THE UNIVERSITY OF HONG KONG CENTRE FOR MEDICAL ETHICS & LAW

"HEALTH AND ARTIFICIAL INTELLIGENCE: LAW, ETHICS AND SOCIETY" CONFERENCE

ABSTRACTS

Tuesday, 26 November 2019

MORNING SESSION

PRESENTATION 1 - KEYNOTE PRESENTATION

Prof Bartha Maria Knoppers

Professor, Director, Centre of Genomics and Policy, McCill University, Canada

Learning Health Systems and the 3 "R"s

Set against the background of algorithms considered as medical devices and genomic/disease reference databases considered as clinical support tools, are the issues of genomic variant reinterpretation with possible recontact and return of results with changing clinical implications. Further complicating this medical and research quicksand, are the contradictory guidances provided by professional societies around the world. How to harmonize, or, if not, at a minimum map out these positions considering the implications for physicians, families and patients?



PRESENTATION 2

Ms Alson Hall Head of Humanities, PHG Foundation, University of Cambridge, UK

Black Box Medicine and Transparency: the policy context

This talk explores current applications and near-future opportunities for machine learning in health care and medical research. It then considers the current requirements for transparency in EU regulations on medical devices and policy guidance, and evaluates this in relation to these developing AI applications in health. Finally the talk addresses some wider implications for health care professionals, regulators and policy makers.

MORNING SESSION

PRESENTATION 3

Mr Johan Ordish

Senior Policy Analyst (Law and Regulation), PHG Foundation, University of Cambridge, UK

AI Transparency and Explanation under the GDPR

This talk considers the general principle of transparency, how this principle interacts with data subject rights, and automated processing requirements found in the GDPR. Specifically, the talk considers whether the GDPR includes a duty of interpretability on explainability for machine learning in the context of healthcare and research.

PRESENTATION 4

Dr Colm McGrath

Lecturer in Tort Law and PC Woo Research Fellox, Dickson Poon School of Law, King's College London, UK

Liability for undiscussed and variant AI treatments

Here we consider two questions looted in the private law analysis of AI and healthcare: 1) Is a healthcare practitioner or institution liable, as a matter of malpractice, to disclose that they have or will be using AL in the course of the patient's treatment; 2) Does a healthcare practitioner or institution owe a duty to offer treatment using AI over conventional means where this is available or to disclose that an AI-based variant course of treatment exists. Through investigating these questions we contribute to the broader mapping of the private law response to rechnological innovation and the relationship between AI, healthcare and liability.

ROUNDTABLE DISCUSSION AND Q & A

Chaired by: **Dr Bernard Murphy** Partner, Howse Williams, Hong Kong

AFTERNOON SESSION

PRESENTATION 1

Dr Jeffrey Skopek

University Lecturer in the Faculty of Law & Deputy Director of the Cambridge Centre for Law, Medicine and Life Sciences, University of Cambridge, UK

Liability for Misdiagnosis by AI

How should civil liability be determined when a patient is harmed by an incorrect diagnosis generated by an AI system? This talk will analyze three different ways in which such harms might be addressed—negligence, products liability, and sui generic legislation—each of which raises legal and normative questions that have received insufficient attention. In exploring these questions, the talk will seek to clarify what is truly novel about AI and the harms arising from its use.

PRESENTATION 2

Dr Chih-hsing Ho

Assistant Research Fellow, Academia Sinica, Taiwan

Medical AI under GDPR

The GDPR aims to encourage innovation by permitting the collection of personal data without consent, repurposing and applying longer retention periods for scientific research. Still, the GDPR definer scientific research in a broad manner, including technological development and demonstration, fundamental research, applied research and privately funded research. Since the GDPR provides this broad exemption, it would be crucial to clarify the limits and requirements of scientific research and public interest, before the application of AI drastically transforms this field.

AFTERNOON SESSION

PRESENTATION 3

Dr Calvin Ho

Assistant Professor, Centre for Biomedical Ethics, Yong Loo Lin School of Medicine, National University of Singapore, Singapore

Governance of AI applications in Health Insurance

Technological advances in Big Data, data sciences and Artificial Intelligence (AI), whether applied in a health or health insurance context, can enhance health system functions and promote personalised care and social value. However, such advances will not replace fundamental components like ethical leadership and governance, or obviate the need for a robust ethical environment. Just as digital health interventions will need such an environment to be effective and beneficial, advancing (AI-based) Big Data analytics in health insurance will require the same. This paper broadly depicts what a robust ethical environment might look like, and provides, as illustrations, four overlapping stfeguards, public policy guardrails and participatory mechanisms that should be established.



PRESENTATION 4

Prof Ma'n Zawati 🦰

Assistant Professor, Executive Director of the Centre of Genomics and Policy, McGill University, Canada

Dr. App Will See You Now: Ethical & Legal Challenges of mHealth Apps

Wearable and probile devices that record and organize personal health information are becoming increasingly ubiquitous. Many of us own devices capable of tracking our activities, counting our steps, estimating our caloric intake, measuring the quality of our sleep, and even recording our heart rate. And while this kind of information promises to empower consumers, enabling them to better understand their health and fitness, such technologies also raise certain legal and ethical questions about data management, privacy, and how we make decisions about our health.

AFTERNOON SESSION

PRESENTATION 5

Dr Keren Priyadarshini

Regional Business Lead, Worldwide Health, Microsoft Asia

Responsible AI in Healthcare

It is inevitable that Artificial Intelligence (AI) will become one of the most important technologies of our future. Designing AI to be trustworthy requires creating solutions that reflect ethical principles that are deeply rooted in important and undess values. Microsoft has defined six principles that we believe should guide the development of AI. Specifically, AI systems should be fair, reliable and safe, private and secure, inclusive, transparent, and accountable. These principles are critical to addressing the societal impacts of AI and building trust as the technology becomes more and more a part of the products and services that people use at work and at home every day. In this session, the speaker will describe these principles in details and share Microsoft best practice as well as its view on AI policy and ethics consideration for the healthcare industry.

PRESENTATION 6

Chaired by:

Dr Zubin J Daruwalla

Health Industries Leader, PyC Singapore & PwC South East Asia Consulting, Singapore

Artificial totelligence in healthcare – applications, regulations and legal issues

ROUNDTABLE DISCUSSION AND Q & A

Dr Barry Solaiman Assistant Professor, College of Law, Hamad Bin Khalifa University, Qatar

Wednesday, 27 November 2019

MORNING SESSION

PRESENTATION 1

Dr Eric M. Meslin

President and CEO, Council of Canadian Academies, Ottawa, Canada

AI's Potential for Disruption in Health Ethics and Science Policy

Much attention has been focused on the potential for AI to disrupt the research and health care ecosystem -- from more intelligent research design to advanced screening, diagnostics and delivery of care. Less attention has been focused on how AI may disrupt the way society anticipates and addresses the ethical and policy issues arising from the technologies. This talk will discuss whether and how our ethics frameworks and regulatory instruments should adapt to this new reality.

PRESENTATION 2

Prof W. John Kao

Chair Professor of Translational Medical Engineering, Department of Industrial and Manufacturing Systems Engineering and Biomedical Engineering Program & Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong

A.I. and Biomedical Technologies: a multi-stakeholders challenge

As a potential game changer, medical AI could have a profound impact on disease prevention, diagnosis, and reatment in addition to outcome improvement and healthcare system management. But how to integrate and translate AI effectively into a myriad of biomedical technologies would require an active collaboration amongst the public sector, research institutions, industry, practitioners, and end-users. Policy reforms without a doubt would play an important role in facilitating this transformation. We will also examine what Hong Kong is doing in building a vibrant biotech ecosystem through multi-stakeholder engagement and capital investment.

Wednesday, 27 November 2019

MORNING SESSION

PRESENTATION 3

Dr Yahong Li

Associate Professor of Law and Director for the LLM Programme in Technology and Intellectual Property Law, The University of Hong Kong, Hong Kong

Patents and Medical AI: China and Beyond

This presentation investigates the role of patents in artificial intelligence (AI) innovation in the medical field (medical AI) and examines how patent law should be reformed to have a positive impact on the development of medical AI and public healthcare. Specific topics include: the advancement and patenting trend of medical AI, patent issues such as inventorship, ownership and patentability of medical AI, as well as compulsory licensing and antitrust rules in medical AI.

PRESENTATION 4

Dr Clifton Emery

Associate Professor, Department of Social Work and Social Administration, The University of Hong Kong, Hong Kong

Childhood's End?

The revolution in Artificial Intelligence simultaneously offers to save humanity from its collective auto-genocidal tendencies and to wipe it out of existence. How do we create norms to govern these scenarios? My team is currently working on projects to use AI to better understand the effects of eczema and child sexual abuse on children, to unpack the tools of totalitarian control used by the North Korean state to perpetrate human rights abuses, and to better understand the techniques used by abusers in cases of intimate partner violence. The aid AI may provide in improving human health and well-being points to the importance of paying attention to opportunity cost. We must ask about both the risks of using AI and the risks of not using AI. This suggests the necessity of a new field of study: research in parameterizing uncontrollable processes.

ROUNDTABLE DISCUSSION AND Q & A

Chaired by:

Mr Brian W Tang

Founding Executive Director of Law, Innovation, Technology and Entrepreneurship (LITE) Programme, Faculty of Law, The University of Hong Kong, Hong Kong

SPEAKERS' BIOGRAPHIES

Prof Bartha Maria Knoppers

Professor, Director, Centre of Genomics and Policy, McGill University, Canada



Bartha Maria Knoppers, PhD (Comparative Medical Law), is a Full Professor, Canada Research Chair in Law and Medicine and Director of the Centre of Genomics and Policy of the Faculty of Medicine at McGill University. She is the founder of the Public Population Project in Genomics (P3G) and CARTaGENE Quebec's population biobank. Since 2005, she has been active in Canadian Stem Cell policy and has chaired the Ethics Working Party of the International Stem Cell Forum (2005-2015). Furthermore, she was Chair of the Ethics and Governance Committee of the International Cancer Genome Consortium (2009-2017). Currently, Chair of the Ethics Advisory Panel, WADA (2015-), she is also one of the co-founders of the Global Alliance for Genomics and Health and Co-Chair of its Regulatory and Ethics Workstream. In 2015-2016, she was a member of the

Drafting Group for OECD's Health Data Governance Policy, and gave the prestigious Galton Lecture in November 2017. She holds four Doctorates Honoris Causa and is a Fellow of the American Association for the Advancement of Science (AAAS), the Hastings Center (bioethics), the Canadian Academy Health Sciences (CAHS), and the Royal Society of Canada. She is an Officer of the Order of Canada and of Quebec and in 2017, she also became the Commander of the Order of Montreal. In 2019, she has been awarded the Henry G. Friesen International Prize in Health Research by the Friends of Canadian Institutes of Health Research (FCIHR).

Dr Eric Meslin President and CEO, Council of Canadian Academies, Ottawa, Canada



Dr. Meslin is President and CEO of the Council of Canadian Academies, a not-for-profit organization that conducts evidencebased expert assessments of leading policy topics in climate, health, energy, S&T policy, indigenous affairs, and public safety for the Government of Canada.

Trained as a philosopher and bioethicist, Dr. Meslin's academic career included 15 years at Indiana University as Founding Director of the Indiana University Center for Bioethics, Associate Dean for Bioethics in the School of Medicine, and Professor of Medicine, of Medical & Molecular Genetics, of Bioethics & Law, of Public Health, and of Philosophy. Dr. Meslin has held academic positions at University of Toronto, the University of Western Australia, and Université de Toulouse. He is a Senior

Fellow, PHG Foundation, University of Cambridge, and an Academic Affiliate in the Nuffield Department of Population Health, University of Oxford. He has published more than 200 articles and book chapters, and two co-edited books on ethical and policy issues in genomics, global health, science policy and human subjects research.

He has had an equally productive administrative and policy career. He was Bioethics Research Director of the Ethical, Legal, and Social Implications (ELSI) program at the National Human Genome Research Institute in the early years of the Human Genome Project, and then Executive Director of the U.S. National Bioethics Advisory Commission established by President Bill Clinton.

Dr Meslin has been an advisor to many organizations including the World Health Organization, UNESCO, Centers for Disease Control and Prevention, Canadian Institutes of Health Research, Genome Canada, Institute of Medicine, National Institutes of Health, and the UK Biobank.

Among his honors Dr. Meslin is a Fellow of the Canadian Academy of Health Sciences, and a Chevalier de l'Ordre Nationale du Mérite (Knight of the National Order of Merit) for contributions to French bioethics policy.



Dr Zubin J Daruwalla

Health Industries Leader, PwC Singapore & PwC South East Asia Consulting, Singapore

Dr Clifton Emery

Associate Professor, Department of Social Work and Social Administration, The University of Hong Kong, Hong Kong



Dr. Emery's research and practice embrace populations made vulnerable by domestic violence, child maltreatment, human trafficking, and refugee status. He is, in particular, interested in the ways that non-professionals stand up against violence and abuse in their everyday lives. Sometimes standing up for victims of violence, trafficking, and other human rights abuses involves informal social control, which occurs when citizens act individually or in groups to promote order and deter crime. Over the past 7 years Dr. Emery has studied informal social control of domestic violence and child maltreatment using qualitative interviews, vignette experiments, and rigorous, random sample population surveys in Beijing, Seoul, Hanoi, Kathmandu, Ulan Bator, Novosibirsk, and rural South Korea. However, in some

circumstances, standing up to protect people from human rights abuses may even involve breaking the law. Dr. Emery is broadly interested in such circumstances. To date most of his research on this topic involves North Korean refugees and the groups that aid them. Dr. Emery has acted as a pro bono consultant for NGOs with connections to these topics including Mother's Choice, the Transitional Justice Working Group, Helping Hands Korea, and Liberty in North Korea.

Ms Alison Hall Head of Humanities, PHG Foundation, University of Cambridge, UK



Alison is Head of Humanities at the PHG Foundation, a health policy think tank which is part of University of Cambridge. Her research focuses on the regulation and governance of genomic data for clinical care and research and the challenges and opportunities associated with delivering personalised healthcare.

Recent work has focused on the impact of EU Regulations on data protection and in vitro diagnostic devices on the implementation of automated processing and artificial intelligence in healthcare. Alison leads a Wellcome Trust funded project <u>Black Box Medicine and Transparency</u> an iterative evaluation of philosophical and legal requirements for transparency in machine learning for healthcare and research. Other recent work includes reports on medical devices regulation

(<u>Algorithms as medical devices</u>), and on other aspects of the algorithm regulation <u>Regulating</u> <u>algorithms in healthcare</u>. She also lead humanities work on novel genomic technologies (<u>Polygenic scores, risk and cardiovascular disease</u>) and on the future of healthcare.

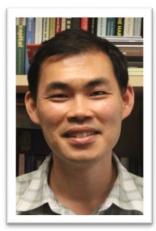
She is a longstanding member of the Global Alliance for Genomics in Health's regulatory and ethics work stream, chair of the Ethics and Policy Committee of the British Society for Genetic Medicine, a member of METADAC (a UK Data Access Committee) and a member of an NHS research ethics committee. Alison has professional qualifications in law and nursing and a master's qualification in bealthcare ethics.

Health and Artificial Intelligence: Law, Ethics and Society

Dr Calvin Ho

Assistant Professor, Centre for Biomedical Ethics, Yong Loo Lin School of Medicine, National University of Singapore, Singapore

Calvin Ho is Assistant Professor at the Centre for Biomedical Ethics in the Yong Loo Lin



School of Medicine, National University of Singapore; Co-Head of the World Health Organization Collaborator Centre on Bioethics in Singapore; and the Editor-in-Chief of Asian Bioethics Review. He is a member of the Ethics Review Board of Médecins Sans Frontières (Doctors without Borders), and also serves as a statutory board member of the Singapore Nursing Board, the Legal Aid Bureau of the Ministry of Law of Singapore, as well as on national advisory committees on transplantation and on genetic testing of the Ministry of Health of Singapore. From December 2019, he will join the Faculty of Law of The University of Hong Kong as an Associate Professor. Calvin's research interests are in regulatory governance and biomedical law and ethics, with focus on emergent technologies (and, most recently,

data analytics and AI). He is a co-editor of Bioethics in Singapore (World Scientific, 2010) and Genetic Privacy (Imperial, 2013), the author of Juridification in Bioethics (Imperial, 2016) and an author of WHO Guidelines on Ethical Issues in Public Health Surveillance (World Health Organization 2017).

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Dr Chih-hsing Ho

Assistant Research Fellow, Academia Sinica, Taiwan



Dr. Chih-hsing Ho is Assistant Research Fellow at Academia Sintsa, Taiwan. Her research focuses on the nexus of law and medicine in general, with particular attention to the governance of genomies and newly emerging technologies, such as biobanks, big data and artificial intelligence (AI). She is currently a member of the Biobank Ethics Review Board at the Ministry of Health and Welfare (MOHW) in Taiwan and a member of the Ethics and Governance Council (EGC) of Taiwan Biobank. Since 2015, she has been a PI in law for a health cloud project in Taiwan and is responsible for designing an adequate regulatory framework for the secondary use of health data and data linkage. She holds a Ph.D. in law from the London School of Economics (LSE) where she was an Olive Stone Scholar and an awardee of Morris Finer Memorial Fellowship. She obtained her first law degree from

Taiwan, and later received her LLM from Columbia Law School and a JSM from Stanford University. Since 2016, she has served as Associate Editor at the Editorial Board of ELSI in Science and Genetics- Frontiers. Before moving back to Taipei in 2014, she had been working at the Centre for Medical Ethics and Law (CMEL) at the University of Hong Kong. Her works appear in many renowned international journals, such as BMC Medical Ethics, Medical Law International, Frontiers in Genetics, Asian Bioethics Review, and the Journal of Law, Information and Science.

Prof W. John Kao

Chair Professor of Translational Medical Engineering, Department of Industrial and Manufacturing Systems Engineering and Biomedical Engineering Program & Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong



Professor W John Kao is the Chair Professor of Translational Medical Engineering at the University of Hong Kong (HKU). Before joining HKU, he was Vilas Distinguished Achievement Professor of Pharmacy, Surgery, and Biomedical Engineering at the University of Wisconsin – Madison. Professor Kao studied biomedical engineering at the Johns Hopkins University (BS), Case Western Reserve University (MS) and macromolecular science and engineering (PhD) also at Care Western. He subsequently worked at the California Institute of Technology (Caltech) and Eidgenössische Technische Hochschule (ETH, Swiss Federal Institute of Technology in Zürich) prior to joining the faculty at UW-Madison for 18 years. While on leave, he currently heads the Biomedical Technologies Cluster at the HK Science and Technology Park.

Professor Kao's research focuses on developing therapeutics for cancer and wound healing. He is an elected fellow of the American Institute of Medical and Biological Engineering, the International Union of Societies for Biomaterials Science and Engineering, where he also has served as the Secretary for the College of Fellows. He is on several editorial boards and his extensive involvement with industry, regulatory and policy bureaus has enabled him to build a successful record in translating enabling technologies to the market. His research has been funded by the National Institutes of Health, the National Science Foundation, and other federal and private agencies. He has published extensively in top journals and more than 170 other publications including abstracts, book chapters, and patents. He has mentored more than 60 undergraduate, graduate, post graduate students, and clinician scientists from around the world.

Dr Yahong Li

Associate Professor of Law and Director for the LLM Programme in Technology and Intellectual Property Law, The University of Hong Kong, Hong Kong



Yahong Li, JSD and JSM (Stanford), is an Associate Professor and Director for LLM Program in Tech & IP Law at the Department of Law of the University of Hong Kong. She specializes in IP law with a focus on cross-disciplinary study of IP, culture and technological innovation. She is an author/editor of, *inter alia*, *Patents and Innovation in Mainland China and Hong Kong: Two Systems in One Country Compared* (Cambridge University Press, 2017), *Copyright, Internet and the Balance of Rights* (HKU Press, 2016), *Imitation to Innovation in China: the Role of Patents in Biotech and Pharmaceutical Industries* (Edward Elgar, 2010). Her peer-reviewed articles appeared in the top IP journals such as *International Review of Intellectual Property and Competition, Law, Innovation and Technology, Cardozo Arts and Entertainment Law Journal, Queen Mary*

Journal of Intellectual Property Law, and University of Perinsylvania Journal of International Law. Dr. Li is a frequent speaker at international and regional conferences, and visiting fellow/Professor at, *inter alia*, Harvard Law School) Cambridge University, Max Planck Institute for Innovation and Competition, Melbourne University Faculty of Law. She is a member of Executive Committee of International Association for the Advancement of Research and Teaching in Intellectual Property (ATRIP), a Council Member of China IP Law Association, a member of Expert Committee of the Great-Bay Area IP Institute of Peking University, and an Honorary Advisor of Hong Kong Institute of Patent Attorneys.

Dr Colm McGrath

Lecturer in Tort Law and PC Woo Research Fellow, Dickson Poon School of Law, King's College London, UK



Dr Colm McGrath is a Lecturer in Tort Law at the Dickson Poon School of Law at King's College London. Previously, he was the WYNG Research Fellow in Medical Law and Ethics at Trinity Hall, Cambridge and a member of the University of Cambridge's Centre for Law, Medicine and Life Sciences. Before that, he worked as a scientific assistant at the Institute for European Tort Law in Vienna and was a University Lecturer in Law at the University of Graz. Colm is joint General Editor of the longrunning Journal of Professional Negligence and the Book Review Editor for the Journal of European Tort Law. He is a Fellow of the European Centre for Tort and Insurance Law in Vienna, a member of the International Advisory Board of the Rivista Responsabilita Medica and an Affiliated Lecturer in the Faculty of Law at the University of Cambridge.

Mr Johan Ordish Senior Policy Analyst (Law and Regulation), PHG Foundation, University of Cambridge, UK



Johan is a Senior Policy Analyst (Law & Regulation) with the PHG Foundation, joining in 2017. Johan specialises in the regulation of digital health and genomic technology. Specifically, he considers how data protection law and medical device law might be applied to novel and developing technologies.

Johan has roles in a number of organisations, assisting the Global Alliance for Genomics and Health with writing and editing primers on the General Data Protection Regulation (GDPR), being a part of the Ethical, Legal, and Social Implications Group for the EU 1+ Million Genomes Initiative, and being decred as an Associate at Hughes Hall, Cambridge.

Johan has explored aspects of machine learning and its regulation in healthcare and research. Notably, the Wellcome Trust funded project <u>Black Box Medicine</u> <u>and Transparency</u> considers the philosophical and legal requirements of transparency in relation to machine learning for healthcare and research. Further, the recently released <u>Algorithms as medical devices</u> report considers now machine learning will be regulated under the Medical Device Regulation (MDR) and In Vitro Diagnostic Medical Devices Regulation (IVDR). Finally, the project <u>Regulating algorithms in</u> <u>healthcare</u> examined how algorithms in healthcare will be regulated as data (under the GDPR), as a medical device (MDR & IVDR), as intellectual property (patents, copyright, and trade secrets), and as a source of liability (professional negligence and product liability).

Health and Artificial Intelligence: Law, Ethics and Society

Dr Keren Priyadarshini Regional Business Lead, Worldwide Health, Microsoft Asia



As the Regional Business Lead of Healthcare in Microsoft Asia, Dr. Keren Priyadarshini leads the company's healthcare business segment across 17 markets in Asia Pacific.

Keren is responsible for driving and implementing Microsoft's healthcare initiatives across the region as well as developing solution offerings and strategies that meet the needs of healthcare and life science customers. She also plays a leading role in establishing thought leadership by defining and articulating the company's vision for the future of healthcare and sharing how Microsoft technologies and partner solutions are making it a reality.

Keren is passionate about empowering providers, payors, and life science companies with the right technology to enable better patient outcomes at lower costs. Improving the quality of healthcare through digital transformation; enabling wider access to healthcare as life expectancy increases, and keeping rising costs in check are issues that keep her awake at night.

Her desire being to create a world of 'Intelligent Healthcare' through AI and the cloud, to unlock biological insight and break data from silos for a truly personal understanding of human health and in turn, enable better access to care, lower costs and improved outcomes.

Keren moved to Singapore almost 15 years ago and has been instrumental in establishing the Asia Pacific business for multinational healthcare companies such as GfK and Truven Health. Before joining Microsoft, Keren was the Asia Pacific Vice President of Sales for Truven Health Analytics, part of the IBM Watson Health, where she pioneered the adoption of Watson in the region.

Born in Chennai, India, Keren graduated as a Fellow from the Indian Institute of Management (IIM-A), Ahmedabad, where she completed her Doctorate in Business Management.

Keren is married with two children. In her spare time, she works with less privileged kids and helps them realize their potential through innovative methods. She is also a foster parent with the Ministry of Social and Family Development (MSF) in Singapore and has fostered several children over the last eight years.

Dr Jeffrey Skopek

University Lecturer in the Faculty of Law & Deputy Director of the Cambridge Centre for Law, Medicine and Life Sciences, University of Cambridge, UK



Jeff Skopek is a University Lecturer in the Faculty of Law of the University of Cambridge, the Deputy Director of the Cambridge Centre for Law, Medicine and Life Sciences, and a Fellow of Hughes Hall. His work explores the normative and conceptual foundations of medical law, focusing in particular on controversies about the harms and benefits that are generated by medical treatment, health care systems, and biomedical research. He recently completed several projects on privacy and anonymity, and he is currently the PI on a Welcome Trust funded project on liability for harms caused by the use of AI in health care. Outside of academia, he serves on the Health and Social Care Advisory Panel for the UK government's Centre for Digital Ethics and Innovation and on Astra Zeneca's Animal Welfare Ethics Review Board. Before becoming an academic, he

served as a law clerk to the Chief Judge of the United States Court of Appeals for the First Circuit. He has been awarded Fulbright, Gates, and Truman Scholarships and holds a J.D. from Harvard Law School, a Ph.D. and M.Phil. in the History and Philosophy of Science from the University of Cambridge, and an A.B. in History from Stanford University.

Prof Ma'n Zawati

Assistant Professor, Executive Director, Centre of Genomics and Policy, McGill University, Canada



Marn H. Zawati (LL.B., LL.M., Ph.D. (DCL)) is an Assistant Professor at McGill University's Faculty of Medicine and the Executive Director of the Centre of Genomics and Policy in the Department of Human Genetics. He is also an Associate Member of McGill's Biomedical Ethics Unit. His research concentrates on the legal, ethical and policy dimensions of health research and clinical care, with a special focus on biobanking, data sharing, professional liability, and the use of novel technologies (e.g. mhealth apps, WGS, WES) in both the clinical and research settings. His work is interdisciplinary, drawing together perspectives from law, ethics, bioinformatics, genomics, and policy. He's also a frequent presenter on a variety of the most critical and topical issues in healthcare and the biosciences. He

has appeared at 100+ international conferences, symposia, meetings, and has shared his expertise with universities, research ethics boards and law firms. Prof. Zawati has published 13 book chapters and 45+ peer reviewed articles in leading publications such as *Nature Reviews Genetics*, the *Canadian Medical Association Journal*, the *Journal of Law and the Biosciences*, the *Journal of Medical Genetics*, and the *McGill Journal of Law and Health*. In 2015, he was awarded the Queen Elizabeth II Diamond Jubilee Scholarship (stay at Oxford University) and was named a Royal Society of Canada Delegate for the IAP Young Scientists of the Year international symposium. In 2014, the Young Bar Association of Montreal named him as one of its Lawyers of the Year.

Dr Bernard Murphy

Partner, Howse Williams, Hong Kong



Both a medical doctor and a solicitor, Bernard's healthcare practice covers a wide range of health professionals including doctors, dentists, nurses and physiotherapists in regulatory proceedings, civil claims, Coroner's inquests and Department of Health investigations. Bernard also acts for hospitals and other institutional and corporate healthcare providers in а comprehensive array of healthcare legal matters. Bernard was admitted as a solicitor in Hong Kong in 2004 and in England and Wales in 2005. His legal career began with Richards Butler Hong Kong.

Before qualifying as a lawyer, Bernard practised medicine for more than ten years, the majority of that time in Hong Kong and China. During and following his medical training, Bernard

worked as a doctor in NHS hospitals in the UK as a house physician and house surgeon. Between 1995 and 1999 Bernard worked in the field of emergency medical evacuation in China and Hong Kong. He has also worked in private medical practice in Hong Kong.

An Adjunct Assistant Professor, Department of Accident and Emergency Medicine, the Chinese University of Hong Kong, Bernard lectures on healthcare legal issues for the Chinese University Department of Accident and Emergency Medicine. He has also presents lectures/workshops for doctors' medical practices, public and private hospitals and other healthcare organisations.

Health and Artificial Intelligence: Law, Ethics and Society



Dr. Barry Solaiman is an Assistant Professor specialising in Constitutional Law and Healthcare Law at HBKU Law in Qatar. He completed his PhD at the University of Cambridge. He holds an LLM from Durham University in Commercial Law, was called to the London Bar and is an Accredited Mediator. At Cambridge, he was Editor-in-Chief of the Cambridge International Law Journal.

In Qatar, he is Co-Director of Weill Cornell Medicine-Qatar's Intersection of Law and Medicine Series, has been appointed to advise the Ministry of Public Health, and is a legal representative for a hospital ethics commutee. He has been invited to speak on healthcare law issues to both academics and

clinicians at hospitals and conferences in the country. In the UK, he assisted Lord Brooke in the House of Lords on the Lobbying Transparency Bill [2016/17] which he drafted amendments to, the British Academy on a report concerning a potential British Bill of Rights and the Department of Sociology at Cambridge on an electoral law project.

His research has been presented globally at contenences in North America, South America, Europe and Asia. This includes papers presented at the University of Cambridge, University of Oxford, Harvard Law School and the National University of Singapore at conferences and forums including the Society of Legal Scholars, the Centre for Public Law, the Asian Law Institute, the World Association for Medical Law, the World Congress of Constitutional Law, the British Association for Comparative Law and the Constitutional Law Scholars Forum amongst others.

Health and Artificial Intelligence: Law, Ethics and Society

Mr Brian W Tang Executive Director, LITE Lab@HKU, The University of Hong Kong, Hong Kong





Brian W Tang is executive director of <u>LITE Lab@HKU</u>, Hong Kong University's <u>new</u> interdisciplinary and experiential programme to foster law, innovation, technology and entrepreneurship (LITE) and support the startup and social entrepreneur ecosystem. His students are the only Asian university participating in <u>Iron Tech Lawyer Invitational</u> to be held at Georgetown University to build lawtech solutions to assist an NGO with access to justice.

Brian is co-chair of the Fintech Association of Hong Kong's <u>RegTech Committee</u>, cofounded the <u>APAC Regtech Network</u>, and sits on <u>IEEE's Global AI Ethics Initiative's Policy</u> <u>Committee</u>, the HKU Fintech Index Advisory Board and <u>the Asia-Pacific Legal Innovation</u> <u>and Technology Association's Steering Committee</u>.

Brian is a frequent author and speaker on AI governance and ethics, including on independent Ai review boards and human-in-the-loop (HITL) systems.

Brian organized Hong Kong's first legaltech and regtech <u>hackathons</u>, is a principal instructor of Asia's first EinTech online course on edX with more than 50,000 learners worldwide and is an author of *The Fintech Book* and *The RegTech Book* and the forthcoming *The AI Book* and *The Legaltech Book*.

Brian is founder of ACMI and was previously at global investment bank Credit Suisse in Hong Kong and Wall Street law firm Sullivan & Cromwell in New York and Silicon Valley. He graduated with an LLM from NYU and a BA/LLB (hons) from UWA.