

# Contributors

**Lilian Alessa, BSc, PhD, PRegBiol**, is President's Professor and Director of the Center for Resilient Communities at the University of Idaho. She has worked as Deputy Chief for Global Strategies at the U.S. Department of Homeland Security, and as a Defense Intelligence Senior Level (DISL) Special Advisor with the U.S. Office of the Director of National Intelligence. Trained as both a physical and social scientist, she currently works as an expert advisor to strengthen security and defense resilience in both Canada and the United States. Among her many achievements, she also pioneered human sensor community-based observing networks (CBONS) and developed the only arctic freshwater resilience assessment index, which is used to enhance infrastructure and resource security, particularly for remote and Indigenous communities. She received her PhDs from the University of British Columbia and sits on several national advisory committees including the Science, Technology and Education Advisory Committee for the National Ecological Observing Network.

**Tom Anderson, PhD**, is a Senior Research Associate in the School of Computing and Communications, Lancaster University. As an Engineer, Organizational Psychologist, and Consultant, he has held technical, advisory, and strategic roles in safety critical industries, such as nuclear and oil and gas. His particular research interest relates to the human and organizational factors that contribute to, and impact on, safety and resilience in high-risk industries.

**Rosanne Anholt, MSc**, is Assistant Professor of Public Administration at the Department of Political Science and Public Administration at the Vrije Universiteit Amsterdam, the Netherlands. She is currently finalizing her PhD, which deals with the meaning of resilience in the context of international policies and practices around security, humanitarian aid, and development assistance. She is also a Board Member of the Dutch Foundation for Peace Studies.

**Devin G. Atallah, PhD**, Assistant Professor of Psychology, Racial/Cultural Focus, with Psychology Department, University of Massachusetts Boston. Atallah aims to engage

decolonizing, qualitative, and community-based participatory approaches to critical inquiry. As an activist, scholar, practitioner, and healer, Atallah focuses on better understanding and supporting intergenerational resilience, resistance, healing justice, and decolonization journeys. Atallah aims to honor and anchor his work in local or Indigenous knowledge of communities in struggle contesting racism and settler colonialism, primarily within his long-term partnerships with communities in Boston, Massachusetts, USA; Bethlehem, Palestine; and Santiago de Chile.

**Susan Ayers, BSc, MSc, PhD**, CPsychol is a psychologist and professor at City, University of London in the Centre for Maternal and Child Health Research. Her research examines women's perinatal mental health, in particular posttraumatic stress disorder and high-risk groups such as parents who have preterm or stillborn babies. She is a founder of the International Network for Perinatal PTSD and author of *Psychology for Medicine and Healthcare*, and an editor of the *Cambridge Handbook of Psychology, Health and Medicine*.

**Roxanne Bainbridge, PhD** is from the Gunggari/Kunja nations of South-Western Queensland. She is a Professorial Research Fellow in Indigenous Health at Central Queensland University Australia and an inaugural Senior Atlantic Fellow for Social Equity (University of Melbourne/Oxford). With a background in medical anthropology, she focuses on culturally constructive critiques of the biomedical sciences and policymaking to provide new understandings of human health, wellness and illness, and, identify the highest leverage points for change opportunities to improve the health and prosperity of Aboriginal and Torres Strait Islander nations. Roxanne's methodological expertise is in community-driven, high-impact applied research embedded in participatory action-oriented research approaches and improvement and systems sciences. She is committed to improving the integrity and quality of research to maximize its impact and benefit to society.

**Olivier Barreteau, PhD** is senior water scientist. He has about 25 years of experience of interdisciplinary research at the interface between hydrology, modeling, and management sciences in projects on local water governance, using social simulation with Agent based modeling and role playing games. His recent works focus on joint adaptive management of land and water in the frame of global changes with issues of interdependences between local adaptation plans. He is committed to interdisciplinary research, keeping a strong link between policymakers, water users, and research on the long term.

**Elena Bennett, PhD** is a professor in the Department of Natural Resource Sciences and McGill School of Environment at McGill University in Montreal, Canada. Her work focuses on multifunctionality and resilience of working landscapes (agriculture, forestry, fisheries, and energy development). Learn more about her work at [bennettlab.weebly.com](http://bennettlab.weebly.com).

**Ana Berástegui, PhD** is a professor of Psychological Intervention in Contexts of Social Exclusion and a director of University Institute for Family Studies (Pontifical Comillas University). She is also the Family and Disability Chair at Pontifical Comillas University and is the co-founder of *Primera Alianza: enhancing early attachments*, a brief, group intervention program to enhance parental sensitivity and early attachment among caregivers

of preschool children, in the context of social exclusion. Her research interests cover family diversity and child welfare and development including adoption, disability, gender, and social exclusion issues. Berástegui has published five research monographs and over 50 journal articles and book chapters.

**Kara Boles** is a second-year MA student in the Clinical Psychology program at Lakehead University. Her research interests include parent–child relationships, pediatric health/wellness, parenting practices, resilience, wellness intervention, mental health, and addictions. Her MA thesis is testing a moderation model focused on childhood adversity, executive function, and functional impairment in emerging adults.

**Bruno Bonté, PhD** has a doctorate in computer science. He is interested in the modeling and simulation of complex systems, using, and participating in the development of, integrative tools at the level of formalisms (based on the Discrete Event System Specification formalism), at the conceptual level (based on the multiagent system paradigm, and at the level of the use of modeling and simulation for collective decision-making (based on the companion modeling approach). His recent research focuses on multiscale simulation of socioecological systems, with applications to the management of water resources and territories subject to global change.

**Francois Bousquet, PhD** is an environmental social scientist who looks at the interactions among diverse actors for the management of the environment and renewable resources. He is interested in the analysis of multiple perspectives and looks at how dialogues between heterogeneous actors who have different points of views, attachments, and different power can favor desirable trajectories for social and ecological systems.

**Katrina Brown** is Professor Emerita at the University of Exeter. She has a long-standing commitment to interdisciplinary analysis of environmental change and international development using a social-ecological systems lens. Her research focuses on vulnerability, adaptation and resilience, and poverty and well-being. She is interested in how people understand, perceive, and respond to environmental and other changes, and her work takes a broadly defined political ecology approach. Her widely acclaimed research monograph, *Resilience, Development and Global Change* (Routledge, 2016) proposes a revisioning of resilience to meet contemporary international development challenges and how this might inform deliberate transformative change.

**Nicole Bush, PhD** is an Associate Professor and the Director of the Division of Developmental Medicine in the University of California–San Francisco Department of Psychiatry and Behavioral Sciences and the Department of Pediatrics. She is a licensed clinical child psychologist and oversees research examining how early social contexts interface with individual differences to affect developmental trajectories of risk and resilience. She also investigates how contextual experiences of adversity become biologically embedded, thereby shaping individual differences that influence the effects of context on mental and physical health. These projects, in conjunction with her intervention work, aim to inform policies to enhance individual and community resilience and reduce population health disparities.

**Juliana Santos de Carvalho, LLM** is former Research Assistant to the Institute for Societal Resilience at the Vrije Universiteit Amsterdam. She is currently a PhD student in International Law at the Graduate Institute of International and Development Studies. She holds an LLM cum laude in Law and Politics of International Security at the VU Amsterdam. She is a licensed lawyer in Brazil, with a Bachelor of Laws summa cum laude from the Universidade Federal do Rio Grande do Norte.

**Carmel Cefai, PhD** is the director at the Centre for Resilience and Socio-Emotional Health, and Professor at the Department of Psychology at the University of Malta. He is Honorary Chair of the European Network for Social and Emotional Competence, joint founding editor of the *International Journal of Emotional Education*, and a member of the European Commission Network of Experts on Social Aspects of Education and Training. He has led various local, national, European, and international research projects in social and emotional learning, mental health in schools, and resilience and well-being in children and young people. He has published extensively, including *RESCUR Surfing the Waves: A Resilience Curriculum for Early Years and Primary Schools*.

**Janine Natalya Clark, PhD, MA, LLB** is a Professor of Gender, Transitional Justice, and International Criminal Law at the University of Birmingham. Her research interests include conflict-related sexual violence, transitional justice, resilience, ethnic conflict, and reconciliation. She is currently the Principal Investigator of a five-year research project, funded by the European Research Council, about resilience and victims/survivors of conflict-related sexual violence. The aim is to develop a new ecological model of transitional justice that fosters resilience. Clark has published three research monographs and over 60 journal articles and book chapters. She has been conducting fieldwork in the former Yugoslavia for more than 15 years.

**Gabriella Conti** holds a PhD in Economics from the University of Essex, London; Co-Investigator of the 1958 British Birth Cohort; and Research Fellow of the Institute for Fiscal Studies. Her research areas are health economics, the economics of human development, and biology and economics. Her research draws on both the biomedical and the social sciences with the aim of understanding the developmental origins of health inequalities, the role of child development as input in the production of health, and the behavioral and biological pathways through which early life shocks, investments and policies have health consequences throughout the life course. She has published in prestigious journals in different disciplines, such as *Science*, *Lancet*, *PNAS*, *Pediatrics*, *International Journal of Epidemiology*, the *Economic Journal*, and the *Journal of Econometrics*. She has recently been awarded the Nick Hales Award from the International Society for Developmental Origins of Health and Disease, and a five-year ERC Consolidator Award from the European Research Council.

**Barbara Cosens, BS, MS, JD, LLM**, is a University Distinguished Professor with the University of Idaho College of Law. Her teaching and research expertise is in water law, the law–science interface, and water dispute resolution. She is faculty on the University of Idaho Water Resources IGERT and WSU INFEWS both focused on climate change in the Columbia River Basin. She co-chaired the Adaptive Water Governance project made possible through

support from the National Science Foundation–funded National Socio-Environmental Synthesis Center, SESYNC, and spent spring 2015 as the Goyder Institute in Australia comparing water law reform in the western United States and Australia during drought.

**Monique Crane, PhD** is a senior lecturer at Macquarie University, a registered psychologist, member of the Australian Psychological Society, and academic member of the College of Organisational Psychologists. She directs a program of research seeking to understand human resilience, particularly in the military context and has worked with the Australian Defence Force since 2010. Crane has developed a new generation of resilience training based on accumulating research and theoretical advancements implicating the critical role of self-reflection and coping insight in strengthening resilience.

**Boris Cyrulnik, PhD** is a neuropsychiatrist and Lecturer at the Marseille Faculty of Medicine, and former Director of Teaching at the University of Toulon. He is renowned for his research on early human interactions and the acquisition of protective or vulnerable factors. Since 1995, he has lead multiple research groups on resilience and in 2004 was the recipient of the Jean Bernard Prize of the Foundation for Medical Research. He has also served as the Dean of the psychological center of the National School of Magistracy (since 2009) and has been awarded several honorary doctorates from the Universities of Mons-Hainaut (2001), Lima (2008), Louvain (2009), and Laval (2010). He is the author of 30 general public essays on resilience (and received the Renaudot Prize in 2008 for this work) and a large number professional books on clinical practice related to this theme.

**Lauren Dalicandro, MA** is a first-year PhD student in the Clinical Psychology program at Lakehead University. Her research interests include addictions and substance use, with a focus on improving intervention effectiveness and cultural fit. Her master's thesis focused on a program evaluation of a culturally adapted parent management program for Indigenous youth and their families in Thunder Bay, Ontario. Her research work is partially supported by an Ontario Graduate Scholarship.

**Caroline van Dullemen, PhD** is lecturing public affairs and she is fellow of the Institute of Societal Resilience, an interdisciplinary research institute at the Vrije Universiteit Amsterdam. Her field of expertise is demography and migration. In 2017 she published the *Politics of Aging, the Risk of Old Age Poverty in Emerging Countries*, in which she brings together the analytics of four country studies and the different ways aging is managed. Earlier, she founded World Granny, an organization focused on improving the quality of life of older people in Africa, Latin America, and Asia. As a result, van Dullemen specializes in financial inclusion for older generations and currently assists the United Nations in the Pacific to realize micro pension schemes for the informal sector. Before, she worked for the Ministry of Foreign Affairs for almost 10 years and was Managing Director of the Academic Bureau of the Green Left Party.

**James S. Famiglietti, PhD** is a hydrologist, a professor and the Executive Director of the Global Institute for Water Security at the University of Saskatchewan, where he holds the Canada 150 Research Chair in Hydrology and Remote Sensing. He is a fellow of the

American Geophysical Union and of the Geological Society of America. Prior to moving to Saskatchewan, he served as the Senior Water Scientist at the NASA Jet Propulsion Laboratory at the California Institute of Technology. From 2013 through 2018, he was appointed by Governor Jerry Brown to the California State Water Boards. Jay and his team have been researching and communicating about water and climate change for over 30 years.

**Timothy Ferris, PhD** is a Senior Lecturer in systems engineering at Cranfield University. He has been an academic since 1991, having had previous experience in the electricity supply industry and in small scale manufacturing. His research interests include systems engineering education, resilience in systems engineering, research methods, and financial analysis for systems engineering

**Mehdi Ghazinour, PhD** is professor of Social Work and has studied different dimensions of psychological trauma. He is Medicine Doctor of Science, licensed psychotherapist in cognitive behavioral therapy, an approved clinical supervisor and trainer. He has over 20 years of experience working with individuals and families in outpatient clinics with experience of severe traumatic life event and posttraumatic stress disorder. He studied individual strategies for managing stress and trauma to understand and identify the factors that explain why some individuals retain their health despite traumatic life experiences while others develop psychological and psychiatric disorders. For couple of years he was deputy head and director of police research environment at Umeå University. He is at the moment guest professor and head of center for police research and practice in Linne University in Sweden. His work now focuses on policing and security services to help officers develop and maintain resilience.

**Antonios Gouglidis, PhD** is a Lecturer in Computing at Lancaster University. His research aims at the integration between theoretical and applied security, toward designing secure and resilient systems. He has published more than 30 papers in international journals, conferences, and workshops. Currently, he investigates security and resilience mechanisms for application in cloud systems and critical infrastructures. More specific topics of research are access control in the cloud, formal verification (model checking) of models and policies, and resilience processes in critical infrastructures.

**Michele Grossman, PhD** is Professor of Cultural Studies and Research Chair in Diversity and Community Resilience at the Alfred Deakin Institute for Citizenship and Globalisation, Deakin University in Melbourne, Australia, where she also leads the Centre for Resilient and Inclusive Societies and the AVERT (Addressing Violent Extremism and Radicalisation to Terrorism) Research Network. Her research and publications focus on community dimensions of preventing and countering violent extremism. She has held major research grants from Australian, British, Canadian, U.S. and European research councils and funding agencies and is a Robert Schuman Fellow (Distinguished Scholar) at the European University Institute in Florence.

**Chloé Guerbois, PhD** after obtaining a Master in Ecology in Paris, flew to Zimbabwe in 2009 to do a PhD on the management of protected areas. Living among elephants and subsistence farmers on the edge of Hwange National Park, she started to learn empirically about

people and resilience. This undisciplined journey led her to the Garden Route in 2015 to study adaptation to global change in coastal areas. Since then her research navigates between human–nature relationships, the dynamics of social-ecological systems and transformative conservation.

**Victoria Hailey** is a Certified Management Consultant. Her organization, VHG (Victoria Hailey Group Corporation; [www.vhg.com](http://www.vhg.com)), helps organizations “engineer trust.” Her research includes emerging technologies that close the responsibility gap in achieving ethical and socially-responsible outcomes reflective of healthy triple bottom lines. She is an ISO Lead Auditor/Instructor (including ISO 22301 BCMS) and was international convener of ISO/IEC 90003 and inaugural chair of IEEE/SSIT/SC.

**Pilar Hernández-Wolfe, PhD** is Professor in the Marriage, Couple, and Family Therapy program at Lewis and Clark College in Portland, Oregon and guest faculty at the Universidad Javeriana, Cali in Colombia. She is a licensed marriage and family therapist and American Association for Marriage and Family Therapy–approved supervisor. She pioneered the concept of vicarious resilience in the context of torture survivor treatment in the United States and mental health services addressing politically based violence. She is the author of numerous peer reviewed articles, chapters, and the books *A Borderlands’ View of Latinos*, *Latin Americans and Decolonization*; *Rethinking Mental Health*; and *La resiliencia vicaria en las relaciones de ayuda* (with Victoria Acevedo). As a consultant, trainer and presenter, she has collaborated with organizations in the United States, Colombia, and México in the areas of clinical supervision, traumatic stress, resilience, equity, and contextually responsive family therapy, the animal human bond, and eco-informed family therapy.

**Katharine F. E. Hogan** is a PhD student and research assistant at the University of Nebraska–Lincoln within the National Science Foundation research traineeship, Training in Theory and Application of Cross-Scale Resilience in Agriculturally Dominated Social Ecological Systems. Her research focuses on prairie restorations, plant community ecology, and ecosystem services. She enjoys musing on complex systems while on long walks with her dog and designing creative, interdisciplinary approaches to science communication.

**David Hutchison, PhD** is a Distinguished Professor of Computing at Lancaster University and the founding Director of InfoLab21. He leads a research group that is well known internationally for contributions in a range of areas including quality of service (QoS), active and programmable networking, content distribution networks, and testbed activities. His current research focuses on the resilience of networked computer systems, and the protection of critical infrastructures and services. He has served on the Technical Program Committee of many Association for Computing Machinery (ACM), Institute of Electrical and Electronics Engineers (IEEE), and International Federation for Information Processing (IFIP) conferences; on editorial boards of the Springer-Verlag Lecture Notes in Computer Science (LNCS), Computer Networks Journal, and the IEEE Transactions on Network and Service Management; and as Editor of the Wiley book series Communications Networking and Distributed Systems.

**Daniel Hyslop, MEcon**, is the Director of Policy and Learning at Interpeace, the International Organisation for Peacebuilding. Previously, he was the Research Director at the Institute for Economics and Peace where he led a wide research agenda on measuring peace, the economic costs of violence and understanding the drivers of positive peace. There, he led development of more than 50 research reports, including seven iterations of the Global Peace Index, a widely read resource on international trends in peace and conflict. He has also contributed to several international flagship studies on peace and fragility with the OECD, United Nations, and World Bank. He holds first-class honors Masters in Economics and Social Science from the University of Sydney.

**Scott Jackson, PhD** is an INCOSE Fellow and the author of the book *Architecting Resilient Systems: Accident Avoidance, Survival and Recovery from Disruptions* (Wiley, 2010). He is an independent researcher and consultant working with aircraft companies around the world to help them incorporate systems engineering in their organizations. He was awarded a PhD by the University of South Australia for his research and findings into the principles for achieving resilience in engineered systems.

**Raffael Kalisch, PhD** graduated in Human Biology at the University of Marburg, with a work on molecular-cellular neuroscience performed at Ecole Normale Supérieure, Paris. He subsequently moved into systems neuroscience, obtaining his PhD with a work on a rat model of anxiety at the Max Planck Institute of Psychiatry, Munich. After positions at the Wellcome Department of Imaging Neuroscience, London, and the University Medical Center Hamburg-Eppendorf, he became a professor of Human Neuroimaging at Johannes Gutenberg University Medical Center, Mainz. He is a founding member of Deutsches Resilienz Zentrum and the founding spokesperson of the International Resilience Alliance (intresa).

**Miriam Kampa, PhD** received her doctoral degree in Psychology from the Johannes Gutenberg University Mainz in 2018. During her time as a PhD student in Raffael Kalisch's laboratory, she established and validated a behavioral and imaging test battery for the Mainz Resilience Project. In her current position as a postdoctoral researcher at the Bender Institute of Neuroimaging, she investigates the timing of extinction learning and supports the development of a multimodal stress reduction intervention. Miriam Kampa has a strong interest in replicability of functional neuroimaging results, contributing to the field with her research on reproducibility of group activations.

**Andrew Kliskey, BSurv, MRRP, PhD** is President's Professor, Director of the Center for Resilient Communities, and Idaho EPSCoR Director at the University of Idaho. Originally from Aotearoa/New Zealand he trained as a land surveyor, resource planner, landscape behavioral geographer, and landscape ecologist. He has spent the last 20 years working with people in Maori communities in New Zealand, Inupiat communities in northwestern Alaska, Denai'na communities in southcentral Alaska, and rural communities in Idaho examining community and landscape resilience. He is lead of the National Science Foundation Innovations at the Nexus of Food-Energy, and Water Systems project in the Upper Snake River Basin, Idaho.



**Kristy Kowatch, MA** is a third-year PhD student in Clinical Psychology at Lakehead University. Her research interests include culturally relevant mental health treatments for First Nation people, substance abuse as a form of self-medication, and resilience in childhood and adolescence, as well as responsible gambling in Northern Ontario and Indigenous populations. Her dissertation research examines the development, implementation, and evaluation of a transdiagnostic group intervention for First Nations children, relying on cultural skills and practices. Kristy's work is partially supported by a Canadian Institutes of Health Research Doctoral Award.

**Dongxue Lei** is a PhD candidate in Architecture at Nanjing University, China, and a Visiting Scholar at Parsons School of Design. Lei's research interests center on design studies, cognitive data visualization, and big interdisciplinarity. For her PhD research, Lei is focusing on the relationship between design interventions and social-ecological resilience in "wet" human-landscape environments within the lower Yangtze River Basin.

**Alexandros Lordos, PhD** is a Lecturer in Clinical Psychology at the University of Cyprus, and is one of the founders of the Centre for Sustainable Peace and Democratic Development, through which he established research partnerships with several international organizations, including UNICEF, the World Bank, Interpeace, United Nations Development Programme (UNDP), and USAID's Office for Transition Initiatives. He has served as principal investigator in research projects across several conflict-affected countries in Europe, Africa, and Asia, investigating the interplay between individual, community, and institutional factors in the emergence of social cohesion and societal resilience. At the University of Cyprus, he directs the Centre for the Study of Life Skills and Resilience, while contributing to the teaching and supervision of undergraduate and postgraduate students in the Psychology Department.

**Jessie Lund, MA** is a second-year PhD student in Clinical Psychology at Lakehead University. Her research interests include childhood adversity, sexual violence, and substance use. Her dissertation research examines executive functioning in relation to past adverse childhood experiences in First Nations adults with substance use problems. Jessie's work is partially supported by a Joseph-Armand Bombardier SSHRC Doctoral Scholarship.

**Feng Mao, PhD** is a lecturer in Environmental and Physical Geography at the School of Earth and Environmental Sciences, Cardiff University. He holds a PhD in Geography from University of Cambridge. His research focuses on interdisciplinary water sciences, with the aim of achieving water sustainability in the Anthropocene through ecological, social, and technical innovations, such as new tools for data collection and environmental modelling, improved knowledge of water-centered dynamics and interactions, and more adaptive governance strategies for global change.

**Ann S. Masten, PhD** Regents Professor of Child Development at the University of Minnesota, studies resilience in human development, particularly in the context of homelessness, war, disaster, migration, and other severe adversities. She is a past President of the Society for Research in Child Development and Division 7 (Developmental) of the American Psychological Association (APA), and a recipient of APA's Bronfenbrenner Award for

Lifetime Contributions to Developmental Psychology in the Service of Science and Society. She has authored more than 200 publications, including the book, *Ordinary Magic: Resilience in Development*. She offers a massive open online course on Coursera: Resilience in Children Exposed to Trauma, Disaster and War: Global Perspectives.

**Raphaël Mathevet, PhD** is an ecologist and geographer. He works on the conservation of biodiversity, protected areas and conservation planning tools, adaptive management, and the evaluation of public policies. He applies simulation tools in interdisciplinary and participatory approaches to resolving management conflicts, especially in the context of wetlands. His most recent work focuses on the concepts of ecological solidarity and stewardship, social-ecological resilience and adaptation, social representations, and mental models. During the last decade he focused on environmental history and political ecology of SES.

**Janya McCalman, PhD** is a Professorial Research Fellow and Program Leader of the Centre for Indigenous Health Equity at Central Queensland University in Australia. She is a National Health and Medical Research Council Fellow, recognized nationally for her contributions to research with schools, health and social services and community groups focused on resilience, empowerment, and mental health research to improve the well-being of Aboriginal and Torres Strait Islander Australians. Research outputs have focused on Aboriginal mental health and well-being, youth health, maternal and child health, health services research, systems integration, health promotion, and implementation research. Her methodological expertise lies in participatory and action-oriented quality improvement research approaches; grounded theory; systematic literature reviews; and research transfer and implementation.

**Fiona S. McEwen, PhD** is a postdoctoral researcher in developmental psychology and a study coordinator in the Department of Biological and Experimental Psychology at the School of Biological and Chemical Sciences, Queen Mary University of London. McEwen obtained her PhD in Psychology from the Institute of Psychiatry, Psychology and Neuroscience, King's College London, and has conducted research in neurodevelopmental disorders and developmental psychopathology. She currently coordinates two studies focusing on mental health in Syrian refugees living in Lebanon and leads a third project exploring measurement of psychopathology in Syrian refugee children.

**Katharine McGowan, PhD** is an assistant professor of social innovation at the Bissett School of Business, Mount Royal University in Calgary, Alberta. Her research spans several centuries and continents as she explores social innovation's past and present to understand its relevance to contemporary questions around Indigenous-settler reconciliation and climate change. Previously, Katharine was a postdoctoral fellow at the Waterloo Institute for Social Innovation and Resilience, where she worked on a wide variety of projects, including editing *The Evolution of Social Innovation* (2017). She holds a doctorate in Canadian History from the University of Waterloo.

**Brian McGrath, MArch** is Professor of Urban Design at Parsons School of Design with expertise in the integration of architecture, ecology, and media. His books include *Urban Design*

*Ecologies Reader* (2012), *Resilience in Ecology and Urban Design* (2012), *Digital Modeling for Urban Design* (2008), *Cinematics* (2007), and *Transparent Cities* (1994). McGrath is a Principle Investigator in the Baltimore Ecosystem Study, served as a Fulbright Senior Scholar in Thailand (1998–1999), was an India China Institute Fellow (2006–2008), and Director of Research, Urbanisms of Inclusion, Atlantis Transatlantic program, funded by the U.S. Department of Education and the European Commission (2010–2014).

**Maurice B. Mittelmark, PhD** is Professor Emeritus at the University of Bergen. His academic interests include health promotion, community development, participatory action research, resources for health and development, and the salutogenic model of health. He has served as President of the International Union for Health Promotion and Education, as Editor of the journal *Health Promotion International*, and for more than two decades, he directed graduate education in health promotion at the University of Bergen. He is the lead editor of Springer's *The Handbook of Salutogenesis* (2017), as well as the second edition (2021).

**Santos Jamiyo Muchavisoy, MA** is a Kamentza elder or “Taita.” He was elected Kamentza governor four times (1994–2010) and was staff consultant for the state of Putumayo (2016–2018). He holds a master's degree in human systems from the Universidad Central de Colombia and diplomates in Law and Indigenous Legislation. He was an adjunct professor at the Technological Institute of Putumayo and at Remington University in Medellín, Colombia. He is a traditional healer based in Sibundoy and travels throughout Colombia as a consultant on Kamentza traditional healing practices.

**Christopher Mushquash, PhD, CPsych** is Canada Research Chair in Indigenous Mental Health and Addiction, Associate Professor in the Department of Psychology at Lakehead University and the Northern Ontario School of Medicine, Director of the Centre for Rural and Northern Health Research at Lakehead University, and the Associate Vice President Research at the Thunder Bay Regional Health Sciences Centre and Chief Scientist at the Thunder Bay Regional Health Research Institute. In addition to his academic appointments, Mushquash is a registered clinical psychologist providing assessment, intervention, and consultation services for First Nations children, adolescents, and adults at Dilico Anishinabek Family Care.

**Kirsty L. Nash, PhD** is a Research Fellow at the Centre for Marine Socioecology and the Institute for Marine and Antarctic Studies at the University of Tasmania. Her research focuses on the resilience of marine socio-ecological systems, functional ecology, and facilitating interdisciplinary research. She is also the founder of [www.aKIDemicLife.com](http://www.aKIDemicLife.com) a website full of resources to support parents and carers working in academia.

**Ying Ou, PhD** graduated from the Department of Social Work and Social Administration at the University of Hong Kong and currently working as a postdoctoral fellow at the Department of Applied Social Sciences, Hong Kong Polytechnic University. Trained at the intersection of social work and population health, she is keen on exploring how the contexts shape and being shaped by human behavior and well-being. Her current research interests focus on social class, social capital, altruism, and health.

**Claudia Pahl-Wostl, PhD** is a professor for resources management at the Institute for Environmental Systems Research (USF) in Osnabrück, Germany. She is an internationally leading scholar on governance and adaptive and integrated management of water resources and the role of social and societal learning. Her research program builds on foundations in systems science, which explicitly acknowledge the complex and often-unpredictable dynamics of the systems to be managed. In 2012, she was awarded the Bode Foundation Water Management Prize for her contribution to pioneering interdisciplinary work on governance in times of change and comparative analyses of water governance in large river basins.

**Catherine Panter-Brick, PhD** is the Bruce A. and Davi-Ellen Chabner Professor of Anthropology, Health, and Global Affairs at Yale University. She is an expert on risk and resilience, having spent three decades working with people affected by war, poverty, and marginalization. A medical anthropologist, she was trained in both human biology and the social sciences. She has extensive experience leading mixed-methods research, having directed over 40 interdisciplinary projects in Afghanistan, Ethiopia, the Gambia, Jordan, Mexico, Nepal, Niger, Pakistan, Saudi Arabia, Tanzania, the United Kingdom, and the United States. For her work in humanitarian areas, she received the Lucy Mair Medal, awarded by the Royal Anthropology Institute to honor excellence in the application of anthropology to the active recognition of human dignity. At Yale University, she directs the Global Health Studies Multidisciplinary Academic Program, the Program on Conflict, Resilience, and Health and the Program on Stress and Family Resilience, and leads research initiatives to develop effective partnerships between scholars, practitioners, and policymakers. She publishes extensively in biomedical and social sciences journals and has co-edited seven books, most recently *Medical Humanitarianism* (Penn Press, 2015) and *Pathways to Peace* (MIT Press, 2014).

**Tatiana Paredes, PhD** holds her PhD from the London School of Economics and currently works as a Research Fellow in the Department of Economics and in the Department of Social Science at University College London. Her primary areas of research are development economics, health economics, and education. She has conducted research about the long-term effects of cash transfer programs on young people's education and labor market outcomes and the impact of government reforms on physicians' and teachers' performance in developing countries.

**Riccardo Patriarca, PhD** is a Postdoctoral Researcher and Adjunct Professor in the Department of Mechanical and Aerospace Engineering at Sapienza University, Rome, Italy. His research focuses on the analysis of complex sociotechnical systems, mainly in terms of risk, safety, and resilience management. His research efforts are aimed at developing methods and models to increase safety of modern and future systems, with the ultimate purpose of supporting sustainable societal development. Patriarca has received several research awards, among them, SESAR certificate of scientific excellence for research in air traffic management (2015, 2018), Royal Aeronautical Society Young Person Award (2017), and the Resilience Engineering Association's Young Talent Award (2017). Riccardo is a 2019 Forbes 30 Under 30 Europe list maker in the category Science and Healthcare (2019), and he has been nominated by Forbes Italy (2019) as one of the 100 most influential young Italian leaders of the future.

**Terri Peters, PhD** is an Assistant Professor at Ryerson University in the Department of Architectural Science in Toronto, Canada. She holds a PhD in Architecture (Aarhus, Denmark), a Professional Diploma in Architecture (UK) and bachelor degrees in Environmental Design (Dalhousie, Canada) and History of Art and Architecture (Victoria, Canada). She has published 20 peer-reviewed journal articles and conference papers on sustainable design, design for daylight, and architectural approaches to building performance. Her area of expertise is the human and social dimensions of green building, and her current research investigates the qualitative and quantitative aspects of daylight and how it can promote well-being.

**Carlos Pitillas, PhD** is a professor, researcher, and therapist at the University Institute for Family Studies and the Human and Social Sciences Faculty at Pontifical Comillas University. His current teaching covers the general teaching of psychoanalysis, as well as specific training in psychoanalytic psychotherapy and child and child psychotherapy. His research interests cover the intergenerational transmission of relational trauma, principles and methods of attachment-centered intervention, psychological consequences of extreme poverty, or pediatric disease. He is co-founder and coordinator of the project *Primera Alianza: Enhancing Early Attachments* and has recently published a book about this model of intervention in Spanish (with A. Berástegui, *Primera Alianza: Fortalecer y reparar los vínculos tempranos*; Gedisa, 2018). A new book on understanding and approaching the intergenerational transmission of trauma is also on the way (Desclée de Brouwer, in press).

**Michael Pluess, PhD** is a chartered psychologist and Professor in Developmental Psychology at the Department of Biological and Experimental Psychology at the School of Biological and Chemical Sciences, Queen Mary University of London. Pluess's research focuses on the investigation of individual differences in the capacity for environmental sensitivity, the notion that some people are more affected by negative as well as positive experiences than other people. He is currently leading several studies on resilience and mental health of Syrian refugee children. His research on differential susceptibility and vantage sensitivity has been published in the leading journals of the field.

**John W. Pomeroy, PhD** is Director of the Global Water Futures programme—the largest university-led freshwater research project in the world. He is a Fellow of the Royal Society of Canada, the American Geophysical Union and the Royal Geographical Society. At the University of Saskatchewan, he is the Canada Research Chair in Water Resources and Climate Change; Distinguished Professor of Geography; Director of the Centre for Hydrology; and Director of the Coldwater Laboratory, Canmore, Alberta. His current research interests are on the impact of land use and climate change on cold regions hydrology and water quality, and improved prediction of climate change impacts, especially floods and droughts.

**Cassandra M. Popham** is a doctoral student in the Department of Biological and Experimental Psychology at Queen Mary University of London. Her research is on children's mental health and resilience in response to war and displacement, specifically in a sample of Syrian refugees living in informal settlements in Lebanon. Cassandra's PhD thesis aims to

explore the concept of resilience and apply this to understanding the multisystemic processes influencing refugee children's mental health over time.

**Tara Quinn, PhD** is an environmental social scientist who works on the impacts of social and environmental change with a particular focus on the risk perception and adaptation.

**Joris Rijbroek, MSc** is director of the Institute for Societal Resilience at Vrije Universiteit Amsterdam, the interdisciplinary research institute of the Faculty of Social Sciences. After studying human geography at the University of Amsterdam, he worked as lecturer in Middle Eastern and Mediterranean studies in the Department of Arabic and Islam at Radboud University Nijmegen. In 2002, he started working as a policy advisor and program manager at the municipality of Amsterdam, focusing on diversity, social cohesion, and polarization in Amsterdam. From 2009 until 2015, he was policy advisor to the national government on the policy fields of diversity, integration, radicalization, and polarization.

**Arian Rostami, PhD** is a researcher at the Police Education Unit, Umeå University. She has considerable experience in preventive interventions in health sciences and has conducted studies on stressful professions such as the medical profession with a special focus on family life and quality of life.

**Danielle S. Roubinov, PhD** is an Assistant Professor in the University of California–San Francisco Department of Psychiatry and Behavioral Sciences and licensed clinical psychologist. Her research examines the pathways and mechanisms through which exposure to adversity early in life shapes children's trajectories of physical and psychological health. A particular focus of her work is on children's developing stress response systems, with a goal to understand how environmental contexts become "biologically embedded" to influence health outcomes across the lifespan. By understanding the *how, when, and for whom* of early trauma and its effects on children's development, she aims to help develop tailored prevention and intervention program to promote resilience among at-risk children and families.

**Mark Rouncefield, PhD** is a Reader in Social Informatics in the School of Computing and Communications, Lancaster University. His research interests are in Computer Supported Cooperative Work and Computer Human Interaction and involve the study of various aspects of the empirical study of work, organization, human factors, and interactive computer systems design, working across traditional disciplinary boundaries to address challenging sociotechnical problems. He is particularly associated with the development of ethnography as a method for informing design and evaluation. His empirical studies of work and technology have contributed to important debates concerning the relationship between social and technical aspects of IT systems design and use.

**J. B. Ruhl, BA, JD, LL.M., PhD** is the David Daniels Allen Distinguished Chair of Law at the Vanderbilt University Law School in Nashville, Tennessee, where he also serves as Director of the Program on Law and Innovation and the Co-Director of the Energy, Environment, and Land Use Law Program. His work has focused on the application of complexity science, resilience theory, and adaptive governance theory to environmental and natural resources policy contexts. He is an elected member of the American Law Institute and the American

College of Environmental Lawyers, and has served in officer positions in the American Bar Association.

**Ingrid Schoon** has a PhD in Psychology (University of Leiden, The Netherlands). She is Professor of Human Development and Social Policy at University College London, Institute of Education and a Fellow at the Social Science Centre (WZB) in Berlin. She is currently President elect of the European Association for Research on Adolescents and past President of the Society for Longitudinal and Lifecourse Studies. Her research focuses on the study of risk and resilience, in particular during the transition from dependent childhood to independent adulthood, asking (a) to what extent and how do social conditions, in particular socio-economic adversity, affect individual thinking, feeling and behavior; (b) to what extent and in what circumstances can individuals succeed against the odds and steer their own life course; and (c) what can be done to improve the life chances of the most vulnerable?

**Stijn Sieckelinck, PhD** is senior researcher at the Institute for Societal Resilience at Vrije Universiteit Amsterdam, The Netherlands, where he coordinates the expert lab on Resilient Identities. He holds a PhD in Social Educational Theory and is a board member of the Radicalisation Awareness Network (EU). Research and consultancy interests lie in the broad field of education, governance, and professionalization, but with a particular focus on radicalization, conflict resolution, and citizenship education.

**Marieke W. Slootman, PhD** works as an Assistant Professor at the Department of Sociology at the Vrije Universiteit Amsterdam. In addition, she is Diversity Officer Education at the Vrije Universiteit Amsterdam. She was Vice-Chair of the Commission Diversity that studied diversity and inclusion at the University of Amsterdam in 2016. In 2014, she earned her PhD (cum laude) from the University of Amsterdam for her dissertation about identification of social climbers with ethnic minority backgrounds, which was rewarded the prize for best sociological dissertation by the Dutch Sociological Association (NSV). Slootman's research focuses on processes of minoritization and exclusion, processes of identification and social mobility, and on diversity in educational institutions.

**Niko Soinen, BS, MS, LLD**, is a Professor of Environmental Law at University of Eastern Finland Law School, Center for Climate, Energy and Environmental Law. His research focuses on the governance of complex social-ecological systems with a particular emphasis on freshwater and marine systems. In his recent work, he has studied the resilience and adaptive capacity of European Union (EU) and Finnish law in regulating complex phenomena, such as the ecological condition of fresh and marine waters in a policy environment geared toward economic growth. Outside of academia, he has worked as a consultant for HELCOM, the World Bank, and for several ministries in Finland.

**Eric A. Specking, PhD** serves as the Assistant Dean of Enrollment Management and Retention for the College of Engineering at the University of Arkansas. Specking received a BS in Computer Engineering, an MS in Industrial Engineering, and a PhD in Engineering from the University of Arkansas. His research interest includes decision quality, resilient design, set-based design, engineering and project management, and engineering education.

During his time at the University of Arkansas, Eric has served as Principal Investigator, Co-Principal Investigator, or Senior Personnel on over 40 research projects totaling over \$6.6 million, which produced over 50 publications (journal articles, book chapters, conference proceedings, newsletters, and technical reports). He is an active member of the American Society for Engineering Education (ASEE) and International Council on Systems Engineering (INCOSE) where he has served in various leadership positions.

**Linda Theron, DEd**, is an educational psychologist by training. She is a full professor in the Department of Educational Psychology/Centre for the Study of Resilience, Faculty of Education, University of Pretoria and an extraordinary professor in Optentia Research Focus Area, North-West University, South Africa. Her research focuses on the resilience processes of South African young people challenged by chronic adversity and accounts for how sociocultural contexts shape resilience. She is lead editor of *Youth Resilience and Culture: Complexities and Commonalities* (Springer, 2015). She is also an associate journal editor of *Child Abuse and Neglect* (Elsevier) and of *School Psychology International* (SAGE).

**Clara Therville, PhD** is a social geographer interested in the governance of environment-society interactions, mostly regarding biodiversity issues. Mobilizing theoretical tools from SES resilience thinking and institutional analysis, she worked on a diversity of social-ecological issues such as protected areas, adaptation to global change along coastlines and agroforestry systems.

**Elaine Toombs, MA** is a fourth-year PhD student in Clinical Psychology at Lakehead University. Her research primarily focuses on First Nations mental health, resilience, and parenting using community-based methods. Her dissertation research examines how adverse childhood experiences may affect psychological and physical health outcomes within a First Nations population seeking treatment for substance use. Elaine's work is partially supported by a Canadian Institutes of Health Research Doctoral Award.

**Michael Ungar, PhD** is a Family Therapist and Professor of Social Work at Dalhousie University where he holds the Canada Research Chair (Tier 1) in Child, Family, and Community Resilience. Since 2002, Ungar has directed the Resilience Research Centre, designing multisite longitudinal research and evaluation projects in more than two dozen low-, middle-, and high-income countries, with much of that work focused on the resilience of marginalized children and families and adult populations experiencing mental health challenges. Building on his work as both a researcher and clinician, Ungar has published over 180 peer-reviewed articles and book chapters on the subject of resilience and is the author of 15 books for mental health professionals, researchers, and lay audiences. He is a Fellow of the Royal Society of Canada and former recipient of the Canadian Association of Social Workers National Distinguished Service Award.

**Froma Walsh, PhD** is Mose and Sylvia Firestone Professor Emerita, School of Social Service Administration and Department of Psychiatry, University of Chicago, and Co-Founder and Co-Director, Chicago Center for Family Health. Walsh, a leader in the field of family therapy, is the foremost authority on family resilience; with 120+ scholarly publications, notably her book,



*Strengthening Family Resilience* (third edition, 2016). She is Past President, American Family Therapy Academy; past Editor, *Journal of Marital and Family Therapy*; recipient of numerous professional awards; and a respected consultant internationally in clinical and community-based applications of a family resilience framework.

**Francis Westley, PhD** is Professor Emeritus and J. D. McConnell Chair of Social Innovation at University of Waterloo. There she led a 10 year project on Social Innovation Generation and founded the Waterloo Institute of Social Innovation and Resilience. She has published, lectured, and presented widely on social innovation, resilience, and transformative change. Previously she held the position of Director of the Nelson Centre, an interdisciplinary environmental center at University of Wisconsin Madison, and the James McGill Professorship in Strategy at McGill University, Montreal, Quebec. She holds a PhD in Sociology from McGill University and Honorary Doctorate from University of Stockholm. She has recently been awarded the 2019 World Thought Leader Award from the Schwab Foundation for Social Entrepreneurship.

**Keith D. Willett, PhD** currently supports the U.S. Department of Defense as a Data Scientist. He holds a PhD in Systems Engineering from Stevens Institute of Technology (2017). Willett is co-chair of the INCOSE System Security Engineering Working Group and has (ISC)<sup>2</sup> CISSP and ISSAP certifications and over 35 years' experience in technology and security.

**Haorui Wu, PhD** is an assistant professor in the School of Social Work at the Dalhousie University. With an interdisciplinary background (social work, architecture, urban planning, and urban design), his community-based interdisciplinary teaching, research, and emerging practice examine postdisaster reconstruction, recovery, and rehabilitation initiatives through the lens of environmental justice and social justice. He seeks to employ community-engaged planning strategies to strengthen built environment social missions, build social capital, enhance holistic well-being, and advance community resiliency in the context of global climate change, disaster, and other world crises. His research consists of (a) empowering local resident leadership and supporting overall well-being by advancing non-discriminatory civic engagement in community-based planning and architecture design and (b) enhancing the humanitarian quality of postdisaster built environment to support community resiliency and sustainability.

**Qiaobing Wu, PhD** is Associate Professor and Associate Head at the Department of Applied Social Sciences, Hong Kong Polytechnic University. She received her PhD in Social Work from University of Southern California. Her primary area of research centers on the health and well-being of children and youth, particularly in the context of migration, including the rural-urban migration in China, the cross-border migration between Hong Kong and the mainland, and international migration. Her research has been funded by various grant agencies such as the National Science Foundation of the United States and the Research Grants Council of HKSAR, and her publications appear widely in the fields of migration, health, and youth studies.

**Li Xu, PhD** holds a PhD in Environmental Science and Sustainability from Curtin University, Australia. Prior to joining the current institute, he worked as a postdoctoral researcher at the School of Environment and Society in Tokyo Institute of Technology. His research interests generally lie in the field of resilience and sustainability of water systems. His previous paper entitled “Resilience Thinking: A Renewed System Approach for Sustainability Science” in *Sustainability Science* won the 2015 Best Paper Award of the journal. Recently, he published a paper which integrated, for the first time, resilience thinking across all research fields into a general framework.

**Cecily Young, BPsych(Hons), Grad Dip(Jung), MPsych(Clin), MAPS** is a clinical psychologist specializing in perinatal mental health and doctoral candidate at the University of Adelaide School of Psychology. Her research examines resilience in the transition to parenthood with a focus on preventative intervention and community engagement.