

International Workshop: Ethics of Biomedical Technology and Artificial Intelligence

Organised by
Global China Studies, College of Liberal Arts and Social Sciences,
City University of Hong Kong (CityU)
(Coordinator: Professor Fan Ruiping)

Date: 31 May – 1 June 2019 (Friday & Saturday)
Venue: G7619, 7/F, Green Zone, Lift 2,
Yeung Kin Man Academic Building, CityU

SCHEDULE

31 MAY 2019 (FRIDAY)

Time	Event
9:30 – 9:45	Opening Session Welcoming Speech by Richard Walker (CityU) Head, Department of Public Policy, College of Liberal Arts and Social Sciences, CityU
Session 1 – Chairperson: Fan Ruiping (CityU)	
9:45 – 10:15	Topic: Biotechnology, Genetics, and the Family Presenter: Ana Iltis (Wake Forest University)
10:15 – 10:25	Discussant: Derrick Au (CUHK)
10:25 – 10:55	Q & A
10:55 – 11:15	Tea Break
Session 2 - Chairperson: Zhang Yuanting (CityU)	
11:15 – 11:45	Topic: Interreligious Perspectives on Emerging Technologies Presenter: Joseph Tham (Regina Apostolorum University)
11:45 – 11:55	Discussant: Ellen Zhang (HKBU)
11:55 – 12:25	Q & A
12:25 – 14:00	Lunch
Session 3 - Chairperson: Ellen Zhang (HKBU)	
14:00 – 14:30	Topic: The promise and perils of AI in medicine Presenter: Robert Sparrow (Monash University)
14:30 – 14:40	Discussant: Lin Fen (CityU)
14:40 – 15:10	Q & A
Session 4 - Chairperson: Derrick Au (CUHK)	
15:10 – 15:40	Topic: How AI will enhance trends altering the clinician-patient relation Presenter: George Khushf (University of South Carolina)
15:40 – 15:50	Discussant: Chan Ho Mun (CityU)
15:50 – 16:20	Q & A
16:20 – 16:40	Tea Break

Session 5 - Chairperson: Li Jianhui (Beijing Normal University)	
16:40 – 17:10	Topic: The Ethical Pros and Cons of AI-based Clinical Diagnosis Presenter: Zhang Xinqing (Peking Union Medical University)
17:10 – 17:20	Discussant: Lawrence Yung (CityU)
17:20 – 17:50	Q & A
17:50 – 18:15	Transportation to the dinner venue
18:15 – 19:45	Dinner

1 JUNE 2019 (SATURDAY)

Time	Event
Session 6 - Chairperson: Ana Iltis (Wake Forest University)	
9:30 – 10:00	Topic: Bioethics of Cerebro-cardiovascular Health Technology and Artificial Intelligence Presenter: Zhang Yuanting (CityU)
10:00 – 10:10	Discussant: Chan Shing Bun Benedict (HKBU)
10:10 – 10:40	Q & A
10:40 – 11:00	Tea Break
Session 7 - Chairperson: George Khushf (University of South Carolina)	
11:00 – 11:30	Topic: Should parents design their children's genome? Presenter: Li Jianhui (Beijing Normal University)
11:30 – 11:40	Discussant: Mang Fan Lun Franz (CityU)
11:40 – 12:10	Q & A
12:10 – 13:45	Lunch
Session 8 - Chairperson: Robert Sparrow (Monash University)	
13:45 – 14:15	Topic: Wearable Devices and Transformations to Human Death Brought About by AI Presenter: Eisuke Nakazawa (The University of Tokyo)
14:15 – 14:25	Discussant: Bai Jie (CityU)
14:25 – 14:55	Q & A
Session 9 - Chairperson: Joseph Tham (Regina Apostolorum University)	
14:55 – 15:25	Topic: Data Protection: A Bottleneck for Biomedical AI Development? Presenter: Wang Yue (Xi'an Jiaotong University)
15:25 – 15:35	Discussant: Sun Sihan (CityU)
15:35 – 16:05	Q & A
16:05 – 16:25	Tea Break
Session 10 - Chairperson: Lin Fen (CityU)	
16:25 – 16:55	Topic: How explainable AI should be for medical diagnosis? -- A view based on the patient's right to informed consent Presenter: Xu Hanhui (Nankai University)
16:55 – 17:05	Discussant: Liu Bojing (CityU)
17:05 – 17:35	Q & A
17:35 – 18:10	Transportation to the dinner venue
18:10 – 19:45	Dinner

Presenters

Ana Ittis

Professor and Carlson Professor of University Studies, Department of Philosophy, Wake Forest University, USA

Ana Ittis, PhD is the Carlson Professor of University Studies, Professor of Philosophy, and Director of the Center for Bioethics, Health and Society at Wake Forest University in Winston-Salem, North Carolina. She also holds an appointment in the Department of Social Sciences and Health Policy at Wake Forest School of Medicine, and is the Director of the Interdisciplinary Minor in Bioethics, Humanities, and Medicine. Ittis earned her MA and PhD in Philosophy from Rice University. She has published widely in bioethics, and holds several editorial positions, including: Co-Editor of the Annals of Bioethics book series (Routledge), Senior Associate Editor of The Journal of Medicine and Philosophy (Oxford University Press), and Co-Editor of Narrative Inquiry in Bioethics (Johns Hopkins University Press). She is the President-Elect of the American Society for Bioethics and Humanities.



George Khushf

Director, Center for Bioethics and Professor, Department of Philosophy, University of South Carolina, USA

George Khushf is Director of the Center for Bioethics and a Professor in the Department of Philosophy at the University of South Carolina. Since 1995 he has worked for the Palmetto Health Alliance (now Prisma), the largest healthcare provider in central South Carolina, in addressing clinical, administrative and organisational ethical issues that arise in the context of their health care practices. His research focuses on ethical and philosophical issues in medicine and emerging areas of science, technology, engineering and medicine. This includes service on ethics advisory boards in nanomedicine, synthetic biology, and genetics, including SynBERC, one of the largest US efforts in synthetic biology. Currently he serves on the Social, Ethical and Legal Ethics (SELI) Committee of the American College of Medical Genetics (ACMG). Current research focuses on the social and ethical conditions needed for realizing the potential integral to emerging technologies that can enhance capacities of medicine.



Li Jianhui

Professor, School of Philosophy, Beijing Normal University, Beijing, China

Li Jianhui is a professor of philosophy at Beijing Normal University and the Academic Registrar of Beijing Normal University - Hong Kong Baptist University United International College (UIC). He received his PhD from Peking University. Prior to joining UIC, Li was Deputy Director of the Office of Graduate Training of the Graduate School and has served as Vice Dean of the College of Philosophy, Beijing Normal University for two years. Since 1996, Li has been invited as visiting scholar to the University of Wisconsin-Madison, Harvard University, the University of California Berkeley, the University of Oxford, Needham Research Institute of Cambridge and Utrecht University.

Li's research is in the areas of philosophy of cognitive science, philosophy of mind, philosophy of biology, and social studies of science. His research was supported by the National Social Science Foundation as major programme, key programme, and general programme, respectively. He published over 10 books and more than 100 papers. Two books were awarded excellent achievements of Beijing Philosophy and Social Science Award, and another book was awarded excellent achievement of University Research Award of Ministry of Education (Humanity and Social Science).



Eisuke Nakazawa

Assistant Professor, Department of Biomedical Ethics, The University of Tokyo, Japan

Eisuke Nakazawa, PhD, is a lecturer in the Department of Biomedical Ethics at the University of Tokyo, Graduate School of Medicine (Japan). He received his doctorate in Philosophy of Science from the University of Tokyo. His current research areas are Biomedical Ethics, Neuroethics and Philosophy of Science. One of his recent publications is Neuroethical issues of the Brain/MINDS project of Japan which he co-authored with Sadato N, Morita K, Kasai K, Fukushi T, Nakamura K, Okano H, and Okabe S in Neuron 101 (February 6, 2019).



Robert Sparrow

Professor, School of Philosophical, Historical and International Studies, Monash University, Australia

Robert Sparrow is a Professor in the Philosophy Program, a Chief Investigator in the Australian Research Council Centre of Excellence for Electromaterials Science, and an adjunct Professor in the Monash Bioethics Centre, at Monash University, where he works on ethical issues raised by new technologies. He has been an ARC Future Fellow, a Japanese Society for the Promotion of Science Visiting Fellow at Kyoto University, a Visiting Fellow in the CUHK Centre for Bioethics, at the Chinese University of Hong Kong, a Visiting Fellow at the Centre for Biomedical Ethics at the National University of Singapore and a Visiting Fellow at Carnegie Mellon University. He has published widely on the ethics of robotics, AI, and human enhancement. He is a co-chair of the IEEE Technical Committee on Robot Ethics and was one of the founding members of the International Committee for Robot Arms Control.



Joseph Tham

Professor, School of Bioethics, Regina Apostolorum University, Italy

Joseph Tham was born in Hong Kong and immigrated to Canada at the age of fifteen. At the University of Toronto, he first majored in Mathematical Sciences and then graduated from Medical School. After several years of work as a family physician, he entered the seminary of the Legionaries of Christ and was ordained a priest in 2004. As a part of this preparation, he has obtained his degrees in philosophy and theology at Rome's Regina Apostolorum Pontifical university, where he also completed his postgraduate studies in bioethics. He successfully defended his doctoral dissertation with high honours on "The Secularization of Bioethics - A Critical History" under the direction of Dr Edmund Pellegrino, former Chairman of the President's Council on Bioethics. He is former dean of the School of Bioethics in Regina Apostolorum where he presently teaches bioethics. He is a Fellow of the UNESCO Chair in Bioethics and Human Rights. He is the author and editor of numerous articles and books, including The Missing Cornerstone (2004), The Secularization of Bioethics (2007) and Bioetica al Futuro [Bioethics of the Future] (2010), Religious Perspectives on Human Vulnerability in Bioethics (2014), Religious Perspectives on Bioethics and Human Rights (2017), Sexuality, Gender and Education (2018), Religious Perspectives on Social Responsibility in Health (2018) and Interreligious Perspectives on Mind, Genes and the Self (2018).



Wang Yue

Associate Professor, Department of Industrial Automation, Xi'an Jiaotong University, Xi'an, China

Wang Yue received her PhD in Law from the University of Glasgow, UK and is Associate Professor of Law School of the Xi'an Jiaotong University. She is also Deputy Secretary General of the Cybersecurity Law and Public Policy Committee of the Cybersecurity Association of China. She is specialising in cybersecurity law, genetic law and ethics. She has led and participated in many national research projects on network and cybersecurity law and medical law, took part in legislative drafting for multiple times, and published several Chinese and English monographs, papers and research reports.



Xu Hanhui

Bioethics Lecturer, School of Medicine, Nankai University, China

Xu Hanhui completed his MA in Medical Ethics from Peking University in 2014. Then, he did his research on "Adult Children's Filial Obligations to Their Parents" at Queen's University of Belfast. He obtained his PhD degree in Philosophy from QUB in 2018. After graduation, he worked as a lecturer in Bioethics at Nankai University. He is currently working on ethical issues in medicine. He is especially interested in the ethical concerns raised by genetic engineering and artificial intelligence.



Zhang Xinqing

Professor, School of Social Sciences and Humanities, Peking Union Medical University, Beijing, China

Zhang Xinqing is Professor at School of Social Sciences and Humanities, at Peking Union of Medical Collage and Chinese Academy of Medical Sciences. He got his PhD from Peking University. He was a research ethics fellow at Harvard School of Public Health.

Zhang's current research interests focus on the ethical and regulatory issues of biomedical clinical research. In the past decade, he conducted four national surveys on the attitudes of Chinese medical workers towards patient-physician relations, job satisfaction and so forth. Currently, he is leading the survey of Ethical Awareness Questionnaire for Biomedical Researchers funded by China National Science Foundation. He has worked as the vice chairman of the Ethical Committee of Stem Cell Research at Peking Union of Medical Collage Hospital. He has authored more than 100 publications and four books, and is member of several Journal Editorial Board.



Zhang Yuanting

Chair Professor, Biomedical Engineering, City University of Hong Kong

Zhang Yuanting is currently Chair Professor of Biomedical Engineering at City University of Hong Kong. He was the Sensing System Architect in Health Technology at Apple Inc., California, USA, the Founding Director of the Key Lab for Health Informatics of Chinese Academy of Sciences (CAS), and the Founding Director of CAS-SIAT of Biomedical and Health Engineering. Professor Zhang dedicated his service to the Chinese University of Hong Kong from 1994 to 2015 in the Department of Electronic Engineering, where he served as the first Head of the Division of Biomedical Engineering and the founding Director of the Joint Research Center for Biomedical Engineering.

Zhang serves as the Editor-in-Chief for IEEE Reviews in Biomedical Engineering, Chair of the Working Group for the development of IEEE 1708 Standard on Wearable Cuffless Blood Pressure Measuring Devices, and a panel member of IEEE Medal on Healthcare Technology Award. He the Editor-in-Chief for IEEE Transactions on Information



Technology in Biomedicine and the founding Editor-in-Chief of IEEE Journal of Biomedical and Health Informatics. He served as Vice Preside of IEEE EMBS, and Chair of 2016-2018 IEEE Award Committee in Biomedical Engineering.

Zhang's research interests include cardiovascular health informatics, unobtrusive sensing and wearable devices, neural muscular modeling and pHealth technologies. He was selected on the 2014, 2015, 2016, 2017 and 2018 lists of China's Most Cited Researchers by Elsevier. He won a number of international awards including IEEE-EMBS best journal paper awards, IEEE-EMBS Outstanding Service Award, IEEE-SA 2014 Emerging Technology Award. Zhang is elected to be IAMBE Fellow, IEEE Fellow and AIMBE Fellow for his contributions to the development of wearable sensing and m-Health technologies.

Discussants and Coordinator

Derrick Au

Centre Director, Centre for Bioethics, The Chinese University of Hong Kong

Bai Jie

PhD student, Department of Public Policy, City University of Hong Kong

Bai Jie is a second-year PhD student of the Department of Public Policy, City University of Hong Kong. She earned her BA from Fudan University and MA from Georgetown University, both major in political science. Her current research interests include Confucian ethics, gender studies, and fertility policy. Her PhD thesis is about surname inheritance in the changing China's society.



Chan Ho Mun

Associate Professor, Department of Public Policy, City University of Hong Kong

Chan Ho Mun obtained his BA and MPhil from the University of Hong Kong in philosophy, his MSc from the University of Sussex in knowledge-based systems, and his PhD in philosophy and cognitive science from the University of Minnesota. His teaching and research have focused on comparative social and political philosophy, applied and comparative ethics, end-of-life decision making, and the problem of rationality. His journal articles and book chapters have appeared in Journal of Medical Ethics, Bioethics, Journal of Medicine and Philosophy, and Education Philosophy and Theory among others. He is currently a Vice Chairman of the Clinical Ethics Committee of the Hospital Authority in Hong Kong and chairs its Working Group on Advance Directives. He is also the Chairman of Hong Kong Bioethics Association and has recently co-edited the book "Towards Sustainability: Medical Ethics and Professionalism" (in Chinese) (City University of Hong Kong Press, 2018) among others.


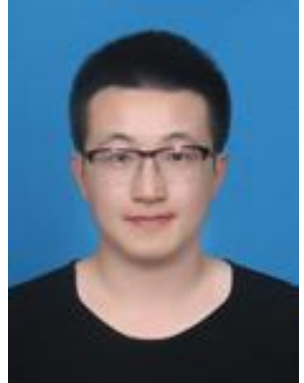




Chan Shing Bun Benedict

Assistant Professor, Department of Religion and Philosophy and Research Fellow, Centre of Applied Ethics, Hong Kong Baptist University

Chan Shing Bun Benedict is Assistant Professor in the Department of Religion and Philosophy and Research Fellow in the Centre of Applied Ethics at Hong Kong Baptist University. He received his PhD in the Philosophy Department at the University of Maryland, College Park. His Areas of Research Specialization (AOS) include Social & Political Philosophy, Applied Ethics & Moral Philosophy, and Comparative Philosophy (Chinese & Western). He has published in academic journals such as Dao: A Journal of Comparative Philosophy, Global Policy, International Journal of Chinese Comparative Philosophy of Medicine, and Journal of Bioethical Inquiry.



<p>Lin Fen Associate Professor, Department of Media and Communication, City University of Hong Kong</p> <p>Lin Fen obtained her MS in Statistics and PhD in Sociology from the University of Chicago. Her research interest includes sociology of media, journalism, political sociology, social and culture change, social movements and collective actions, political communication and China. Currently an Association Professor at the City University of Hong Kong, her areas of teaching are relevant to media and society and different aspects of communication. She has received prizes and honours including the Visiting Scholarship of Columbia University, Top Faculty Paper Award of the International Communication Association, William Rainey Harper and Social Science Visiting Committee Fellow of University of Chicago and Robert E. Park Lectureship Award of the University of Chicago for her research and teaching effort.</p>	
<p>Liu Bojing Lecturer, Wenzhou Medical University</p> <p>Liu Bojing received his PhD in literature studies from Jilin University in Mainland China. He is Lecturer at Wenzhou Medical University and is currently conducting his post-doctor research project at the Global China Studies Program of the College of Liberal Arts and Social Sciences at City University of Hong Kong. Liu's research interests include modern and contemporary Chinese literature, death aesthetics and medical ethics. He has published research papers in leading Chinese academic journals.</p>	
<p>Mang Fan Lun Franz Assistant Professor, Department of Public Policy, City University of Hong Kong</p> <p>Franz Mang's research interests lie mainly in social and political philosophy, comparative philosophy, and ethics. He received his DPhil (PhD) in Politics from Oxford University in 2016. Between 2010 and 2014, he was a Swire Scholar (on a fully-funded scholarship) at St Antony's College, Oxford University. He received his BA in Philosophy and MPhil in Politics from The Chinese University of Hong Kong and The University of Hong Kong respectively. He has published articles in Social Theory and Practice, Dao: A Journal of Comparative Philosophy, and Res Publica.</p>	
<p>Sun Sihan PhD student, Department of Public Policy, City University of Hong Kong</p> <p>SUN Sihan holds a Bachelor in economics from the University of California, San Diego, and a Master in Urban Education Policy from Brown University. She is currently a PhD candidate in Public Policy at the City University of Hong Kong. With a focus on bioethics, her current research works aim to develop a qualitative approach for the design, assessment, and upgrade of the advance directive from the perspective of Confucian ethics. Her research output intends to serve the policy making regarding palliative care at local and regional levels. She has published articles in International Journal of Chinese and Comparative Philosophy of Medicine, Chinese Medical Ethics, and the Chinese Social Science Today. Before she joined the PhD program, Sun had worked as the data analyst and superintendent assistant in the Central Falls School District in Rhode Island, USA, the administrative staff in the graduate school of the Harbin Institute of Technology, Shenzhen, and the associate editor of Journal of International Education News issued by the Educational Science Research Institute of Shenzhen.</p>	

Yung Yeuk Yu Lawrence

Instructor I, Department of Public Policy, City University of Hong Kong

Lawrence is Instructor in the Department of Public Policy. He completed his bachelor and master degrees in philosophy at the University of Hong Kong. He earned his doctoral degree in philosophy at the University of East Anglia. He teaches a number of GE courses and also courses related to applied ethics, public policy, social and political philosophy. His research interests include applied ethics, ancient philosophy (Chinese and Greek) and social and political philosophy.



Ellen Zhang

Head, Department of Religion and Philosophy, Hong Kong Baptist University

Ellen Zhang holds a PhD in Philosophy of Religion from Rice University. She is an associate professor and the department head in the Department of Religion and Philosophy at HKBU. She is also a research fellow at the Centre for Applied Ethics, and the editor-in-chief of the International Journal of Chinese and Comparative Philosophy of Medicine. Her research projects are related to philosophy of religion, Chinese philosophy (Daoism and Buddhism), and comparative studies in philosophy and ethics. Her recent publications include “Religious Ethics: Mode and Interpretation in the Chinese Tradition” in *The Blackwell Companion to Religious Ethics* (forthcoming), “Forgetfulness and Flow: ‘Happiness’ in Zhuangzi’s Daoism” in *Science, Religion & Culture* (2019), “Neurogenomics: Bioethical Challenges from a Buddhist Perspective,” in *Interreligious Perspectives on Mind, Genes and the Self* (2018), “Karma, Compassion, and Dharma: A Buddhist Perspective on Social Responsibility and Healthcare - A Reflection in Light of Buddhism” in *Religious Perspectives on Social Responsibility in Health* (2018), “Negative Certainties: Nāgārjuna’s Challenge to Kant on the “Togetherness of Intuition and Concepts” in *Intuition: Kant and Asian Philosophy* (2018), and “Daoism, Utopian Imagination and Its Discontents” in *Imagination: Cross-Cultural Philosophical Analyses* (2018).



Fan Ruiping

Chair Professor, Department of Public Policy, City University of Hong Kong

Fan Ruiping is Chair Professor of Bioethics and Public Policy in the Department. He also serves as Co-Editor of the International Journal of Chinese & Comparative Philosophy of Medicine (Hong Kong), Associate Editor for both the Journal of Medicine & Philosophy (USA) and the Chinese Medical Ethics (Mainland China), and on the Editorial Board of the Philosophy and Medicine book series (via Springer). His research focuses on Confucian bioethics, Chinese and comparative philosophy, and ethics and public policy. In addition to over 150 journal articles and book chapters (80 in English and 70 in Chinese) published, he has also authored *Reconstructionist Confucianism: Rethinking Morality after the West* (in English, 2010) and *Contemporary Confucian Bioethics* (in Chinese, 2011). He was the editor or co-editor of *Confucian Bioethics* (in English, 1999), *Confucian Society and the Revival of Dao* (in Chinese, 2008), *The Renaissance of Confucianism in Contemporary China* (in English, 2011), *Confucian Constitution and China’s Future* (in Chinese, 2012), *Ritual and the Moral Life* (in English, 2012), *Confucian Constitutional Order* (in English, 2013), *Family-oriented Informed Consent: East Asian and American Perspectives* (in English, 2015), and *Building Chinese Bioethics: New Explorations* (in Chinese, 2017).

