### 安全・健康・ウェルビーイングの将来: ヒューマン・ロボット・インタラクション(HRI)を念頭に

## Future of Safety, Health and Well-being (SHW): From the Viewpoint of Human-Robot Interaction (HRI)

主催/Organizer: キヤノングローバル戦略研究所/Canon Institute for Global Studies (CIGS). 協力/Supporters: Global Initiative for Safety, Health and Well-being at EXPO2025 and Beyond (GISHW), セーフティグローバル推進機構/Institute of Global Safety Promotion (IGSAP), 日刊工業新聞/Nikkan Kogyo Shimbun.

> 2024年11月18日/November 18, 2024. 日本工業倶楽部会館/Japan Industrial Club 東京都港区/Mitano-ku, Tokyo

#### Introduction

一般財団法人キヤノングローバル戦略研究所 研究主幹 栗原潤/ Jun KURIHARA, Research Director, Canon Institute for Global Studies (CIGS) Kurihara.Jun@canon-igs.org/Kurihara.Jun@gmail.com

#### プログラム/Program

## Future of Safety, Health and Well-being (SHW): From the Viewpoint of Human-Robot Interaction (HRI)

第I部プログラム: 13:00-14:50		Part I: Program: 13:00-14:50
開会挨拶	13:00- 13:05	Opening Remarks
GISHW 最新情報& 大阪エグゼクティブ委員会会議報告	13:05- 13:30	GISHW Update & Osaka Executive Committee Meeting Report
Session 1: 世界の企業・機関による安全・健康・ウェルビーイングテクノロジーの活用事例:日本、ドイツ、デンマーク	13:30- 14:05	Session 1: Safety, Health & Well-being Technology: Case Studies in Japan, Germany, and Denmark
Session 2: 職場における安全・健康・ウェル ビーイング(SHW)のグローバル課題	14:05- 14:25	Session 2: Global Challenges for Safety, Health, and Well-being (SHW) at Work
Session 3: 万博が目指すもの: SHW@Workへの参加 と様々な分野における共創の可能性	14:25- 14:45	Session 3: What the Expo2025 Seeks: Participation in SHW@Work and the Potential for Co-Creation across Various Fields
閉会挨拶	14:45- 14:50	Closing Remarks
Networking Break with Refreshments (4阵)	15:00- 15:30	Networking Break with Refreshments (4th Floor)

Jun KURIHARA, Canon Institute for Global Studies (CIGS)

#### プログラム/Program

#### Future of Safety, Health and Well-being (SHW): From the Viewpoint of Human-Robot Interaction (HRI)

第II部プログラム: World Café: 15:30-17:00	Part II: Program: World Café: 15:30-17:00
World Caféのご案内 (4階) 5つのテーブル、 各テーブルにテーマ表示とモニター 3セッション: 28分+テーブル/テーマ移動2分 司会による導入、 各スピーカーによる3~5分の プレゼンテーション、その後Q&A	World Café: Guidance (4th Floor) 5 Tables, each equipped with visible signage (topic) and a computer screen 3 sessions 28 minutes + 2 minutes to change tables/topics. Introduction by chair, 3-5 min. presentation by each speaker followed by Q&A
Topic 1: ビジョンゼロとリーダーシップ	Topic 1: Vision Zero & Leadership
Topic 2: デジタリゼーション、AI&ロボティクス	Topic 2: Digitalisation, AI & Robotics
Topic 3: ウェルビーイング テクノロジー: 誰ひとり取り残さない	Topic 3: Wellbeing-Technologies: No One Left Behind
Topic 4: 万博SHWデイズプログラムの紹介& 世界へのプロモーション	Topic 4: Explore EXPO SHW-Days Grand Programs & International Promotion
Topic 5: EXPO2025での共創のターゲット – SHWデイズ	Topic 5: Target of Co-Creation at EXPO2025- SHW Days

	第I部プログラム/Part I: Program: 13:00-14:50
13:00-	開会挨拶/Opening Remarks
13:05	Jun Kurihara, Canon Institute for Global Studies (CIGS), Institute of Global Safety Promotion (IGSAP)
13:05-	GISHW 最新情報&大阪エグゼクティブ委員会会議報告/ GISHW Update & Osaka Executive Committee Meeting Report GISHW Promotional video (by Nikkei ADEX)
13:30	Summary of GISHW Osaka Conference: Toshihiro Fujita, GISHW Executive Committee
	EXPO2025 - A Unique Opportunity: Hans-Horst Konkolewsky, GISHW Executive Committee Greeting: Nobuhiro Endo, President, Japanese Industrial Standards Committee (JISC) (Video)
13:30- 14:05	Bession 1: 世界の企業・機関による安全・健康・ウェルビーイングテクノロジーの活用事例: 日本、ドイツ、デンマーク/ Session 1: Safety, Health & Well-being Technology: Case Studies in Japan, Germany, and Denmark Kazutsugu Suita, Department of Mechanical Engineering, Daido University Takashi Kawata, Institute of Global Safety Promotion (IGSAP Construction Committee) Tomoyuki Kawaharada, HSE Manager of Projects, JGC Corporation Sven Timm, Central Prevention Division, DGUV/ International Social Security Association (ISSA) Lars Tornvig, Human House / Danish Vision Zero Council

	第I部プログラム/Part I: Program: 13:00-14:50
14:05- 14:25	Session 2: 職場における安全・健康・ウェルビーイング(SHW)のグローバル課題/ Session 2: Global Challenges for Safety, Health, and Well-being (SHW) at Work Ivan Ivanov, Occupational and Workplace Health, World Health Organization (WHO) (Video) Yuka Ujita, Occupational Safety and Health, International Labour Organization (ILO) Seong Kyu Kang, International Commission on Occupational Health (ICOH) Ho Siong Hin, International Association of Labour Inspection (IALI)
14:25- 14:45	Session 3: 万博が目指すもの: SHW@Workへの参加と様々な分野における共創の可能性/ Session 3: What the Expo2025 Seeks: Participation in SHW@Work and the Potential for Co-Creation across Various Fields Masao Mukaidono, Institute of Global Safety Promotion (IGSAP) Wataru Imamura, Ministry of Economy, Trade and Industry (METI) Marijana Zivkovic Mtegha, Institution of Occupational Safety and Health (IOSH) Majed Ibrahim Alfuwaiz, National Council for Occupational Safety and Health, Saudi Arabia
14:45- 14:50	Session 3:閉会の辞/Closing Remarks Kiyoshi Kurokawa, Former UCLA Professor / Emeritus Professor at The University of Tokyo, National Graduate Institute for Policy Studies (GRIPS), and Tokai University

#### 第II部プログラム/Part II: Program: World Café: 15:30-17:00

World Caféのご案内 (4階) 5つのテーブル、各テーブルにテーマ表示とモニター

3セッション: 28分+テーブル/テーマ移動2分、

司会による導入、各スピーカーによる3~5分のプレゼンテーション、その後Q&A

World Café: Guidance (4th Floor)

5 Tables, each equipped visible signage (topic) and a computer screen 3 sessions, 28 minutes + 2 minutes to change tables/topics. Introduction by chair, 3-5 min. presentation by each speaker followed by Q&A

Topic 1: ビジョンゼロとリーダーシップ

Topic 1: Vision Zero & Leadership

Alan Stevens, Institution of Occupational Safety and Health (IOSH)

Ho Siong Hin, International Association of Labour Inspection (IALI)

Sven Timm, Central Prevention Division, DGUV / International Social Security Association (ISSA) Nathan Winter, International Network of Safety & Health Professional Organisations (INSHPO)

Topic 2: デジタリゼーション、AI&ロボティクス

Topic 2: Digitalisation, AI & Robotics

Tamio Tanikawa, National Institute of Advanced Industrial Science and Technology (AIST)

Bonnie Yau, Occupational Safety and Health Council, Hong Kong

Miho Shimada, Safety Management Department, Daiwa House Industry Co., Ltd. (IGSAP Construction Committee) Toshiyuki Kajiya, Director, Institute of Global Safety Promotion (IGSAP manufacturing Committee)

Topic 3: ウェルビーイング テクノロジー: 誰ひとり取り残さない

Topic 3: Wellbeing-Technologies: No One Left Behind

Hans-Horst Konkolewsky, Vice Chair, GISHW Executive Committee

Kazutsugu Suita, Department of Mechanical Engineering, Daido University

Tsuyoshi Matsushita, MTG

Hirokazu Tanaka, Remote Robotics: Sony Corporation & Kawasaki Heavy Industries Koji Akamatsu, GISHW secretariat

Slide No. 6

#### 第II部プログラム/Part II: Program: World Café: 15:30-17:00

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3セッション: 28分+テーブル/テーマ移動2分、司会による導入、各スピーカーによる3~5分の プレゼンテーション、その後Q&A

World Café: Guidance (4th Floor)

5 Tables, each equipped visible signage (topic) and a computer screen 3 sessions, 28 minutes + 2 minutes to change tables/topics. Introduction by chair, 3-5 min. presentation by each speaker followed by Q&A

Topic 4: 万博SHWデイズプログラムの紹介&世界へのプロモーション

Topic 4: Explore EXPO SHW-Days Grand Programs & International Promotion

Toshihiro Fujita, GISHW Executive Committee

Shinichi Takasaki, Director, ILO Office for Japan (ILO Youth Congress)

Kazuyuki Igeta, NIHON L'Oréal K.K. (L'Oréal Safety Kids)

Marijana Zivkovic Mtegha, Institution of Occupational Safety and Health (IOSH) (Symposium & World Assembly) Hiroshi Asahi, Japan Standards Association (JSA) (Symposium)

Topic 5: EXPO2025での共創のターゲット – SHWデイズ

Topic 5: Target of Co-Creation at EXPO2025- SHW Days

Yoshikazu Tanaka, MICE Policy / World Expo2025 & IR Project Planning Dept, Osaka Convention & Tourism Bureau

Eiyu Hayashi, Nikkan Kogyo Shimbun (EXHIBITION)

Masahiro Hashiki, Messe Düsseldorf Japan (EXHIBITION)

Keisuke Mikawa, Congrès Inc.

Takashi Adachi, Network Headquarters, Nikkei ADEX (ALL)

Takehiro Uehara, GISHW secretariat

#### **APPENDIX 1:**

# Global Initiative for Safety, Health & Well-being at EXPO2025 and Beyond (GISHW) Second Executive Committee Meeting November 13, INTEX Osaka

#### **AGENDA**

Purpose: Agreement and approval of all GISHW programs to be promoted at EXPO 2025 (Moderator: Mr. Jun Kurihara)

Opening Remarks: GISHW Updates & Actions moving forward to EXPO2025, along with the key theme

promoted by the Expo Association "Co-Creation" (Dr. Toshihiro Fujita)

#### GISHW's KEY PROGRAMS@EXPO 2025

- 1. International Symposium (Mr. Hans-Horst Konkolewsky)
- 2. World Assembly (Ms. Marijana Zivkovic Mtegha, Mr. Takehiro Uehara)
- 3. ILO Youth Congress (Mr. Shinichi Takasaki)
- 4. Exhibition (Mr. Lars Wismer, Ms. Akiko Ohara, Mr. Eiyu Hayashi)
- 5. Theme Park (Mr. Eiyu Hayashi)
- 6. Festival (Mr. Koji Akamatsu, Mr. Koji Sagawa)
- 7. International Standardization Symposium (Mr. Hiroshi Asahi, Mr. Toshiyuki Kajiya)
- 8. High-Level Summit (Mr. Hans-Horst Konkolewsky)

#### APPENDIX 2 (1): International Wellbeing Tech Forum Slide No. 9 November 14~15, November, INTEX Osaka

	DAY ONE: Wednesday, November 14, 2024
10:10- 10:20	Dr. Toshihiro Fujita, GISHW Executive Committee Chair, IGSAP director: "GISHWの取り組みとEXPO2025で国際連携が成し遂げようとしていること [The Global Initiative for Safety, Health and Well-being (GISHW)'s Activities and Its Purposes by Participating in Expo 2025 Osaka]."
10:20- 10:35	Dr. Hiroshi Ishiguro, Thematic Project Producer of EXPO 2025 Osaka, Kansai, Japan, Distinguished Professor of Osaka University: "いのちの未来 [Future of Life]."
	afety, Health, and Well-being: The Global Aim "Why Are Safety and Well-being Important for Japanese ies Now? (Moderator: Mr. Jun Kurihara)
10:40- 11:24	Round Table A 10:40-10:42 Introduction 10:42-10:50 Mr. Shinichi Takasaki, Director, ILO Office for Japan:  "ILO Youth Congress." 10:50-10:58 Mr. Zhao Li, Deputy Director, International Labor Affairs, US Department of Labor:  "From Melbourne to Fortaleza: The G20's Quest for Coordinated Action to Enhance Worker Safety, Health, and Well-being." 10:58-11:06 Mr. Alan Stevens, Head of Strategic engagement, IOSH:  "IOSH's Implementation of Worldwide Safety, Health, and Wellbeing." 11:06-11:14 Dr. Kiyoshi Kurokawa, Former UCLA Professor/ Emeritus Professor at the University of Tokyo, National Graduate Institute for Policy Studies (GRIPS), and Tokai University:  "Quo Vadis Japonia" (Where Are You Headed, Japan?)." 11:14-11:24 Discussion

#### APPENDIX 2 (2): International Wellbeing Tech Forum Slide No. 10 November 14~15, November, INTEX Osaka

DAY ONE:	Wednesday, 1	November	14, 2024
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	Part I: Safety, Health, and Well-being: The Global Aim "Why are safety and well-being important for Japanese companies now? (Moderator: Mr. Jun Kurihara)	
	Round Table B 11:29-11:31 Introduction 11:31-11:39 Mr. Nathan Winter, President - International Network of Safety & Health Professional Organisations (INSHPO):     "INSHPO's Pursuit of a Global Society Focused on Safety, Health, and Wellbeing." 11:39-11:47 Dr. Koichi Fukase, Executive Vice President, Osaka University:     "大阪大学における健康とウェルビーイングのための革新的アルファ線核医学がん治療研究の	
11:29-	取り組み [Innovative Alpha Therapy Developed by Osaka University in Order to Promote Health and	
12:11	11:47-11:55 Dr. Tommi Alanko, Director, Occupational Safety, The Finnish Institute of Occupational Health (FIOH): "Finland's Vision Zero Forum: Best Practices and Innovations from 500 Leading Companies." 11:55-12:03 Eng. Majed Ibrahim Alfuwaiz, Secretary General, National Council for Occupational Safety and Health, Kingdom of Saudi Arabia: Saudi National Council for Occupational Safety and Health (NCOSH): "Saudi Arabia's Global Collaboration in Safety, Health, and Wellbeing (tentative)." 12:03-12:11 Mr. Hiroshi Asahi, President, Japanese Standards Association (JSA): "安全・健康・ウェルビーングと国際標準化 [J: Safety, Health and Well-being and the Importance of International Standardization]."	
	12:11-12:21 Discussion	
12:50- 13:35	The Mukaidono Safety Award Ceremony	

## APPENDIX 2 (3): International Wellbeing Tech Forum Slide No. 11 November 14~15, November, INTEX Osaka

#### DAY ONE: Wednesday, November 14, 2024

Part II: Collaborative Safety and Well-being Technology: Transformation Driven by International Standardization "How Can AI and Robotics Be Introduced and Implemented in Small and Medium-Sized Enterprises?" (Moderators: 1st Half Dr. Tamio Tanikawa, 2nd Half Mr. Toshiyuki Kajiya)

Round Table C

14:05-14:07 Introduction

14:07-14:15 Mr. Nariaki Murata, Project Manager, Production Engineering Development Management Div., Toyota Motor Corporation:

"人が安全安心に機械と共存/協働するモノづくり現場を実現する協調安全の取り組み [Collaborative Safety Initiatives to Realize Monozukuri Sites Where People Can Coexist and Collaborate with Machines with Safety and ANSHIN]."

14:15-14:23 Mr. Satoru Miura, Kajima Corporation:

"自動化施工システムの実装 – 建設現場の工場化による生産性と安全性の飛躍的な向上 [Implementation of Automated Construction Systems – Dramatic Improvements in Productivity and Safety by Transforming the Construction Site into a Factory]."

14:23-14:31 Mr. Kouichi Hatano, Kao Corporation SCM - Technology Development Center Mechatronics Gr.: "Safety2.0による協働ロボット導入促進

[Promoting the introduction of collaborative robots using Safety 2.0 technology]

14:31-14:39 Ms. Miho Shimada, Daiwa House Industry Co., Ltd:

"Improves Wellbeing! Reporting New "HIYARI-HATTO" at Construction Sites."

14:39-14:47 Dr. Kiyoshi Fujiwara, Team Leader, Dependable Systems Research Team, Industrial Cyber-Physical Systems Research Center, AIST:

"ロボットのための安全技術とAI. [Safety Technology and AI for Robotics]."

14:47-15:55 Mr. Toshiyuki Kajiya, Director, The Institute of Global Safety Promotion (IGSAP):

"安全・健康・ウェルビーイング向上を支える協調安全実現への包括的アプローチ

[Holistic Approach to Realizing Collaborative Safety as Supportive Measures of Safety, Health & Well-being]."

14:55-15:05 Discussion

Jun KURIHARA, Canon Institute for Global Studies (CIGS)

14:05-15:05

#### APPENDIX 2 (4): International Wellbeing Tech Forum Slide No. 12 November 14~15, November, INTEX Osaka

#### DAY ONE: Wednesday, November 14, 2024

Part II: Collaborative Safety and Well-being Technology: Transformation Driven by International Standardization "How Can AI and Robotics Be Introduced and Implemented in Small and Medium-Sized Enterprises?" (Moderators: 1st Half Dr. Tamio Tanikawa, 2nd Half Mr. Toshiyuki Kajiya)

Round Table D

15:10-15:02 Introduction

15:12-15:20 Dr. Winson Yeung, Principal Consultant, Occupational Safety and Health Council (OSHC): "Digitization and Technological Solutions to Improve Safety and Well-being in the Work Environment – Hong Kong's Experience."

15:20-15:28 Dr. Thomas Bömer, IFA - Institute for Occupational Safety and Health of the German Social Accident Insurance (DGUV):

"Driving Safety, Health, and Wellbeing through Technological Innovation Six Examples of How We Support Zero Accidents and Healthy Work."

15:28-15:36 Dr. Hiroshi Irie, Manager, Digital Strategy Promotion Unit, Innovation Strategy Headquarters, East Japan Railway Company:

"「オープンイノベーションプラットフォーム」~WaaS共創コンソーシアム

['Open Innovation Platform' WaaS Co-Creation Consortium]." (cf. Well-being as a Service)

15:36-15:44 Mr. Yoshiaki Kodachi, Director, International Electrotechnology Standardization Division, Innovation and Environment Policy Bureau, Ministry of Economy, Trade and Industry (METI):

"協調安全の標準化によるウェルビーイングの実現 [Standardization of 'Collaborative Safety' to Contribute to Well-being]."

15:44-15:52 Mr. Jakob Kort, Co-Head Digital Transformation & Corporate Development bei BG BAU: "Implementation of AI in New Industries: The German Perspective."

15:52-16:00 Dr. Kazutsugu Suita, Professor, Daido University:

"人とロボットの共存・協働・協調における産業と社会応用 [Human and Robot Coexistence, Collaboration, and Cooperation for Industrial and Service/Social Applications]."

16:00-16:10 Discussion

Jun KURIHARA, Canon Institute for Global Studies (CIGS)

15:10-16:10

## APPENDIX 2 (5): International Wellbeing Tech Forum Slide No. 13 November 14~15, November, INTEX Osaka

	DAY TWO: Thursday, November 15, 2024
10:10- 10:30	Mr. Hans-Horst Konkolewsky, Global Initiative for Safety, Health and Well-being EXPO2025 and Beyond, Vice-Chairperson: "GISHW's Pioneering Initiative: A First in 170 Years of EXPO History."
	Historic Event at EXPO 2025: "A Gift to 8 Billion People: The New Global Trends in Safety, Health, and ng - Essential Knowledge for Executives!" (Moderator: Mr. Jun Kurihara)
10:35- 11:35	Round Table E 10:35-10:37 Introduction 10:37-10:45 Ms. Marijana Zivkovic Mtegha, Strategic Engagement Manager, IOSH:

## APPENDIX 2 (6): International Wellbeing Tech Forum Slide No. 14 November 14~15, November, INTEX Osaka

#### DAY TWO: Thursday, November 15, 2024

Part I: A Historic Event at EXPO 2025: "A Gift to 8 Billion People: The New Global Trends in Safety, Health, and Well-being - Essential Knowledge for Executives!" (Moderator: Mr. Jun Kurihara)

Round Table F

11:40-11:42 Introduction

11:42-11:50 Mr. Yoshikazu Tanaka, Director of MICE Policy / Director of World Expo2025 & IR Projects, OCTB (Osaka Convention & Tourism Bureau):

"Osaka's MICE Vision Centering on Safety, Health, and Wellbeing."

11:50-11:58 Dr. Ulrike Bollmann, Founder and President of ENETOSH, German Social Accident Insurance (DGUV):

"Developing a Culture of Prevention in Times of Crisis: New Approaches to Education and Training."

11:58-12:06 Dr. Sven Timm, Director of Central Prevention Division, DGUV Vice President of ISSA Prevention Sections Information and Prevention Culture:

"DGUV's Vision Zero Activities and Initiatives."

12:06-12:14 Mr. Lars Tornvig, Danish Vision Zero Council:

"Danish Vision Zero Business Council's Initiatives for the World Expo."

12:14-12:22 Prof. Dr. Masao Mukaidono, Honorary Chair of GISHW Executive Committee IGSAP Chair:

"「働く人の幸せの基本は安全に有り」を全経営者が悟るようになったことをEXPO2025の遺産にしよう

[Let's Make the Legacy of EXPO2025 That All Managers Realize That 'Safety Is the Basis of Workers' Happiness']."

12:22-12:32 Discussion

11:40-12:32