Precision Convergence Webinar Series

Linking Brain to Society for Adaptive Real-World Behavior:

The Self, Consciousness, and the Limits on Free Will

By Dr. Roy Baumeister

With High-Level Panel of Leaders in Science, Technology, On-the-Ground Action, and Policy

Tuesday, August 24, 2021 | 11 AM to 1 PM EST (2 hours in duration)

For *Remote Participation*, please register HERE

ABSTRACT: The anchor presentation will begin by framing the brain-to-society challenge for adaptive real-world behavior (the theme of this webinar series) in terms of the "cultural animal" perspective: The distinctively human traits arise from adaptations to make culture possible. The human brain is thus designed to learn and use cultural systems. The human self, unique in nature, exists at the interface between the animal body and society, and it emerges as the brain learns to perform culturally defined roles in the social system. The advanced form of consciousness (also unique) made possible by the human brain is another of these adaptations. A massive amount of evidence resolves the ongoing debate about whether conscious thoughts cause behavior: Yes they do, beyond doubt, though there are some important qualifications, and conscious thinking itself always rests on unconscious processing. Instead of viewing conscious and unconscious as separate, competing systems, it is more appropriate to examine how they work together, because almost all human behavior derives from a combination of conscious and unconscious processes. So-called free will includes self-control , rational decision-making, planning, and initiative, all of which consume some of the body's limited energy resources. Co-chaired by Prof. Laurette Dubé (MCCHE) and Dr. Shawn Brown (PSC), the high-level panel of academic and action leaders that will follow will advance research and action to support adaptive real world behavior and context in digital, physical and human collaborative in development in the bio/health/health system and bio/agriculture/food domains through a modular portfolio of projects anchored in open science and innovation, with interfaces with public and private value creation systems.

PRESENTER: Roy F. Baumeister is a psychology professor at the University of Queensland. He received his Ph.D. in social psychology from Princeton in 1978 and did a postdoctoral fellowship in sociology at the University of California at Berkeley. He worked for years at Case Western Reserve University and Florida State University. Baumeister's research spans multiple topics, including self and identity, self-regulation, interpersonal rejection and the need to belong, sexuality and gender, aggression, self-esteem, meaning, and self-presentation. He has received research grants from the National Institutes of Health and from the Templeton Foundation. He has nearly 700 publications, and his 42 books include Evil: Inside Human Violence and Cruelty, The Cultural Animal, Meanings of Life, and the New York Times bestseller Willpower: Rediscovering the Greatest Human Strength. Other scientists have referred in their publications to his work over 200,00 times, making him among the handful of most cited (most influential) psychologists in the world. He has received several major awards, including the William James Fellow award (their highest honor) from the Association for Psychological Science, and the Jack Block Award from the Society for Personality and Social Psychology.

About the series: The precision convergence series is launched to catalyze unique synergy between, on the one hand, novel partnerships across sciences, sectors and jurisdictions around targeted domains of real-world solutions, and on the other hand, a next generation convergence of AI with advanced research computing and other data and digital architectures such as PSC's Bridges-2, and supporting data sharing frameworks such as HuBMAP, informing in a real time as possible the design, deployment and monitoring of solutions for adaptive real-world behavior and context.

The McGill Centre for the Convergence of Health and Economics (MCCHE) is a virtual world network of scientist, action and policy leaders promoting the weaving of digital-powered interdisciplinary science into person-centered domain-specific solutions at scale to global challenges faced by traditional and modern economy and society worldwide. The MCCHE stimulates lasting collaborations that bridge the many divides in the market, economy, and society that are at the root of these most pressing modern challenges through collaborative of modular convergence innovation platforms.

The Pittsburgh Supercomputing Center is a joint computational research center between Carnegie Mellon University and the University of Pittsburgh. Established in 1986, PSC is supported by several federal agencies, the Commonwealth of Pennsylvania and private industry. PSC provides university, government, and industrial researchers with access to several of the most powerful systems for high-performance computing, communications, and data-handling available to scientists and engineers nationwide for unclassified research. PSC advances the state-of-the-art in high-performance computing, communications and informatics and offers a flexible environment for solving the largest and most challenging problems in computational science.

Co-Chairs:

Laurette Dubé, PhD is the founding Chair and Scientific Director of the McGill Centre for the Convergence of Health Economics. She holds the James McGill Chair of Consumer and Lifestyle Psychology and Marketing. Her work has been published in top disciplinary journals in Psychology, Management and Medicine as well as in multidisciplinary journals. She holds an MBA in finance, and a PhD in behavioural decision making and consumer psychology. During her 2020-2021 sabbatical, she is a visiting scholar at the National Research Council of Canada and at the Pittsburgh Supercomputing Center, Carnegie Mellon, USA. https://thefutureeconomy.ca/interviews/ laurette-dube

Shawn Brown, PhD is Vice Chancellor for Research Computing at the University of Pittsburgh and the Director of Pittsburgh Supercomputing Center at the Carnegie Mellon University/University of Pittsburgh and. Prior to his appointment, Dr. Brown served as the Associate Director of Research Software Development at the McGill Centre of Integrative Neuroscience at the McGill Neurological Institute. Dr. Brown is an expert on high - performance computing and computational simulation. He has over 25 years of experience in developing software to support the use of high-performance computing for research in areas such as chemistry, bioinformatics, and public health. his research interests are ALSO in how agent-based modeling and other computational techniques can be used to provide decision support in public health and chronic disease.

Panelists:

Michael J Meaney is a James McGill Professor of Medicine at Douglas Mental health University Institute of McGill University. Meaney also joined the Singapore Institute for Clinical Sciences in 2008 as a Senior Investigator and leads the Translational Neuroscience Program. Meaney was educated at Loyola College of Montreal and received his PhD from Concordia University (Montreal) with post-doctoral training in Cell and Molecular Neurobiology at The Rockefeller University. Meaney's primary research interest is that of the stable effects of early experience on gene expression and development, focusing on the influence of variations in maternal care. He has authored over 500 journal articles.

Klaus Kraemer, PhD is Managing Director of Sight and Life Foundation, Basel, Switzerland, and Adjunct Associate Professor in the Department of International Health of Johns Hopkins Bloomberg School of Public Health, Baltimore, USA. Sight and Life Foundation is a non-profit organization that develops evidence-based and equitable malnutrition solutions for low- and middle-income contexts. Klaus Kraemer is a global nutrition leader with 30 years of experience in the private and non-profit sectors. Dr. Kraemer oversees a global team of professionals, interacts with funders and partners, provides vision and direction for the organization, and serves as its key spokesperson. He is passionate about supporting good nutrition for people who need it most. At present, he successfully leads efforts to make nutritious eggs more available and affordable, and to shape supply and demand of maternal multiple micronutrient supplements (MMS). He serves multiple professional societies dedicated to nutrition, food systems and implementation science, has published over 150 scientific articles and numerous other publications, and is editor of Sight and Life magazine. He serves on the Board of the Micronutrient Forum and Mongolian Health Initiative, is a member of the Swiss Commission for Research Partnerships with Developing Countries, assumes several advisory functions, and is the recipient of distinguished international honors.

Susan Michie, FMedSci, FAcSS is Professor of Health Psychology and Director of the Centre for Behaviour Change at University College London. She is co-Director of NIHR's Behavioural Science Policy Research Unit, leads UCL's membership of NIHR's School of Public Health Research and is an NIHR Senior Investigator. Dr. Michie's research focuses on behaviour change in relation to health and the environment: how to understand it theoretically and apply theory to intervention development, evaluation and implementation. Her research, collaborating with disciplines such as information science, environmental science, computer science and medicine, covers population, organisational and individual level interventions. She serves as an expert advisor on the UK's Scientific Pandemic Influenza Group on Behavioural Science (Covid-19) and is a consultant advisor to the World Health Organisation on Covid-19 and behaviour. She is also expert advisor to Public Health England and the UK Department of Health and Social Care, is Chair of the UK Food Standard Agency's Social Sciences Advisory Committee and chaired the Academy of Social Science's 'Health of People' project.

Dr. Gillian Bartlett is the Associate Dean for Population Health and Outcomes Research at the School of Medicine at the University of Missouri where she is also a tenured Professor of Family & Community Medicine and Co-Director for the Translational Biomedical PhD program. She received her PhD in epidemiology from McGill in 2001 and her MSc in 1996. In 2014, she was awarded the Carrie M. Derick Award for Excellence in Graduate Teaching and Supervision for McGill University and the Faculty of Medicine Honour List for Educational Excellence. Dr. Bartlett specializes in in implementation science for translation of evidence into clinical practice. Her current concentration is on convergence science and stakeholder engagement around health care utilization and outcomes for vulnerable populations; implementation of precision medicine using patient-oriented strategies; and the use of education innovations to advance the discipline of translation biomedicine. Dr. Bartlett is currently the Executive Director for the Network Coordinating Office of the Primary and Integrated Health Care Innovations (PIHCI) network. She is also the President of the North American Primary Care Research Group.