

► 15 – 18 JAN 2018 ◀

UNDERSTANDING AND COMMUNICATING RISKS: FACTS, FEARS, AND FALLACIES

EXECUTIVE EDUCATION

► INTRODUCTION ◀



People face risks in their everyday lives. We make decisions that can have an impact on their safety and security, health, finances, well-being, and the environment. But often, our decisions are based less on empirical evidence and objective probabilities, and more on our gut feelings, emotions, and biases. For instance, we are vulnerable to framing effects, we tend to emphasise losses more than gains, we pay undue attention to vivid and memorable risks even if the actual probabilities are miniscule, and we are influenced by popular stories and myths. These biases may affect experts in business and policy makers in government as much as they affect the average citizen.

Managers and professionals in the private sector, as well as policy analysts and regulators in the public sector will all benefit from a better understanding of their risks and how such risks should be communicated to the public. This is crucial for developing a better-informed and more discerning citizenry, and for inoculating citizens against unfounded fears and fallacies.

This four-day programme by the Lee Kuan Yew School and the Lloyd's Register Foundation for the Public Understanding of Risk at the National University of Singapore will help participants accurately and intelligently analyse risks in their respective domains; appreciate how people commonly perceive risks; and communicate their risks to stakeholders, citizens/consumers, and the general public.

► KEY INFORMATION ◀

Date & Duration

15 – 18 January 2018 (4 DAYS)

Venue

Lee Kuan Yew School of Public Policy
National University of Singapore

(469C Bukit Timah Road Singapore 259772)

Programme Fees*

- › S\$4,800 + 7% GST#
- › S\$4,320 + 7% GST# (10% group discount for 3 or more participants)
- › S\$3,840 + 7% GST# (20% discount for LKY School Degree Programme/ Executive Education Programme Alumni)^

Applications

Please submit completed Application Form & CV

(Refer to enclosed form for more details)

Deadline for Applications

01 December 2017

Contact

Executive Education Department
Lee Kuan Yew School of Public Policy

Tel: (65) 6601 5774 / (65) 6601 1183

Fax: (65) 6872 9291

Email: lkysppoe@nus.edu.sg

* Fee is based on per-person basis and includes food, refreshments, site visits, and learning support materials. Overseas participants should arrange their own visa, travel insurance, travel costs from Singapore, accommodation, transport, and cover their living expenses while in Singapore. The LKY School does not provide scholarships or financial aid for this programme.

Goods and Services Tax (GST) is applicable for Singapore-based participants and overseas participants who are self-funded or sponsored by a Singapore organisation.

^ All discounts are not cumulative and only one of them (the greater) is granted at a time. Alumni discount can only be used once per year. Nominees from non-profit and non-governmental organisations may qualify for sponsorships. Please contact us for more details.

▶ PROGRAMME OBJECTIVES ◀

This programme will help participants to:

- › **Understand** the various statistical techniques used in risk analysis and how they are used to communicate risk assessments
- › **Appreciate the various factors** that contribute to how an individual or group perceives risks
- › **Appreciate the impact of risk communications** on people's perception, analysis and management of risks
- › **Apply this knowledge** to design sound risk communication messages
- › **Explore the impact** of technology and social media on risk communication
- › **Communicate** in effective, efficient, and persuasive ways

▶ TARGET AUDIENCE ◀

The programme is specially designed for professionals in the public, private, media, and non-profit sectors who have to communicate risk to their customers or citizens, stakeholders or shareholders, and/ or the general public. It is especially relevant for professionals working in the areas of health, food and product safety, environmental risks, finance, infocomm technology, and safety and security. Policy analysts who have to develop or implement policies to help citizens manage risks will also find this programme useful. Finally, individuals who wish to deepen their understanding and skills in risk management and communication will also benefit from attending this course.

▶ PROGRAMME FOCUS ◀

Topics to be covered include:

Day 1 — Quantitative Reasoning

- › Key Concepts in Probability and Statistics
- › Thinking Probabilistically
- › Drawing Inferences from Data: Common Fallacies and Pitfalls
- › Risk Analysis for Complex Systems

Day 2 — Risk Perception

- › Managing Risks in Complex Systems
- › How People Perceive Risks
- › Over-reacting and Under-reacting to Risks

Day 3 — Risk Communication

- › Need for Effective Risk Communication
- › The Four Basic Styles of Communication
- › Fischhoff's Developmental Stages
- › Risk Communication as a Strategic Activity

Day 4 — Risk Communication in Practice

- › Risky Decisions: Apparent Irrationalities in Mass Behaviours
- › Measuring Risk Perceptions and Cross-Cultural Differences
- › Communicating Environmental Risks
- › Communicating Risk in Social Media

▶ APPLICATION FORM ◀

Application deadline: 01 December 2017

UNDERSTANDING AND COMMUNICATING RISKS: FACTS, FEARS, AND FALLACIES 15 – 18 January 2018

All fields are compulsory

› Participant Details

MR/MS/DR/OTHERS* (If others, please specify) _____

FIRST NAME _____ LAST NAME _____

DESIGNATION _____ DEPARTMENT _____

ORGANISATION _____

ADDRESS OF ORGANISATION _____

NATIONALITY _____ OFFICE NUMBER _____

EMAIL ADDRESS _____ MOBILE NUMBER _____

DIETARY RESTRICTION (IF ANY) _____

NO. OF YEARS OF RELATED EXPERIENCE _____

› Programme Expectation

MOTIVATION FOR JOINING THIS PROGRAMME (1–2 sentences)

DESCRIBE YOUR CURRENT ROLE IN YOUR ORGANISATION (1–2 sentences)

› Payment Details

Programme Fees*:

[] S\$4,800 + 7% GST#

[] S\$4,320 + 7% GST# (10% group discount for 3 or more participants)^

[] S\$3,840 + 7% GST# (20% discount for LKY School Degree Programme/ Executive Education Programme Alumni)^

Please indicate programme title and year of completion: _____

* Fee is based on per-person basis and includes food, refreshments, site visits, and learning support materials. Overseas participants should arrange their own visa, travel insurance, travel costs from Singapore, accommodation, transport, and cover their living expenses while in Singapore. The LKY School does not provide scholarships or financial aid for this programme.

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Mode of Payment:SPONSORED BY INDIVIDUAL OWN ORGANISATION OTHER ORGANISATION

Please state the Sub-BU Code if sponsored by Singapore government agency:

Payment Contact:

FIRST NAME _____ LAST NAME _____

DESIGNATION _____ DEPARTMENT _____

ORGANISATION _____

BILLING ADDRESS _____

EMAIL ADDRESS _____ OFFICE NUMBER _____

How did you hear about this programme (You may select more than one option):

 PREVIOUS PROGRAMME PARTICIPANT LKY SCHOOL ALUMNI LKY SCHOOL WEBSITE LKY SCHOOL SOCIAL MEDIA LKY SCHOOL EMAIL/ NEWSLETTER INTERNET SEARCH PROGRAMME BROCHURE OTHERS: PLEASE SPECIFY: _____

Please indicate below if and how you wish to be contacted for future updates of LKY School programmes and events:

 OFFICE NUMBER EMAIL NO, I DO NOT WISH TO BE CONTACTED**› Cancellation Policy and Important Notes**

Kindly complete the Application Form and submit together with a copy of participant's CV either by email or post. The LKY School reserves the right to determine the final list of participants taking diversity into account.

Once confirmed, should the participant cancel four (4) weeks before the programme, the LKY School will charge the participant or the sponsoring organisation a cancellation fee equivalent to 50% of the programme fee. LKY School reserves the right to postpone or cancel the programme by giving at least 14 days notice.

Please note that photography, audio and video recording may occur during the programme. All photography, audio and video recording may be used for the purpose of LKY School's marketing, publicity purposes in print, electronic and social media. If you do not wish to have your image recorded or published, for compelling and legitimate grounds relating to your particular situation, please inform us via email before the start of the programme. LKY School shall not be responsible for photographs and/or videos taken by unauthorized persons during the programme.

By signing this application form, you agree that LKY School and NUS may collect, use and disclose your personal data, as provided in this application form, for the following purpose in accordance with the Personal Data Protection Act 2012 and our data protection policy:

› Disclosure and transfer of your data to third party service providers, agents and/or our affiliates or related corporations that provide administration, data processing, computer or other services to LKY School and NUS.

Please visit our website at <http://www.nus.edu.sg/legal-information-notice> for further details on our data protection policy, including how you may access and correct your personal data or withdraw consent to the collection, use or disclosure of your personal data.

I have read the above and accept the terms.

Applicant's Signature**Date**Send your application materials to us by email or post. Put "**UNDERSTANDING AND COMMUNICATING RISKS: FACTS, FEARS, AND FALLACIES**" as the email subject line or on the envelope flap.You can also submit your application **ONLINE**. Visit www.lkyspp.nus.edu.sg/executive-education/ for more details.**► FACULTY & SPEAKERS ◀**

The programme will be taught by international faculty of the Lee Kuan Yew School of Public Policy, and by distinguished guest speakers and panelists.

Yap Von Bing*Assistant Professor, Department of Statistics and Applied Probability
National University of Singapore*

Yap Von Bing has two degrees from NUS: B.Sc. (Hons) in Mathematics (1996) and an M.Sc. in Applied Mathematics (1997, supervised by Dr Goh Say Song). He got a Ph.D. in Statistics from the University of California in 2002. After a postdoctoral fellowship at the University of California, he joined the Department of Statistics and Applied Probability in 2004. His main interest is applied statistics: the interface between statistical theory and science, especially on molecular evolution, comparative genomics and ecology. He enjoys talking about mathematics, statistics and science with anyone age 8 to 88.

Robert Wasson*Senior Research Fellow
Lee Kuan Yew School of Public Policy*

Robert Wasson is a Senior Research Fellow in the Lee Kuan Yew School of Public Policy at the National University of Singapore. Trained as a geomorphologist he began his career doing fundamental research into processes of landform creation, landscape history, and climate change. At ANU, he became Head of the Department of Geography and Human Ecology, Dean of Science, and then Director of the Centre for Resource and Environmental Studies. These positions allowed him to return to research in Asia where he has worked in India, Pakistan, Nepal, Thailand, Myanmar, Indonesia, China, Malaysia, The Philippines, and Timor Leste. During this time he served on many Australian Government water and land advisory committees, and continued his work with the International Geosphere and Biosphere Program (becoming Deputy Chair of the Science Committee) and the International Human Dimensions of Global Change Program.

Another change occurred when he became Deputy Vice Chancellor Research at Charles Darwin University in the Australian tropics prior to joining NUS in 2011. This management role enabled some understanding of the workings of higher education policy and practice.

At NUS he has focused on histories of floods and human vulnerability to floods in northern Thailand, the Indian Himalayas, and northern Australia using multi-disciplinary methods and with many collaborators.



► FACULTY & SPEAKERS ◀

Hawye Auyong

*Research Fellow, Case Study Unit
Lee Kuan Yew School of Public Policy*

Hawye Auyong is a Research Fellow at the Case Study Unit of the Lee Kuan Yew School of Public Policy. He develops case studies that are used in public policy courses.

He has a Master of Science in Engineering Management from Cornell University and a Bachelor of Science in Electrical Engineering from the University of Illinois at Urbana-Champaign. His research interests include developmental economics, labour policy, and industry development.

He was previously a strategist at the Ministry of Trade and Industry's Futures Group and Assistant Head in the Electronics Cluster at the Economic Development Board.

Baruch Fischhoff

*Howard Heinz University Professor, Department of
Engineering and Public Policy
Institute for Politics and Strategy
Carnegie Mellon University*

Baruch Fischhoff is Howard Heinz University Professor, Department of Engineering and Public Policy and the Institute for Politics and Strategy, Carnegie Mellon University.

A graduate of the Detroit Public Schools, he holds a BS (mathematics, psychology) from Wayne State University and a PhD (psychology) from the Hebrew University of Jerusalem. He is a member of the National Academy of Sciences and of the National Academy of Medicine and has served on many NAS/NRC/NAM committees. He is past President of the Society for Judgment and Decision Making and of the Society for Risk Analysis. He has chaired the Food and Drug Administration Risk Communication Advisory Committee and been a member of the Eugene (Oregon) Commission on the Rights of Women, the Department of Homeland Security Science and Technology Advisory Committee and the Environmental Protection Agency Scientific Advisory Board, where he chaired the Homeland Security Advisory Committee. He is a Fellow of the American Psychological Association, the Association for Psychological Science, the Society of Experimental Psychologists, and the Society for Risk Analysis. His books include *Acceptable Risk*, *Risk: A Very Short Introduction*, *Judgment and Decision Making*, *A Two-State Solution in the Middle East*, *Counting Civilian Casualties*, and *Communicating Risks and Benefits*. He has co-chaired three National Academy Sackler Colloquia on the Science of Science Communication.

Donald Low

*Associate Dean (Research and Executive Education)
Lee Kuan Yew School of Public Policy*

Donald Low is Associate Dean (Research and Executive Education) at the Lee Kuan Yew School of Public Policy. Besides leading the School's executive education efforts, he also heads its case study unit. His research interests at the School include economics in public policy, inequality and social spending, behavioural economics, public finance, organisational change, and governance and politics in Singapore.

Prior to his current appointment, Donald served fifteen years in the Singapore government. He held various senior positions, including the director of fiscal policy at the Ministry of Finance and the director of the Strategic Policy Office at the Public Service Division. He also established the Centre for Public Economics at the Civil Service College of Singapore to advance economics literacy in the Singapore government.

Donald is the editor of *Behavioural Economics and Policy Design: Examples from Singapore* (2011), a pioneering book which details how the Singapore government has applied ideas from behavioural economics alongside standard economics in the design of public policies. His most recent book, *Hard Choices: Challenging the Singapore Consensus* (2014), raises searching questions about the long-term viability of many aspects of governance in Singapore, and argues that a far-reaching and radical rethinking of the country's policies and institutions is necessary, even if it weakens the very consensus that enabled Singapore to succeed in its first 50 years.

Leong Ching

*Co-Director
Institute of Water Policy
Lee Kuan Yew School of Public Policy*

Leong Ching obtained her PhD in Public Policy from the Lee Kuan Yew School of Public Policy. She is the recipient of the Wang Gung Wu Medal and Prize winner 2013, (Best PhD Thesis in Humanities and Social Sciences). She has previously worked as a newspaper and television reporter and has graduate degrees in philosophy, information technology and journalism.

Her research interests include water policies, public sector reform, and communication strategies. Her current research project includes examining the impact of communication on the implementation of water policies, narratives and third-party governance.

► FACULTY & SPEAKERS ◀

Reuben Ng

Assistant Professor

Lee Kuan Yew School of Public Policy

Reuben Ng trained as a behavioural scientist at Oxford and Yale as a Fulbright Scholar. He spent 15 years in government, consulting, and research. In government, he was the Deputy Director in the Prime Minister's Office driving evidence-based policy making through data analytics, and Smart Nation strategies. In consulting, he built the advanced analytics practice at a Fortune 100 firm as an Associate Director, and implemented complex analytics projects across industries (e.g., government, banking, consumer goods) and functions (e.g., strategy, HR, operations).

Reuben is an expert in preventive healthcare of older adults, population health analytics, psychometrics, resilience and culture. He is credited with creating innovative techniques to measure societal perceptions/stereotypes that are applied to social policy, and program evaluation. His applied policy research has been recognised by grants/ awards from the US National Institute of Aging, American Psychology Association, and featured in major Singapore newspapers including The Straits Times, Business Times, TODAY, Lianhe Zaobao. He is also the first Singaporean to receive the International Fulbright Science and Technology Award, the first non-British recipient of the UK Social and Economic Research Council (ESRC)'s Neville Butler Prize (runner-up) awarded at the Houses of Parliament in London, and the youngest winner of an Early Research Career Award from the International Council of Psychologists. He has over 50 journal/conference papers, taught extensively in Asia & US, and was nominated for teaching awards at Quinnipiac and Yale.

Lye Lin-Heng

Associate Professor

Faculty of Law

National University of Singapore

Lye Lin-Heng graduated in law from the University of Singapore, and holds Masters degrees in law from the University of London (King's College) and Harvard University. She is an Advocate & Solicitor of the Supreme Court of Singapore and is Director of the Law Faculty's Asia-Pacific Centre for Environmental Law (APCEL). She was Vice-Dean and Director of the Faculty's Graduate Programme from 1995-1998. She chairs the University's Inter-Faculty Programme Management Committee on the multi-faculty Masters in Environmental Management (MSc (Env Mgt)) programme hosted by the School of Design and Environment. She is a member of the Land Titles (Strata) Board, and was a former board member of the Housing Development Board and the Tenants' Compensation Board. She was a member of the Ministry of Environment's Committees on Environmental Education and on Waste Minimization and Resource Conservation in the Revised Singapore Green Plan 2012. She is a member of the Technical Committee on National Drinking Water Quality Standards, National Environment Agency, Ministry of Environment and Water Resources.

She is a member of the Board of Governors of the IUCN Academy of Environmental Law, and co-chair of its Teaching and Capacity-Building Committee. She is a resource person in capacity-building programs conducted by the World Bank, the Asian Development Bank and the Ministry of Environment, Singapore. She has presented papers at conferences worldwide including Australia, Belgium, Brazil, Chile, China, Germany, Holland, Hong Kong, Indonesia, Korea, Macao, the South Pacific, United Kingdom and the United States. She teaches at the University of Sydney's Law School and is Visiting Associate Professor at Yale University's School of Forestry & Environmental Studies.

Tracy Loh

Senior Lecturer, Department of Communications and New Media

National University of Singapore

Tracy Loh received a Bachelor of Arts in Mass Communication and Sociology from the National University of Singapore, a Master of Science in Sociology from the University of Bristol, England as well a Master of Communication Studies from the Nanyang Technological University, Singapore. She completed her Doctor of Philosophy from Cornell University, USA. Her research interests lie in breaching the boundaries between sociology and communication.

Before entering academia, Tracy has also spent many years working in the fields of advertising, public relations and marketing communications. Her experience lies mainly in the hospitality and food and beverage industries as well as in the music industry.

EXECUTIVE EDUCATION

LEE KUAN YEW SCHOOL OF PUBLIC POLICY

National University of Singapore
469C Bukit Timah Road
Singapore 259772



LKYSPP.nus.edu.sg



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