

# EGen 2019

# THE EUROPEAN CONFERENCE ON AGING & GERONTOLOGY

The Bartlett Real Estate Institute, UCL

December 07-08, 2019 | London, UK

#### PROGRAMME & ABSTRACT BOOK

The European Conference on Aging & Gerontology (EGen) is run in partnership with The Bartlett Real Estate Institute at University College London (UCL), The National Archive of Computerized Data on Aging (NACDA) at the University of Michigan, USA, and the IAFOR Research Centre at Osaka University, Japan.

ISSN: 2433-7544 (Online) ISSN: 2433-7587 (Print)















#### www.iafor.org/about/partners

### **IAFOR Global Partners**

























































IAFOR has entered into a number of strategic partnerships with universities across the world to form the IAFOR Global Partnership Programme. These academic partnerships support and nurture IAFOR's goals of educational cooperation without borders, connecting the organisation with institutions that have an international and internationalising profile, and a commitment to interdisciplinary research.

The IAFOR Global Partnership Programme provides mutual recognition and scope for Global Partner institutions and organisations to showcase their research strengths, as well as engage in the development of projects and programmes with IAFOR.



### **Organising Committee**

Natasha Azzopardi-Muscat

European Public Health Association (EUPHA) & University of Malta, Malta

**James Barlow** 

Imperial College London, UK

**Dimitrios Buhalis** 

Bournemouth University, UK

Stefano Capologno

Politecnico di Milano, Italy

**Marcus Chidgey** 

Loqiva, UK

**Evangelia Chrysikou** 

The Bartlett Real Estate Institute UCL, UK

**Alexey Danilov** 

Sechenov University, Russia

**Carina Dantas** 

Cáritas Diocesana de Coimbra, Portugal

**Isaiah Durosaiye** 

University of Sheffield, UK

**Maggie Ellis** 

European Knowledge Tree Group for eHealth

**Jonathan Erskine** 

EuHPN, UK

Ava Fatah gen. Schieck

University College London, UK

Joseph Haldane

The International Academic Forum (IAFOR), Japan

**Paul Higgs** 

University College London, UK

Anastasia Kalea

University College London, UK

Konstantinos E. Kouskoukis

Hellenic Academy of Thermal Medicine, Greece

**Peter McLennan** 

University College London, UK

James W. McNally

University of Michigan & NACDA Program on Aging, USA

Iveta Nagyova

European Public Health Association (EUPHA)

Shinichi Ohnuma

University College London, UK

**Elena Petelos** 

University of Maastricht, Netherlands | CSFM, School of Medicine, University of Crete, Greece | European Public Health Association (EUPHA)

**Haruko Satoh** 

Osaka University, Japan

Eleftheria Savvopoulou

University College London, UK

**Andrew Sixsmith** 

Simon Fraser University, Canada

Ian Spero

Founder Agile Ageing Alliance, UK

Eleni Tracada

University of Derby, UK

Nick Tyler

University College London, UK

Chariklia Tziraki-Segal

Hebrew University of Jerusalem, Israel

Willeke van Staalduinen

European Innovation Partnership on Active and Healthy Ageing (EIPonAHA), Netherlands

**Antoinette Vietsch** 

Politician (Former MP), Architect, Healthcare Planner

**Greg Williams** 

The University of Manchester, UK

**Dineke Zeegers Paget** 

European Public Health Association (EUPHA)

### **Letter of Welcome**



Dear Colleagues,

Welcome to IAFOR's first European Conference on Aging & Gerontology, hosted at the Bartlett's new Here East Campus, in partnership with University College London (UCL) through the Real Estate Institute, and Osaka University's Osaka School of International Public Policy (OSIPP) through the IAFOR Research Centre.

For the past ten years, IAFOR has brought people and ideas together in a variety of events and platforms to promote and celebrate interdisciplinary study, and underline its importance. In the past twelve months, we have engaged in

many cross-sectoral projects, including those with universities (the University of Barcelona, Hofstra University, UCL, University of Belgrade and Moscow State University), think tanks (the East-West Center, and the Asia Pacific Higher Education Research Partnership), as well as projects with the United Nations in New York, and most recently with the Government of Japan through the Prime Minister's office. With the IAFOR Research Centre, we continue to engage in a number of interdisciplinary initiatives we believe will have an important impact on domestic and international public policy conversations. It is through our conferences that we expand our network and partnerships, and I have no doubt that this venue will offer a remarkable opportunity for the sharing of research and best practices, for the meeting of people and ideas.

This event is the younger and smaller sister to the annual Asian Conference on Aging & and Gerontology (AGen), now in its sixth year and held in Tokyo, and in recognition of the Japanese roots of the conference and well as Japan's leading position in the disciplines relating to ageing, the conference committee have prioritised a programme that draws heavily on that country's expertise. We are also happy to recognise and continue the extremely long and fruitful history between the UK and Japan, and especially UCL, which has had an outsized importance in the development of the modern Japanese nation-state in the latter half of the nineteenth century, when Japan opened itself to the world.

I would like to thank members of the Organising Committee, and in particular its chair, Dr Evangelia Chrysikou for her great effort in putting together such an excellent programme for the event, and to the exceptional line-up of invited speakers. I would like to thank the Sasakawa Foundation for its generous support of this event, as well as the European Public Health Association, The International Academy for Design and Health, The National Archive of Computerized Data on Aging (NACDA), and Logiva.

We have so much to learn from each other, and I expect the resultant professional and personal collaborations to endure for many years.

I look forward to meeting you all.

#### Dr Joseph Haldane

Chairman & C.E.O, The International Academic Forum (IAFOR)
Guest Professor, Osaka School of International Public Policy (OSIPP), Osaka University, Japan Visiting Professor, Doshisha University, Japan & The University of Belgrade, Serbia Member, Expert Network, World Economic Forum





## Instagram

























Share your conference photos and join the conversation on Instagram using the hashtag #IAFOR

# Conference Guide

**Conference at a Glance** 

**Room Schedule** 

**Lunch & Dinner** 

**Directions & Access** 

Floor Plan

**General Information** 

**Presentation Guide** 

**IAFOR Membership** 

Professor Stuart D. B. Picken (1942-2016)

**IAFOR Publications** 



# December 07, 2019 | The Bartlett Real Estate Institute Saturday at a Glance

outur day	at a Giaires
09:30-10:15	Conference Registration & Morning Coffee   Lounge
10:15-10:40	Announcements & Welcome Address   Lecture Theatre 1 Haruko Satoh, Osaka University, Japan Joseph Haldane, IAFOR, Japan James W. McNally, University of Michigan & NACDA Program on Aging, United States
10:40-11:00	Opening Address   Lecture Theatre 1 Contribution of UCL to the Ageing Society of Japan Shin-ichi Ohnuma, University College London, United Kingdom
11:00-11:30	Special Keynote Presentation   Lecture Theatre 1 Studies on Interactive Robots Hiroshi Ishiguro, Osaka University, Hiroshi Ishiguro Laboratories, Japan (by video address) Ryuji Yamazaki, Osaka University, Hiroshi Ishiguro Laboratories, Japan
11:30-12:00	Keynote Presentation   Lecture Theatre 1 Imperceptible Brain Monitoring System -Patch EEG- Tsuyoshi Sekitani, Osaka University, Japan
12:00-12:15	Conference Photograph   Lecture Theatre 1

**Keynote Presentation | Lecture Theatre 1** 

Tadasu Iida, Osaka University, Japan

Conversions of Existing Buildings into Welfare Facilities for the Elderly

Lunch Break | Lounge

12:15-13:15

13:15-13:45



# December 07, 2019 | The Bartlett Real Estate Institute Saturday at a Glance

13:45-14:05	Keynote Presentation   Lecture Theatre 1
	The Challenge of the Fourth Age for Ageing Societies
	Paul Higgs, University College London, United Kingdom

14:05-14:25 Keynote Presentation | Lecture Theatre 1
Why Successful Ageing Needs Innovation in the Built Environment
James Barlow, Imperial College London, United Kingdom

14:25-14:45 Keynote Presentation | Lecture Theatre 1
"Design shall not wither them..."
Nick Tyler, University College London, United Kingdom

14:45-15:15 Keynote Panel | Lecture Theatre 1

**Discussion Panel** 

Paul Higgs, University College London, United Kingdom James Barlow, Imperial College London, United Kingdom Nick Tyler, University College London, United Kingdom Moderator: Evangelia Chrysikou, University College London, United Kingdom

Office Kingdom

15:15-15:30

15:30-17:00 Parallel Session I
 17:00-18:00 Conference Welcome Reception | Lounge
 19:15-21:30 Official Conference Dinner (optional extra)

Coffee Break | Lounge



# December 08, 2019 | The Bartlett Real Estate Institute Sunday at a Glance

09:00-09:30	Conference	Registration	& Morning	Coffee I	Lounge
05.00 05.00		i icqibil ation	C IVIOIIIII		Louinge

#### 09:30-10:00 Featured Presentation | Lecture Theatre 1

Fear of Falling: Evaluating Elderly Fall Risks Across Multiple

**European Nations** 

James W. McNally, University of Michigan & NACDA Program

on Aging, United States

10:00-12:00 Parallel Session I

12:00-13:00 Lunch Break | Lounge

13:00-14:00 Workshop Session

14:00-14:15 Coffee Break | Lounge

14:15-15:45 Parallel Session II

#### 15:45-16:45 Closing Panel Session | Lecture Theatre 1

Smart Environments and Active Ageing: Empowering Travel

and Quality of Life

Dimitrios Buhalis, Bournemouth University, United Kingdom Maggie Ellis, European Knowledge Tree Group for eHealth Ian Spero, Founder Agile Ageing Alliance, United Kingdom Peter McLennan, University College London, United Kingdom

#### **16:45-17:00** Closing Remarks

Evangelia Chrysikou, University College London, United Kingdom

Joseph Haldane, IAFOR, Japan

# Saturday Schedule | December 07, 2019

	Lounge	Lecture Theatre 1	Lecture Theatre 2
10:15-10:40	-	Welcome Address	-
10:40-11:00	-	Opening Address	-
11:00-11:30	-	Keynote Presentation: Hiroshi Ishiguro	-
11:30-12:00	-	Keynote Presentation: Tsuyoshi Sekitani	-
12:15-13:15	Lunch Break	-	-
13:15-13:45	-	Keynote Presentation: Tadasu lida	-
13:45-14:05	-	Keynote Presentation: Paul Higgs	-
14:05-14:25	-	Keynote Presentation: James Barlow	-
14:25-14:45	-	Keynote Presentation: Nick Tyler	-
14:45-15:15	-	Keynote Panel	-
15:15-15:30	Coffee Break	-	-
15:30-17:00	-	Lifespan Health Promotion	Built Environment
17:00-18:00	Conference Welcome Reception	-	-
19:15-21:30		Conference Dinner (optional extra)	

# Sunday Schedule | December 08, 2019

	Lounge	Lecture Theatre 1	Lecture Theatre 2
09:30-10:00	-	Featured Presentation: James W. McNally	-
10:00-12:00	-	Interdisciplinary	Built Environment
12:00-13:00	Lunch Break		
13:00-14:00	-	Workshop I	Workshop II
14:00-14:15	Coffee Break	-	-
14:15-15:45	-	Lifespan Health Promotion	Resilience
15:45-16:45	-	Closing Panel Session	-
16:45-17:00		Closing Remarks	



### **Lunch & Dinner**

A buffet lunch is available on Saturday (12:15-13:15) and Sunday (12:00-13:00) at the conference venue during the designated lunch hour.

#### **Lunch Times**

Saturday, December 07 12:15-13:15 Lounge Sunday, December 08 12:00-13:00 Lounge

#### **Conference Dinner**

The Conference Dinner is a ticketed optional event on Saturday, December 07.

The Conference Dinner is held at a restaurant near the conference venue, and offers conference participants an excellent chance to enjoy delicious food in a relaxed setting while getting to know each other and making new connections outside the main conference environment.

Conference Dinner attendees should meet in the Lounge at 18:20 on Saturday, December 07. The group leaves for the restaurant at 18:40. Please remember to bring your name tag to the Conference Dinner. Dinner starts from 19:00.

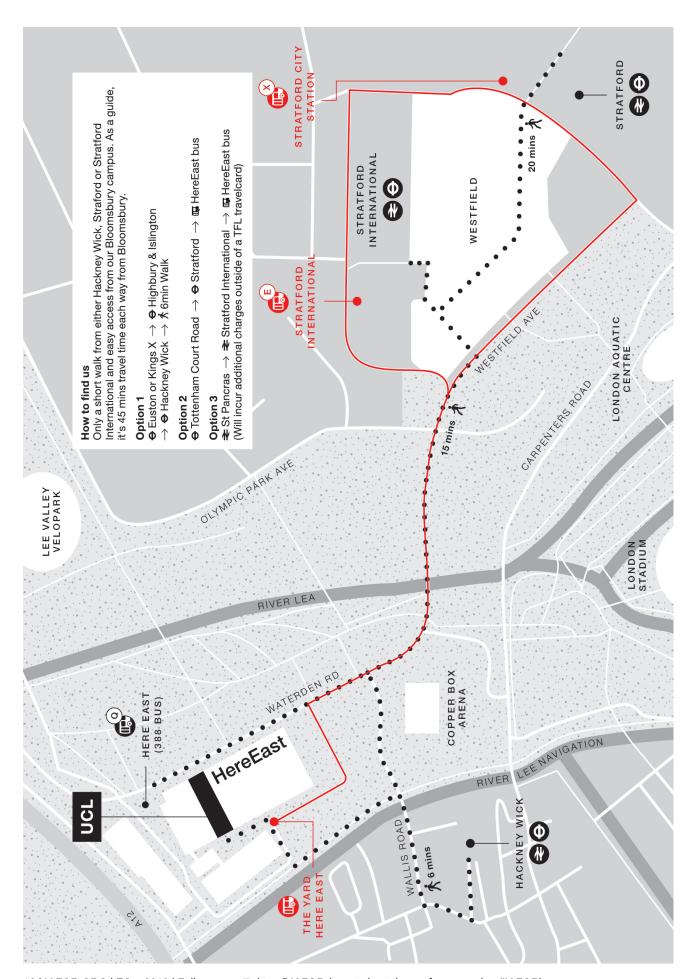
#### **Restaurant Name & Address:**

Shane's On Canalside 26 E Bay Ln, Hackney Wick, London E15 2GW, United Kingdom

Tel: +44 20 3828 9991

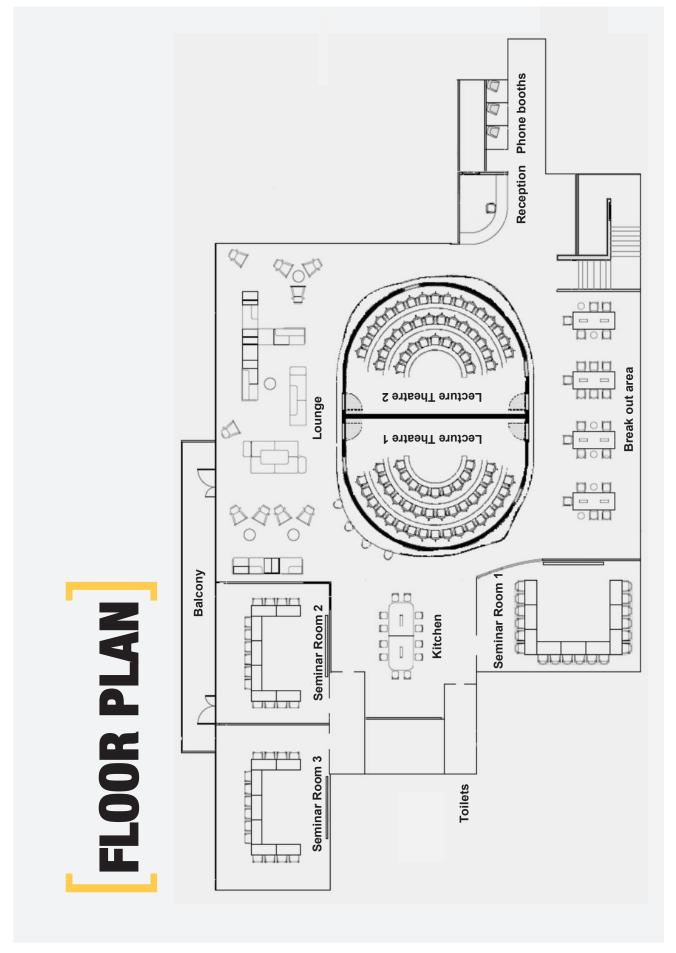
#### **Conference Venue**

### **Directions & Access**



#### **Conference Venue**

## Floor Plan





### **General Information**

#### **Registration Desk**

You will be able to pick up your registration pack and name card at the Conference Registration Desk. The Conference Registration Desk will be situated at the following locations during the conference:

Saturday, December 07 09:30-15:00 Lounge Sunday, December 08 09:30-15:00 Lounge

If you have any questions or concerns, IAFOR staff and volunteers will happily assist you in any way they can.

#### Name Badges

When you check in, you will receive a registration pack, which includes your name badge. Wearing your badge is required for entrance to the sessions. You must wear your badge at all times during the conference.

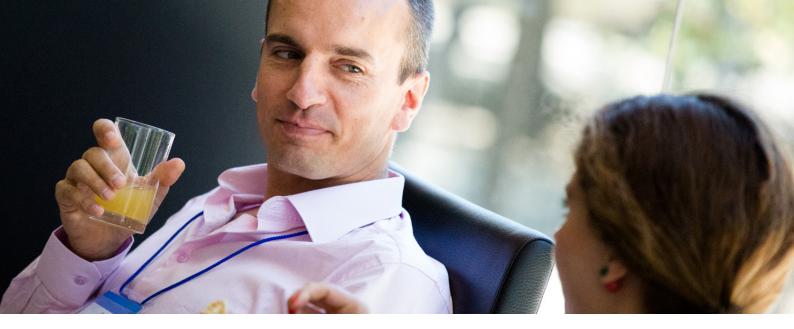
#### **Internet Access**

There is free Wi-Fi internet connection at the conference venue. However, this can be unreliable so we would strongly suggest that you do not rely on a live connection for your presentation.

Instructions on how to connect to the Wi-Fi will be available at the registration desk.

#### **Refreshment Breaks**

Complimentary coffee, tea and water will be available during the scheduled coffee breaks. Light snacks will be provided once in the morning and once in the afternoon.



### **General Information**

#### **Smoking**

Smoking is only permitted in designated areas.

#### What to Wear & Bring

Attendees generally wear business casual attire. You may wish to bring a light jacket or sweater as meeting rooms are air-conditioned and sometimes cool.

#### **Photo/Recording Waiver**

Human interaction through networking, and dissemination of this knowledge, is at the core of what IAFOR does as an academic research organisation, conference organiser and publisher. As part of the archiving of the conference event, IAFOR takes photos in and around the conference venue, and uses the photos to document the event. This also includes the filming of certain sessions. We consider this documentation important and it provides evidence of our activities to members, partners and stakeholders all over the world, as well as to current and potential attendees like you. Some of these photos will therefore appear online and in print, including on social media. The above are the legitimate interests of the organisation that we assert under the new European Union law on General Data Protection Regulation (GDPR). Under this legislation, you have an absolute right to opt out of any photo. We are committed to protecting and respecting your privacy. Read our full privacy policy — www.iafor.org/about/privacy-policy



### **Presentation Guide**

#### **Oral & Workshop Presentations**

Oral Presentations are normally scheduled in sessions comprising three presentations, lasting 75 minutes in total. In sessions with two Oral Presentations, the session will last 50 minutes, and in the case of four Oral Presentations, an extended session lasting 100 minutes will be scheduled.

The time in the sessions is to be divided equally between presentations. We recommend that an Oral Presentation should last 15–20 minutes to include time for question and answers, but should last no longer than 25 minutes. Any remaining session time may be used for additional discussion.

#### **Equipment**

All rooms will be equipped with a MacBook computer pre-installed with PowerPoint and Keynote and connected to a LCD projector or LCD screen. If you wish, you may directly link your own PC laptop, although we advise you to use the computer provided by plugging in your USB flash drive. We recommend that you bring two copies of your presentation in case one fails, and suggest sending yourself the presentation by email as a third and final precaution.

#### **Session Chairs**

Session Chairs are asked to introduce themselves and other speakers (briefly) using the provided printouts of speaker bios, hand out the provided presentation certificates at the end of the session, ensure that the session begins and ends on time, and that the time is divided fairly between the presentations. Each presenter should have no more than 25 minutes in which to present his or her paper and respond to any questions. The Session Chair is asked to assume this timekeeping role, and to this end yellow and red timekeeping cards are used as a visual cue for presenters, letting them know when they have five minutes remaining, and when they must stop.

Please follow the order in the programme, and if for any reason a presenter fails to show up, please keep to the original time slots as delegates use the programme to plan their attendance.



### **Presentation Guide**

#### **Presentation Certificates**

Presenters will receive a certificate of presentation from their Session Chair or a member of staff at the end of their session.

#### **Conference Proceedings**

The Conference Proceedings are published on the IAFOR website (papers.iafor.org), and can be freely accessed as part of IAFOR's research archive. All authors may have their full paper published in the online Conference Proceedings.

**Full text submission is due by January 08, 2020 through the online system.** The proceedings will be published on February 08, 2020. Authors will have PDF copies of their offprints emailed to them by March 08, 2020.

#### A Polite Request to All Participants

Participants are requested to arrive in a timely fashion for all presentations, whether to their own or to those of other presenters. Presenters are reminded that the time slots should be divided fairly and equally between the number of presentations, and that presentations should not overrun.

Participants should refrain from talking amongst themselves and ensure that mobile phones are switched off or set to silent mode during presentations.



### **Become an IAFOR Member**

IAFOR provides an excellent personal and professional environment for academics and scholars of all ages and backgrounds to come together and exchange the latest ideas, and inform each other's perspectives through their own cultural and disciplinary background and experiences. We are able to do this thanks to the exceptional network of individuals and institutions around the world who support our work and help shape our exceptional events globally. We emphasise the nurturing and supporting of young academics from different backgrounds, providing mutual advice and guidance, and offer more senior academics the chance to forge working relationships outside of their traditional networks.

In a world where division and strife are underlined and played up in national and local contexts, and political posturing frequently seeks to ostracise and demonise, IAFOR is committed to working across cultural and national borders, and to work to bring people together. We believe that mature human interaction and academic and cultural exchange are essential to offering positive versions of the future, where cooperation happens with individuals and institutions who share a commitment to bridge divides, to being good global citizens, and to making the world a better place.

By becoming a member, you will become a stakeholder in the IAFOR mission of facilitating international exchange, encouraging intercultural awareness, and promoting interdisciplinary discussion in the hope and expectation of generating and sharing new knowledge. Join us now in this growing global organisation, and help make a difference today.

To learn more about IAFOR membership, please visit: www.iafor.org/membership



## The Reverend Professor Stuart D. B. Picken (1942–2016)

The late Reverend Professor Stuart D. B. Picken began his distinguished career in academia as a Rotary Scholar on a research trip to Japan. A native of Scotland who had dedicated himself to religious studies, he immediately became fascinated by Japanese culture and the practice of Shinto. He was particularly drawn to the parallels and differences he saw in Western pedagogy compared to that of the East and began a lifelong mission to bridge the communication and knowledge gap between the two worlds.

Picken was appointed Professor of Philosophy at the International Christian University (ICU) in 1972. Here he turned his Western theological and philosophical training to comparative religious and cultural studies of Japan, at a time when the country was emerging from the shadows of the Second World War.

His groundbreaking and controversial work on suicide in Japan made his name within the country, but it was his subsequent work on Shinto that influenced the rehabilitation of the religion at a time when it was dismissed in the West as pagan and primitive, or unjustly caricatured for its wartime associations.

Whether in his research or teaching, Picken devoted much of his life to increasing understanding between his adopted country of Japan and the West, and in 2007 he was recognised with the Order of the Sacred Treasure, an imperial decoration for his pioneering research and outstanding contribution to the promotion of friendship and mutual understanding between Japan and the United Kingdom. He also served as the International Adviser to the High Priest of the Tsubaki Grand Shrine, one of Japan's largest and oldest shrines.

From 2009 he was the founding Chairman of The International Academic Forum (IAFOR), where he was highly active in helping nurture and mentor a new generation of academics, and facilitating better intercultural and international awareness and understanding.

Stuart D. B. Picken was a cherished friend and an inspiration to IAFOR and its community of supporters. In honour of Professor Picken and his dedication to academia, the ideals of intercultural understanding and the principles of interdisciplinary study, IAFOR has created the Stuart D. B. Picken Grant and Scholarship, an award supported by the Stuart D. B. Picken Memorial Fund. Awards are made to PhD students and early career academics who are in need of funding to complete their research, and whose work demonstrates excellence in the core values of academic rigour, intercultural sensitivity and interdisciplinarity.

# www.iafor.org/publications IAFOR Publications

#### Introduction

IAFOR's publications provide a constructive environment for the facilitation of dialogue between academics at the intersections of nation, culture and discipline. Since 2009, when the organisation was established, over 20,000 academics have presented their research at IAFOR conferences — a wealth of ideas have been generated and partnerships formed. Our various publications, from Conference Proceedings, to peer-reviewed journals, to our online magazine, provide a permanent record of and a global online platform for this valuable research. All of our publications are Open Access, freely available online and free of publishing fees of any kind. By publishing work with IAFOR, authors enter into an exclusive License Agreement, where they have copyright, but license exclusive rights in their article to IAFOR as the publisher.

#### **Conference Proceedings**

As a presenter at an IAFOR conference you are encouraged to submit a final paper to our Conference Proceedings. These online publications are Open Access research repositories, which act as a permanent record of the research generated at IAFOR conferences. All of our Conference Proceedings are freely available to read online. Papers should be uploaded through the submission system before the Final Paper Submission Deadline, which is one month after the end of the conference. Please note that works published in the Conference Proceedings are not peer-reviewed and cannot be considered for publication in IAFOR journals.

#### **IAFOR Journals**

IAFOR publishes several editorially independent, Open Access journals across a variety of disciplines. They conform to the highest academic standards of international peer review, and are published in accordance with IAFOR's commitment to make all of our published materials available online.

#### How are papers submitted?

Submissions should be original, previously unpublished papers which are not under consideration for publication in any other journal. All articles are submitted through the submission portal on the journal website and must conform to the journal submission guidelines.

#### How does IAFOR ensure academic integrity?

Once appointed by IAFOR's Publications Committee, the Journal Editor is free to appoint his or her own editorial team and advisory members, who help to rework and revise papers as appropriate, according to internationally accepted standards. All papers published in the journal have been subjected to the rigorous and accepted processes of academic peer review. Neither editors nor members of the editorial team are remunerated for their work.

#### Where are the journals indexed?

IAFOR Journals are indexed in Scopus, DOAJ, ERIC, MIAR, TROVE, CiteFactor and EBSCO, SHERPA/ROMEO and Google Scholar. DOIs are assigned to each published issue and article via Crossref. Please note that indexing varies from journal to journal.

20 | IAFOR.ORG | EGen2019 | Follow us on Twitter @IAFOR (tweet about the conference using #IAFOR)

#### What's the reach?

Each of our journal issues is viewed thousands of times a month and the articles are frequently cited by researchers the world over, largely with thanks to our dedicated marketing efforts. Each issue is promoted across our social media platforms and to our tailored email marketing lists. On average, each journal publishes biannually.

Selected IAFOR Journals are available for purchase on Amazon. Search for The International Academic Forum (IAFOR).

#### What's the cost?

IAFOR Journals are Open Access publications, available online completely free of charge and without delay or embargo. Authors are not required to pay charges of any sort towards the publication of IAFOR Journals and neither editors nor members of the editorial boards are remunerated for their work.

#### How are IAFOR Journals related to IAFOR Conferences and Conference Proceedings?

IAFOR Journals reflect the interdisciplinary and international nature of our conferences and are organised thematically. A presenter can choose to publish either in Conference Proceedings or submit their manuscript to the corresponding IAFOR Journal for review.

#### **Current IAFOR Journal titles include**

IAFOR Journal of Arts & Humanities
IAFOR Journal of Cultural Studies
IAFOR Journal of Education
IAFOR Journal of Language Learning
IAFOR Journal of Literature & Librarianship
IAFOR Journal of Media, Communication & Film
IAFOR Journal of Psychology & the Behavioral Sciences

#### THINK

THINK, The Academic Platform, is IAFOR's online magazine, publishing the latest in interdisciplinary research and ideas from some of the world's foremost academics, many of whom have presented at IAFOR conferences. Content is varied in both subject and form, with everything from full research papers to shorter opinion pieces and interviews. THINK gives academics the opportunity to step outside of the traditional research publishing status quo – to get creative, explore different disciplines and to have their ideas heard, shared and discussed by a diverse, global audience.

For more information on THINK please visit www.think.iafor.org

If you would like more information about any of IAFOR's publications, please contact publications@iafor.org



# Saturday, December 07 | 17:00-18:00 | Lounge Conference Welcome Reception

Join fellow delegates for a drink or two at the Conference Welcome Reception. This event provides a great opportunity for delegates to network and get to know each other. All registered presenters and audience members are welcome to attend. Admission is included in the conference registration fee.

The Welcome Reception will be held in the Lounge from 17:00 to 18:00.

# Saturday December 07

**Plenary Session** 

# Haruko Satoh, James W. McNally & Joseph Haldane Announcements & Welcome Address

Saturday, December 07 | 10:15-10:40 | Lecture Theatre 1



#### **Haruko Satoh**

Haruko Satoh is Specially Appointed Professor at the Osaka School of International Public Policy (OSIPP), where she teaches Japan's relations with Asia and identity in international relations. She is also co-director of the OSIPP-IAFOR Research Centre and she was previously part of the MEXT Reinventing Japan project on "Peace and Human Security in Asia (PAHSA)" with six Southeast Asian and four Japanese universities.

In the past she has worked at the Japan Institute of International Affairs (JIIA), Chatham House, and Gaiko Forum. Her interests

are primarily in state theory, Japanese nationalism and identity politics. Recent publications include: "China in Japan's Nation-state Identity" in James DJ Brown & Jeff Kingston (eds) Japan's Foreign Relations in Asia (Routledge, 2018); "Japan's 'Postmodern' Possibility with China: A View from Kansai" in Lam Peng Er (ed), China-Japan Relations in the 21st Century (Palgrave Macmillan, 2017); "Rethinking Security in Japan: In Search of a Post-'Postwar' Narrative" in Jain & Lam (Eds.), Japan's Strategic Challenges in a Changing Regional Environment (World Scientific, 2012); "Through the Looking-glass: China's Rise as Seen from Japan", (co-authored with Toshiya Hoshino), Journal of Asian Public Policy, 5(2), 181–198, (July 2012); "Post- 3.11 Japan: A Matter of Restoring Trust?", ISPI Analysis No. 83 (December 2011); "Legitimacy Deficit in Japan: The Road to True Popular Sovereignty" in Kane, Loy & Patapan (Eds.), Political Legitimacy in Asia: New Leadership Challenges (Palgrave Macmillan, 2011), "Japan: Re-engaging with China Meaningfully" in Tang, Li & Acharya (eds), Living with China: Regional States and China through Crises and Turning Points, (Palgrave Macmillan, 2009).

Professor Satoh is a member of IAFOR's Academic Governing Board. She is Chair of the Politics, Law & International Relations section of the International Academic Advisory Board.



#### James W. McNally

Dr James W. McNally is the Director of the NACDA Program on Aging, a data archive containing over 1,500 studies related to health and the aging lifecourse. He currently does methodological research on the improvement and enhancement of secondary research data and has been cited as an expert authority on data imputation. Dr McNally has directed the NACDA Program on Aging since 1998 and has seen the archive significantly increase its holdings with a growing collection of seminal studies on the aging lifecourse, health, retirement and international aspects of aging. He has spent much of his career

addressing methodological issues with a specific focus on specialized application of incomplete or deficient data and the enhancement of secondary data for research applications. Dr McNally has also worked extensively on issues related to international aging and changing perspectives on the role of family support in the later stages of the aging lifecourse.



#### Joseph Haldane

Joseph Haldane is the Chairman and CEO of IAFOR. He is responsible for devising strategy, setting policies, forging institutional partnerships, implementing projects, and overseeing the organisation's business and academic operations, including research, publications and events.

Dr Haldane holds a PhD from the University of London in 19thcentury French Studies, and has had full-time faculty positions at the University of Paris XII Paris-Est Créteil (France), Sciences Po Paris (France), and Nagoya University of Commerce and

Business (Japan), as well as visiting positions at the French Press Institute in the University of Paris II Panthéon-Assas (France), The School of Journalism at Sciences Po Paris (France), and the School of Journalism at Moscow State University (Russia).

Dr Haldane's current research concentrates on post-war and contemporary politics and international affairs, and since 2015 he has been a Guest Professor at The Osaka School of International Public Policy (OSIPP) at Osaka University, where he teaches on the postgraduate Global Governance Course, and Co-Director of the OSIPP-IAFOR Research Centre, an interdisciplinary think tank situated within Osaka University.

A Member of the World Economic Forum's Expert Network for Global Governance, Dr Haldane is also a Visiting Professor in the Faculty of Philology at the University of Belgrade (Serbia), a Visiting Professor at the School of Business at Doshisha University (Japan), and a Member of the International Advisory Council of the Department of Educational Foundations at the College of Education of the University of Hawaii at Mānoa (USA).

From 2012 to 2014, Dr Haldane served as Treasurer of the American Chamber of Commerce in Japan (Chubu Region) and he is currently a Trustee of the HOPE International Development Agency (Japan). He was elected a Fellow of the Royal Asiatic Society in 2012, and a Fellow of the Royal Society of Arts in 2015.



Saturday, December 07 | 10:40-11:00 | Lecture Theatre 1



#### Shin-ichi Ohnuma

Professor Shin-ichi Ohnuma is the Deputy Director of the UCL Institute of Ophthalmology and also the UCL Japan Ambassador at the UCL Global Engagement Office. His research interest is Age-related diseases in Ophthalmology. He is aiming to develop new treatment of eye-diseases using animal models. Also, he has a strong passion to facilitate interaction between UCL and Japan. Based on this activity, he was awarded Foreign Minister's Commendation for 2017.

# Special Keynote Presentation: Hiroshi Ishiguro & Ryuji Yamazaki Studies on Interactive Robots

Saturday, December 07 | 11:00-11:30 | Lecture Theatre 1 (video address)

We, humans, have an innate brain function to recognise other humans. Therefore, very human-like robots, androids, can be ideal information media for human-robot/computer interaction. The speaker, Ishiguro, has developed various types of interactive robots and androids so far. These robots can be used for studying technology and understanding human nature. He has been a leading contributor to the research area of Human-Robot Interaction with the robots.

Geminoid, that is a teleoperated android of an existing person, can transmit the presence of the operator to distant places. The operator recognises the android body as his/her own body after talking with someone through the geminoid and has the virtual feeling of being touched when someone touches the geminoid.

However, the geminoid is not the ideal medium for everybody. For example, elderly people often hesitate to talk with adult humans and adult androids. A question is what the ideal medium for everybody is. In order to investigate it, the speaker proposes the minimum design of interactive humanoids. It is called Telenoid. The geminoid is the perfect copy of an existing person and it is the maximum design of interactive humanoids. On the other hand, the minimum design looks like a human but we cannot judge the age and gender. Elderly people like to talk with the Telenoid very much. In this talk, the speaker discusses the design principles for the robots and their effects on conversations with humans.

Further, Ishiguro has been developing and studying autonomous conversational robots and androids recently. Especially, he focuses on embodiment, emotion and intention/desire of the robots and androids.

In addition to these robotics studies, he will discuss our future society where we have symbiotic relationships with them in this talk.

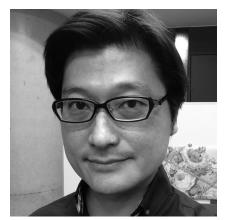


#### Hiroshi Ishiguro

Hiroshi Ishiguro received a Doctor of Engineering in Systems Engineering from Osaka University, Japan in 1991. He is currently Professor of the Department of Systems Innovation in the Graduate School of Engineering Science at Osaka University (from 2009) and Distinguished Professor of Osaka University (from 2017). He is also visiting Director (from 2014) (group leader: 2002–2013) of Hiroshi Ishiguro Laboratories at the Advanced Telecommunications Research Institute and an ATR fellow. His research interests include sensor networks, interactive robotics, and android science. He received the Osaka Cultural Award in

2011. In 2015, he received the Prize for Science and Technology (Research Category) by the Minister of Education, Culture, Sports, Science and Technology (MEXT), Japan. He was also awarded the Sheikh Mohammed bin Rashid Al Maktoum Knowledge Award in Dubai in 2015.

Ryuji Yamazaki's biography is available on the following page.



#### Ryuji Yamazaki

Ryuji Yamazaki (Yamazaki-Skov), PhD is a Specially Appointed Associate Professor at Symbiotic Intelligent Systems Research Center, Institute for Open and Transdisciplinary Research Initiatives, Osaka University, Japan. He received an MA in Philosophy from Chuo University (Japan), and a PhD in Knowledge Science from Japan Advanced Institute of Science and Technology (JAIST), in 2004 and 2010. He has worked as a researcher at JAIST, Advanced Telecommunications Research Institute International in Kyoto, Japan, as an Invited Researcher, member of the PENSOR project (Philosophical Enquiries into

Social Robotics) at Aarhus University (Denmark), and as an Assistant Professor at the School of Social Sciences, Waseda University (Japan). His current research is focused on media studies, social robotics, phenomenology of embodiment, clinical philosophy and ethics, and robo-philosophy.

**Keynote Presentation: Tsuyoshi Sekitani** 

# Imperceptible Brain Monitoring System -Patch EEG-

Saturday, December 07 | 11:30-12:00 | Lecture Theatre 1

I will introduce the research and development of ultra-flexible, -thin, and imperceptible brain activity monitoring systems. Concretely, we developed new type brain activity monitoring system, naming "Patch-EEG". Patch-EEG (Electroencephalogram) is a sheet-type brain-wave sensor system that can monitor brain waves simply by attaching the sensor to the forehead. The weight of the system is 20 g and the thickness is less than 5 mm, including 8ch-soft electrodes, CPU, wireless module, and battery. The patch EEG has a measurement accuracy comparable to that of large medical equipment.

It has been used in not only medical applications but also applications such as the development of products using brain waves, measurement of the quality of sleep, monitoring of brain waves during sports activities, and easy monitoring of brain activities at home as Self-care devices. In addition, I will address some recent progresses on ultra-thin bio-signal monitoring systems and outline the leading edge of bio-signal monitoring using these systems and their future prospects.



#### Tsuyoshi Sekitani

Professor Tsuyoshi Sekitani received his BS from Osaka University in 1999, and PhD from the Department of Applied Physics, School of Engineering, at the University of Tokyo, Japan, in 2003. From 2003 to 2010, he was an Assistant Professor, and in 2011, he was an Associate Professor in the School of Engineering at the University of Tokyo. In 2014, he was made a Full Professor in the Institute of Scientific and Industrial Research at Osaka University. In 2017, he was awarded the title of Osaka University Distinguished Professor. From 2019, he is playing a leading role in the

research intensification of Osaka University as an Executive Assistant to the President of Osaka University. He was awarded as IEEE Paul Rappaport Award in 2009 and 2010, "Highly Cited Researchers" (The World's Most Influential Scientific Mind) from Thomson Reuters in 2014, and from Clarivate Analytics in 2018, Young Scientist Award from the Ministry of Education, Culture, Sports, Science and Technology, Japan in 2015, and the Japan Society for the Promotion of Science Award in 2016.



Japan is one of the fastest ageing nations in the world due to the extended lifespan and decline in the birth rate. The population has begun to decline gradually since 2011. On the other hand, the ratio of vacant houses reached 13.6% in 2018. Though 8.5 million out of 62.4 million houses are unoccupied, about 1 million houses are still built every year. Vacant houses are increasing not only in rural areas but in cities. It causes several problems to the surrounding environment. Therefore, various attempts are made to reduce vacant houses and to use them effectively. One of such attempts is converting those houses into welfare facilities. It is also effective from the viewpoint of users and facility operators because users will be able to feel easy as if they were visiting their friend's houses and operators can reduce construction costs. This presentation will show some successful conversion cases in Japan.



#### Tadasu lida

Tadasu Iida received a PhD in Engineering from Osaka University in 2004, and has been Associate Professor of the Architectural Engineering Course in the Graduate School of Engineering at Osaka University since 2007. Previously, he worked as an architect in an architect office specialising in medical and welfare facilities from 1994 to 2001. Research for his doctoral dissertation was carried out in one of the hospitals which he had been involved in design. His research interest is design of these facilities. Moreover architectural ergonomics and sustainable use of existing buildings recently. As for ergonomics research,

he was involved in the joint research on innovative step-by-step ramp designed for wheelchair users with the Building Research Institute, the National Research and Development Agency. He advises local government and social welfare service corporation on the foundation of welfare facilities for the elderly and for people with disabilities. He won a prize for excellence in Nikkei Architecture 750th Issue Commemorative Design Competition in 2003. He also received the Osaka University Prize for his outstanding contribution to education in 2018.

**Keynote Presentation: Paul Higgs** 

# The Challenge of the Fourth Age for Ageing Societies

Saturday, December 07 | 13:45-14:05 | Lecture Theatre 1

If the 20th century was the century in which retirement from work became a universal experience in the most prosperous nations, the 21st century is likely to be the century in which old age is transformed into two contrasting experiences. For the majority and for the youngest cohorts of retired people improvements in health and standards of living offer the possibility of a period of life defined by forms of leisure retirement. This 'Third Age' can be contrasted with the experience of an old age defined by frailty, cognitive impairment and institutional care. Such a 'Fourth Age' becomes a fearful backdrop to those who feel that their 'successful ageing' is threatened by a descent into the dependency represented by the nursing home and other forms of institutional and community care. This presentation will outline the importance of understanding this new bifurcation of later life for the development of appropriate health and social care policies.



#### **Paul Higgs**

Paul Higgs is Professor of Sociology of Ageing at UCL. His research interests stem from work he conducted with Dr Chris Gilleard which has been published in four books: *Cultures of Ageing: Self Citizen and Society* (2000), and *Contexts of Ageing: Class, Cohort and Community* (2005). From 2005 to 2008 he directed an ESRC/AHRC funded project, "From passive to active consumers: Older people's consumption 1998–2001". He also co-authored the book, *Medical Sociology and Old Age* (2009) with Ian Rees Jones of Cardiff University. Another two books with Chris Gilleard have been published in recent years:

Ageing, Corporeality and Embodiment (2013) and Rethinking Old Age: Theorising the Fourth Age (2015), as well as a book on social class and later life edited with Marvin Formosa. From 2009 to 2011 he was a co-organiser of an ESRC funded seminar series on "new ageing populations". He is currently a co-investigator on two five-year NIHR/ESRC projects (MARQUE and PRIDE) investigating the social aspects of dementia. Professor Higgs is also an editor of the journal Social Theory and Health and co-editor of the 2017 Sociology of Health and Illness monograph which addresses the topic of dementia and the social mind.

Professor Higgs studied for a BSc in Sociology at the Polytechnic of North London and a PhD in Social Policy at the University of Kent. Before moving to UCL in 1994, he was the Eleanor Peel Lecturer in Social Gerontology at St George's Hospital Medical School, London. At UCL he was variously Lecturer, Senior Lecturer and Reader in Medical Sociology. He is currently Professor of the Sociology of Ageing and was elected a fellow of the Academy of Social Sciences in 2012 and a fellow of the Gerontological Society of America. He is also a visiting professor in the Faculty of Social Sciences at the University of Bath.

**Keynote Presentation: James Barlow** 

# Why Successful Ageing Needs Innovation in the Built Environment

Saturday, December 07 | 14:05-14:25 | Lecture Theatre 1

The role of the built environment is usually neglected, yet it is an essential component of a health and social care system that supports successful ageing. Adoption of innovations in technology, services and organizational arrangements may be constrained by the built environment as much as their wider policy and institutional context. The presentation will discuss the challenges of integrating the built environment into care services and solutions for an ageing society.



#### **James Barlow**

Professor Barlow has been Professor of Technology and Innovation Management (Healthcare) at Imperial College Business School since 2003. He was co-founder of the Innovation Studies Centre, and from 2006 to 2013 was Principal Investigator and a director of the Health and Care Infrastructure Research and Innovation Centre (HaCIRIC). He is a member of the Centre for Health Economics and Policy Innovation.

Previously, Professor Barlow's positions were at the Science Policy Research Unit (University of Sussex), University of Westminster and the Policy Studies Institute. He earned a PhD from the London School of Economics and has a background in geography and economics.

His research, teaching and consultancy focuses on the adoption, implementation and sustainability of innovation in healthcare systems. Professor Barlow has led or been involved in many research and consulting projects around the world. He has also worked extensively on innovation in housing provision and other housing policy issues.

In addition to research and teaching, Professor Barlow advises and consults for government, healthcare services and industry. He has worked with companies from the medical technology, pharmaceutical, ICT and construction sectors.

In July 2014, he was appointed as the new president of the International Academy for Design and Health, a global knowledge community bringing together the built environment industries creating new healthcare infrastructure.

His advisory work includes membership or chairing of expert panels on healthcare innovation for the Department of Health, Department of Trade and Industry, OFCOM, Welsh Assembly Government, European Commission, Royal Society, King's Fund, London Health Commission and Policy Exchange. He has given evidence on public-private partnerships before the Treasury Select Committee and evidence on healthcare innovation issues to other Parliamentary Committees.

Professor Barlow is currently associate director of research and evaluation for Imperial College Health Partners, and works with the executive boards for the NIHR Northwest London CLAHRC and the Department of Health Policy Innovation Research Unit. He also sits on the advisory board for the Guy's and St Thomas' Hospital Charity Strategy Committee.

He has published numerous books and journal articles, and his latest book, *Managing Innovation in Healthcare*, was published by World Scientific in January 2017.

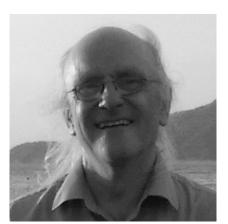
32 | IAFOR.ORG | EGen2019 | Follow us on Twitter @IAFOR (tweet about the conference using #IAFOR)

**Keynote Presentation: Nick Tyler** 

## "Design shall not wither them..."

Saturday, December 07 | 14:25-14:45 | Lecture Theatre 1

Ageing is basically a numerical construct. What happens during a person's life is that they change – from baby to toddler, to adolescent, to adult, and so on. At each stage, some characteristics are stronger and some weaker – some are in the stage of growing or developing and others are changing in different ways. An older person's sight changes but their life experience does as well, so that they could find better ways of meeting their needs. It is too simplistic to say that ageing simply means that things become worse. Our research starts from the concept of Capabilities – the comparison between what people can do, and what the environment requires them to do – and it is this mismatch that causes problems for people in terms of being able to do the activities they wish. By examining capabilities we learn what a person needs to be able to do to meet the requirements of their chosen activities and the environments in which they occur, and that then determines how we approach the design. This paper explains how we do this and the facilities we have had to design in order to achieve a better understanding of the needs of people throughout the lifespan in terms of their interactions with their immediate environment.



#### **Nick Tyler**

Professor Tyler, Chadwick Professor of Civil Engineering at University College London (UCL), was educated at the Royal College of Music, the Polytechnic of Central London (now the University of Westminster) and UCL. He worked as Operations Manager at Unichem Ltd (1984-1985) before joining UCL in 1987, holding appointments as Research Assistant, Lecturer, Senior Lecturer and Reader at UCL in the period from 1987 to 2002, when he was then appointed to a professorship. Since 2003, Professor Tyler has been the Head of the Department of Civil and Environmental Engineering (renamed Civil,

Environmental and Geomatic Engineering in 2007). He is also Director of the UCL CRUCIBLE Centre and UCL Accessibility Research Group. A Fellow of the Institution of Civil Engineers, Professor Tyler's notable appointments outside UCL include: Member of EPSRC Engineering Programme Strategic Advisory Team 2006; Member of the Chief Scientific Adviser's review team for the Department for Transport 2009; Member of the Advisory Panel for Infrastructure UK 2010; Adviser to the Chinese Government Ministry of Science and Technology on Low carbon transport (2010). He was appointed CBE for Services to Technology in the 2011 New Year's Honours list.



Dr Evangelia Chrysikou of UCL will make a provocation on the various topics raised in the plenary session. The other participants of the panel will then respond.



#### **Evangelia Chrysikou (Moderator)**

Evangelia is Lecturer (Assistant Professor) at the Bartlett Real Estate Institute, UCL in London, Program Director of the MSc Healthcare Facilities and medical architect. She rare PhD on mental health facilities from UCL and a former Marie Curie H2020 Fellow. She is also Vice-President of the Urban Health Section, EUPHA. Evangelia has been actively involved in policymaking, being Coordinator on D4 Action Group of the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA) of the European

Commission (EC) and consulted, on behalf of the EC, the Hellenic Ministry of Health and the Centre of European Constitutional Law on legislation regarding mental health facilities. Her work on therapeutic environments has received prestigious international awards (Singapore 2009, Kuala Lumpur 2012, Brisbane 2013, Birmingham 2014, London 2014, Vienna 2017, London 2019). Her research on mental health, ageing, accessibility and mental health, autism, social inclusion, healthcare, welfare and wellness facilities, medical architecture, medical tourism planning spans in several countries of the world (UK, France, Belgium, Greece, Middle East, Japan, New Zealand etc.). Currently, she is the PI at a Butterfield award of the Great Britain Sasakawa Foundation and a CoI at a Marsden Fund from the Royal Society of New Zealand. Evangelia authored the books 'Architecture for Psychiatric Environments and Therapeutic Spaces' & 'The Social Invisibility of Mental Health Facilities', a healthcare architecture editor, reviewer, active member of several professional and scientific associations and a TED-MED speaker. She is also Member of the Board at the Scholar's Association Onassis Foundation.

Presenters' biographies are available on the following pages: Paul Higgs (page 31), James Barlow (page 32), Nick Tyler (page 33).

# Saturday December 07

#### **Parallel Sessions**

Abstracts appear as originally submitted by the author. Any spelling, grammatical, or typographical errors are those of the author.

# 15:30-17:00 | Lecture Theatre 1 Saturday Session I

Lifespan Health Promotion Session Chair: Ian Spero

54861 15:30-16:00 | Lecture Theatre 1

Swallowing Changes in People with Parkinson's in Saudi Arabia: Perceptions and Practices Kholoud Alhussain, King Fahad Medical City, Saudi Arabia
Lindsay Pennington, Newcastle University, United Kingdom
Katie Brittain, Northumbria University, United Kingdom
Nicholas Miller, Newcastle University, United Kingdom

Purpose: To explore the experience of swallowing changes in people with Parkinson's (PwP) in Saudi Arabia and their impact on both PwP and their families. Method: This is a qualitative study, using semi-structured interviews with 39 participants PwP and their carers and a focus group with three speech and language therapists (SLT). The interviews and focus group were analysed using thematic analysis. Result: The main themes categories that emerged are 'the whole meal is awkward', 'we all have Parkinson's' and 'I leave it all to Allah'. There was a close link between cultural context and how eating and drinking changes manifested and impacted on individuals and families. The influence of Islamic beliefs was apparent in both the PwP and the caregivers' interviews. It shaped how they dealt with the disease, how they interpreted symptoms and change, their views on rehabilitation and their willingness to discuss the impact of swallowing changes with the interviewer. Conclusion: This study highlights how Saudi Arabian society has traditional mealtime customs for families and for older people in particular. An understanding of these socio-cultural factors is necessary to appreciate how the impact of eating and drinking changes in Saudi Arabia differs from impacts reported for other populations and the different implications this holds for rehabilitation of PwP. SLTs need to be aware of the cultural background of the person with Parkinson's when assessing their eating and drinking abilities. Considerations have to be made when recommending treatment plans or eating modifications.

55210 16:00-16:30 | Lecture Theatre 1 Health Expectancies of Older Sri Lankans Manori Weeratunga, University of Colombo, Sri Lanka

Sri Lanka's elderly population is increasing in an unprecedented manner as a result of the population's increasing life expectancy at birth. However, greater longevity does not guarantee better elderly health. Therefore, whether the additional years of life are also accompanied by good health has become a subject of intense interest. The objectives of this study are to estimate the healthy life expectancy of the elderly population in Sri Lanka, identifying the gaps between life expectancy at birth and healthy life expectancy and examining the reasons for such differences. This study was largely based on the healthy life expectancy proposed by the Sullivan Method and used both primary and secondary data. Healthy life expectancy is calculated using the life tables constructed by the Department of Census and Statistics for the period 2011-2013 and 2000-2002. In order to supplement the analysis, a sample survey of 300 elderly people and five case studies were carried out in the Gampaha district, Sri Lanka. When the difference between total life expectancy and health expectancy is investigated, the study found that on average men were in a disabled state for 0.8 years compared to 0.94 years for women in 2001. However, this difference has drastically increased in 2012, with 5.24 and 7.32 years for men and women, respectively. These results show that within 11 years women's morbidity has exacerbated compared to men. The study further revealed that lack of financial security makes elderly people vulnerable to unhealthy situations, especially in relation to widowed elderly women.

#### 55133 16:30-17:00 | Lecture Theatre 1

Pre-disease Processes Associated With Aging as a Target for Intervening Aging Progression into Disease Shaoyu Wang, Charles Sturt University, Australia Kateryna Antonova, Charles Sturt University, Australia

Aging is the single most prominent risk factor for many age-related diseases, such as neurodegenerative disease, cancer, and cardiovascular diseases. While one research avenue is to prevent, halt, or even reverse aging process per se, the other avenue is to prevent or halt the progress of the aging process into disease as within a branch of geroscience. We propose that in the latter case, the interactions between the normal aging process and environmental factors can give rise to precursors for developing into age-related pathologies, yet not committed to progression into any irreversible diseases. The environmental factors can be either within microenvironments (e.g. pro-inflammatory factors) surrounding cells, tissues and organs or derived from macro environments (e.g. temperature, pathogens and chemicals) external to the organisms. This precursor state may be reverted back to normal healthy aging if the environmental factors are beneficial to organisms. However, this precursor state may be progressed into age-related disease if the environmental factors are detrimental to organisms. It is during this state that effective intervention can be implemented. We will present examples of these states, including the one for neurodegenerative disorders and possible interventions. In such a case, axonal degeneration is a potential precursor developing into neurodegenerative disorders. This "precursors" hypothesis can be tested and eventually guide the intervention on aging-diseases progression.

#### 15:30-17:00 | Lecture Theatre 2

#### **Saturday Session I**

#### **Built Environment**

Session Chair: Stefano Capolongo

54729 15:30-16:00 | Lecture Theatre 2

System Innovations in Design for Aging – A Research-driven Multi-stakeholder Approach for Transforming Medical Systems

Jonas Rehn, Darmstadt University of Applied Sciences, Germany

In many cases design approaches use a systemic point of view in order to gain insights that inform the process of developing new products and services or improve existing ones. At its best, design uses research methods as well as scientific evidence and creativity tools to tackle wicked problems in fields such as sustainability or health care. However, in order to have a long-term and effective impact design approaches must not only use a systemic point of view for isolated innovations but need to create or at least facilitate system innovations. Following the ideas of Geels and Schot (2007), Kemp et al. (1998) and Bizer and Führ (2015), system innovations are created at the intersection of technological, social and institutional areas requiring a high level of stakeholder engagement and using a transdisciplinary mind set. While this approach is state of the art in current research on design for sustainability (Ceschin and Gaziulusoy, 2016), it offers great potentials for design in the context of health care and aging. This paper presents frameworks comprising of suitable methods and starting points for design research and practise to create, initiate and facilitate system innovations in the context of health and wellbeing.

#### 55224 16:00-16:30 | Lecture Theatre 2

Vulnerable Ageing Population with Mental Health Conditions Living in Modern Cities – Does Urban Renewal Have an Impact to Well-being?

Eleni Tracada, University of Derby, United Kingdom

Current debate amongst experts on ageing in urban environments focuses on how designers and planners can develop age-friendly cities or communities. Since 2007, World Health Organisation has been supporting 'active ageing by optimizing opportunities for health, participation and security in order to enhance quality of life as people age'. Thus, a global network of age-friendly cities has been launched and particular programmes supported by ongoing research are now focusing on planning of age-friendly neighbourhoods. Cities are aiming at provision of age-friendly services and engagement of local communities in making urban areas healthier and fully inclusive. The author of this paper reviews recent national and international initiatives, such as the ones mentioned above and then, concentrates especially to studies and proposals related to ageing population with conditions such as dementia. As members of a research cluster at their University, the author and her colleagues have set up aim and objectives of a range of research projects which focus on innovative proposals for integration of arts not only in health places, such as hospitals and hospices, but also in urban inclusive neighbourhoods. The author was recently involved with a project/survey of suburban areas of Derby that are in need of revitalisation; survey findings found that especially elderly with conditions in transient or immigrant communities are in desperate need of not only care, but also in need of new planning in areas they live.

#### 55357 16:30-17:00 | Lecture Theatre 2

Post-War Architectural Heritage for Contemporary Active Ageing

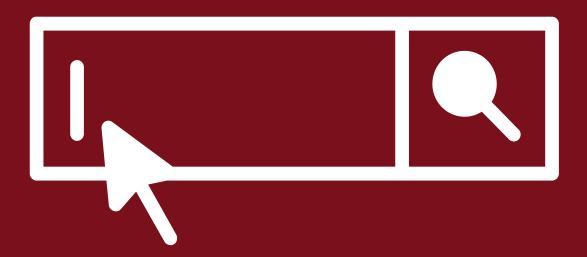
Christina Malathouni, University of Liverpool, United Kingdom

Several studies to date have explored the benefits of cultural heritage to human wellbeing. These have often focused on mental wellbeing and explored the benefits of engaging with heritage either as a visitor to heritage sites or museums, or as a volunteer in similar settings. Respectively, such benefits may derive from the development of a sense of belonging, or a sense of achievement and the satisfaction of being useful. The particular potential of architectural heritage has not received much attention to date. Participation in city tours or visits to buildings often offers the opportunity for a more active, yet not necessarily strenuous, engagement with built heritage which should be explored for various age groups. In this context, the proposed paper aims to focus on post-war architectural heritage and its possible benefits for contemporary ageing population. Contrary to lagging misconceptions about our most recent architectural heritage, its value is increasingly understood and appreciated not only by heritage and architecture professionals, but also by the general public. What is more, post-war architecture was created within the living memory of contemporary ageing population and can bear personal connotations which, in turn, can act as additional motivation for active engagement. The discussion will include an overview of campaigns to save controversial post-war buildings and how powerful the involvement of a range of different groups of the general public has been. In addition, it will discuss popular ways of exploring architectural heritage and reflect on possible enhancement of available options aiming at active ageing.

# iafor

### RESEARCH ARCHIVE

# www.papers.iafor.org



Visit the IAFOR Research Archive, where you can search and access the repository of research generated by IAFOR.

You can search by keyword(s), subject area(s), or specific conference proceeding(s) to access abstracts and full papers from past IAFOR conference proceedings, browse and read them online, or download them to your device.

# Sunday December 08

#### **Parallel Sessions**

Abstracts appear as originally submitted by the author. Any spelling, grammatical, or typographical errors are those of the author.

**Featured Presentation: James W. McNally** 

# Fear of Falling: Evaluating Elderly Fall Risks Across Multiple European Nations

Sunday, December 08 | 09:30-10:00 | Lecture Theatre 1

Programs such as the WHO age-friendly cities project has attempted to improve the overall quality of life and accessibility of urban environments for elderly residents, but many European cities present high risks and fall hazards to aged individuals. High curbs, cobblestone sidewalks, quickly transitioning crosswalk lights, and high-density sidewalk crowds offer multiple challenges to the elderly who routinely walk within an urban environment. This presentation examines data from the Survey of Health, Ageing, and Retirement in Europe (SHARE) study, a multinational comparative survey of ageing across 26 European nations and Israel. The presentation reviews the composition of respondents who have fallen in the past six months and compares it to respondents who feel they are at risk of falling. After a broad review of fall risks across Europe, the analysis will focus on falls as reported in four nations: France, Spain, Netherlands, and Germany. All four of these nations are long-standing members of the WHO age-friendly cities project. Because SHARE is a longitudinal study, we can look at changes in behaviors across time, allowing us to evaluate shifts in perceptions regarding the risk of falls. Looking at data from 2007 and the latest SHARE Wave in 2017 we will examine whether the active participation in programs aimed at creating a safer environment for the elderly within urban areas results in a measurable change in the perceived risk of falling among elderly respondents.



#### James W. McNally

Dr James W. McNally is the Director of the NACDA Program on Aging, a data archive containing over 1,500 studies related to health and the aging lifecourse. He currently does methodological research on the improvement and enhancement of secondary research data and has been cited as an expert authority on data imputation. Dr McNally has directed the NACDA Program on Aging since 1998 and has seen the archive significantly increase its holdings with a growing collection of seminal studies on the aging lifecourse, health, retirement and international aspects of aging. He has spent much of his career addressing methodological issues with a specific focus

on specialized application of incomplete or deficient data and the enhancement of secondary data for research applications. Dr McNally has also worked extensively on issues related to international aging and changing perspectives on the role of family support in the later stages of the aging lifecourse.

# 10:00-12:00 | Lecture Theatre 1 Sunday Session I

#### Interdisciplinary

Session Chair: Isaiah Durosaiye

55116 10:00-10:30 | Lecture Theatre 1

Multisensory and Embodied Art for People With Dementia at Logandene Care Unit

Louisa Williams, Art in Site, United Kingdom

Peter Shenai, Art in Site, United Kingdom

Art in Site has produced an art scheme to help improve wellbeing of patients and aid occupational therapists to deliver their care programmes at Logandene Care unit, which serves a patient group with early- and mid- stage dementia. When we spoke to carers, OTs, and staff, it became clear that there was a need for artworks that would encourage embodied, active, physical interactions: as one of the staff said, "we need environmental cues to help people to stand up, to become more aware of their bodies and environment... to investigate the world in the present". One of the chief nurses provided valuable insight into why this is so important: people with dementia need to engage in embodied activities - activities that stimulate along "vestibular, proprioceptive" lines - because this helps to kick-start cognitive functions and make them more alert. Thus there was a need to make interactive work that would encourage a range of embodied, physical interactions. Our scheme includes a set of interactive wall pieces, which encompass images, objects, sculptural forms, bright colours, and texture. Accompanied by handrails and placed around the unit at strategic points, these integrate with daily schedules, allowing for improvisatory bodily interactions - tugging, stroking, holding, twisting, sliding etc. The scheme has been designed in consultation with occupational therapists at the trust, optimizing it for use as part of their care programmes, facilitating multisensory experiments and bodily interactions with the environment.

#### 55185 10:30-11:00 | Lecture Theatre 1

Examining Well-being Among Older Persons With Disabilities Using Sen's Capability Approach: The Case of Trinidad Bephyer Parey, The University of the West Indies, Trinidad and Tobago

All persons have the right to an adequate standard of living as stated by the Universal Declaration of Human Rights. There is evidence however that older persons with disabilities experience neglect and exclusion which impacts on their well-being. Using Sen's capability approach, the aim of this paper is to examine well-being achievement among older persons with disabilities in Trinidad. A multiphase mixed methods design with three phases is employed. In the initial exploratory phase, functionings of importance are identified via 10 interviews and used to develop an instrument with both closed- and open-ended questions in the subsequent instrument development phase. In the third phase, this instrument is used to measure the extent of well-being achievement and identify its hindering factors. Based on 31 observations, the results indicate that well-being was not achieved fully, or even to a greater extent among the sample. The integrated findings suggest changes in social and health systems to promote well-being achievement among persons with disabilities in Trinidad.

#### 53698 11:00-11:30 | Lecture Theatre 1

The Long-Term Impact of Functional Disability on Hospitalization Spending in Singapore

Cynthia Chen, National University of Singapore, Singapore Woon Puay Koh, National University of Singapore, Singapore Ngee Choon Chia, National University of Singapore, Singapore Joanne Yoong, University of Southern California, United States Jian-Min Yuan, University of Pittsburgh, United States Tze Pin Ng, National University of Singapore, Singapore

Singapore is one of the fastest-aging populations due to increased life expectancy and lowered fertility. Lifestyle changes increase the burden of chronic diseases and disability. These have important implications for social protection systems. The goal of this paper is to model future functional disability and healthcare expenditures based on current trends. To project the health, disability and hospitalization spending of future elders, we adapted the Future Elderly Model (FEM) to Singapore. The FEM is a dynamic Markov microsimulation model developed in the US. Our main source of population data was the Singapore Chinese Health Study (SCHS) consisting of 63,000 respondents followed up over three waves from 1993 to 2010. The FEM model enables us to investigate the effects of disability compounded over the lifecycle and hospitalization spending, while adjusting for competing risk of multi-comorbidities. Results indicate that by 2050, 1 in 6 elders in Singapore will have at least one ADL disability and 1 in 3 elders will have at least one IADL disability, an increase from 1 in 12 elders and 1 in 5 elders respectively in 2014. The highest prevalence of functional disability will be in those aged 85 years and above. Lifetime hospitalization spending of elders aged 55 and above is US\$24,400 (30.2%) higher among people with functional disability compared to those without disability. Policies that successfully tackle diabetes and promote healthy living may reduce or delay the onset of disability, leading to potential saving. In addition, further technological improvements may reduce the financial burden of disability.

#### 55239 11:30-12:00 | Lecture Theatre 1

Measuring Disability Among Underserved Aging Minority Populations in the US: The Case of Pacific Islanders Sela V. Panapasa, University of Michigan, United States
James McNally, University of Michigan, United States

Our ability to engage in comparative research on patterns of disability among the aged, both in the United States and internationally has grown substantially over the past two decades. Unfortunately, this growing understanding of disability patterns has also illustrated the need for increasingly granular data on minority populations due to the inherent heterogeneity within broad racial and ethnic categories. One group that has particularly suffered from a lack of information has been the elderly Native Hawaiian and Pacific Islander population in the United States. Historically, this group has been chronically under-examined in the health literature and little to nothing is known about their patterns of disability or their needs for support services that encourage autonomy and independence. This paper uses the recently released NHPI-NHIS survey fielded by the Centers for Disease Control to explicitly collect health information on this underserved population. This nationally representative health survey is based on the National Health Interview Survey annually fielded in the United States and provides a wealth of information on health, socioeconomic and demographic characteristics of the US population. The paper examines, for the first time, patterns of Activities of Daily Living (ADLs) among Pacific Islander elderly and compares these results to the US population as a whole and major racial groups using the companion NHIS. This paper will be the first examination of elderly health patterns among Pacific Islanders using nationally representative data and will add to our collective understanding of health inequalities among the elderly in the United States.

#### 10:00-12:00 | Lecture Theatre 2

#### **Sunday Session I**

#### **Built Environment**

Session Chair: Christina Malathouni

54002 10:00-10:30 | Lecture Theatre 2

The Attractiveness of the Neighbourhood Park for the Elderly in Social and Perceptual Dimensions Associated with Psychological Benefit

Youmei Zhou, University of Sheffield, United Kingdom

Kevin Thwaites, University of Sheffield, United Kingdom

This study explores the attraction of neighbourhood parks to ageing people to maintain their mental and general health, and to examine the association between the attitudes older park users and the parks' social and psychological benefits. The value of green space has been widely studied, and benefits the health of the elderly, but we must also aim to engage them, drawing them into parks. Semi-structured interviews were conducted to establish older park users' views of their neighbourhood parks, with a sample of 418 respondents from five selected neighbourhood parks in Beijing. For this research, thematic analysis employed both quantitative and qualitative coding approaches using NVivo and SPSS to achieve reliable results. The older park users' experience of their parks' attractiveness was identified and integrated into a conceptual framework. Four types of social interaction were identified as meeting the social-psychological needs of the elderly. Gamma correlation analysis in SPSS shows that mid-level social interaction (doing an activity together) and a deeper level of social interaction (making friends) have a statistically significant positive impact on perceived psychological benefits like confidence, social networking and belonging; a good friendly perceptual dimension of neighbourhood park gives a statistically significantly positive impact on psychological benefit; lower-social interaction (staying with people in parks) also has a statistically significantly positive impact on the relief of loneliness. 72% of older participants showed a desire for friendship in a neighbourhood park.

#### 53908 10:30-11:00 | Lecture Theatre 2

Active Ageing Within the Long-term Care Facilities in Korea

Yumi Shin, Seoul National University, South Korea Hyun-Jeong Kim, Yuhan University, South Korea Jung-Hwa Ha, Seoul National University, South Korea

Active Ageing(AA), as described by the World Health Organization (WHO), focuses on "optimizing opportunities" and emphasizes the social integration and quality of life in old age. However, the concept of AA has not been examined in the context of frail older residents in long-term care facilities(LTCF). We conducted a qualitative study involving in-depth interviews with residents of LTCF(n=5), families of residents(n=3), staffs and owners of LTCF(n=21) and analyzed using directed content analysis. The results revealed that the concept of AA in LTCF involves optimizing opportunities for health, social participation, and security, the three basic pillars of WHO's policy framework for AA. However, the extent to which residents of LTCF can optimize opportunities for AA varied depending on their level of physical and cognitive functioning. Specifically, we found that there were three distinct groups: those who have poor physical and cognitive functioning and mostly bedridden, those who have good physical health but poor cognitive functioning level due to dementia, and those who are cognitively intact but have are limited in physical functioning, mostly due to stroke. Findings suggest that programs need to be developed to pursue social integration using the remaining functions for older residents who have limitations in either physical or cognitive health. For older patients who have limitations in both physical and cognitive functioning, practitioners can help them integrate with societies using the remaining senses such as vision, hearing, and tactile sensation.

#### 54005 11:00-11:30 | Lecture Theatre 2

Implementing Evidence-base and Inspiration Practice for the Development of Inclusive Mental Health Hubs in the Community

Eleftheria Savvopoulou, University College London, United Kingdom

Evangelia Chrysikou, University College London, United Kingdom

Mental Healthcare is a sociotechnical system including patients, staff, facilities, processes and medication. Emphasis remaining on jurisdictional processes and medical models retains stigma. Integrated and outpatient services enable early detection and support. This project, initiated by an NHS Mental Health Trust at a stage of building asset redevelopment, aimed at identifying both state of the art and inspirational elements in care to inform a multi-stakeholder and patient inclusive co-design process. Research followed a mix methods approach gathering data on best practice in community mental health facilities globally, with a consideration to the unprecedented ageing of the service user population. Literature review focused on multiple aspects of the environment. Then, best-practice was gathered from grey literature. Finally, we conducted interviews with international experts. The scope included healthcare provision excellence: evidence-base and design innovation. Buildings and practices employing challenging aesthetics and ideas were also included. Data were evaluated using the SCP model, a tool developed for the evaluation of psychiatric environments. Findings were organised under 32 key themes, further digested in two sections. The first comprised design learnings and the second visual material. Findings from key themes were subsequently organised in a matrix of design recommendations for wards and community mental health hubs. These fed the dialogue of designers, stakeholders, clinicians, and service users that followed. By treating design and place-making as therapeutic tool we could challenge the way people view mental health buildings. Creating the means to disrupt a normally segregated architectural dialogue was essential to this process.

#### 55218 11:30-12:00 | Lecture Theatre 2

Closed-Loop Living Models and Practices for Living Across the Lifespan

Larissa Lai, University College London, United Kingdom

Evangelia Chrysikou, University College London, United Kingdom

To age in place, the required infrastructure, capital, and services have to all be in place - this has proven to be especially difficult to sustain for vulnerable aging adult communities. This research aims to investigate the application of circular economy concepts and in particular closed-loop systems for potential solutions. These closed-loop systems exploit the possibilities of recycling and reusing resources instead of generating waste and leakage of capital. When applied to healthcare-oriented communities, these should employ practices associated with the communities' physical infrastructure as well as the provision of services, where residents exchange services, produce food and items necessary for daily living with the aid of automated systems and specialists within their own intergenerational communities. We examine relevant literature and existing projects that aim to operate in a closed-loop manner, including an Icelandic ecovillage, which will be studied and presented using anthropological methods. These practices will then be projected in an exploratory mode to create hypotheses for the development of tools to inform more effective aging communities that encourage mutual aid, socialization, participation in activities, and self-sufficiency, reaping with eco-psychosocial benefits for older adults that lead to better health outcomes - all with a decreased amount of inputs needed.

# 13:00-14:00 | Lecture Theatre 1 Sunday Session I

#### **Workshop Presentation Session**

53981 13:00-13:30 | Lecture Theatre 1

Supporting Entrepreneurship and Innovation in Silver Economy from an Intellectual Property Perspective: Do's and Don'ts

Yannis Skoulikaris, European Patent Office, Netherlands

In the framework of independence and interdependence, a number of technological developments aim at supporting autonomy and/or intra-group reliance of the aging population. The Silver Economy study prepared for the European Commission's DG Communications Networks, Content & Technology, clearly recommends supporting innovation of products and services targeted towards independent living in age-friendly communities, as well as supporting the digital revolution in health and care. Exploring and exploiting these innovative technologies does not come at zero cost. On one hand, substantial investments are needed, and on the other, resulting products have a demanding set of specifications. Against this backdrop, securing return on investment calls for effective protection of one's Intellectual Property (IP). This highly interactive, hands-on workshop will present the basics on protection of technological advancements' IP, explore how to go about these issues in a structured approach, and harvest the participants' own experiences and ideas on the issue. It can be either a standalone workshop or in combination with a number of papers on Silver Economy products, med-tech, pharma IP, specific devices or applications, which can be brought as case studies to the participants to work with. It is intended to compile and make available the outcome of the workshop's presentation material, insights and recommendations in a short report, with valuable, IP-related do's and dont's, useful for Academics, Researchers, Entrepreneurs and Olderpreneurs operating in the context of Silver Economy.

#### 54084 13:30-14:00 | Lecture Theatre 1

Developing an Interactive Mobile Phone Self-report App for Self-management of Fall Prevention of Elderly: Content and Usability Evaluation

Keren Mazuz, Hadassah Academic College Jerusalem, Israel

Digital interventions using M-health, such as Smartphone applications (apps), are becoming an increasingly common way to improve adherence to prevention treatments among elderly. Thus, it is important to investigate how elderly patients feel about and engage with these technologies. This paper based on a qualitative and quantitative study to explore elderly patients' perspectives and usability of a Smartphone app to improve adherence in fall prevention interventions. Falls remain an important risk factor for elderly worldwide; as the population gets older, more older people will fall but less tells their doctor despite the fact that falling once doubles your chances of falling again. This fall type called ""silent events"" and one out of five silent falls does cause a serious injury such as broken bone or head injury and hip fractures. The interactive self-report system app called Age TechCare facilitates patients' understanding of the interconnections between behavior, lifestyle and fall prevention. It designed to manage silent events by documenting them via a digital diary and recommending the user what is best to do to prevent fall. The app aims to increase the elderly know-how and self-responsibility to prevent falls. Knowing what happens and what to do can help to cut down a person's risk of falling. It was found that the mobile phone self-report system was reliable and perceived easy to use.

# 13:00-14:00 | Lecture Theatre 2 Sunday Session II

#### **Workshop Presentation Session**

#### 13:00-13:30 | Lecture Theatre 2

Designing in Accordance with Perception and Physiology: A Call for Paradigm Shift in Architecture to Include Vulnerable People and People Across the Lifespan

Evangelia Chrysikou, University College London, United Kingdom

Research on the silver economy supports that products and services enhancing autonomy and social cohesion is common denominator for successful enterprises, targeting both consumers across the lifespan and younger people who care for them. Policymaking focuses on such interventions mainly from medical-pharmacological and hi-tech perspectives. This presentation argues that policies and interventions for active and healthy ageing might benefit from a broader integration framework that would allow the whole spectrum of the environment to become part of the solution. This might be crucial for low tech components of the system, such as the building stock, which tend to be perceived as problem already solved. Yet, the fact that building infrastructure exists does not mean that all our buildings are fit for purpose or that in practice our built environment is friendly for people across the lifespan. These could be achieved through new architectural and design paradigms that contrary to the prevailing built environment education and practice, operate in harmony with human perception and physiology and especially with the perception and physiology of people across the lifespan. Through evidence base multidisciplinary research and architectural interventions informed by the complexities of human perception and physiology, the physical environment itself could join the integrated web of healthcare technologies that are currently included in the WHO definition.

#### 55363 13:30-14:00 | Lecture Theatre 2

Living Architecture: Learning from Time-based Performance Practices

Ava Fatah, University College London, United Kingdom

The human body can be used for all kinds of cognitive purposes, as simulation and modelling systems that enable us to project to unseen things that would otherwise be more difficult to access. Following on this, and as a response to one of the greatest challenges humanity currently faces: the ageing of the population, this paper calls to rethink the role of architectural education and suggest to provide new tools and methods to be incorporated into the architectural education that draw on the human body as a design material. This paper presents an attempt to foster new ways that extend beyond traditionally applied modes in architectural education and supports re-inventing it as a mediated spatial and social experience through integrating space, the body, digital media and computation within the studio context. Here, I suggest that to be able to capture, respond and regulate people's experience, understanding the human body and body movement, is key. This is especially critical within the context of an ageing population. The paper will outline my teaching approach within the context of the studio 'Body as Interface', which draws on lessons from time-based performance pedagogy and throws light on the nature of body-based design process and the explicit bodily involvement by designers as part of the design iterative process towards a time-based architecture. Donald Schon's concept of the 'knowledge in action' and Kirsh's concept of the 'thinking with the body' provide a useful framework for interpreting this teaching approach.

# 14:15-15:45 | Lecture Theatre 1 Sunday Session II

Lifespan Health Promotion Session Chair: Eleni Tracada

55451 14:15-14:45 | Lecture Theatre 1

Bioclimatotherapy as a Therapeutical Approach on Aging and Gerontology Sofia Tzouvara, National and Kapodistrian University of Athens, Greece Anastasios Philippou, National and Kapodistrian University of Athens, Greece

Climate affects human health more than any other environmental factor. Since ancient times, it was believed that some climates exerted a positive influence on health and served to reinforce human defensive system. Hippocrates is considered the creator and founder of this therapeutic field. Bioclimatotherapy is based on the adaptation to natural environmental factors and the relief from stressful climatic elements, and it is conducted in three bioclimatic zones (near the sea, in upland areas, in alpine regions), which differ in the intensity of their climatic stimuli. The main therapeutical methods are climatic terrain treatment, fresh air rest treatments, aerotherapy, heliotherapy, speleotherapy, thalassotherapy, mud therapy and balneotherapy. Bioclimatotherapy as a treatment is highly indicated in Aging and Gerontology, specifically in dermatological diseases (psoriasis, vitiligo, atopic dermatitis), rheumatological diseases (psoriatic arthritis, rheumatoid arthritis, spondylitis, fibromyalgia), respiratory diseases (asthma, chronic obstructive pulmonary disease, cystic fibrosis), psychiatric diseases, chronic fatigue and pain syndrome. Bioclimatotherapy has been widely used in Ancient Greece and now returns dynamically as a new approach on Gerontology and Anti-aging.

#### 53637 14:45-15:15 | Lecture Theatre 1

Advantages and Limitations of Older-adult Volunteers in Conducting a Well-being Course as 'Facilitators' in the Provision of a University's Open Studies in Japan

Naoko Suzuki, Tokushima University, Japan

As the proportion of those aged 65 and over has sharply risen in recent years, how to make use of their potential manpower as "volunteers" as well as "workers" has been generating an inordinate amount of attention in Japanese society. This study intends to indicate the advantages and limitations for older-adult volunteers by employing a case study of two female older volunteers. These women have launched a "well-being" course as a pair in the university's open studies programme, consisting of giving brief lectures on various topics and later facilitating small group discussions among the participants in order to stimulate their brains through social participation and conversation. The participatory observations and informal interviews with these older facilitators before and after the course were undertaken by the author, who was also supervising their roles as lecturers and facilitators in the process of the course. The study found that older volunteers can demonstrate competent leadership, particularly in facilitating effective conversations in each of the groups by referring to their life experience and vast knowledge of human nature. Yet, difficulties were observed in terms of classroom control, such as how to deliver a convincing speech, how to respond to unexpected reactions from participants, and how to treat those with special needs. It is therefore suggested that the institution seriously deliberate over and define the role of "volunteers" in this context and consider to what extent they should be further trained so as to be resilient in the face of a various kinds of challenge.

#### 54257 15:15-15:45 | Lecture Theatre 1

Epidemiological of Health Problem Among Elderly and Need Assessment for Developing Healthcare Environmental Services Program for Elderly People in Town

Sirima Mongkolsomlit, Thammasat University, Thailand Katiya Ivanovitch, Thammasat University, Thailand Nontiya Homkom, Thammasat University, Thailand

The purpose of this research was to studies the epidemiology of health problems, need assessment of health problems and factors associated with a health problem in elderly people in the town of Thailand. The study design was a cross-sectional study among 2,027 elderly people. The results found that the majority of elderly people were female (62.8%). There were 54.6% in the young-old group (60-69 years old), 31.6% the middle age-old group (70-79 years old) and 13.7% the old-old group (more or equal 80 years old). Almost of the elderly has underlying diseases around 80.9%, such as hypertension, diabetes, arthrosis, osteoarthritis, cardiovascular diseases, allergic rhinitis, asthma, and paresis. Physical health and mental health need assessment of the elderly in the town was health check-up 82.8%. Social environmental need assessment of the elderly was the elderly club 31.6% and activities for the elderly such as occupational training or exercised 15.9%. Moreover, elderly need for good waste management, community cleaning, and facility management. In conclusion, Health services provided for elderly people by local government should be offered promotion and support the activity both physical health, mental health, and social environment for quality of life among elderly people.

# 14:15-15:45 | Lecture Theatre 2 Sunday Session II

Resilience

Session Chair: Joseph Haldane

53661 14:15-14:45 | Lecture Theatre 2 The Daily Life of Caregivers Audrey Duceppe, University Laval, Canada Jean Vézina, University Laval, Canada

The purpose of this study is to investigate day-to-day fluctuations in burden and behavioral disorders, whether these two variables vary together day-to-day. A total of 27 caregivers of people with a major neurocognitive disorder were recruited in the community (age = 66,81 years old, 81,5% women, 81,5% spouse). These caregivers completed a behavioral problem observation grid for 28 consecutive days. This grid aims to specify the type of observed behavior (wandering, apathy, aimless activity, disinhibition, agitation, verbal and physical aggression) as well as the level of disturbance associated with each behavior. The cargiver's Burden Inventory was also completed during these 28 consecutive days. The multilevel analysis confirmed the hypothesis that the feeling of burden and the number of behaviors vary significantly from day-to-day. When this variance is integrated, it is possible to observe that the total number of daily behaviors significantly predicts the feeling of burden. In addition, the results demonstrate a significant random effect of time, suggesting that several trajectories are possible for the feeling of burden. These results indicate that the feeling of burden is far from being the static concept that is described in transversal studies. In addition to the number of disruptive behaviors, time is reveled to be an important indicator of the fluctuation of the feeling of burden. Interventions aiming at the caregiver's wellbeing should consider the dynamic composent of the caregiver's burden and the disruptive behaviors.

#### 54086 14:45-15:15 | Lecture Theatre 2

Progressing Understandings of Resilience Among Older Adults Experiencing Homelessness: A Conceptual Model for Research, Policy and Practice
Mei Lan Fang, University of Dundee, United Kingdom

Sarah Canham, University of Utah, United Kingdo Sarah Canham, University of Utah, United States Mineko Wada, Simon Fraser University, Canada

Current conceptualisations of resilience are ambiguous with no consensus on the definition nor agreement on how resilience is measured and experienced across populations and sub-groups. Yet, guidance on how to further understandings of resilience, and, develop research, policy and practice to consider resilience experiences across one of society's most vulnerable groups is sparse. Specifically, existing definitions of resilience are non-inclusive of the lived experiences of homeless older adults – individuals who have the most to offer in terms of progressing notions on how some people 'stand up' to adversity and 'bounce back' to a state of physical and psychological homeostasis across the life-course. To address this problem, we use data from a community-engaged research project that examined the health supports needed for individuals experiencing homelessness upon hospital discharge to develop a conceptual model of resilience – informed by Bronfenbrenner's ecological theory. In-depth interviews (October 2017 - January 2018) were conducted with 10 shelter/housing providers, 10 hospital-based social workers, and 20 persons with lived experience of homelessness in Metro Vancouver, Canada. Narratives of significant adversity were shared by those who experienced homelessness while accessing (or attempting to access) healthcare, and by those who provide support to persons without a fixed address at the time of hospital discharge. Amidst reported adversities and challenges were significant accounts of resilience at the individual and community levels. Such rich insights informed our conceptual model, which can be used to shape research, policy and practice (i.e. service provision) across high-income and lower- and middle-income societies.

#### 53991 15:15-15:45 | Lecture Theatre 2

Voices of the Unheard: Housing Older People in the Klong Toey Community in Bangkok, Thailand Isaiah Durosaiye, University of Sheffield, United Kingdom Sutida Sattayakorn, Kasetsart University, Thailand Karim Hadjri, University of Sheffield, United Kingdom Soranart Sinurraibhan, Kasetsart University, Thailand Junjie Huang, University of Sheffield, United Kingdom Supreeya Wungpatcharapon, Kasetsart University, Thailand

This paper presents a study on Klong Toey (KT), a community of informal settlements in Bangkok, located on a large land area owned by the Port Authority of Thailand (PAT), which plans to evict untenured families from its land. PAT is proposing three alternative housing solutions to the affected families. The first option is a cash compensation scheme, to help affected families purchase a housing. The second is the rehousing of the families in new 24-storey residential buildings. The third option is the relocation of the affected families, through the provision of land in the outskirt of Bangkok. A focus group undertaken with the affected families found that none of the options proposed offer a satisfactory solution. Housing, infrastructure and livelihood are interrelated for the families in KT, and these three domains play a crucial role in the health and well-being of its low-income older residents. Families have created a positive livelihood around their existing housing, with their home often supporting their economic activities, such as a grocery or household shops. While there is a recognition by the community to vacate their existing housing, attention should also be given to non-physical meanings of home, such as familial relationships, community support and social networks, all of which provide older urban residents in KT a sustainable livelihood and a sense of place.

Closing Panel Session: Dimitrios Buhalis, Maggie Ellis, Ian Spero & Peter McLennan. Moderator: Andrew Edkins

#### Smart Environments and Active Ageing: Empowering Travel and Quality of Life

Sunday, December 08 | 15:45-16:45 | Lecture Theatre 1

Prof Dimitrios Buhalis is going to make a provocation on the topic and then the other participants of the panel will respond so that a dialogue on the subject will be held both with the panel and the floor.



#### **Dimitrios Buhalis**

Professor Dimitrios Buhalis is a Strategic Management and Marketing expert with specialisation in Information Communication Technology applications in the Tourism, Travel, Hospitality and Leisure industries. He is Director of the eTourism Lab and Deputy Director of the International Centre for Tourism and Hospitality Research, at Bournemouth University in England. He is also Editor in Chief of the most established Journal in Tourism: Tourism Review, now the SSCI Journal is in its 74th volume. He is a well known international speaker on trends, technology, marketing, tourism and hospitality. Professor Buhalis is an inspirational

forward thinker that undertakes cutting edge research, develops innovations and makes a major impact to global society. For the period January 2016- September 2019, Buhalis was the Head of Department of Tourism and Hospitality, at Bournemouth University. Dimitrios is a Founding Member and past President (2010-2014) of the International Federation for Information Technologies in Travel and Tourism (IFITT). He served as the First Vice President of the International Academy for the Study of Tourism (2017-2019). He also served as an Executive Board Member of the United Nations World Tourism Organisation (UNWTO) Affiliate Members for the periods 2013-2015 and 2017-2019.



#### Maggie Ellis

Maggie Ellis has been at the London School of Economics (LSE) since 1999 where she has also been involved with EU R&D. MonAMI, and SOCIONICAL projects lead to new EU technology schemes as well as for contingencies and EU PPI implementation. Originally an occupational therapist, she managed physical disability and mental health services, and also served as Chairman of the British OT Association, the European OT Committee. Maggie was awarded Fellowships by RCOT and ISPO. She has organised both a Trade and a Ministerial Mission to Japan with their government. EU and ISO Technical Committee Membership brought wider experience linking user needs, planners, and policymakers. Her

most recent project at LSE (Enterprise) (2014-2019), where Maggie was Leader of the LSE Team, independently contracted to the Scottish Futures Trust to review and validate calculations and services that Trust provided to the Scottish Government. The review helped deliver 131 GBP million net benefits and savings to infrastructure investment in Scotland. [Continued on the following page.]

Maggie uses this background managing Rehabilitation at West Square Associates (WSA). Maggie is a Member of the CPG for Digital Inclusion and Disability, Holyrood and APPG Disability, Smart Cities, and Legal Aid in the UK Parliament.



#### lan Spero

A social entrepreneur with a deep knowledge of cause-related marketing, Ian Spero believes in the power of private/public sector alliances to improve lives.

Ian is founder and director of the Agile Ageing Alliance (AAA), a campaigning social business which aims to demonstrate that through innovations in technology, business and service models, our homes and neighbourhoods of the future can be reimagined to boost health and wellbeing, leading to a reduction in the financial burden on State and citizens.

A regular contributor to conferences, seminars, anthology and academic papers, Ian has published two influential white papers: Neighbourhoods of the Future and Better Homes for Older Adults – Improving Health, Care, Design and Technology, in 2017 and 2019.

Ian's professional interest in health and wellbeing began in 2011 when he established Creative Skills For Life, a research project enabling young people living with life-threatening conditions to come together and explore their creative potential as a catalyst for healing and personal development.

In 2013 Ian was commissioned by Innovate UK to co-design the innovation agencies "Long Term Care Revolution" programme, which aimed to transform late-life care from an "end of life" institutional model, widely regarded as unfit for purpose, to a dynamic market of innovative new products and services that offer people greater choice and flexibility of care when they reach later life. This experience was the catalyst leading to the launch of the Agile Ageing Alliance in 2015.

Ian currently serves as an Advisor and Monitoring Officer for Innovate UK, responsible for promoting commercialisation and safeguarding public investment in a diverse portfolio of public grant-funded early-stage business initiatives.

Ian has always maintained an active interest and passion for the arts and creative industries. A notable example is "RockCouture". With a view to raising funds and awareness for a pioneering new cancer care centre, Ian conceived and curated the RockCouture® collection, 150 electric guitars, personally customised by many of the biggest names in music, fashion, art and design. Following critically acclaimed exhibitions at the National Museum of Ireland, Galeries Lafayette Paris, and Harrods of London, illustrating the story of the electric guitar and its impact on pop culture, the guitars were auctioned for charity: www.rockcouture.tv

Previously Ian led Spero Communications, exploring innovative concepts in brand development, employing emerging technologies and new engagement channels to realise strategic objectives for major blue-chip brands, including the AA, BT, IBM, NEC, News Inc, Nortel, Toshiba, and Vodafone.

Ian has received commendations from among others: New York Festivals – awards for film and video; International Public Relations Golden World Award; IPR Sword of Excellence; PR Week Award; Revolution Magazine Award; BT Britain Award for Innovation; the Emerald Literati Network Award for Excellence; and IVCA (International Visual Communications Association), and Awards for Learning; Experiential Communication; and Entertainment.



#### Peter McLennan

Peter McLennan is senior Lecturer at the Bartlett School of Planning UCL. He is MSc Course Director in Facility and Environment Management at the Bartlett School of Graduate Studies and has been involved with that course since its inception in 1992 and has worked in all aspects of delivery and administration for the teaching and learning of this programme within the Bartlett. Since 2001 he has taken over the role as Course Director for the programme, which is accredited by both the British Institute of Facility Managers and the Royal Institute of Chartered Surveyors. He is also an associate member of the

British Institute of Facilities Management since 1999. His principle expertise is in teaching, research and consultancy through applied methods and techniques for creating and evaluating workplace and occupancy performance within the context of facility management and use. He has developed a number of empirically based commercial applications to assess, measure, and predict occupancy requirements, particularly the spatial aspects of occupancy, for building users. This approach was formalised in part as a research assistant on three EPSRC projects at UCL: adaptability potential of buildings (GR J99575) created a comparative tool for assessing the potential use of buildings; selective demolition (GR L14107), which reviewed the spatial reconfiguration during the change process; and refurbishment in occupation (GR L13971), which created a management framework for profiling health and safety risks. In addition, there are a number of commercially based projects under various consultancy arrangements looking at space and its use. All of this work involves understanding occupancy, the use of space to support human activities of buildings through time from planning to operations. He is co-editor of *Facility Management: risks and opportunities*, which highlights this perspective.



#### **Andrew Edkins (Moderator)**

Professor Andrew Edkins is Head of the Bartlett Real Estate Institute. His experience is purely projects - and complex or major ones in particular. After finishing his degree, he went on a graduate training scheme with the former John Laing plc and upon completion of that was proudly part of the team who built Chelsea & Westminster hospital (the first 'fast-track' major teaching hospital project for the NHS). His professional research career started in late 1996 after he had substantially finished his PhD and had been appointed as a junior faculty member at The Bartlett, working with Graham Ive on a funded research project

that eventually led to the book 'The Constructors' Key Guide to PFI'. He has worked on a number of funded research projects. The first major successes were in the area of risk management where he won two EPSRC grants. He has also done work as part of an EPSRC grant on international project performance comparisons (comparing almost identical facilities built in both the UK and France as part of the Channel Tunnel), for the National Audit Office. Most recently, he has been involved as part of a collaborative team comprising UCL and the University of Bristol in a research project commissioned by Infrastructure UK (part of HM Treasury) looking at potential interdependencies arising from proposed significant infrastructure projects in the UK.

# THINK.IAFOR.ORG

#### THE ACADEMIC PLATFORM

THINK.IAFOR.ORG is IAFOR's online magazine, launched in early 2016. THINK is an ambitious project conceived by academics, for academics, with the following objectives:

To provide an international, far-reaching platform for the best research presented at IAFOR conferences;

To make original, high-quality, thought-provoking multimedia content freely accessible to a wide readership;

To facilitate the opportunity for academics to step outside of the traditional research publishing status quo – to get creative, explore different disciplines and to have their ideas heard, shared and discussed by a diverse, global academic audience.

Content published on *THINK* spans a wide variety of disciplines and the format is varied, encompassing full research papers, long-form journalism, opinion pieces, creative writing, interviews, podcasts, video, photography, artwork and more. Current contributing authors include leading academics such as Professor Svetlana Ter-Minasova, Professor A. Robert Lee, Professor Bill Ashcroft and Professor J. A. A. Stockwin.

Get involved by visiting the website, following us on Facebook and Twitter and signing up to our e-newsletter.

facebook.com/ThinkIAFOR twitter.com/ThinkIAFOR

#### **SUBMIT TO THINK**

We are currently accepting submissions for publication in 2019. We welcome photographs to accompany articles, as well as topical photo-essays.

Submissions should be between 500 and 2,500 words and sent to publications@iafor.org. Please include "THINK submission" in the subject line.

50 | IAFOR.ORG | EGen2019 | Follow us on Twitter @IAFOR (tweet about the conference using #IAFOR)

# Reviewers

IAFOR depends on the assistance of a large number of international academics and practitioners who contribute in a variety of ways to our shared mission of promoting international exchange, facilitating intercultural awareness, encouraging interdisciplinary discussion and generating and sharing new knowledge. Our academic events would not be what they are without a commitment to ensuring that international norms of peer review are observed for our presentation abstracts. With thousands of abstracts submitted each year for presentation at our conferences, IAFOR relies on academics around the world to ensure a fair and timely peer review process in keeping with established international norms of double-blind peer review.

We are grateful for the time, effort and expertise donated by all our contributors.

#### **EGen2019**

#### **Review Committee**

Dr Evangelia Chrysikou
University College London, United Kingdom
Dr Isaiah Durosaiye
University of Sheffield, United Kingdom
Dr Christina Malathouni
University of Liverpool, United Kingdom
Dr Elena Petelos
CSFM, School of Medicine, University of Crete,
Greece
Mr Greg Williams
University of Manchester, United Kingdom

# EGen2019 Senior Reviewers

**Professor Sirima Mongkolsomlit** Thammasat University, Thailand

## EGen2019 Reviewers

Dr Junjie Huang
University of Sheffield, United Kingdom
Dr Bephyer Parey
The University of the West Indies,
Trinidad and Tobago
Dr Min Hooi Yong
Sunway University, Malaysia

# A-Z Index of Presenters

#### **A-Z Index of Presenters**

Alhussain, Kholoud	р. 36
King Fahad Medical City, Saudi Arabia	
Chen, Cynthia	p. 41
National University of Singapore, Singapore	
Chrysikou, Evangelia	p. 44
University College London, United Kingdom	. 46
Duceppe, Audrey	p. 46
University Laval, Canada	4.0
Durosaiye, Isaiah	p. 46
University of Sheffield, United Kingdom	40
Fang, Mei Lan	p. 46
University of Dundee, United Kingdom	- 44
Fatah, Ava	p. 44
University College London, United Kingdom	- 20
Kaluthantiri, Manori	p. 36
University of Colombo, Sri Lanka	- 40
Lai, Larissa	p. 42
University College London, United Kingdom	27
Malathouni, Christina	p. 37
University of Liverpool, United Kingdom	- 42
Mazuz, Keren	p. 43
Hadassah Academic College Jerusalem, Israel	- 40
McNally, James	p. 40
University of Michigan, United States	- 4E
Mongkolsomlit, Sirima Thammasat University, Thailand	p. 45
	n 41
Panapasa, Sela V.	p. 41
University of Michigan, United States Parey, Bephyer	p. 41
The University of the West Indies,	р. 41
Trinidad and Tobago	
Rehn, Jonas	p. 37
Darmstadt Universtity of Applied Sciences,	p. 51
Germany	
Savvopoulou, Eleftheria	p. 42
University College London, United Kingdom	p. 42
Shin, Yumi	p. 42
Seoul National University, South Korea	p. 42
Skoulikaris, Yannis	p. 43
European Patent Office, Netherlands	р. 40
Suzuki, Naoko	p. 45
Tokushima University, Japan	p. 10
Tracada, Eleni	p. 37
University of Derby, United Kingdom	p. 01
Tzouvara, Sofia	p. 45
National and Kapodistrian University of Athens,	p. 10
Greece	
Wang, Shaoyu	p. 36
Charles Sturt University, Australia	F. 00
Williams, Louisa	p. 41
Art in Site, United Kingdom	p
Zhou, Youmei	p. 42
University of Sheffield United Kingdom	

Notes	

# **Notes**

Notes	

# www.iafor.org/conferences Upcoming Events

#### Hawaii, USA, 2020

#### January 10-12, 2020

The IAFOR International Conference on Education – Hawaii (iicehawaii.iafor.org)

The IAFOR International Conference on Sustainability, Energy & the Environment – Hawaii (iicseehawaii.iafor.org)

#### Singapore, 2020

#### February 07-09, 2020

South East Asian Conference on Education (seace.iafor.org)

#### Tokyo, Japan, 2020

#### March 23-26, 2020

The Asian Conference on Education & International Development (aceid.iafor.org)

#### March 26–29, 2020

The Asian Conference on Psychology & the Behavioral Sciences (acp.iafor.org)

The Asian Conference on Ethics, Religion & Philosophy (acerp.iafor.org)

#### March 27-29, 2020

The Asian Conference on Aging & Gerontology (agen.iafor.org)

#### March 29 - April 1, 2020

The Asian Conference on Language (acl.iafor.org)

#### May 24–27, 2020

The Asian Conference on the Arts & Humanities (acah.iafor.org)

The Asian Conference on the Social Sciences (acss.iafor.org)

#### May 27–30, 2020

The Asian Conference on Cultural Studies (accs.iafor.org)

The Asian Conference on Asian Studies (acas.iafor.org)



#### London, UK, 2020

July 16-19, 2020

The European Conference on Education (ece.iafor.org)

The European Conference on Language Learning (ecll.iafor.org)

#### Osaka, Japan, 2020

August 03-06, 2020

The Osaka Conference on Education (oce.iafor.org)

#### Barcelona, Spain, 2020

September 17-20, 2020

The Barcelona Conference on Education (bce.iafor.org)

The Barcelona Conference on Arts, Media & Culture (barcelona-amc.iafor.org)

#### Tokyo, Japan, 2020

**October 30 - November 02, 2020** 

The Asian Conference on Education (ace.iafor.org)

November 01, 2020

The Asian Undergraduate Research Symposium (aurs.iafor.org)

November 05-08, 2020

The Asian Conference on Media, Communication & Film (mediasia.iafor.org)

# Introducing the IAFOR Research Centre at Osaka University, Japan

The IAFOR Research Centre (IRC) is a politically independent, international and interdisciplinary think tank based at the Osaka School of International Public Policy (OSIPP), at Japan's Osaka University, that conducts and facilitates international and interdisciplinary research projects. The main focus is to encourage mutual international and intercultural understanding and cooperation in line with IAFOR's mission of encouraging interdisciplinary discussion, facilitating heightened intercultural awareness, promoting international exchange, and generating and sharing new knowledge.

The IRC helps to nurture and capacity build by encouraging students to take part in international conferences and research projects, in line with the Osaka University's Global 30 commitments from Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT).

For more information about the IAFOR Research Centre visit: www.osipp.osaka-u.ac.jp/iaforresearchcentre/



THE IAFOR RESEARCH CENTRE
OSAKA SCHOOL OF INTERNATIONAL PUBLIC POLICY
OSAKA UNIVERSITY

大阪大学大学院国際公共政策研究科OSIPP IAFOR研究センター

