

SCIENCE OF CITIES: KNOWLEDGE COUNCIL



LEE TZU YANG

Designation

Chairman, Public Service Commission,
Singapore

**Country/Region**

Singapore, Asia

Expertise

Futures; Systems Thinking

Description

Mr Lee Tzu Yang was appointed as Chairman of the Public Service Commission on 1 Aug 2018 and from 14 Jan 2022 he concurrently serves as the Vice-President of the Judicial Service Commission and the Legal Service Commission. He is a Justice of the Peace and Chairman of the Board of Visiting Justices and Board of Inspection. He chairs the board of The Esplanade Company Limited as well as the board of the Singapore University of Technology and Design.

Mr Lee graduated from the London School of Economics and Political Science in 1976. He joined Shell in 1979 and retired as Chairman of Shell Companies in Singapore in 2014 after serving in operational, commercial and strategy functions in a range of markets. He was recognised by the Institution of Chemical Engineers as an Honorary Fellow in 2016.

In 2005, he was awarded the Bintang Bakti Masyarakat (Public Service Star), and in 2014 he was awarded the Pingat Jasa Gemilang (Meritorious Service Medal).

LUIS M.A BETTENCOURT

Designation

Professor, Inaugural Director, Mansueto Institute for Urban Innovation, University of Chicago, USA



Country/Region

USA, Americas

Expertise

Smart cities; Complexity science; Systems thinking; Urban science

Description

Luís M. A. Bettencourt is the Inaugural Director the Mansueto Institute for Urban Innovation at the University of Chicago and Professor of Ecology and Evolution. He is also Associate Faculty of the Department of Sociology and External Professor at the Santa Fe Institute. His research focuses on the identification, modelling and theory of the processes and properties that create and sustain cities. His work has been influential in developing new theory and creative approaches to challenges of urbanization worldwide. His new book Introduction to Urban Science (MIT Press, 2021) provides an interdisciplinary synthesis and vision for the future of cities.

VANESSA EVERS

Designation

Director, NTU Institute of Science and Technology for Humanity (NISTH), Singapore



Country/Region

Based in Singapore, Asia

Expertise

Social science; Citizen science; Digital humanities

Description

Vanessa Evers is a full Professor of Computer Science at Nanyang Technological University in Singapore and Director of the Institute for Science and Technology for Humanity. She is the founder of the DesignLab at the University of Twente, the Netherlands. Her research interests are: Social Artificial Intelligence, Impact of AI, autonomous systems and robots on society, and cross-cultural aspects of Human Machine Interaction. Vanessa has published approx. 200 peer-reviewed publications. She has presented her work internationally at high profile events such as the World Economic Forum in Davos (2016) and the European Heads of State Digital Summit in Tallinn (2017).

JOSEF HARGRAVE

Designation

Director and Global Foresight Leader,
Arup



Country/Region

UK, Europe

Expertise

Futures thinking; Scenario planning;
Circular Economy; Systems thinking

Description

Josef has a background in Biology, Innovation Management, and Corporate Foresight. He focuses on the trends and issues shaping the future of the built environment and their impact on design, strategy, innovation, and policy making. As Director and Global Foresight Leader, Josef is responsible for the delivery of foresight services and projects globally, working across Arup's Americas, Australasia, East Asia, Europe and UKIMEA regions. Josef is also an Associate Lecturer at Central Saint Martins University of the Arts London as part of the MA Innovation Management, a Trustee at the Museum of Architecture, and a member of the World Futures Studies Federation.

HIROO ICHIKAWA

Designation

Professor Emeritus, Meiji University /
Executive Director, The Mori Memorial
Foundation



Country/Region

Japan, Asia

Expertise

Urban policy; Risk management;
Urban and regional planning

Description

Hiroo Ichikawa is internationally active as a steering board member of Future of Urban Development and Services, World Economic Forum as well as a Chairman of working committee for the world-famous Global Power City Index (GPCI). He is presently a committee member of Governor Koike's policy making in addition to other planning works at Tokyo Metropolitan Government (TMG) more than 30 years. He specialises in metropolitan planning, crisis management and telework.

YING LONG

Designation

Tenured Associate Professor of Tsinghua University; Founding director of Beijing City Lab, China



Country/Region

China, Asia

Expertise

Urban science; Quantitative urban studies; Data augmented design and future cities

Description

Ying Long, Ph.D. is working in the School of Architecture, Tsinghua University, China as a tenured Associate Professor. His research focuses urban science, including applied urban modelling, urban big data analytics & visualisation, quantitative urban studies, planning support systems, data augmented design and future cities.

Before joining Tsinghua University, he worked for Beijing Institute of City Planning as a senior planner for 11 years. Familiar with planning practices in China and well-versed in international literature, he has published almost 200 papers and led over 20 research/planning projects. Dr. Long is also the founder of Beijing City Lab (BCL www.beijingscitylab.com), an open research network for quantitative urban studies.

PHILIPP RODE

Designation

Executive Director, LSE Cities,
London, UK



Country/Region

UK, Europe

Expertise

Urban Governance and Sustainability

Description

Philipp Rode is Executive Director of LSE Cities and Associate Professorial Research Fellow at LSE. He is co-director of the LSE Executive MSc in Cities and co-convenes the LSE Sociology Course on 'City Making: The Politics of Urban Form'.

As researcher, consultant and advisor, he has been directing interdisciplinary projects comprising urban governance, transport, city planning and urban design at LSE since 2003. The focus of his current work is on institutional structures and governance capacities of cities and on sustainable urban development, transport and mobility.

He is co-directing the cities workstream of the Global Commission on the Economy and Climate and has co-led the United Nations Habitat III Policy Unit on Urban Governance. He has previously led the coordination of the chapters on Green Cities and Green Buildings for the United Nations Environment Programme's Green Economy Report.

SANJEEV SANYAL

Designation

Secretary to Government of India;
Member of the Economic Advisory
Council of the Prime Minister, India



Country/Region

India, Asia

Expertise

Economics, Smart Cities, Complexity
Theory, Liveability

Description

Sanjeev Sanyal is currently a member of the Economic Advisory Council of the Prime Minister, and Secretary to Government of India. He was the Principal Economic Adviser to the Finance Minister for five years till February 2022. He has also represented India on many international forums such as OECD and G7, and was the Co-Chair of the G20's Framework Working Group. He was one of the main architects of the G20's Global Action Plan that was used to coordinate the international response to the Covid19 pandemic. Prior to joining the government, he spent over two decades in financial markets and was Global Strategist and Managing Director at Deutsche Bank.

An alumni of Shri Ram College of Commerce, Delhi, Mr. Sanyal later attended Oxford University as a Rhodes Scholar. He has had many affiliations including being a Visiting Scholar at Oxford University; an Adjunct Fellow at Institute of Policy Studies, Singapore; a Fellow of the Royal Geographical Society, London; Visiting Professor at Jawaharlal Nehru University, Delhi; Senior Fellow of the World Wildlife Fund. He was awarded the Eisenhower Fellowship in 2007 for his work on urban dynamics. In 2010 he was named as a Young Global Leader by the World Economic Forum in Davos.

Mr. Sanyal is the author of a number of best-selling books including Land of the Seven Rivers, The Ocean of Churn, India in the Age of Ideas, and the Indian Renaissance. He co-authored and edited six Economic Surveys of the Government of India between 2017 and 2022. He has also published over two hundred articles and columns in leading national and international publications.

JOHN A. SWEENEY

Designation

Senior Research Fellow, Westminster International University in Tashkent, Uzbekistan



Country/Region

Türkiye, Asia/Europe

Expertise

Futures Thinking: Scenario Planning

Description

Dr. John A. Sweeney is a Senior Research Fellow at Westminster International University in Tashkent, Uzbekistan where he also serves as a Visiting Professor.

Dr. Sweeney also teaches in the University of Houston's MA in Foresight programme. He currently serves as the Co-Editor of World Futures Review: A Journal of Strategic Foresight and as the Transformative Foresight Lead at the School of International Futures. Dr. Sweeney has worked directly in over 45 countries across five continents and online with international agencies and institutions, governments, corporations, and communities from all over the world.

DAVID WALLERSTEIN

Designation

Chief eXploration Officer,
Tencent

Country/Region

USA, Americas

Expertise

Smart cities; Technologies for
future cities



Description

Mr. Wallerstein's career has been defined by a desire to foster the healthy development of human relationships across national borders, and bringing next-gen technologies to market to increase human resilience.

He is Chief eXploration Officer (CXO) and Senior Executive Vice President of Tencent. He drives Tencent's participation in new technologies, business areas, research collaborations and ideas. Mr. Wallerstein has worked on building Tencent's international footprint and entrance into new business areas since 2001. Working with Naspers, he drove their early investment into Tencent and subsequently joined Tencent's executive team.

Mr. Wallerstein also worked with other multinationals in China and Japan in the 1990s, facilitating their investments and strategic planning. Mr. Wallerstein is the author of "Rearchitecting Earth: AI for FEW," and producer of the documentary film "Day Zero."

KONGJIAN YU

Designation

Professor and Dean, Peking University
College of Architecture and Landscape;
President, Turenscape



Country/Region

China, Asia

Expertise

Nature-based solutions; Ecological urbanism, Environmental design and engineering; Landscape architecture

Description

Kongjian Yu is a recipient of Doctor of Design from Harvard, Honorary Ph.D from Sapienza University of Rome and Norwegian University of Life Sciences, the 2020 IFLA Sir Geoffrey Jellicoe Award winner and member of the American Academy of Arts and Sciences.

He is Professor and Founding Dean of Peking University College of Architecture and Landscape, Founder and Design Principal of Turenscape. He is a strong advocator of ecological urbanism and sponge cities. His practices have won numerous international awards including 14 ASLA Awards, 5 WAF World Architecture Festival Best Landscape of the Year Awards.

ALEXANDER ZEHNDER

Designation

Partner, NanRise Pte Ltd Singapore;
Chairman, Scientific Advisory Board,
Singapore Centre for Environmental Life
Sciences Engineering; Founder &
Director, Triple Z Ltd



Country/Region

Switzerland, Europe

Expertise

Sustainability; Environmental system
science; Market mechanisms for
sustainable development and the water-
food-energy nexus

Description

Alexander J.B. Zehnder is a partner and co-founder of NanRise Pte Ltd (www.nanrise.sg), a spin-off of Nanyang Technological University of Singapore (NTU), a visiting professor at NTU, and professor emeritus of ETH Zurich.

He has served as President of the ETH Board of Directors, Scientific Director of the Water Resources of Alberta Innovates - Energy and Environment Solutions in Edmonton, Canada, headed the Swiss Institute for Aquatic Sciences and Technology (EAWAG), and has been a faculty member at Wageningen Agricultural University, the Netherlands, and Stanford University, USA. His specialty is sustainable production and use of natural resources. He is one of the founding fathers of the concept of the "2000-Watt Society".

URBAN RESILIENCE: KNOWLEDGE COUNCIL



LILY KONG

Designation

President, Singapore Management University (SMU)

Country/Region

Singapore, Asia

Expertise

Socio-cultural and urban geography



Description

Professor Kong is SMU's fifth President and the first Singaporean to lead the university.

Internationally known for her research on urban transformations in Asian cities, with particular focus on social and cultural change, Professor Kong has written extensively about communal relations, particularly, the intersection of religion and secularity in cities, creative industries/cities, urban heritage conservation, and smart cities.

In a global study by Stanford University (2020), Prof Kong was identified as among the world's top 1% of scientists in the field of Geography. She was included in the Forbes Inaugural 50 over 50 (Asia 2022) and Forbes Asia's Power Businesswomen list (2020).

RUTH BOUMPHREY

Designation

Chief Executive, Lloyd's Register
Foundation

Country/Region

UK, Europe

Expertise

Environmental protection,
engineering of critical infrastructure



Description

Dr Ruth Bumphrey is the Chief Executive at Lloyd's Register Foundation, a global charity protecting life and property and supporting education, engineering-related research and public engagement. In her previous role as Director of Research, she was responsible for a large portfolio of grants, direct charitable activities and accelerated innovation activities.

She has a PhD in ecotoxicology and experience in environmental protection, marine science and technology, and has previously held roles as the Head of Earth Observation for the UK Space Agency and as Head of International at the Natural Environment Research Council (NERC).

Ruth is Chair of the Welding Institute, is a Board member and trustee of the National Oceanography Centre, and previously was a Council member at Lancaster University. She sits on the National Preparedness Commission and the advisory board for the Journal of data-centric engineering. She is a founder and board member of EngineeringX: an initiative to promote excellence in international engineering for public good.

SØREN BRØNDUM

Designation

Managing Director for Ramboll

Country/Region

Denmark

Expertise

Energy, Buildings



Description

Søren Brøndum is Managing Director for Ramboll's global Buildings business. He has worked in Ramboll for 30 years, holding various leadership roles, and has been part of the Danish Executive Management in Ramboll Denmark since 2016. He is Chairman of the Board in Ørestad Innovation City (ØICC) and Member of the board and Chair of the Construction Committee in the Danish Association of Consulting Engineers (FRI).

Søren has played an instrumental role in driving strategic growth of Ramboll's global buildings business. He has been responsible for some of Ramboll's largest multidisciplinary and most complex projects during his more than 30 years of service in Ramboll. He is recognized for his international outlook, systemic thinking and expertise in holistic and sustainable development for the built and natural environment.

AMY CHESTER

Designation

Managing Director, Rebuild by Design

Country/Region

USA

Expertise

Resilience, Climate Change,
Community Participation, Design
Strategies



Description

Amy Chester works to create solutions for complex issues at the nexus of urbanism, politics, design, and community engagement. She is the managing director of Rebuild by Design, bringing its collaborative research and design approach to address climate challenges in cities in the U.S. and around the world.

Chester worked for NYC Mayor Michael Bloomberg where she was part of the team who created PlaNYC, the Mayor's sustainability agenda, and as the Chief of Staff to the Deputy Mayor for Legislative Affairs. Previously, Chester has worked at the NY City Council and more than a dozen electoral and issue-based campaigns, as well as working to build affordable housing for low-income New Yorkers.

EMI KIYOTA

Designation

Associate Professor, NUS Yong Loo Lin School of Medicine and NUS College of Design and Engineering; Director (Programmes), Health District @ Queenstown, and Advisor Corporate Infrastructure Office, National University Health System. Founder, Ibasho.



Country/Region

Japan, US

Expertise

Social resilience; Environmental gerontology; organisational culture change

Description

Emi Kiyota is Associate Professor, Yong Loo Lin School of Medicine and College of Design and Engineering at National University of Singapore, and Director (Program) of the Health District @ Queenstown. She is an environmental gerontologist with more than 20 years of experience in designing and implementing person-centred care in long-term care facilities and hospitals globally. In addition to making a vast array of contributions to national and international initiatives focused on quality improvement in the built environment for long-term care and aging services, Emi holds great concern for the needs of elders in the low-middle income countries. In 2010, she founded Ibasho, dedicated to co-create socially integrated, sustainable communities that value their elders, embodying in the Japanese concept of a place where one feels at home being oneself. Working with local elders in Ofunato, Japan, after the Tsunami 2011, she led the development of the first Ibasho project, a center for community recovery now being replicated in Philippines and Nepal.

Her current focus is on creating socially integrated and resilient cities where elders are engaged and able to actively participate in their communities. She has been awarded fellowships to investigate this topic, including the Loeb Fellowship at the Graduate School of Design at Harvard University, the Rockefeller Bellagio Residency Fellowship, Atlantic Fellowship for Equity in Brain Health at the Global Brain Health Institute at University of California, San Francisco. She holds a Ph.D. in architecture - Environment and Behavior Studies - from the University of Wisconsin-Milwaukee, a Master of Architecture and a Master of Science in Horticulture Therapy from Kansas State University.

UPALI NANDA

Designation

Global Director of Research, HKS. Assoc.
Prof of Practice, University of Michigan.

Country/Region

USA, Americas

Expertise

Human health & Wellbeing, Sensory
Design



Description

Dr. Upali Nanda is Principal and Global Director of Research for HKS, an international architectural firm where she spearheads and leads research projects globally. She also teaches as Associate Professor of Practice at the Taubman School of Architecture and Urban Planning at University of Michigan and serves as the Executive Director for the non-profit Center for Advanced Design Research and Education.

Her award-winning research around health and wellbeing, neuroscience and architecture, senshetics, point of decision design, and outcome-driven design has been widely published. She has won various research and innovation awards including the 2018 Women in Architecture Innovator Award.

BAMBANG SUSANTONO

Designation

Chairman, Nusantara National Capital Authority, Republic of Indonesia

Country/Region

Indonesia, Asia

Expertise

Development and Finance



Description

Dr. Susantono is the Chairman of the Capital City (Ibu Kota Nusantara - IKN) Authority, the future capital city of Indonesia, set to be inaugurated in 2024.

Prior to that, Dr. Bambang Susantono was the Vice-President for Knowledge Management and Sustainable Development of the Asian Development Bank (ADB). As Vice-President, Dr. Susantono was responsible for managing knowledge in ADB and coordinating research and studies on various topics such as energy, transport, water, education, health, finance, digital technology, and urban development, as well as cross-cutting nexus themes such as climate change, environment, governance, gender equality, social development, rural development and food security, and regional cooperation. He also coordinated ADB annual flagship publications, including the Asian Development Outlook, Key Indicators of Asia Pacific, and Asian Regional Economic Integration Report.

He has been a distinguished thought leader on sustainable development, published author and active researcher. He has also taught at several universities and leading research institutes. He holds a PhD in Infrastructure Planning, as well as Master's degrees in Transportation Engineering, and City and Regional Planning from the University of California Berkeley. Prior to ADB, Dr. Bambang was a former Vice-Minister of Indonesia's Ministry of Transportation and Deputy Minister for Infrastructure and Regional Development, Ministry of Economic Affairs.

PAUL TENG

Designation

Professor, Senior Adjunct Fellow at S. Rajaratnam School of International Studies non-traditional security. FAO consultant.



Country/Region

Singapore. Asia

Expertise

Resource; food resilience

Description

Professor Teng is Adjunct Senior Fellow, S. Rajaratnam School of International Studies, and concurrently Managing Director & Dean, NIE International Pte. Ltd., both of Nanyang Technological University Singapore. He is also Senior Adviser (AgriFood) to A*STAR Singapore. Paul previously held leadership positions in the Worldfish Centre, the International Rice Research Institute, Monsanto Company and U.S. universities. He is internationally recognized for his expertise in tropical agrifood systems, urban agriculture and food security. He has published widely and is a Fellow of The World Academy of Sciences and other professional societies and has an Honorary D.Sc. from Murdoch University, Australia.

WONG MUN SUMM

Designation

Co-founder and Director, WOHA

Country/Region

Singapore, Asia

Expertise

Sustainable design and architecture,
climate adaptive design



Description

Mun Summ Wong co-founded the Singapore-based architectural practice WOHA in 1994. He is a Professor-in-Practice at the National University of Singapore's Department of Architecture where he co-directs the Integrated Sustainable Design Masterclass. The Masterclass addresses the global sustainability crisis with an integrated interdisciplinary approach.

WOHA works at all scales, from interiors and architecture to public spaces and master plans. The practice sees their projects as active components that participate in larger urban and natural systems. Their projects foster community, enable stewardship of nature, generate biocentric beauty, activate ecosystem services and build resilience.

WOHA's recent award-winning projects include the Singapore Pavilion at the Expo 2020 Dubai, Kampung Admiralty and the Oasia Hotel Downtown

BRENDA YEOH

Designation

Raffles Professor of Social Sciences and Director for Humanities and Social Sciences, and Humanities and Social Science Research at NUS Office of the Deputy President



Country/Region

Singapore, Asia

Expertise

Migration research in Asia, including themes such as cosmopolitanism, gender and social reproduction

Description

Brenda S.A. Yeoh FBA is Raffles Professor of Social Sciences at the National University of Singapore (NUS) and Research Leader of the Asian Migration Cluster at the Asia Research Institute, NUS. She was recently awarded the prestigious Vautrin Lud Prize (2021) for her outstanding achievements in the field of Geography.

Her research interests include the politics of space in colonial and postcolonial cities as well as a wide range of migration research in Asia including cosmopolitanism and highly skilled talent migration; gender, social reproduction and care migration; migration, national identity and citizenship; globalising universities and international student mobilities; and cultural politics, family dynamics and marriage migrants.

YOO YOUNG SOOK

Designation

Chairperson of the Climate Change Center (Former Minister of the Environment, Republic of Korea)



Country/Region

Korea, Asia

Expertise

Governance towards local carbon cities

Description

Dr. Yoo Young Sook is the Chairperson of the Climate Change Center. She also took the role of the Minister of the Environment for the Republic of Korea and the Vice President of the Korea Institute of Science & Technology.

As a representative female leader of Environment and science in South Korea, she has been presenting a balanced view with broad knowledge and experience in three spheres, as a former government official, scientist, and representative of civil society, which contributes to promoting a livable and sustainable country by building the trust of the population towards the environment and influencing the willingness of policymakers to act on scientific advice to response climate change.

ZHU DAJIAN

Designation

Head of Shanghai Tongji University
Department of Public Management and
Policy, Director of Institute of Governance
for Sustainable Development



Country/Region

China, Asia

Expertise

Policy and planning framework for
sustainable urban development,
circularity and resilience

Description

Dr Zhu Dajian is Distinguished Professor and Vice Chairman of University Academic Committee at Tongji University in Shanghai. His research interests include sustainability science, circular economy and low-carbon economy, urban development and governance. He was awarded the Circular Economy Leadership Award by World Economic Forum in 2016. He is a member of Urbanization (2010-2012, Circular Economy (2014-2016), Sustainability Governance (2014-2016), and Future of Production (2016-2018) under the Global Agenda Council of the World Economic Forum (WEF), and as Board member of the International Society of Ecological Economics (ISEE)(2017-2018).