Site on Evacuation Time and Routes through Evacuation Experiment in Virtual Reality
Hidetoshi Masuda, <u>Daisuke Sugawara</u>	A New Framework for Tsunami Source Inversion Based on Tsunami Deposit Data
Kento Tanaka, <u>Anawat Suppasri</u> , Yoshinori Shigihara, <u>Fumihiko Imamura</u>	Estimation Tsunami Drift to Aquaculture Rafts through the Development of a Drift Simulation Model

More information about AOGS2024 21<sup>st</sup> Annual meeting

<https://www.asiaoceania.org/aogs2024/public.asp?page=home.asp>

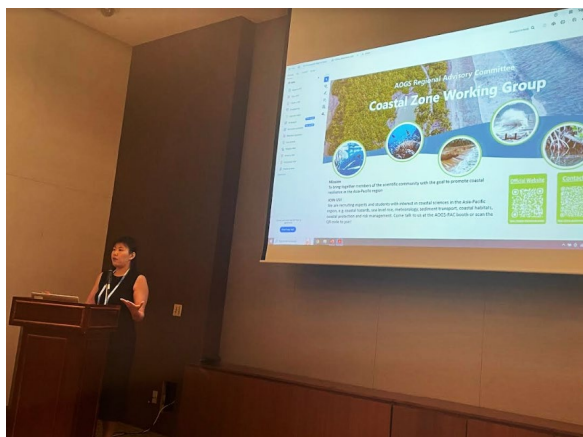
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Award presentation to Prof. Shunichi Koshimura by IG section president



Distinguished lecture by Prof. Shunichi Koshimura



Activities of coastal zone working group presented by Dr. Constance Chua



Assoc. Prof. Anawat Suppasri attended the council transition ceremony



Presentation by Assoc. Prof. Anawat Suppasri



Presentation by Dr. Constance Chua

Text and photos : Anawat Suppasri and Constance Chua  
 (Tsunami Engineering Lab)

## **Learning and Preparing for Disasters with People with Disabilities in Banda Aceh, Indonesia (2024/7/17 - 26)**

Theme: hazard, disaster, disability, vulnerability, resilience, 2004 Indian Ocean earthquake and tsunami, inclusiveness

Venue: Banda Aceh, Indonesia

URL: <https://www.kafalahindonesia.org/>  
<https://www.slbtncs.sch.id/>  
<https://aiwest-dr.usk.ac.id/#overview>

From July 17 to July 26, 2024, Associate Professor Sebastien Boret (International Research Collaboration Office), Assistant Professor Hyejeong Park (Disaster Medical Informatics Lab), and their Indonesian collaborator Prof. Alfi Rahman (Syiah Kuala University), conducted fieldwork on disaster and disabilities in Banda Aceh, Indonesia. This international collaboration aimed to enhance social resilience and develop an inclusive approach to disaster risk reduction.

### **Disaster and Disability 20 years after the 2004 Indian Ocean Tsunami**

Since July 2023, the research team has interviewed individuals with disabilities and organizations involved in disability welfare and disaster prevention in Banda Aceh. This time, they carried out interviews with over ten people with disabilities facilitated by the local office of Kafalah, Indonesia. We learned about the experience of a diverse range of individuals, from young in their 20s with hearing and speech impairments working in graphic design to older men and women leading an NGO for and with people with visual impairments. We also interviewed two young men with bodily deformities about their respective lives as a YouTube content maker (almost 400K followers) and a disability activist. Through these interviews, we gathered a comprehensive view of people with disabilities in Acehnese society with insights into their disaster perception and experiences, their social interactions and communities, and their status and welfare.

Our discussions revealed as much about capacity as their needs. They believe empowering people with disabilities is necessary for inclusive disaster risk reduction. In conclusion of this meeting, some of the interviewees and representatives of the Kafalah Foundation were invited to participate in the 'Disaster and Disability Special Session' at the AIWEST-DR conference (November 8-9, 2024), and Assoc. Prof. Boret suggested the conception of 'The Ability Project', an inclusive platform where people working in the world of disability will share their experience with their community.

### **Disaster Preparedness Program for School Children with Disabilities**

The second activity was a three-day disaster education and evacuation drill conducted at SLB TNCC (Sekolah Luar Biasa the Nanny Children Center) from July 22 to July 24. The participants included 33 teachers and 60 students with physical and intellectual disabilities, our research team, an NGO, and supporters from Basarnas Aceh (The National Search and Rescue Agency of Indonesia). Day 1 consisted of the teachers' training and a last review of the material in English and Indonesian. Day 2 focused on introducing and sensitizing students to natural hazards and early prevention measures. Day 3 saw the performances of earthquake and tsunami drills.

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Based on our observations and the feedback sessions with all the participants, this event successfully enhanced collective and mechanical solidarity to increase risk awareness and respond to disaster. The program also fostered mutual support among teachers, between teachers and students, and among students themselves. The program consisted of adapted tasks (videos, card games, coloring hazards, etc.) for the participants to learn actively about hazards and dangerous situations, learn self-protective actions, and practice evacuations within the school. Finally, we praised the students and teachers for their active participation, proved their capacities, and made the classes and the drills their own. As reported in the local news, this experience will have a lasting impact on the school while paving the way for similar.

Lastly, Assoc. Prof. Boret, Park, and Prof. Alfi visited Prof. Syamsidik, director of the Tsunami and Disaster Mitigation Research Center (TDMRC) at Syiah Kuala University, to discuss AIWEST-DR 2024, commemorating the 20<sup>th</sup> year of the 2004 tsunami in Banda Aceh on November 8-9, 2024. Prof. Syamsidik commented on the importance and the originality of our research on the experiences of people with disabilities to provide a broader and comprehensive perspective for building social inclusiveness capacity and resilience. In addition to our special session on disaster and disability, Prof Syamsidik invited us to present our findings at forthcoming national conferences on disaster preparedness activities in Indonesia.



Focus Group Interview,  
Kafalah Indonesia (NGO)



Drop, Cover, and Hold on Session,  
Disaster Workshop at SLB TNCC



Coloring Activity  
For Increasing Disaster Awareness



Group Photo at SLB TNCC



Evacuation Drills

Report by Sebastien Boret  
(International Research Collaboration Office)  
Hyejeong Park  
(Disaster Medical Informatics Lab)

## **UCL visited Tohoku University for Initiation of Double PhD Program between UCL and Tohoku University in Disaster Science (2024/7/24-26)**

Theme : Disaster science, Interdisciplinary research

Place : Tohoku University (Aobayama Campus, Kawauchi Campus and Katahira Campus)

Tohoku University (TU) and University College London (UCL) is currently initiating a new Double PhD Program in disaster science. Risk and Disaster Reduction (RDR) department leads UCL side while Civil and Environmental Engineering department and International Research Institute of Disaster Science (IRIDeS) co-lead TU side. Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab) and Dr. Miwako Kitamura (International Research Collaboration Office) are main persons in charge from IRIDeS. Prof. Joanna Faure Walker, head of RDR and other UCL members visited TU for several courtesy visits to all TU's institutions that related to this DD program including School of Engineering, IRIDeS, Civil and Environmental Engineering, Global Learning Center and Katahira Headquater and made several discussions about this DD program in details. Prof. Shinichi Egawa (International Cooperation for Disaster Medicine Lab) also joined the meeting at IRIDeS with IRIDeS's director, Shinichi Kuriyama. We are aiming for the world's first DD in disaster science given strength from both TU and UCL and contributing new generation of global leader young researchers/practioners in this field.

Japan Society for the Promotion of Science (JSPS): Project for Strengthening Global Expansion of Universities

<https://www.jsps.go.jp/english/e-tenkairyoku/kekka.html>

2024 Tohoku University-University College London Matching Fund

<https://web.tohoku.ac.jp/ged/11688?lang=en>

Text and photos : Anawat Suppasri (Tsunami Engineering Lab)

Miwako Kitamura (International Research Collaboration Office)

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Field visit to the 2011 tsunami affected areas



Courtesy visit to School of Engineering with Prof. Akinori Ito, Dean



Courtesy visit to IRIDeS with Prof. Shinichi Kuriyama, Director



Courtesy visit to Civil and Environmental Engineering with Prof. Daisuke Sano, Head



Detail discussions on the new DD program at School of Engineering



Courtesy visit to Katahira Headquarter with Prof. Toshiya Ueki (Executive Vice President) and Prof. Masahiro Yamaguchi (Vice President)



## IRIDeS faculty member delivered invited lectures and visited ITB and other Indonesian governmental agencies (2024/8/20-22)

Theme : Disaster science, Coastal hazards, Community resilience

Place : Bandung Institute of Technology (ITB), Bandung, Indonesia

Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab) spent his 3-days activities in Indonesia for strengthen collaboration between Japan and Indonesia on tsunami research, education (student exchange and student recruitment) and Tohoku University alumni related activities.

During the 20<sup>th</sup> -21<sup>st</sup> Augst, Assoc. Prof. Anawat Suppasri delivered two invited general lectures on tsunami and other coastal disasters mitigation focusing on Japanese experience and perspectives on resilience of Indonesian communities at the Water Resources Development Centre and Institute for Research and Community Service, Institut Teknologi Bandung (ITB) to both faculty members and graduate / undergraduate students. At ITB, he also had several meetings with other ITB top-level faculty members such as vice-dean of Civil Engineering Department, dean of Industrial and Technology Faculty and director of Institute for Research and Community Service as well as other Tohoku University Alumni members who are working as faculty members in ITB.

On the 22<sup>nd</sup> August, Assoc. Prof. Anawat Suppasri visited Ministry of Housing Affairs (KEMENDAGRI) and National Agency for Disaster Countermeasure (BNPB) to discuss about disaster related insurance and the ongoing joint SATREPS project funded by JICA (Japan International Cooperation Agency) and JST (Japan Science and Technology) on resilience and innovation in coastal community.

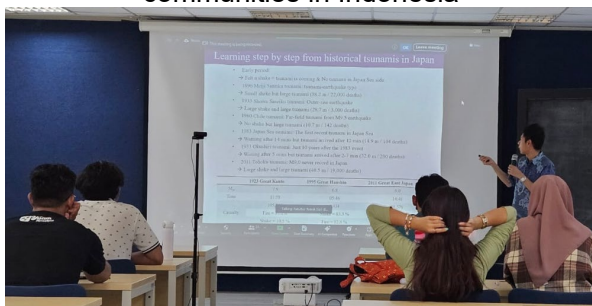
SATREPS (JST-JICA) Building Sustainable System for Resilience and Innovation in Coastal Community: [https://www.coast.dpri.kyoto-u.ac.jp/satreps\\_bricc/](https://www.coast.dpri.kyoto-u.ac.jp/satreps_bricc/)



The 1<sup>st</sup> lecture on resilience of coastal communities in Indonesia



Participants of the 1<sup>st</sup> lecture



The 2<sup>st</sup> lecture on tsunami mitigation in Japan



Discussions with the vice dean of Civil Engineering Department and other TU alumni

Text and photos: Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab)  
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Discussions with dean of Industrial and Technology Faculty and director of Institute for Research and Community Service



Discussions at the Ministry of Housing Affairs (KEMENDAGRI)



Discussion at the National Agency for Disaster Countermeasure (BNPB)



Discussion at the National Agency for Disaster Countermeasure (BNPB)

## IRIDeS faculty member visited Cilacap, Indonesia and conducted a survey on tsunami risk (2024/9/10-13)

Theme : Hazard map, 2004 Indian Ocean tsunami, 2006 Central Java earthquake, Tsunami evacuation facilities

Place : Badan Penanggulangan Bencana Daerah Kabupaten Cilacap, Cilacap, Indonesia

Prof. Osamu Murao (International Strategy for Disaster Mitigation Lab), in collaboration with Gadjah Mada University and Syiah Kuala University in Indonesia, is advancing his research project funded by the Japan Society for the Promotion of Science (JSPS) on the "Development of Recovery Evaluation Methods in Disaster-affected Areas in Indonesia and Clarification of Spatio-temporal Changes in Disaster Risk Perception."

As part of this project, from September 10 to 13, 2024, Prof. Murao visited Cilacap in Central Java, Indonesia, to conduct a survey on residents' awareness of tsunami inundation risks based on the hazard map. Additionally, he visited the Regional Disaster Management Agency (Badan Penanggulangan Bencana Daerah: BPBD) to present an overview of the project and engaged in active discussions on the current state of tsunami evacuation in Cilacap and future challenges. The BPBD expressed a strong commitment to further cooperation and anticipated working together to address the issues, contributing to enhancing the region's disaster preparedness. After completing the survey in Cilacap, Prof. Murao shared updates on the research progress with his counterpart at Gadjah Mada University, Prof. Ikaputra, and discussed the future development of the project.



Welcome gate to Cilacap



Group photo



Interview survey of residents



Meeting at BPBD

Text and photos : Osamu Murao (International Strategy for Disaster Mitigation Lab)



## IRIDeS faculty member conducted several activities under SATREPS project in Indonesia (2024/9/12-19)

Theme : Disaster science, Coastal hazards, Community resilience

Place : University of Pattimura, Ambon, and Bali, Indonesia

Assoc. Prof. Anawat Suppasri is a sub-leader of the ongoing SATREPS project in Indonesia. This project on disaster resilience and innovation in coastal community is funded by JICA (Japan International Cooperation Agency) and JST (Japan Science and Technology). Ambon City in Maluku Province and Bali Island are two out of four study areas of this project. On the 12<sup>th</sup> September, a workshop was organized at University of Pattimura to report ongoing results and exchange information and ideas with various stakeholders. Project members also visited other university's research departments and facilities for discussion on further collaboration.

On the 13<sup>th</sup> September, the project members visited disaster management agency (BNPB) offices under Ambon city and Maluku province to discuss about the current disaster situation, preparation of hazard map and evacuation plan and data sharing. The team also visited Ambon city mayor to report the activities and strengthen contribution to the local communities. Assoc. Prof. Suppasri also made an invited lecture to students of University of Pattimura.

During the 14<sup>th</sup>-15<sup>th</sup> September, the project members visited several villages that had been impacted by the 1950 tsunami caused by a large earthquake in Banda Sea and submarine landslide inside Ambon Bay. Although number of the tsunami warning siren is limited, there are several tsunami evacuation signs and routes in these villages. The group exchanges ideas with leaders of each village on the current situation, further contribution from the project and eyewitness information for future research.

During the 16<sup>th</sup>-17<sup>th</sup> September, Assoc. Prof. Suppasri visited tsunami evacuation buildings and mangrove forest areas in Bali as well as made some ground truth observation of buildings for future building type detection using satellite images and machine learning.

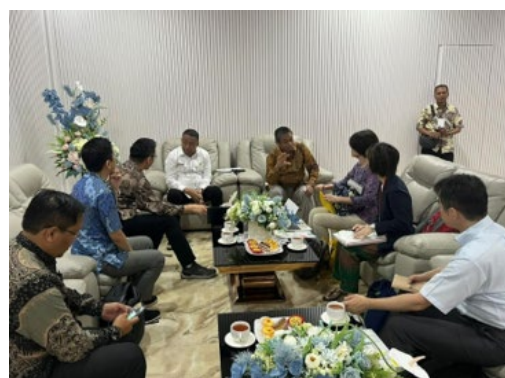
On the 18<sup>th</sup> September, the Joint Coordinating Committee (JCC) meeting was held in Bali. Assoc. Prof. Suppasri represented Tohoku University as a project's sub-leader to presented about multi-hazard and risk assessment in four study areas, development of young researchers and exchanged information with other members and audiences from both Japan and Indonesia. On the 19<sup>th</sup> September, the project members visited mangrove information center in Bali. All results and from the team led by IRIDeS, Tohoku University will be also integrated to guideline for topography and bathymetry development, improvement of the current country's risk platform, guideline for multi-hazard simulation and assessment.

SATREPS (JST-JICA) Building Sustainable System for Resilience and Innovation in Coastal Community [https://www.coast.dpri.kyoto-u.ac.jp/satreps\\_bricc/](https://www.coast.dpri.kyoto-u.ac.jp/satreps_bricc/)

Text and photos : Anawat Suppasri (Tsunami Engineering Lab)



Workshop at University of Pattimura



Meeting with vice-rector of University of Pattimura

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Lecture on tsunami mitigation in Japan



Visit to the house of the mayor of Ambon city



Meeting at local disaster management agency



A village affected by the 1950 tsunami



Eco-tourism spot in a smart village



Tsunami evacuation sign in a tsunami-ready village



Tsunami evacuation building in Bali



SATREPS JCC meeting



## **Freie Universität Berlin – IRIDeS Summer School**

### **Navigating Narratives: Understanding Institutional Dynamics in Disaster Recovery (2024/9/23-28)**

Theme: Great East Japan Earthquake, tsunami, and nuclear disaster; disaster recovery, narratives, institutional theory; inclusive BOSAI; international exchange  
Place: IRIDeS; Natori, Ishinomaki, Minamisanriku, Futaba, Okuma, Tomioka

From September 23 to 28, 2024, the International Research Institute of Disaster Science (IRIDeS) hosted a joint summer school titled “Navigating Narratives: Understanding Institutional Dynamics in Disaster Recovery,” in collaboration with the Graduate School of East Asian Studies (GEAS) and the Japanese Studies Department of Freie Universität Berlin. The GEAS summer school is an annual program that focuses on various institutional topics, with each year's event held in a different country in East Asia.

A total of 17 faculty members and doctoral researchers from Freie Universität participated, including Vice President Prof. Verena Blechinger-Talcott, Prof. Gregory Jackson (Department of Management), and the Associate Director of the Graduate School, Dr. Katrin Gengenbach. The program centered on the Great East Japan Earthquake and the subsequent recovery processes. It featured a blend of academic presentations on disaster science and disaster risk reduction in Japan, along with field research in Natori, Ishinomaki, Minamisanriku (Miyagi Prefecture), Futaba, Tomioka, and Okuma (Fukushima Prefecture).

On the first day, IRIDeS director Prof. Shinichi Kuriyama, Prof. Blechinger-Talcott, Dr. Gengenbach, and Assoc. Prof. Julia Gerster (Disaster Culture and Archive Studies/ Inclusive Disaster Risk Reduction Lab/ Communication Science for Disaster Risk Reduction Lab) addressed the Summer School participants with a warm welcome. Over the week, presentations by Tohoku University faculty members—Prof. Fumihiko Imamura (Tsunami Engineering Lab), Assoc. Prof. Julia Gerster, Assoc. Prof. Elizabeth Maly and Researcher (Specially Appointed) Miwako Kitamura (International Research Collaboration Office), Assoc. Prof. Erick Mas (Disaster Geo-informatics Lab), Assoc. Prof. Alyne Delaney, and Prof. Jun Mitarai (Disaster Resilient Society Promotion Lab)—covered a wide range of topics, including the impacts of the Great East Japan Earthquake, changes in the living environment of survivors due to recovery and relocation policies, decontamination and revitalization policies in Fukushima, and disaster risk reduction from the viewpoints of minority groups. Additionally, Prof. Tamaki from Fukushima Medical University provided an overview of radiation health effects, with specific emphasis on the Fukushima Daiichi nuclear disaster. Prof. Yanai from Tohoku Gakuin University gave an insightful presentation on the economic repercussions of the triple disaster, focusing particularly on the city of Ishinomaki in preparation for the field research.

On September 24, participants were divided into two groups for fieldwork: the “Natori Group” and the “Fukushima Group.” The “Natori Group,” led by Researcher Kitamura, explored the damage in the Yuriage district of Natori City and visited the disaster memorial *Mémoire de Yuriage*. The walking tour, guided by local resident Toshiyuki Naganuma, offered personal insights into the region's recovery and his story of survival. Participants then engaged in a discussion with Miwako Takahashi and her daughter Momoko, who lives with Rett syndrome, to address the challenges faced by people with disabilities during disaster recovery and risk reduction.

Meanwhile, the “Fukushima Group” began with a walking tour in the reopened area of Futaba Town to learn about the nuclear disaster, life before the disaster, and the current state of recovery. They visited the TEPCO decommissioning museum, where they received a guided tour providing information about the nuclear accident and the ongoing recovery and decommissioning efforts. In the afternoon, they toured the interim storage facility in Okuma, where they observed how decontamination policies are implemented firsthand. Equipped with Geiger counters, participants

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measured changes in the environment and localities, depending on procedures such as reusing contaminated soil in street pavements or burying it underground, and reflected on radiation measurements they took outside Fukushima Prefecture. The fieldwork concluded with a discussion with Norio Kimura, a former resident of the area turned into the interim storage facility, arranged by F-ATRAS. In his talk, Kimura shared his feelings about the loss of his family in the tsunami, his thoughts on the nuclear disaster that prevented the search for missing people, and what the provision of the former residential area to the interim storage facility means to him, exemplifying the ongoing human impact of the nuclear disaster and recovery policies.

The final fieldwork, spanning two days, was conducted with all participants. On the first day, the group visited Kadonowaki Elementary School in Ishinomaki, where they learned about the history and current state of recovery of the city, as well as disaster memorials in general and the Kadonowaki Elementary memorial in particular, from memorial director Richard Halberstadt. On the way to Genki Ichiba, local residents Hajime and Naomi Chiba shared their insights on the history of Ishinomaki, the recovery efforts, and their personal research. After moving to Minamisanriku, hotel owner Noriko Abe gave a presentation on Hotel Kanyo's role in disaster relief as a shelter and the importance of tourism in long-term recovery.

The last day of fieldwork began with participation in the kataribe bus, during which Kazuma Goto shared his experiences and thoughts on the 3.11 disaster and recovery at places affected by the tsunami. He also guided the group through the Takano Kaikan, a wedding hall that was turned into a private disaster memorial. The fieldwork concluded with a barbecue at the "hill of life," which serves not only as a leisure facility but also as a place of learning about living with nature and disaster risk preparedness.

Throughout the week, participants, divided into three different groups, analyzed the presentations and explanations during fieldwork from the viewpoints of:

1. National and local narratives;
2. Narratives of diversity
3. Narratives of natech disasters and natural hazard disasters.

In the final symposium held on September 28, they discussed their findings and thoughts with an audience that included some of the local guides and presenters. Assoc. Prof. Sebastien Boret (International Research Collaboration Office) and Prof. Christopher Craig (Center for Integrated Japanese Studies) provided insightful comments on disaster narratives and the content of the presentations. It was especially highlighted that participants identified key topics and challenges in recovery discussed in disaster science and demonstrated the ability to discuss these issues from the background of their respective research disciplines. Some of the findings included discrepancies between desired forms of recovery from local people's points of view and build back better policies and communication challenges and dilemmas regarding recovery policies in Fukushima Prefecture. The Summer School also provided a unique opportunity to understand the impact of a triple disaster and to correlate with disasters, climate change and institutions in the East Asian region in particular, and overall on a global scale.

The summer school was jointly organized by IRIDeS faculty Gerster, Maly, and Kitamura; along with Freie Universität Berlin faculty Prof. Verena Blechinger-Talcott and Dr. Katrin Gengenbach, with assistance from doctoral researchers Elena Korshenko and Nakako Hattori. The organizers express gratitude to the generous sponsors, Center for International Cooperation at Freie Universität Berlin, the international mobility funding at Freie Universität Berlin (PROMOS), GEAS, IRIDeS, and F-REI.

Report by:

Julia Gerster (Disaster Culture and Archive Studies)  
Elizabeth Maly (International Research Collaboration Office)  
Miwako Kitamura (International Research Collaboration Office)

(pictures on the next page)



Opening remarks were delivered by Prof. Blechinger-Talcott, Dr. Gengenbach (Freie Universität Berlin), and Prof. Kuriyama (IRIDeS).



The participants listening to a presentation by Prof. Imamura.



The Natori group with Miwako and Momoko Takahashi.



Field research in the Yuriage district guided by Toshiyuki Naganuma.



The Fukushima group looking over the Fukushima Daiichi nuclear power plant.



Conducting radiation measurements in the interim storage facility.



The Fukushima group in front of Shohatsu shrine in Futaba Town.



Memorial director Richard Halberstadt explains the fire damage at Kadonowaki Elementary School.



The group comparing photographs prior 3.11 to the reconstructed area of Kadonowaki.



Assoc. Prof. Maly translating explanations of kataribe Kazuma Goto in Minamisanriku.



At the "hill of life" in Minamisanriku.



The audience listening to the group presentations at the final symposium on Sep 28, 2024.

## **The Editorial Board Meeting of the ASEAN Journal of Disaster Health Management (2024/9/24-26)**

Theme: The platform of the ASEAN Academic Network of Disaster Health Management

Venue: Gadjah Mada University, Yogyakarta, Indonesia

On September 24, 2024, Professor Shinichi Egawa from the Disaster Medicine Department participated as an Associate Editor in the editorial board meeting of the ASEAN Journal of Disaster Health Management (AJDHM), an activity in the Project for Strengthening the ASEAN Regional Capacity on Disaster Health Management (ARCH Project), held at the Faculty of Medicine, Nursing and Nutrition at Gadjah Mada University.

The ARCH Project, which was initiated in 2016 based on a bilateral agreement between Japan and Thailand, is currently in its second phase (ARCH2) and aims to standardize disaster health and medical responses and improve the disaster health management capabilities of ASEAN member states in a region frequently affected by disasters.

The ASEAN Journal of Disaster Health Management (AJDHM) is being established as a platform for academic research and dissemination on disaster health management (DHM) in the ASEAN region. The first issue is scheduled to be published in January 2025. Professor Egawa is committed to the journal's framework as the JICA advisory committee member through his experience as editor-in-chief and deputy editor of various journals related to disaster medicine and general medicine.

This was the second editorial meeting, where discussions were held on topics such as the online submission and peer-review system, decision-making on paper acceptance, and the sustainability of the journal. The ASEAN Institute of Disaster Health Management (AIDHM), established in October 2023., serves as the core of ASEAN's disaster health management and the editorial office for the journal.

To enhance academic capabilities, AIDHM held a five-week-long academic writing workshop to improve young researchers' writing skills. Additionally, collaborative research projects on disaster health management are progressing among ASEAN member states, with the results expected to be published in the journal's first issue.

The improvement and standardization of disaster health management in ASEAN will not only enhance the capacity for self-help, mutual aid, and international assistance in this disaster-prone region. Still, they will also positively impact neighboring countries in Asia and Oceania. The overall health standards of a society greatly influence the health impact of disasters. While trauma and infectious diseases have historically been significant issues, as countries face aging populations, challenges related to lifestyle diseases and mental health will become more critical. Hospitals, public health, and welfare facilities must continue functioning during disasters. A flexible health and medical system are needed to respond to new and complex hazards, such as armed conflicts, nuclear power plant accidents, cyberattacks, and their associated health impacts.

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**AJDHM**  
ASEAN Journal of Disaster Health Management

Editorial board members and logo of the ASEAN Journal of Disaster Health Management

Text: Shinichi Egawa (Co-creation Center for Disaster Resilience,  
International Cooperation for Disaster Medicine Lab)

## IRIDeS faculty member delivered special lectures at National Pingtung University and National Taitung University (2024/10/9,11)

Theme: Disaster Prevention and Community, DRR, Disaster Response  
Place: National Pingtung University and National Taitung University, Taiwan

Prof. Osamu Murao (International Strategy for Disaster Mitigation Lab) visited Taiwan from October 8th to 13th, 2024 and delivered special lectures on “Disaster Prevention” at two universities.

On October 9th, he gave a lecture at National Pingtung University in Pingtung City for students in the Department of Chinese Literature. The lectures were titled “Evolving Disasters and Urban Risks” and “Approaches to Architecture and Urban Design for Disaster Risk Reduction”.

On October 11th, he also lectured at National Taitung University in Taitung City on the theme “Disaster Prevention and Community”. The session, aimed at regular students at the university, focused on how to apply lessons learned from past disasters. The students expressed keen interest in disaster management practices shaped by Japan’s extensive experience as a disaster-prone nation.

Prof. Murao has conducted ongoing recovery research in a community affected by the 1999 Chi-Chi Earthquake in Taiwan. This work paved the way for a collaboration with National Taitung University. Earlier this year, in January, faculty and students from the university visited IRIDeS as part of an educational program of National Taitung University.

Looking ahead, Prof. Murao is committed to deepening this collaboration and fostering stronger exchanges between Taiwan and Japan in the field of disaster prevention.



Lecture at National Pingtung University



Group Photo at National Taitung University



Lecture at National Taitung University



Professor Murao's Lecture

Text and photos: Osamu Murao (International Strategy for Disaster Mitigation Lab)

## **The 24th Japan-Korea-China Architects & Building Engineers Conference Sendai Meeting held at IRIDeS (2024/10/29-30)**

Theme: DRR, Recovery, Urban Development, Architecture  
Venue: IRIDeS

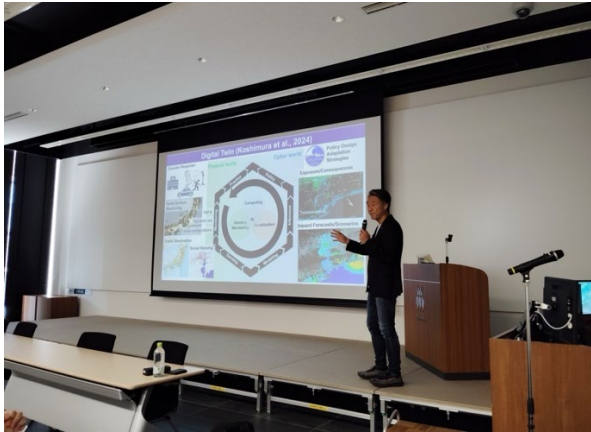
The 24th Japan-Korea-China Architects & Building Engineers Conference Sendai Meeting was held from October 29th to 30th, 2024, co-hosted by the International Committee of the Japan Federation of Architects & Building Engineers Associations and IRIDeS. “Japan-Korea-China Architects & Building Engineers Conference” is an international conference organized by the registered architect associations of Japan, South Korea, and China. Due to the COVID-19 pandemic, it was the first time in six years for the event to be held in Japan.

The first day, October 29th, began with an introduction to IRIDeS, followed by a screening of the film “The Great Tsunami in Japan Reflecting on the 2011 disaster”. Afterward, Prof. Shunichi Koshimura, Vice Director of IRIDeS (Disaster Geo-informatics Lab, Co-creation Center for Disaster Resilience), delivered a keynote lecture titled “Tsunami Digital Twin Concept, Progress, and Application,” discussing the utilization of digital twins and disaster resilience. This was followed by a keynote lecture by Prof. Osamu Murao (International Strategy for Disaster Mitigation Lab) titled “Architecture and Urban Design for Disaster Risk Reduction.” During the afternoon workshop, teams from Japan, China, and South Korea presented case studies of DRR and urban and architectural design initiatives that have been undertaken in their respective countries. Following these presentations, a discussion session was held between the participants and faculty members of IRIDeS, where they exchanged opinions based on the morning’s lectures.

In the afternoon of October 30th, Open Session was held, with around 70 participants, including members of the Miyagi Prefecture Architects Association and students from Tohoku University. As an example of DRR efforts considering natural disasters, Associate Prof. Akihiro Shibayama (Disaster Culture and Archive Studies) introduced “The Digital Archives of the Great East Japan Earthquake”. Additionally, as an example of recovery efforts, Associate Prof. Katsuya Hirano (Spatial Design Strategies Lab) gave a lecture titled “Reconstruction project in Ishinomaki and Onagawa”, discussing the reconstruction efforts in Tohoku region. Following this, case studies from Japan, China, and South Korea were presented, and an active Q&A session took place.

Text and photos: Osamu Murao (International Strategy for Disaster Mitigation Lab)  
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Prof. Koshimura's Keynote Lecture



Prof. Murao's Keynote Lecture



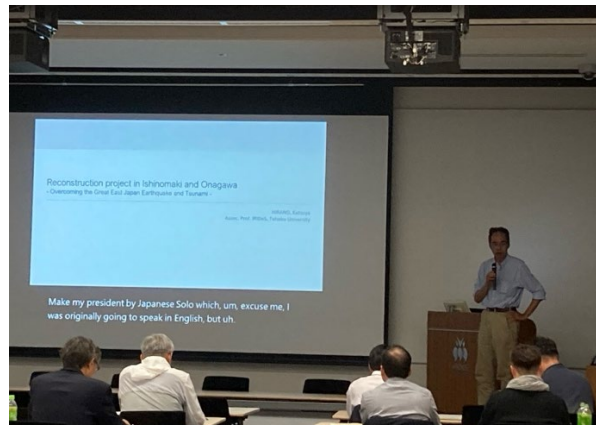
Group Photo



Workshop



Associate Prof. Shibayama's Lecture



Associate Prof. Hirano's Lecture

## **AIWEST-DR 2024 Conference Report (2024/11/8-10)**

Theme: “Bridging History and Horizons Towards Sustainable Resilience, Adaptive and Inclusive World:  
Commemorating 20 years of the 2004 Aceh Tsunami”

Venue: TDMRC, Syiah Kuala University (Banda Aceh, Indonesia), online

URL: <https://aiwest-dr.usk.ac.id/>

Video archive: <https://www.youtube.com/watch?v=4cVcR4khh8>

Organized by the Tsunami and Disaster Mitigation Research Center (TDMRC), at Syiah Kuala University, Banda Aceh, Indonesia, to share lessons from the historic human suffering and infrastructure damage and reconstruction since the 2004 Indian Ocean Tsunami, the 16th Aceh International Workshop and Expo on Sustainable Tsunami Disaster Recovery (AIWEST-DR 2024) was held on 8-10 November 2024, at TDMRC, Syiah Kuala University, in Banda Aceh, Indonesia. This year, the event commemorated 20 years since the 2004 Aceh Tsunami and shared knowledge and experiences from various countries and from multiple groups such as academics and practitioners in handling tsunami disasters.

Co-organizers included the University of Sydney, IRIDeS, Tohoku University, National Defence University of Malaysia (UPNM), Universitas Gadjah Mada (UGM), Indonesian Disaster Experts Association (PIT-IABI), and Indonesian Geographical Society (IGI). IRIDeS members, particularly Assoc. Prof. Sebastien Boret (International Research Collaboration Office), Assoc. Prof. Elizabeth Maly (International Research Collaboration Office), Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab), and Assoc. Prof. Erick Mas (Disaster Geo-informatics Lab) have been involved with organizing AIWEST-DR conferences for several years.

The first day of AIWEST-DR 2024 started with a plenary session and two panel sessions. IRIDeS Deputy Vice-director Prof. Shunichi Koshimura (Disaster Geo-informatics Lab and Co-creation Center for Disaster Resilience) gave a keynote speech about “Revisiting Banda Aceh Tsunami: Proposal of Global Tsunami Inundation and Damage Forecast Facility.” Assoc. Prof. Anawat Suppasri shared the experience of the 2004 Indian Ocean Tsunami and the 2011 Great East Japan Earthquake and Tsunami in a panel session titled “Lessons Learned and Best Practices in Hazard and Technology, Infrastructure Development.”

The second day of AIWEST-DR 2024 began with a special session titled “Disabilities, Inclusion, and Disaster Education in Banda Aceh: Learning from the 2004 Indian Ocean Earthquake and Tsunami,” organized by Assoc. Prof. Sébastien Boret and Asst. Prof. Hyejeong Park (International Cooperation for Disaster Medicine Lab). Prof. Anawat Suppasri led a special session “A New Era of Coastal Disaster Prevention and Mitigation Integrating Nature and Technology.” Parallel sessions included 27 presentations authored or co-authored by IRIDeS members and graduate students, presented in person and online. Prof. Kozo Nagami (2030 Global DRR Agenda Office) and Assoc. Prof. Elizabeth Maly respectively received prizes for best presentations.

AIWEST-DR 2024 concluded with a closing and award ceremony. The organizers highlighted that it was an opportunity to gather international researchers and experts from different countries and share current advances in research on a broad range of topics to deal with future disaster risks. The conference highlighted active international collaborations between all the participants and countries and learning from past disaster experiences. Also, through a mini expo exhibition during the AIWEST-DR 2024, the IRIDeS exhibit booth exhibited significant international collaboration and the upcoming World Bosai Forum 2025. The next AIWEST-DR will be organized by UCL in 2025 (place and dates TBC).

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Presenters and titles from IRIDeS members in the special session and parallel sessions

Session	Presenters/authors	Title
<b>Plenary Session</b>	Shunichi Koshimura	Revisiting Banda Aceh Tsunami: Proposal of Global Tsunami Inundation and Damage Forecast Facility
<b>Panel Session</b>	Anawat Suppasri	Tsunami Warning and Evacuation Facilities in Thailand and Tohoku
<b>Special Session</b>	Sébastien Boret & Hyejeong Park	Disabilities, Inclusion, and Disaster Education in Banda Aceh: Learning from the 2004 Indian Ocean Earthquake and Tsunami
<b>Special Session</b>	Anawat Suppasri	A New Era of Coastal Disaster Prevention and Mitigation Integrating Nature and Technology
<b>Parallel Session</b>	Anawat Suppasri, Miwako Kitamura, David Alexander, Shuji Seto and Fumihiko Imamura	Lessons from the 2024 Noto Peninsula Earthquake
	Sesa Wiguna, Bruno Adriano, Ruben Vescovo, Erick Mas, Ayumu Mizutani and Shunichi Koshimura	Building damage recognition using remote sensing and semi-supervised learning for rapid assessment
	Erick Mas, Luis Moya, and Shunichi Koshimura	When is the shortest path not the best alternative for a tsunami evacuation?
	Bruno Adriano, Ruben Vescovo, Sesa Wiguna, Erick Mas and Shunichi Koshimura	AI-based Framework for Collapsed Buildings Mapping: Case Study of the 2024 Noto Peninsula Earthquake Using Aerial
	Shunichi Koshimura, Abdul Muhari, Erick Mas, Bruno Adriano, Takashi Abe and Akihiro Musa	Proposal of Real-time Tsunami Inundation and Damage Forecast System in Indonesia
	Yuta Hara, Kimiko Takeda, Ryohei Yamashita, Ryo Saito, Daisuke Sasaki and Tatsuto Aoki	The risks of "fallacy of composition" as remaining ethical challenges by scientific research in disaster-affected areas
	Mohd Muhaimin Ridwan Wong, Nordila Ahmad, Anawat Suppasri and Syamsidik	Proposal of a Tsunami Intensity Scale Derived from a Tsunami Building Vulnerability Index
	Daisuke Sasaki, Yolanda Yolanda, Yuta Hara, Novi Reandy Sasmita, Nudzran Yusya and Hizir Sofyan	How can Local Academic Institutions Play a Key Role in
	Muhammad Daffa Al Farizi, Syamsidik Syamsidik, Anawat Suppasri and Hayyan Ghifary Armaya	Evaluating Tsunami Risk and Economic Loss: Integrating Event Loss Table Methods in Western Coast Part of Aceh, Indonesia
	Daisuke Sasaki, Anawat Suppasri and Fumihiko Imamura	Japanese Foreign Aid to Fisheries in Response to Disaster: The Case of the 2022 Tonga Volcanic Eruption
	Mari Yasuda and Toshiaki Muramoto	Disaster Prevention Awareness -Based on 10 years practice of the Tohoku University DRR Education "YUI" Project-
	Aiko Sakurai, Takeshi Sato, Makoto Kumagai and Yoshiyuki Murayama	Supporting for school teachers to update tsunami evacuation plans



Yifei Wang and Akihiro Shibayama	Consideration of the Use of Hydrogen Fuel Cell Vehicles in the Event of a Natural Disaster
Takashi Oda, Aiko Sakurai and Takeshi Sato	Leveraging Web-GIS for School Safety: Insights from Japan and Taiwan
Elizabeth Maly, Julia Gerster, Ryo Saito and Naomi Chiba	Visualizing the Earthquake, Tsunami, and Nuclear Accident: Disaster Images in 3.11 Picture Books
Hyejeong Park and Sebastien Boret	Consideration of People with disability in Inclusive Disaster Risk Reduction
Hayley Leggett, Miwako Kitamura, Anawat Suppasri, Fumihiko Imamura and Tiziana Rossetto	Understanding community attitudes and response to tsunami mitigation infrastructure and DRR methods in Kesennuma, Japan
Kenichi Kamata and Fumihiko Imamura	The Impact of Major Earthquake Disasters on the Establishment of Earthquake Insurance in Japan
Hiroyuki Miura, Osamu Murao, Ryo Saito, Mizuki Sato, Mufidatun Khoiriyah and Muzailin Affan	Time-series analysis of satellite images for spatially evaluating long-term changes in Banda Aceh after the 2004 Indian Ocean Tsunami
Osamu Murao, Mizuki Sato, Kazuya Sugiyasu, Hiroyuki Miura, Mufidatun Khoiriyah, Ryo Saito and Muzailin Affan	Tsunami Evacuation Risk Change Associated with Urban Recovery in Banda Aceh after the 2004 Indian Ocean Tsunami
Kozo Nagami, Tomoki Miyano and Mohammad Naser Sediqi	Medium to Long-term Impacts from In-situ Housing Reconstruction: Insights from Post-disaster Surveys of the Indian Ocean Tsunami and Nepal Earthquake
Elizabeth Maly and Tamiyo Kondo	Rooted Placemaking for Long-term Disaster Recovery: Community-based Initiatives in Tohoku after the Great East Japan Earthquake
Mufidatun Khoiriyah and Osamu Murao	A Review of the Effectiveness of Tsunami Evacuation Buildings Distribution in the Government-Designated Planning Area (BWP) in Cilacap Using GIS Simulation
Julia Gerster	Food culture and community recovery – a case study from post-3.11 Miyagi and Fukushima.
Miku Okuba, Shoko Araki, Michio Ubaura and Elizabeth Maly	A study on the relocation from Floating Villages to land in Cambodia: focus on the living environment
Ryo Saito, Osamu Murao, Hiroyuki Miura, Mizuki Sato, Mufidatun Khoiriyah <sup>4</sup> , Muzailin Affan, Toshiaki Muramoto <sup>2</sup> and Pradytia Putri Pertiwi	Memory as Build Back Better and its Spatio-Temporal Change: Measurement and Future Direction
Sébastien Boret, Hyejeong Park, Alfi Rahman, Muzayin Nazaruddin, Yulia Direzkia and Pradytia Putri Pertiwi	Disaster Educational Programs for Children with Special Needs: An Interdisciplinary Study of a Special Support School in Banda Aceh in Indonesia

Text and Photos: Hyejeong Park (Disaster Medical Informatics Lab)  
Sébastien Boret, Elizabeth Maly (International Research Collaboration Office)  
Anawat Suppasri (Tsunami Engineering Laboratory)  
Erick Mas (Disaster Geo-informatics Laboratory)

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Prof. Koshimura, Keynote Speech



Assoc. Prof. Suppassri, Plenary Session



Disabilities, Inclusion, and Disaster Education in Banda Aceh, Special Session



A New Era of Coastal Disaster Prevention and Mitigation Integrating Nature and Tsunami



Prof Kozo Nagami, Assoc. Prof. Elizabeth Maly  
Best Presenters award



Group Photo of IRIDeS participants

## **Special Session on Disability, Inclusion, and Disaster Education in Banda Aceh (2024/11/9)**

Theme: Learning from the 2004 Indian Ocean Earthquake and Tsunami.”

Venue: AIWET-DR 2024 Conference, Syiah Kuala University, Aceh, Indonesia

URL: <https://aiwest-dr.usk.ac.id/>

Assoc. Prof. Sébastien P. Boret (International Research Collaboration Office) and Assis. Prof. Hyejeong Park (International Cooperation for Disaster Medicine Lab) organized a special session on *“Disabilities, Inclusion, and Disaster Education in Banda Aceh: Learning from the 2004 Indian Ocean Earthquake and Tsunami”* on November 9, the second day of the AIWEST-DR 2024 Conference. This presentation is based on a multidisciplinary approach with local counterparts, including Alfi Rahman, Syiah Kuala University, Muzayin Nazaruddin, Universitas Islam Indonesia, Yulia Direzka, Clinical Psychologist, Rumah Sakit Umum Daerah dr. Zainoel Abidin (RSUDZA), Pradytia Putri Pertiwi, Gadjah Mada University, and DM Ria Hidayati, SLB TNCC, KiSah Delisa, Young Voices Community (NPO), Ahmad, Kafalah Indonesia (NGO), and Teuku Ahmad Barqah, National Search and Rescue Team (BARSANAS).

Assoc. Prof. Boret opened the session by reminding us that living (i.e., survival) and education are fundamental rights of people with disabilities as inscribed in the Indonesian Constitution. It is, therefore, imperative that society includes its specific needs and capacity within its framework for disaster emergency response and risk reduction. Contributing to this effort, this session drew lessons and recommendations regarding people with disabilities in post-tsunami Aceh to improve the development of ‘Inclusive Disaster Risk Management’ and build sustainable, equal, and resilient communities in Aceh and beyond.

The first part of this session examined and discussed a pilot workshop for disaster education and drills in a school for children with disabilities, SLB TNCC. All the children at SLB TNCC have some form of disability, whether it may be physical, intellectual, or both. Assoc. Prof. Boret and Assis. Prof. Park started by reviewing the 3-day workshop preparations and implementations, including teachers' training, in-class activities to raise natural hazard risk awareness, and earthquake self-protection and tsunami evacuation drills ([click here for more details](#)). Mrs. DM Ria Hidayati, the principal of SLB TNCC, highlighted the importance of the workshop to protect the lives of the children and the teachers. In addition, she shared her experience of receiving formal training in disaster risk reduction in Jakarta and her current status as ambassador of disaster risk reduction in specialised schools of Banda Aceh.

The presentations were followed by a discussion with two commentators: Teku Ahmad Barqah from the National Search and Rescue Team (BASARNAS) and Prof. Pradytia Putri Pertiwi, Gadjah Mada University. Mr. Barqah pointed out that out of the 60 students who participated in the drills, only three were not able to complete the tasks. He also insisted on the fact that disaster drills should be conducted actively and independently by the school (not as ceremonies led by disaster preparedness agencies, as he deplores to be often the case in Aceh). Among the many important reflections of Prof. Pradytia, we should remember her call to make sure that we get 100% of the children and teachers safe in future drills. To this effect, Prof. Pradytia advised that each student's capacity be evaluated individually and form clusters based on their capacity to improve the efficiency of the teaching.

The session concluded with a commentary from Yulia Direzika, Clinical Psychologist, Rumah Sakit Umum Daerah dr. Zainoel Abidin (RSUDZA), Banda Aceh. She highlighted the process of trauma and the importance of giving people with disabilities an understanding of their capacity and their rights for counseling after the event of a disaster.

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This second drew the lessons of the experiences of people with disabilities during the twenty years that followed the 2004 Indian Ocean Tsunami. This part of the session was organised by Mr. Ahmad from Kafalah Indonesia. His organization has been supporting vulnerable people, including people with disabilities and orphans, since the 2004 tsunami ([kafalahindonesia.org](http://kafalahindonesia.org)). Mr. Ahmad invited three distinguished speakers with disabilities: Mrs. Erlina Marlinda, Women with Disabilities, Ms. Aflinda, Association for people with visual impairment, and Mrs. KiSah Delisa, a renowned figure of survivors of the 2004 tsunami ([more about the story](#)). These three speakers shared their experiences of the 2004 tsunami, their lives as a disabled person in Aceh, and their roles as activists. Among the numerous lessons, they shared the ambition to transmit the fact that people with disabilities need to be considered not as ‘objects’ of disaster preparedness and risk reduction. They encourage the whole community to include their voices and their experiences as ‘subjects’ of the broader society of Aceh during and outside disasters.



Text and Photos: Sébastien Boret (International Research Collaboration Office)  
Hyejeong Park (International Cooperation for Disaster Medicine Lab)

## Romania University Disaster Symposium (2024/11/24)

Theme : Romania ,International research collaboration activities, tsunami disaster

Place : Online, Timișoara Polytechnic University ,Romania

On 24 November 2024, His Excellency, Ambassador Takashi Katae, accompanied by Visiting Professor Michihiro Chikata (Disaster Culture and Archive Studies), visited Timișoara Polytechnic University (UPT) to participate in the Japanese Autumn Festival Kakehashi. The visit, aimed at fostering academic and cultural exchange between Japan and Romania, included a collaborative event titled "Learning from Disasters for Prevention and Mitigation", co-organised with Tohoku University's International Research Institute of Disaster Science (IRIDeS). This event explored interdisciplinary approaches to disaster science, recovery, and resilience building.

The programme featured a screening of the documentary "The Great Tsunami in Japan" Reflecting on the 2011 disaster, which vividly depicted the aftermath of the Great East Japan Earthquake and the efforts of those involved in reconstruction. Professor Fumihiko Imamura (Tsunami Engineering Lab) from IRIDeS delivered an enlightening lecture on the mechanisms of tsunamis, the impact of the earthquake, and the importance of disaster science and reconstruction support.

A cultural perspective was also shared through presentations focusing on "Art and the Memory of Disaster." Research Fellow (Specially Appointed) Miwako Kitamura (International Research Collaboration Office) introduced efforts to preserve the memory of the Noto Peninsula earthquake and the Great London Fire, while Associate Professor Orika Komatsubara (Graduate School of Arts and Letters) presented on using Kamishibai (traditional Japanese storytelling using drawing) to convey the memories of Minamata's environmental disaster. These presentations highlighted the vital role of art in transmitting disaster memories to future generations.

The event concluded with a Q&A session and a live online connection with faculty members from Tohoku University, who shared reflections and their aspirations for future collaboration.

This symposium reaffirmed the potential for international academic partnerships with Romania, underscoring the value of joint efforts in disaster science and cultural exchange.



Prof. Imamura's presentation



Poster of the event

Text: Miwako Kitamura (International Collaboration office)

Orika Komatsubara (Graduate School of Arts and Letters)

Photos: Chikata Michihiro (Disaster Culture and Archive Studies)

## **GASP-EES International Symposium: Crisis of Wellbeing and Wellbeing in Crisis Across Borders (2024/12/5-7)**

Theme: Crisis of Wellbeing and Wellbeing in Crisis Across Borders International Symposium

Venue: Tohoku Forum for Creativity, Tohoku University, Sendai, Japan

URL: [GASP-EES International Symposium](#), [Detailed Program](#)  
[Global Area Studies Program \(GAPS\) and East Eurasian Studies Project \(EES\)](#)  
[Center for Northeast Asian Studies](#)

The National Institute of Humanities, Global Area Studies Program (GAPS) and East Eurasian Studies Project (EES), the Center for Northeast Asian Studies (CNEAS), Tohoku University, and the International Research Institute of Disaster Sciences (IRIDeS), Tohoku University organised a 3-day international conference on the topic of Crisis of Wellbeing and Wellbeing in Crisis Across Borders hosted by The Tohoku Forum for Creativity, Tohoku University. The event gathered distinguished scholars and young researchers from Hong Kong (Lingnan University), Europe (UCL, University of Oxford, University of Tartu, University of Helsinki, Vilnius University), Mongolia (National University of Mongolia), the USA (University of Cincinnati), and Japan (Kyoto University, Nagoya University, Osaka Kyoiku University, National Museum of Ethnology, Ritsumeikan University, Saga University, University of Tokyo). Joining them was an audience of 30 participants, including students and visiting professors from Tohoku University and other members of GAPS-EES.

The event started with a field trip (Dec. 5) to the coastal areas affected by the 2011 Great East Japan Earthquake and Tsunami. Led by Sébastien Boret, the visit began at the monument dedicated to the tsunami victims and a tour of the Arahama Elementary School Disaster Remains, Sendai City. While guiding the participants, the former school principal shared his experience and lessons of evacuating successfully the staff, students, and some of the residents on the school's rooftop before the tsunami engulfed the surroundings. The tour continued with a visit to the memorial parks of Yuriage Port Area, Natori City. While walking the grounds, the participants learned about the history of the community before and after the disaster, the processes of memorialisation and reconstruction, and the issues surrounding wellbeing.

The second day (Dec. 6) consisted of an Early Career Research Seminar from the GASP-EES participating institutions. The afternoon began with a welcome address from Prof. Hiroki Takakura (Director of the Centre for Northeast Asian Studies, Tohoku University), the leader of the Research Unit for Minority Rights and Media, part of the Global Area Studies Program (GAPS) and East Eurasian Studies Project (EES) with the support of Assistant Prof. Alimtohte Shiho (CNEAS, Tohoku University) overseeing the organisation of the event. The main activity involved the seminar, which consisted of five post-doctoral researchers and graduate presentations organised and moderated by Prof. Yukihiro Kawaguchi (Head of Cultural Anthropology, Tohoku University).

These international young researchers gave a stimulating presentation on their respective research projects: 1) Wellbeing and the Engagement with Environment: an Economic Anthropological Analysis, Roberto Facchia (PhD Candidate, Tohoku University); 2) Towards a Better Life: Contested, Cooperation in Urban Eco Park, Construction in China, Zhao Chen (JSPS PD, Tokyo Metropolitan University); 3) Women's Labor and Aspirations: Shaping Social Change in Urban Bangladesh, Ami Suzuki (Research Fellow, Kobe University); 4) Boundary between Sacred and Secular as Observed in Practice of "Changing into Red Clothes: A Case Study of Women in Western Bhutan, Fuko Kawamura, (JSPS PD, Kwansei Gakuin University); 5) Navigating Tradition and Modernity: Food in the Sakha Republic, Varvara Parilova (PhD Student, Tohoku University). The symposium concluded with comments from Prof. Kawaguchi and a stimulating discussion with senior researchers, setting the ground for the next day's main seminar.



The third day (Dec. 7) was an all-day international symposium with four distinctive sessions. The first session, Transition and Transformation: The Quest for Wellbeing in a Dynamic Environment, was organised and moderated by Dr. Hiroko Naito (IDE-JETRO). This session explores what well-being Hong Kong citizens seek and how they struggle to seize it in their relationship with mainland China and overseas countries. The speakers were Ruby YS LAI (Lingnan University, HK), presenting on the vulnerabilities and resilience of residents of Hong Kong and Ryuta Hagiwara (Hitotsubashi University), sharing his research on the relationship between law and happiness during the political crisis. The commentary was received from Sayaka Ogawa from Ritsumeikan University in Kyoto.

The second session, Nomadism, Borders, and Well-being: Strategies of Life Around Crisis and Mobility in Contemporary Pastoralists, was organised and moderated by Dr. Moe Terao (CNEAS, Tohoku University). This session discussed how the pursuit of well-being and mobility strategies are being implemented from the perspectives of pastoralists and urban people, as well as the mobility associated with crises and the potential for well-being. The main topics related to environmental crisis and well-being by Ariell Ahearn (University of Oxford) and the subject of cooperation during natural hazard disasters by Byambabaatar Ichinhorloo (National University of Mongolia) and Daniel Murphy (University of Cincinnati). Ayumi Nakano animated the discussion from Chukyo University in Nagoya.

The third session focused on the issue of People with Disabilities in Times of Disasters: Mobility, Welfare, and Social Inclusion in two Asian countries. This session discussed the impact of the crisis on existing vulnerabilities and a sense of well-being, not only for people with disabilities, but possible means of improving their inclusion and empowerment in crisis response and society as a whole. The presenters were Abigail Ewen from University College London and Madoka Nishiura from the University of Tokyo. They presented their respective research on disabled people in Nepal during the 2015 Earthquake aftermath and the experience of COVID-19 in a deaf community living on the island of Bali. The session concluded with a commentary on disability prejudice from Prof. Keiko Kitagawa from Saga University.

The fourth session explored The Russian Invasion of Ukraine and the Wellbeing of Indigenous Peoples. Organised and moderated by Prof. Hiroki Takakura, this session discussed the decision process and experience of exile of Indigenous Russian people due to the Ukrainian War. Unpacking their positionality and history, it (re)considered the meaning of their well-being and hope for these people. The two case studies examined the case of Indigenous participation in the war by Stephan Dudeck (University of Tartu) and the experience of a cross-border living minority of Tyva Republic by Victoria Peemot (University of Helsinki). Their presentation was further discussed during a commentary by Takehiko Inoue (Osaka Kyoiku University).

To conclude the symposium, Sébastien Boret invited commentaries of Donatas Brandisouskas from Vilnius University and Minoru Mio of the National Museum of Ethnology in Osaka and head of the Global Area Studies Program (GAPS) and East Eurasian Studies Project (EES). Together with all the participants, they encouraged the organisation of future events and collaborative writing to tie the diversity of case studies around a common theoretical ground.

Report by Sébastien Penmellen Boret (International Research Collaboration Office),  
Hiroki Takakura, Moe Terao, Alimtohte Shiho (Center for Northeast Asian Studies),  
Hiroko Naito (IDE-JETRO), Yukihiro Kawaguchi and Ikuno Ochi (Cultural Anthropology)

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Visiting the Jizo Memorial Project and the 'Tea Place', Yuriage, Natori City



Tohoku GAPS-EES International Symposium Group Photo, Tohoku University.

## **IRIDeS faculty members conducted activities to commemorate the 2004 Indian Ocean Tsunami in Thailand (2024/12/11-13)**

Theme : The 2004 Indian Ocean Tsunami

Place: Phang Nga Province, Thailand

URL: <http://www.earth-th.org/> (Earthquake Research Center of Thailand (Earth))

Earthquake Research Center of Thailand (Earth) organized the 2<sup>nd</sup> Thailand Symposium on Earthquake Research with the title “20 years on remembering the 2004 Indian Ocean Tsunami” in Thailand during 11-13 December 2024. Several IRIDeS members lead and participated activities related to this event.

On the 11<sup>th</sup> December, Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab) and Dr. Mari Yasuda (Earthquake Induced Tsunami Risk Evaluation Lab (Tokio Marine and Nichido Fire Insurance)) conducted disaster mitigation education class in two local schools (100 students) by giving lecture, introducing “Gensai Pocket”, learning from stamp rally and newly developed tsunami hazard maps.

On the 12<sup>th</sup> December, Assoc. Prof. Suppasri helped the organizer to guide 50 participants to field visit of the 2004 tsunami affected areas using scientific materials based on several joint research topics and projects with Thai researchers since 2004.

On the 13<sup>rd</sup> December, Prof. Fumihiko Imamura (Tsunami Engineering Lab), Assoc. Prof. Suppasri and Dr. Yasuda made invited presentations in the first session of the symposium “Learning from the past” by sharing lessons from the 2011 Great East Japan Earthquake and Tsunami in Japan and collaborative research on both engineering and interdisciplinary topics between IRIDeS and Thai researchers. Prof. Kenjiro Terada, Assoc. Prof. Shuji Moriguchi (Computational Safety Engineering Lab) and Asst. Prof. Naruethep Sukulthansorn (Nippon Koei Resilient City with Digital Twin Technologies Joint Research Lab) made invited presentations in the third session “Safety Engineering for Preparedness” by introducing several research activities of computational safety engineering lab on earthquake and other disasters related researches as examples.

These activities had been successfully conducted by not only strengthen collaborative research on tsunami disaster mitigation between IRIDeS and Thailand but also seeking for future disaster education and social contribution.

Text and photos: Anawat Suppasri (Tsunami Engineering Lab)  
(continues to the next page)





Disaster mitigation class at Ban Bang Niang school



Disaster mitigation class at Wat Kom Nai school



Explanation of the 2004 tsunami at Pakarang Cape



Field visit to tsunami museum in Khao Lak



Presentation by Prof. Fumihiko Imamura



Presentation by Assoc. Prof. Anawat Suppasri



Presentation by Dr. Mari Yasuda



Presentation by Prof. Kenjiro Terada



Group photo of IRIDeS members

## IRIDeS faculty member received a distinguished alumni award from Samsenwittayalai School (2025/1/25)

Theme: Distinguished alumni award  
Place: Bangkok, Thailand

On the 25<sup>th</sup> of January 2025, Assoc. Prof. Anawat Suppasri of IRIDeS (Tsunami Engineering Lab) received a distinguished alumni award together with other 11 award recipients from the Alumni Association of Samsenwittayalai School in Bangkok, Thailand. Assoc. Pro. Anawat Suppasri received this award because of his domestic and international social contribution to the academic research field of disaster science and mitigation. This year celebrates the 70<sup>th</sup> anniversary of Thailand's top junior high school and high school, and this will be a good opportunity to maintain the strong network for recruiting top international students to Tohoku University as the "International Excellence Research University" in the future.

Samsenwittayalai School: [https://en.wikipedia.org/wiki/Samsenwittayalai\\_School](https://en.wikipedia.org/wiki/Samsenwittayalai_School)



Distinguished Alumni Award ceremony



Distinguished Alumni Award plaque

Text and photos : Anawat Suppasri (Tsunami Engineering Lab)

## 10th JDA Symposium – “Using the Japan Disasters Digital Archive in the Classroom: Perspectives from Japan and the U.S.” (January 30, 2025)

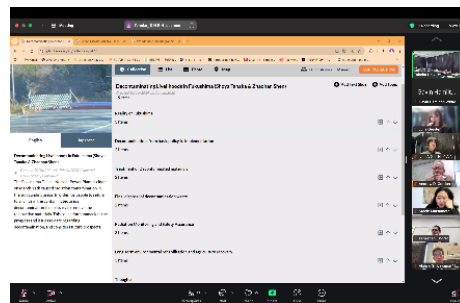
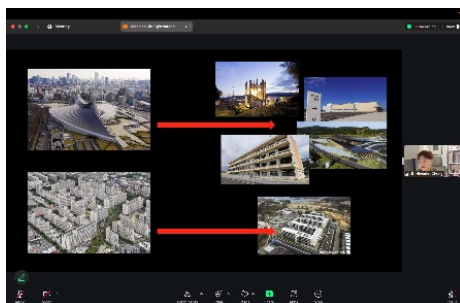
Theme: Disaster Digital Archiving, Disaster Education, International Collaboration  
Place: IRIDeS, Tohoku University; Reischauer Institute, Harvard University; Online

On January 30, 2025, the 10th Japan Disasters Archive (JDA) Symposium was held online from 9:00 to 10:30 JST, marking a milestone in this ongoing initiative to foster cross-cultural dialogue and disaster education through digital archives. Organized by the Reischauer Institute at Harvard University and Tohoku University, the event brought together students and faculty to explore how the JDA can be used as a teaching and research tool in understanding the Great East Japan Earthquake and its aftermath. Notably, this year's symposium featured presentations by Harvard University students for the first time, enriching the discussion with diverse academic and cultural perspective

The event opened with welcome remarks from Professor Andrew Gordon (Harvard University), followed by an introduction by Associate Prof. Julia Gerster (Disaster Culture and Archive Studies). As part of the annual JDA seminar, Tohoku University students visited Fukushima to prepare for their presentations. They explored the coastal region, including Futaba and Namie, visited the Great East Japan Earthquake and Nuclear Disaster Memorial Museum, attended a local community festival, stayed overnight in Tomioka, and joined a disaster storytelling bus tour.

Four student-led presentations followed. Zhaohan Shen and Shoya Tanaka (Tohoku University) presented “Decontaminating Livelihoods in Fukushima,” focusing on how radiation cleanup efforts have impacted local economies and perceptions. Tsukasa Kitahara (Harvard University) discussed the stigma and reputational damage faced by Fukushima residents in the wake of the nuclear disaster. The team of Xiyan Gong, Junho Cha, and Jiaxin Yan (Tohoku University) spoke on “Shifting Realities,” examining the long-term changes in coastal communities affected by the nuclear power plant. Nicholas Chung (Harvard University) concluded the session with a presentation on “Symbolic Architecture of Post-3.11,” reflecting on how architecture has played a role in the physical and emotional rebuilding process.

A lively Q&A session followed the presentations, where students engaged with the audience and each other on topics ranging from the ethics of nuclear energy to the role of memory in disaster recovery. Closing remarks were offered by Professor Gordon, who commended the students' efforts and the deep insight they brought to complex and often personal topics.



Screenshots of the presentations kindly provided by Prof. Gavin Whitelaw



## Visiting Disaster Centers in Sweden and Estonia (11-18 February 2026)

Theme: Disaster Science, Research Collaboration

URL: <https://www.cnds.se/>, <https://www.kruk.ee/en/crisis-research-centre/>

Prof. Takako Izumi (International Environment and Disaster Management Research Lab) and Associate Professor Sébastien P. Boret (International Research Collaboration Office) visited two disaster research centers in Sweden and Estonia for further IRIDeS collaborations and understanding of disaster management in Europe.

Their trip began with a visit to **the Center of Natural Hazard and Disaster Science (CNDS)** in Uppsala, Sweden ([https://irides.tohoku.ac.jp/media/files/\\_u/topic/file/20221104\\_report.pdf](https://irides.tohoku.ac.jp/media/files/_u/topic/file/20221104_report.pdf)). In addition to strategic meetings, Prof. Izumi and Assoc. Prof. Boret participated in the **CNDS 15<sup>th</sup> Anniversary Symposium**. Their presentations reported on the past and future collaborations between IRIDeS and CNDS partly funded by the MIRAI program. The MIRAI program forms the basis for long-term cooperation, researcher and student mobility, and economic and cultural exchange between 17 Japanese and Swedish universities. Members of this program, IRIDeS and CNDS have exchanged students and researchers during two disaster summer schools held in Sendai and Uppsala in 2024. Prof. Izumi participated in a panel debate on “**Grand Challenges for the Future**” with Ms. Margareta Wahlström of UN Assistant Secretary-General for Disaster Risk Reduction. To conclude their visit, they also finalised an application for research collaboration on **Investigating local perceptions of earthquake and climate change risks to improve disaster management** – A joint pilot study in Tohoku, Japan.

After Sweden, Prof. Izumi and Assoc. Prof. Boret visited the **Crisis Research Center (KRUUK)** in Tallinn, Estonia. They were welcomed by Ms. Anne-May Nagel and Ms. Hannes Nagel, the center’s co-founders. They explained that their center was established in 2022 in order to popularise and develop crisis management in Estonia. Its members carry out crisis management studies, the results of which are reflected in various reports, scientific journals and popular literature. They also present the crisis management challenges in preparation for crises and post-crisis, focusing on **VUCA environmental crises**. Their main partners include state agencies, local governments, and the private sector. This first meeting was an opportunity to learn from the European experience in disaster management, especially in the context of the Ukrainian War. Before parting, Mr. Nagel and Ms. Nagal expressed their strong desire to **visit IRIDeS in Sendai later in 2025** to learn further from the Japanese expertise and explore the potential for collaboration between Europe and Japan.

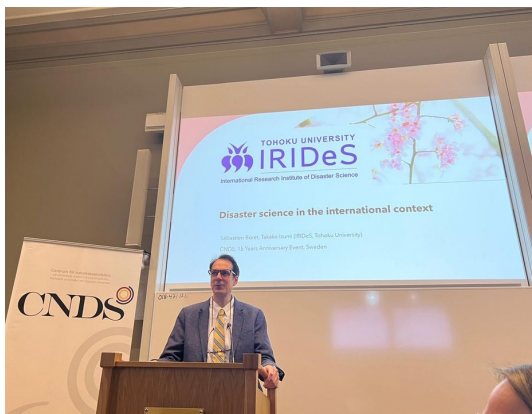
REPORT: BORET P. Sébastien (International Research Collaboration Office) and  
IZUMI Takako (International Environment and Disaster Management Research Lab)  
(continues to the next page)



15<sup>th</sup> CNDS Anniversary,  
 Director Steffi Burchardt (left). Panel Debate (left to  
 right): Prof. Frederik Bynander, Prof. Takako Izumi,  
 and Ms. Margareta Wahlström



The MoU signing between CNDS and IRIDeS



Assoc. Prof. S. Boret introducing CNDS-IRIDeS



Visiting the co-founders of  
 the Crisis Research Center in Tallinn,  
 Anne-May Nagel (left) and Hannes Nagel (right)

## Participation at the 10th Academic Conference of the Society for Disaster Shelter and Refuge Life (2025/2/22-23)

Theme: Disability, disaster evacuation, shelters

Venue: Osaka Metropolitan University

URL: <https://dsrl.jp/> (Japanese)

Associate Professor Sébastien Boret (International Research Collaboration Office) and Assistant Professor Hyejeong Park (International Cooperation for Disaster Medicine Lab) were invited by Professor Keiko Kitagawa, a founding member of the society and emeritus professor at Saga University, to present at the 10th Conference of the Society for Disaster Shelter and Refuge Life in Osaka, Japan.

The Society for Disaster Shelter and Refuge Life aims to improve the safety of disaster victims by verifying and researching evacuation life during disasters through the exchange and cooperation of its members, who are practitioners and researchers of evacuation shelters and evacuation life. The theme of their 10th conference was “Thirty years since the Great Hanshin-Awaji Earthquake: Now is the time to make TKB48 the standard for evacuation shelters”. Many reports discussed the TKB (Toilet-Kitchen-Bed) conditions in the recent Noto Peninsula Earthquake (1/1/2024).

During a panel reporting on the conditions of people with disabilities during disasters in Japan, Assoc. Prof. Boret and Asst. Prof. Park presented “Support for people with disabilities in times of disaster: Voices from the Noto Peninsula in the wake of the Great East Japan Earthquake”. Their presentation received little interest from both the organisers and the audience, with particular interest in the need for a new framework for refuge for people with disabilities. Prof. Kitagawa continued the discussion with a talk on “Disasters and People with Disabilities: Issues in providing support during disasters in an ultra-aged society”.

To conclude their discussion, Prof. Kitagawa invited Assoc. Prof. Boret and Asst. Prof. Park to join the Society and agreed that it was urgent to develop a joint project on the theme of disability and disaster in Japan and overseas.



Assoc. Prof. Sébastien P. Boret



Asst. Prof. Hyejeong Park



Prof. Keiko Kitagawa

Text and photos: Sébastien Boret (International Research Collaboration Office)  
Hyejeong Park (International Cooperation for Disaster Medicine Lab)



## **IRIDeS faculty member visited India and delivered a special lecture at the CSIR-Central Building Research Institute (2025/2/25-26)**

Theme: GP-RSS, CSIR-CBRI, Irrigation system  
 Venue: CSIR-CBRI (Roorkee, Uttarakhand, India)

Prof. Osamu Murao of International Strategy for Disaster Mitigation Lab visited India from February 25th to 26th, 2025, as part of the International Joint Graduate Program in Resilience and Safety Studies (GP-RSS). During his stay, he visited the CSIR-Central Building Research Institute (CSIR-CBRI) in Roorkee, Uttarakhand. Tohoku University was certified as a Designated National University Corporation in 2017. It has positioned “Disaster Science & Safety Studies” as one of the world’s leading research clusters. GP-RSS is operated as part of an initiative that promotes international education and research in collaboration with prominent overseas universities. This visit aimed to foster mutual understanding and sustain and develop ongoing relationships between the institutions.

Prof. Murao first met with the institute’s director, Prof. Ramancharla Pradeep Kumar, to discuss future research collaboration and DRR strategies. Following this meeting, he conducted an inspection of the Upper Ganges Canal and the Solani Aqueduct. Constructed in the mid-19th century, the Upper Ganges Canal plays a crucial role in regional agriculture as an irrigation system utilizing water from the Ganges River. The Solani Aqueduct, which allows the canal to cross the Solani River, is a historic structure that has made significant contributions to the modern civil engineering of India. During the site visit, Prof. Murao was briefed on the construction techniques of the time and the current management system, providing valuable insights into the maintenance and disaster resilience challenges of historical infrastructure.

On February 25, Prof. Murao delivered a special lecture at CSIR-CBRI titled “Reconsideration on Urbanization in the Tokyo Metropolitan Area Since the 1923 Great Kanto Earthquake from the Perspective of Exposure.” His lecture addressed urban vulnerabilities following the Great Kanto Earthquake and discussed seismic and disaster mitigation measures in anticipation of potential future earthquakes, such as a Tokyo inland earthquake or a Nankai Trough earthquake.

Through this visit, stronger collaborative ties were established with research institutions in India, exploring potential avenues for joint research in DRR. Efforts will be made to further strengthen the partnership with CBRI to advance academic initiatives in disaster-resilient urban development, seismic-resistant architectural technologies, and post-disaster urban reconstruction. These endeavors aim to contribute to the progress of disaster science.



Photo with the Director of CSIR-CBRI




Photo with the participants of the lecture

Text and photos : Osamu Murao  
 (continues to the next page)



Upper Ganges Canal



संयुक्त आर्य समाज भवन अनुसंधान संस्थान, कुरुक्षेत्र

CSIR-Central Building Research Institute, Roorkee  
Ministry of Science and Technology, Govt of India


CSIR-CBRI International Experts Lecture


February 25, 2025, Tuesday, 11:30 AM (IST) onwards

At Rabindranath Tagore Auditorium, CSIR-CBRI, Roorkee

**Reconsideration on Urbanization in Tokyo Metropolitan area Since  
1923 Great Kanto Earthquake from the Perspective of Exposure**

The 1923 Great Kanto Earthquake raised major concerns about urban vulnerability, especially regarding fire spread and building damage. In response, Japan has focused on fire prevention, seismic retrofitting, and urban resilience. Professor **Osamu Murao**'s research addresses ongoing disaster risks, particularly from potential future earthquakes, such as the Tokyo Inland or Nankai Trough earthquakes. His work on **urban vulnerability evaluation, building vulnerability functions, and hazard maps** has been crucial for assessing risks in cities like Tokyo and Yangon. Additionally, his studies on **urban recovery** inform future disaster preparedness. Professor Murao's interdisciplinary approach continues to shape urban planning, promoting safer, more resilient cities.





**Dr. Osamu Murao**  
Professor, Doctor of  
Engineering, International  
Strategy for Disaster  
Mitigation Lab, Graduate  
School of Engineering  
(Concurrent)

Professor **Osamu Murao** is a Doctor of Engineering and a leading researcher specializing in disaster mitigation and urban resilience. He is affiliated with the **International Strategy for Disaster Mitigation Laboratory (ISDM)** and the **Preservation of Historical and Cultural Heritage Lab** at **Tohoku University**. His primary research focuses on **disaster risk reduction, urban vulnerability evaluation, and post-disaster recovery**, with field research conducted in Japan and internationally, including in **Myanmar, Taiwan, Turkey, and Sri Lanka**.

Professor Murao's significant contributions include developing methods for assessing and reducing risks in urban areas, particularly those prone to earthquakes. He has created **building vulnerability functions and hazard maps** for cities like Tokyo and Yangon. His work on **urban recovery** processes, including those following the **2011 Great East Japan Earthquake**, has greatly influenced disaster recovery strategies. He has also contributed to integrating **disaster mitigation** into **architecture and urban planning** to build more resilient cities.

His achievements include receiving the **Prize of the Architectural Institute of Japan (2020)** for educational contributions and the **Silver Prize** in the **2011 International Competition for the Disaster Recovery Plan** following the Great East Japan Earthquake. Through an interdisciplinary approach, Professor Murao continues to influence disaster management strategies worldwide, combining engineering, urban design, and disaster management for global resilience.

Summary of the Special Lecture

## **EU-JAPAN Forum and fieldsite visit on Research and Innovation Communication in Support of Disaster Societal Resilience and Risk Governance (3-4 March 2025)**

Theme: natural hazards, disaster risks, complexity, building resilience, interdisciplinarity  
Venue: DPRI, Kyoto University

On March 3-4, 2025, Professor Michio Ubaura (Spatial Design Strategies Lab), Associate Professor Sebastien Boret (International Research Collaboration Office) and Assistant Professor Hyejeong Park (International Cooperation for Disaster Medicine Lab) participated in the EU-JAPAN Forum on Research and Innovation Communication in Support of Disaster Societal Resilience and Risk Governance. Organised by Crisis Management Innovation Europe, this event aimed to introduce European disaster scholars and their projects to disaster experts in Japan and further collaboration between both parties within the 'Horizon Europe' framework funded by the European Commission.

Horizon Europe: [https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe\\_en](https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en)

As part of the second session on 'Return of Experience: Technologies and risk management methodologies in support of disaster risk reduction, Prof Ubaura presented his latest research on 'Applying the experience of recovery from the Great East Japan Earthquake to the recovery process from the Noto Peninsula Earthquake.' Prof Ubaura participated in a productive panel discussion with colleagues from Greece, Germany, France, and the Netherlands, with whom they could debate technology's benefits and limits during community reconstruction.

On the second day, Assoc Prof Boret gave a keynote lecture on 'The Science of Disaster Vulnerabilities and Inclusion at Tohoku University and the Sendai Framework for Disaster Risk Reduction.' After introducing IRIDeS, he shared the progress needed in researching socio-economic vulnerabilities, especially in the field of people with disabilities, research he carries out with Assist Prof Park. During fruitful discussions, they received feedback for advancing resilience and disability research and were offered opportunities for EU-Japan collaboration.

The organiser of the forum, Mr. Philippe Quevaulliers and some members of the forum, Emmanuel Garnier (CEA LSCE, France; Visiting Professor at Tohoku University), Rosa Tamborrino (Politecnico Torino, Italy), and Funda Atun (University of Twente, The Netherlands) visited Sendai and IRIDes, including Prof Fumihiko Imamura of the Tsunami Engineering Lab, during their participation to the World Bosai Forum 2025. Together, they visited the affected areas and places of remembrance of Ishinomaki, furthering their discussion for future collaborations.

Report by: Sebastien Boret (International Research Collaboration Office),  
Hyejeong Park (International Cooperation for Disaster Medicine Lab),  
Michio Ubaura (Spatial Design Strategies Lab) and  
Fumihiko Imamura (Tsunami Engineering Lab).

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Assoc Prof Boret Keynote on vulnerabilities



Disaster Governance with Prof. Garnier



Tour of Ishinomaki's disaster areas



Visiting Prof Imamura and the Tsunami Lab

## IRIDeS faculty members won the poster award at the poster session of the World Bosai Forum 2025 (2025/3/9)

Theme: World Bosai Forum 2025, poster award, inclusive disaster risk management

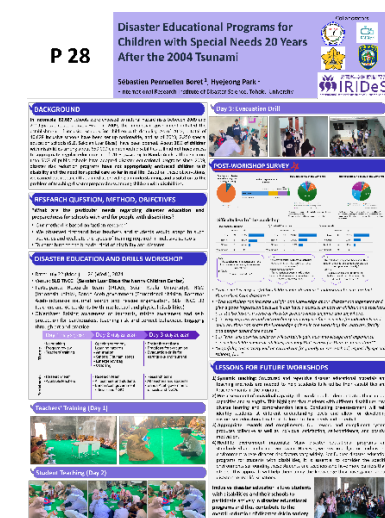
Venue: Sendai International Center, Sendai

URL: <https://worldbosaiforum.com/2025/en/news/detail---id-1018.html>

Assoc. Prof. Sébastien Penmellen Boret (International Research Collaboration Office) and Assis. Prof. Hyejeong Park (International Cooperation for Disaster Medicine Lab) were awarded the World Bosai Forum 2025 Poster Award for their research on '**Understanding the vulnerabilities of disabled people in the context of disasters**'. The World Bosai Forum is a global biennial forum on disaster risk reduction held in Sendai. The event gathers hundreds of disaster stakeholders, including international researchers, practitioners, and citizens.

This poster examines the development of inclusive disaster education in the schools in Banda Aceh twenty years after the 2004 Indian Ocean tsunami. 'Leave No One Behind' is a principle of United Nations Sustainable Development Group (UNSDG) that encourages states to develop more inclusive and accessible societies. Extended to the domain of disaster prevention, this philosophy opens the door to a long-awaited call for more inclusive disaster preparedness among vulnerable groups, especially people with disabilities. Indonesia is a nation that embraces inclusiveness with campaigns promoting more access to education for vulnerable groups. The Ministry of Education, Culture, Research and Technology (MoERCT) is currently experimenting with the development of 'inclusive schools' where children with physical/cognitive disabilities can sit in regular classes alongside their 'friends without disabilities.' In a country at risk of frequent disasters, such programs also demand the initiation of inclusive school-based disaster preparedness.

This research fills the gap by developing disaster classes, materials, and tools adapted to children with physical and cognitive disabilities. Its interdisciplinary team comprises social scientists, clinical psychologists, therapists, NGOs, and scholars of disasters. Our leading partner is a Special Support School providing for children with all kinds of disability, where we developed disaster classes and materials to foster an understanding of disaster risk and awareness. Leaving no one behind, this case study allows us to consider all children with various abilities and needs. This study concludes with remarks on the possibility of applying their materials and findings in inclusive school settings and, more broadly, across society.



Awarded poster



Poster award plaque



Poster award certification

Text and photos: Sébastien Boret (International Research Collaboration Office)  
Hyejeong Park (International Cooperation for Disaster Medicine Lab)

## **IRIDeS faculty members visited UCL to strengthen research and academic collaboration (2025/3/18-21)**

Theme: International collaboration

Venue: University College London (UCL), United Kingdom

From March 18th to 21st, 2025, Prof. Shinichi Egawa (International Cooperation for Disaster Medicine Lab), Assoc. Prof. Anawat Suppasri (Tsunami Engineering Lab) and Dr. Miwako Kitamura (International Research Collaboration Office) represented three main research disciplines of IRIDeS: science/engineering, social science, and medical science. They visited several departments and institutions of one of the UK's top universities, University College London (UCL), to strengthen research and academic collaboration on various interdisciplinary topics related to disaster science.

On the 18th of March, IRIDeS members visited our main counterpart, the Risk and Disaster Reduction (RDR) Department, in the morning with the department's head, Prof. Joanna Walker, to discuss overall matters related to institutional collaboration. In the afternoon, Assoc. Prof. Anawat Suppasri delivered his invited talk on the topic related to cascading impacts and new tsunami research progress of the 2024 Noto Peninsula Earthquake for the UNESCO CHAIR-Educational Activities webinar, which is organized by UCL EPICentre (Earthquake and People Interaction Centre). In the evening, Dr. Miwako Kitamura was a panelist for "RDR monthly event on Gender, disaster and the Sendai Framework: A decade of progress," which explored achievements since the adoption of the Sendai Framework for Disaster Risk Reduction in 2015 with a particular focus on progress in gender and disaster risk reduction.

On March 19th, in the morning, IRIDeS members visited RDR's bachelor students, who will conduct an internship in the 2011 Great East Japan Earthquake-affected areas in June 2025. This activity has been supported by the Project for Strengthening Global Expansion of Universities since 2022. In the afternoon, IRIDeS members brainstormed on future health and disaster medicine collaborations with Prof. Ilan Kelmen RDR and the Institute of Global Health (IGH). The spiral evolution of the disaster medical system in Japan can be a good topic for future collaboration.

On March 20th, in the morning, IRIDeS members visited Prof. Maria Kett, who is a director of the MSc in Humanitarian Policy and Practice, Faculty of Population Health Science, for potential collaboration of student exchange and other academic collaborations. Prof. Kett has worked as a nurse in humanitarian response and indicated the diverse and multidisciplinary approach to the health and humanitarian aspects of disaster risk reduction. In the afternoon, IRIDeS members met with the UCL Global Engagement Office and RDR academic members on several matters related to the double Ph.D. degree in disaster science with Tohoku University.

On March 21st, IRIDeS members visited Assoc. Prof. Gianluca Pescaroli, RDR, who is leading the EU and UKRI-funded AGnostic risk management for high Impact Low probability Events (AGILE) Horizon Europe Project that IRIDeS is also one of the consortium members to discuss the current progress activities. Furthermore, Dr. Kitamura delivered a lecture alongside Professor Tatsuki for the 'Gender and Conflict' module of the UCL RDR Master program. The lecture focused on disaster risk reduction for persons with disabilities through a gender lens.

This visit is supported by the TU-UCL Matching Fund under the project title "Initiation of Double PhD Programme between UCL and Tohoku University in Disaster Science." IRIDeS members also used this visit for a number of meetings regarding several ongoing research projects supported by the Matching Fund, such as liquefactions caused by the 2024 Noto Peninsula earthquake, Women's Leadership for DRR, and Cultural heritage and social innovation in Japan.

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UCL Risk and Disaster Reduction department: <https://www.ucl.ac.uk/risk-disaster-reduction/>  
 TU-UCL Matching Fund 2024: <https://web.tohoku.ac.jp/ged/11688?lang=en>  
 TU-UCL Matching Fund 2025: <https://web.tohoku.ac.jp/ged/13213?lang=en>  
 Japan Society for the Promotion of Science (JSPS): Project for Strengthening Global Expansion of Universities: <https://www.jspss.go.jp/english/e-tenkairyoku/kekka.html>



Visiting RDR with Prof. Joanna Walker



Invited talk for UNESCO webinar with Prof. Tiziana Rossetto



Panel discussion of RDR monthly event



RDR students who will conduct internship



Meeting on the newly launch MSc program



Meeting at Global Engagement Office

Text and photos : Shinichi Egawa (International Cooperation for Disaster Medicine Lab),  
 Anawat Suppasri (Tsunami Engineering Lab) and  
 Miwako Kitamura (International Research Collaboration Office)

## **Symposium on Kamishibai-Based Disaster Storytelling by Foreign Residents in Japan (2025/03/20)**

Theme: Inclusive Disaster Risk Reduction, International DRR, The Great East Japan Earthquake, Tsunami and Nuclear Disaster.

Place: IRIDeS

On March 20, 2025, a symposium titled *"Transmitting Disaster Experiences through Kamishibai: Foreign Residents' Perspectives on the 3.11 disasters"* was held at the International Research Institute of Disaster Science (IRIDeS), Tohoku University. The event brought together academics, community leaders, international residents, and disaster communication practitioners to discuss challenges foreigners may face in disaster situations in Japan, unique contributions they bring to disaster preparedness and explore the possibilities of kamishibai (Japanese picture storytelling) in sharing their disaster experiences, which are currently underrepresented in disaster memory.

The symposium was jointly organized by IRIDeS and the Hoover Institution at Stanford University, in collaboration with the Sendai Tourism, Convention and International Association (SenTIA), and supported by the Machi Monogatari Production Committee and the Tohoku University Center for Integrated Japanese Studies. Assoc. Prof. Julia Gerster (Disaster Culture and Archive Studies) was responsible for the main organization and moderation of the event. Assoc. Prof. Elizabeth Maly (International Research Collaboration Office) supported a smooth event implementation on the day.

The program began with an introduction that outlined the objectives of the project, focusing on disaster storytelling as a method to enhance community resilience and inclusiveness in disaster education. This was followed by a presentation by representatives from SenTIA, highlighting the specific challenges faced by foreign residents in Sendai during the 2011 disaster. The highlight of the event was a kamishibai performance conducted by the Namie Machimonogatari Tsutaetai group from Namie Town (Fukushima Prefecture) based on two real-life stories. The first story recounted the experience of Mr. Richard Halberstadt, a British national who remained in the disaster-stricken city of Ishinomaki. Despite the overwhelming devastation, he chose to stay in Japan and now serves as the director of the Ishinomaki City Earthquake Ruins Kadonowaki Elementary School. The second story focused on a Nepalese family who had moved to Japan to seek medical treatment for their child. Just as they were beginning to adjust to life in Japan, the 2011 disaster struck. Their struggle to evacuate safely while caring for a sick child underscored the compounded difficulties faced by immigrant families during large-scale disasters. The story was based on the experiences of Ms. Bhawani Duwadi, a translator and advisor active in Sendai's international support services. Following the performances, all panelists, including Ms. Bhawani and Mr. Halberstadt, discussed the importance of inclusive disaster communication and the power of personal narratives in fostering understanding and preparedness across cultural and linguistic divides.

This symposium not only shed light on the often-overlooked experiences of foreign residents during disasters but also demonstrated the potential of traditional cultural forms like kamishibai in modern disaster education. The event was a meaningful step toward a more inclusive and empathetic approach to remembering and learning from the 3/11 disaster.

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This event and research were supported by the Co-creation Center for Disaster Resilience.

A short documentary about the event can be seen here (NHK WORLD-JAPAN):

<https://www3.nhk.or.jp/nhkworld/en/shows/2087144/>



The Namie Machi Monogatari Tsutaetai holding the two Kamishibai stories.



The audience following the presentations.



During the panel discussion. From left to right: Assoc. Prof. Julia Gerster, Dr. Kaoru Ueda, Ms. Bhawani Duwadi, Mr. Richard Halberstadt, Mr. Masahiro Horino, and Mr. Ikumasa Teppei.

Report by: Julia Gerster (Disaster Culture and Archive Studies)  
Elizabeth Maly (International Research Collaboration Office)