Benjamin James Capps

B.Sc. (Honours) Cardiff University MA University of Sheffield Ph.D. University of Bristol



(1) PRESENT EMPLOYMENT

August 2014 - Associate Professor in Health Care Ethics

Present Department of Bioethics

Faculty of Medicine, Dalhousie University, Halifax, Nova Scotia, Canada

(2) PREVIOUS EMPLOYMENT

1st April 2008 - Assistant Professor

8th August 2014 Centre for Biomedical Ethics

Yong Loo Lin School of Medicine, National University of Singapore, Singapore

Director of Graduate Studies

2nd October 2006 - Research Associate (Ethics in Medicine)

1st January 2008 Centre for Ethics in Medicine, University of Bristol, UK

1st September 2004 - Wellcome Trust Postdoctoral Research Fellow

30th **September 2006** Centre for Ethics in Medicine, University of Bristol, UK

"Stem Cell Therapy and 'Procedural Ethics': Proposals for a Harmonised Policy

within the European Union"

Funded by the Wellcome Trust's Biomedical Ethics Programme. Sponsor: Alastair V.

Campbell (UK and Singapore); Collaborator: Søren Holm (Norway & UK); Advisors:

Jennifer Gunning (UK) & Alex Faulkner (UK).

1st October 2003 - Teaching and Research Associate (Ethics in Medicine)

30th June **2004** Centre for Ethics in Medicine, University of Bristol, UK

Degree Director: BSc. in Bioethics; Intercalating Degree

Year Coordinator: Ethics and Law in Medicine; 1st year MB ChB

[2000-2003: PhD @ University of Bristol]

1999-2000 Researcher (Molecular Genetics)

School of Biological Sciences, University of Bristol, UK

1997-1999 Researcher (Law)

School of Law, University of Bristol, UK

(3) POSITIONS OF DISTINCTION

2010-2014 Honorary Associate Member; ESRC Centre for Economic and Social Aspects

of Genomics (Cesagen), Cardiff University, UK

2008-2009 Honorary Research Fellow; Centre for Ethics in Medicine, University of

Bristol, UK

(4) PROFESSIONAL MEMBERSHIP

Chair, Human Genome Organisation (HUGO) Committee on Ethics, Law and Society (CELS)

Appointed Chair in March 2018; Interim Chair: Feb 2017; Vice Chair: January 2016. Appointed member: January 2012–present.

Associate Editor, Human Genomics. May 2025-present.

- **Journal Advisory Board:** *Cambridge Quarterly of Healthcare Ethics*. Cambridge University Press. Clinical Neuroethics Advisory Board. 2020–present.
- Humanimal Trust: Public Guardian Involvement & Engagement (PGIE) group, and,
- **Humanimal Trust. Member of Science Committee**. Surrey, United Kingdom, Registered Charity Nos 1156927 & SC048960 www.humanimaltrust.org.uk; September 2022–present.
- Canadian One Health University Network. One Health Institute, University of Guelph. https://onehealth.uoguelph.ca/canadian-one-health-university-network/; May 2025-present.
- World Federation for Animals. Advisory Member, One Health Working Group. Feb 2022-2024.
- Ethics, Legal and Social Implications (ELSI) Working Group Forum. Co-lead (as chair of HUGO CELS) of initiative to bring together leads/chairs of ELSI groups within international health research consortia. With Public Health Alliance for Genomic Epidemiology (PHA4GE), the Global Alliance for Genomics and Health (GA4GH), the International Common Disease Alliance (ICDA), the Global Genomic Medicine Collaborative (G2MC) and the International HundredK+ Cohorts Consortium (IHCC). March 2022-2023.
- Centre for Genomics Enhanced Medicine. Member. AGADA Biosciences Inc., the Centre for Drug Research and Development, Dalhousie University, the IWK Health Centre and the Nova Scotia Health Authority; Halifax, Nova Scotia, Canada. November 2018-present.
- International Advisor to the Gene Modifying Technology Working Group. Science, Health, and Policy Relevant Ethics (SHAPES). Yong Loo Lin School of Medicine, National University of Singapore. 2019-21.
- **Belris: Bioethics and Legal Research in Singapore.** Joint Director (independent philanthropic thinktank). June 2014-November 2016.
- Neuroethics Working Group, Bioethics Advisory Committee. Singapore. Appointed Member. August 2011-August 2014.
- Pro-Tem National Oversight Committee for Human-Animal Combinations in Stem Cell Research. Ministry of Health, Singapore. Appointed member, March 2011-February 2012.

Royal United Hospital Trust (Bath, UK) Clinical Ethics Committee. Member, 2003-2008.

(5) EDUCATION

2nd October 2000 - Ph.D. (Medicine)

31st **Sept 2003** Centre for Ethics in Medicine, Bristol Medical School, University of Bristol, UK

'UK and European Policy in Stem Cell Research: Proposals for the Ethical

Grounding of Future Regulation'

Funded by the *Wellcome Trust's <u>Biomedical Ethics Programme</u>*. Supervised by Alastair V. Campbell (UK & Singapore). Examined by Roger Brownsword (UK) and Richard Ashcroft (UK).

Submitted November 2003; Viva voce (and provisionally awarded) January 2004;

Convocation 1st March 2004. Available

30th Sept 1996 - MA in Biotechnological Law and Ethics

29th Sept 1997 School of Law, University of Sheffield, UK

6th October 1993 - B.Sc. (Honours) Genetics

30th June 1996 Cardiff School of Biosciences, Cardiff University, UK

(6) RESEARCH

(i.) Research Fellowships

18th-30th Visiting Fellow

March 2015 Centre for Biomedical Ethics, National University of Singapore

Sponsored by MoH Grant on One Health (see below), Centre for Biomedical Ethics, NUS.

13th June - Overseas Visiting Fellow

8th July 2011 The Hastings Center, Garrison, New York, USA

Sponsored by the Capacity Development in Biomedical Ethics Programme, Centre for

Biomedical Ethics, NUS. Academic host: Karen J. Maschke.

19th-28th Research Fellow

July 2008 School of Population Health (sponsors), University of Queensland, Australia

Academic host: Wayne Hall.

7th January - Visiting Fellow

15th February 2008 Centre for Biomedical Ethics, National University of Singapore (sponsors)

Academic host: Alastair Campbell.

27th January - Visiting Fellow (secondment)

30th **April 2007** Centre for Biomedical Ethics, National University of Singapore

28th April - Overseas Visiting Fellow

3rd June 2005 The Hastings Center, Garrison, New York, USA

(ii.) Publications

ORCID: 0000-0002-9104-6025

Scopus Author ID: 25638460600

a) Citations (June 2025)

<u>Career</u> h-index	H-Index Source	Citations / Items included
15	Scopus	609 / 64
16	Research Gate	869 / 102
20	Google Scholar	1078 / 107

b) Ongoing Projects

Re-examining the Assumptions: Population-Specific Reference Genomes, Genomic Sovereignty, and Common Human Heritage. CELS Workshop @ the HUGO Genome Meeting, Durban, South Africa, March 2025. Paper in preparation.

AI and One Health: Can Environmentalism be Artificial?

One Medicine Ethics (with Iva Hauptmannova, Humanimal Trust)

Encyclopaedia of Applied Ethics. Section editor, Genomics; and chapter: Genomics and the Environment.

c) Monographs

Capps, B. 2024. *One Health Environmentalism*. Cambridge: Cambridge University Press. Online ISBN: 9781009271097

Carter, A., Capps, B. and Hall, W. 2009. *Addiction Neurobiology: Ethical and Social Implications*. European Monitoring Centre on Drugs and Drug Addiction Monographs: Number Nine. EMCDDA, Lisbon; & Office for Official Publications of the European Communities, Luxembourg. ISBN: 978-92-9168-347-5. pp. 184.

Concluding deliverable of EMCDDA project (see below: Research Grants, 2006). Capps was PI for the project, the editorial group were primary researchers, and contributors were named collaborators. For the monograph, the editorial group were allocated chapters to lead and had overall editorial responsibility for the final manuscript.

d) Edited Books

Capps, B. and Campbell, AV. eds. 2010. *Contested Cells: Global Perspectives on the Stem Cell Debate*. London. Imperial College Press. ISBN: 978-1-84816-437-6; 1-84816-437-8. pp. 486.

e) Refereed, International Journals

- Capps, B., Chadwick, R., Joly, Y. Lajaunie, C., Hauptmannova, I., Mackenzie, S., Mulvihill, J., Mumford, E., Rasmussen, S., Sanghavi, K., Thaldar, D., Yeates, J., Quinzin, M., and Lederman, Z. 2025. The Ecological Genome Project and the Promises of Ecogenomics for Society: Realising a Shared Vision as One Health. *Bioethics* https://doi.org/10.1111/bioe.70020.
- **2.** Capps, B. 2025. A One Health Economy. *Global Bioethics*. 36(1). https://doi.org/10.1080/11287462.2025.2511516
 - Commissioned paper for special Issue One Health and Planetary Health Approaches to Environmental Degradation.
- 3. Hamosh, A. et al. On Behalf of the HUGO Forum.* 2025. Expression of concern for global biomedical research by the Human Genome Organization (HUGO). *Human Genomics* 19: 46 https://doi.org/10.1186/s40246-025-00755-4
 - *Capps is a member of the HUGO Forum as chair of HUGO CELS.
- 4. Capps, B., Chadwick, R., Lederman, Z., Lysaght, T., Mills, C., Mulvihill, J., Oetting, W., Winship, I., & HUGO Committee on Ethics, Law and Society. 2023. The Human Genome Organisation (HUGO) and a vision for Ecogenomics: The Ecological Genome Project. *Human Genomics* 17: 115 https://doi.org/10.1186/s40246-023-00560-x
- 5. Capps, B. 2023. What do Chimeras Think About? *Cambridge Quarterly of Healthcare Ethics* 32(4): 496-514.
- 6. Capps, B. 2022. One Health Requires a Theory of Agency. *Cambridge Quarterly of Healthcare Ethics* 31(4): 518-529.
- Capps, B. 2022. One Health Ethics. Bioethics * 36(4): 348-355.
 *Certificate for Top 10 most-cited papers published 1st January 2022-31st December 2023.
- 8. <u>Capps, B.</u>, Joly, Y., Lee, W. B., Mulvihill, J., HUGO Committee on Ethics, Law and Society, and HUGO Council. 2021. Letter: The Human Genome Organisation (HUGO) and the COVID-19 Pandemic. *Human Genomics* 15:12 https://doi.org/10.1186/s40246-021-00310-x.
- 9. Capps, B. 2021. Philosophy is Still Missing from the Human-Mouse Chimera Debate. *American Journal of Bioethics* 21(1): 61-63.
- 10. Capps, B. 2021. Where does Open Science Lead Us During a Pandemic? A Public Good Argument to Prioritise Rights in the Open Commons. *Cambridge Quarterly of Healthcare Ethics* 30(1): 1-14.
- 11. Lederman, Z. and Capps, B. 2020. One Health Ethics: A Response to Pragmatism. *Journal of Medical Ethics* 46(9): 632-633.
- 12. Capps, B., Van de Eijk, Y., and Krahn, T. 2020. Conflicts of Interest in E-Cigarette Research: A Public Good and Public Interest Perspective. *Bioethics* 34(1): 114-122.
- 13. Capps, B. 2019 Gene Drive Gone Wild: Exploring Deliberative Possibilities by Developing One Health Ethics. *Law, Innovation and Technology* 11(2): 231-256.
- 14. <u>Capps, B.</u>, Chadwick, R., Joly, Y., Lysaght, T., Mills, C., Mulvihill, J. and Zwart, H. 2019. Statement on Bioinformatics and Capturing the Benefits of Genome Sequencing for Society. *Human Genomics* 13:24; https://doi.org/10.1186/s40246-019-0208-4.
- 15. Moreno, P., <u>Capps, B.</u> et al.* 2019. Open-Science Precision Medicine in Canada: Points to Consider. *FACETS*. 4(1): 1-19; https://doi.org/10.1139/facets-2018-0034; *23 authors listed on paper.
- **16.** Lederman, Z. and Capps, B. 2018. Expanding a Shared Benefit Approach in One Health Research. *American Journal of Bioethics* 18(10): 47-49.
- 17. <u>Capps, B.</u>, Mulvihill, J., Joly, Y., and Lysaght, T., and the HUGO Committee on Ethics, Law and Society. 2018. The View of CRISPR Patents through the Lens of Solidarity and the Public Good. *American Journal of Bioethics* 18(12): 54-56.

- **18.** Wolpe, P., Rommelfanger, K. and the Drafting and Review Delegates of the BEINGS Working Groups.* 2017. Ethical Principles for the Use of Human Cellular Biotechnologies. *Nature Biotechnology* 35: 1050-1058.
 - *Capps is one of 62 named authors who contributed to the text, reviewed, and provided revisions as members of project working groups.
- 19. <u>Capps, B.</u>, Chadwick, R., Joly, Y., Mulvihill, J., Lysaght, L. and Zwart, H. 2017. Falling Giants and the Rise of Gene Editing: Ethics, Private Interests and the Public Good. *Human Genomics* 11:20; https://doi.org/10.1186/s40246-017-0116-4.
- **20.** Mackley, M. and Capps, B. 2017. Expect the Unexpected: Screening for Secondary Findings in Clinical Genomics Research. *British Medical Bulletin* 122(1): 109-122.
- 21. Capps, B. 2017. Do Chimeras Have Minds? The Ethics of Clinical Research on a Human-Animal Brain Model. *Cambridge Quarterly of Healthcare Ethics* 26(4): 577-591.
- 22. Lysaght, T, <u>Capps, B.</u>, Bailey, M., Bickford, D., Coker, R., Lederman, Z., Watson, S. and Tambyah, P. 2017. Justice is the Missing Link in One Health: Results of a Mixed Methods Study in an Urban City State. *PLoS ONE* 12(1): e0170967.
- 23. Mulvihill, J. Capps, B., Joly, J. Lysaght, T., Zwart, H. and Chadwick, R. The International Human Genome Organisation (HUGO) Committee of Ethics, Law, and Society (CELS). 2017. Ethical Issues of CRISPR Technology and Gene Editing through the Lens of Solidarity. *British Medical Bulletin* 122(1): 109-122.
- 24. Lysaght, T., Kerridge, I., Sipp, D., Porter, G and <u>Capps, B.</u> 2017. Ethical and Regulatory Challenges with Autologous Adult Stem Cells: A Comparative Review of International Regulations. *Journal of Bioethical Inquiry* 14(2): 261-273.
- **25.** Capps, B. and Lederman, Z. 2016. Responding to a Public Health Objection to Vaccinating Great Apes. *Journal of Agriculture and Environmental Ethics* 29(5): 883-895.
- **26.** Capps, B. 2016. The Funding of Medical Research by Industry: Can a Good Tree bring Forth Evil Fruit? *British Medical Bulletin* 118(1): 5-15.
- 27. Thong, I., Foo, M., Sum, M., <u>Capps, B.</u>, Lee, T., Ho, C. and Sim, K. 2016. Therapeutic Misconception in Psychiatry Research: A Systematic Review. *Clinical Psychopharmacology and Neuroscience* 14(1): 17-25.
- **28.** Capps, B. 2015. Models of Biobanks and Implications for Reproductive Health Innovation. *Monash Bioethics Review* 33(4): 238-257.
- 29. Capps, B. and Lederman, Z. 2015. One Health, Vaccines and Ebola: The Opportunities for Shared Benefits. *Journal of Agriculture and Environmental Ethics* 28(6): 1011-1032.
- 30. <u>Capps, B.</u>, Bailey, M., Bickford, D., Coker, R., Lederman, Z., Lover, A., Lysaght, T., and Tambyah, P. 2015. Introducing One Health to the Ethical Debate about Zoonotic Diseases in South East Asia. *Bioethics* 29(8): 588–596.
- **31.** Capps, B. and Lederman, Z. 2015. One Health and Paradigms of Public Biobanking. *Journal of Medical Ethics* 41(3): 258-262.
- 32. Capps, B. and Van Der Ejik, Y. 2014. The Tobacco Industry, Researchers, and Ethical Access to UK Biobank: Using the Public Interest and Public Good. *American Journal of Public Health* 104(10): 1833-1839.
- 33. Khan, A., <u>Capps, B.</u>, Sum, MY., Kuswanto, CN. and Sim, K. 2014. Informed Consent for Human Genetic and Genomic Studies: A Systematic Review. *Clinical Genetics* 86(3): 199–206.
- 34. Capps, B. 2014. A Critical Commentary on Derek Morgan's Unpublished Manuscript: "Coming Back to Life: The Normal Chaos of Medical Law" and How to Deal with Property in Human Cells. *Medical Law Review* 22(4): 606-619.
- 35. Capps, B. 2014. Regulating Induced Pluripotent Stem Cells Ethically in the Bio-Economy: A Preliminary Enquiry. *Asian Bioethics Review* 6(3):208-233.

- **36.** Capps, B. 2013. Regulating Induced Pluripotent Stem Cells Ethically in the Bio-Economy: A Preliminary Enquiry. *Biomedical Law and Ethics* 7(1): 1-45. Republished with permission, in Asian Bioethics Review 2014.
- 37. Capps, B. and Ch'ng JH. 2013. Conducting Malaria Research in Developing Countries: A Right to Claim Healthcare. *Asian Bioethics Review* 5(4): 296-315.
- **38.** Lysaght, T, Kerridge, I., Sipp, D., Porter, G. and <u>Capps, B.</u> 2013. Oversight for Clinical Uses of Autologous Adult Stem Cells: Lessons from International Regulations. *Cell Stem Cell* 13(6): 647-651.
- **39.** Lysaght, T, Kerridge, I., Sipp, D., Porter, G. and <u>Capps, B.</u> 2013. Global Bionetworks and Challenges in Regulating Autologous Adult Stem Cells. *American Journal of Medicine* 126(11): 941-943.
- **40.** Capps, B. 2013. Defining Variables of Access to UK Biobank: The Public Interest and the Public Good. *Law, Innovation and Technology* 5(1): 113-139.
- 41. Capps, B. and Lysaght, T. 2013. Challenging the Production of Vaccines for a Future Influenza Pandemic. *Asian Bioethics Review* 5(2): 110-130.
- **42.** Capps, B., Nielsen, L. and Stirrat, G. 2012. A Brief Critique of Two Claims about the Social Value of Biotechnological Enhancements. *Asian Bioethics Review* 4(4): 259-271.
- 43. Ahmad, A., Lysaght, T., Liu, J., Subramaniam, M., Tan SB. and <u>Capps, B.</u> 2012. Understanding Risk: Psychosis and Genomics Research in Singapore. *Genomics, Society and Policy* 8(2): 15-28 (renamed Life Sciences, Society and Policy in 2013).
- 44. Rekhi, G., <u>Capps, B.</u>, Lysaght, T. and Chong, SA. 2012. Reappraising Consent: Conducting Ethical Psychiatric Research in Singapore. *Journal of Law and Medicine* 20: 152-164.
- 45. Capps, B. 2012. The Public Interest, Public Goods, and Third Party Access to UK Biobank. *Public Health Ethics* 5(3): 240-251.
- **46.** Lysaght, T. and Capps, B. 2012. Public Discourses of Stem Cell Science in Singapore (1997–2010). *New Genetics and Society* 31(4): 342-358.
- 47. Lysaght, T., <u>Capps, B.</u>, Subramaniam, M. and Chong, SA. 2011. Translational and Clinical Research in Singapore: Ethical Issues in a Longitudinal Study of the Prodromal Phase of Schizophrenia. *Early Intervention in Psychiatry* 6(1): 3-10.
- **48.** Lysaght, T., <u>Capps, B.</u>, Campbell, A., Subramaniam, M. and Chong, SA. 2011. Intervening in Clinical Research to Prevent the Onset of Psychoses: Conflicts and Obligations. *Journal of Medical Ethics* 38(5): 319-321.
- **49.** Capps, B. 2011. Libertarianism, Legitimation, and the Problems of Regulating Cognition-Enhancing Drugs. *Neuroethics* 4(2): 119-128.
- **50.** Capps, B. and Carter, A. 2010. Standing at the Precipice: A Cautionary Note about Incremental Goods. *American Journal of Bioethics Neuroscience* 1(3): 46-48.
- **51.** Capps, B. 2010. Enhancing Public Ethics: Libertarianism, Legitimation, and the Problems of Technology Regulation. *Asian Bioethics Review* 2(4): 273-287.
- **52.** Ho, WC., Capps, B., and Voo, TC. 2010. Stem Cell Science and its Public: The Case of Singapore. *East Asian Science, Technology and Society: An International Journal* 4(1): 7-29.
- **53.** Voo, T.C. and Capps, B. 2010. Influenza Pandemic and the Duties of Healthcare Professionals. *Singapore Medical Journal* 51(4): 275-280.
- 54. Chong, SA., <u>Capps, B.</u> Subramaniam, M., Voo, TC., and Campbell, A.V. 2010. Clinical Research in Times of Pandemics. *Public Health Ethics* 3(1): 35-38.
- 55. Carter, A., Capps, B. and Hall, W. 2008. Implicationi ethiche e politiche delle applicationi della ricerca neurobiolgica sulla dipendenze (Ethical and Political Implications of Addiction Neuroscience). *Medicina delle Tossicodipendenze* (Italian Journal of the Addictions) 16(60): 39-46.

- **56.** Hall, W., Capps, B. and Carter, A. 2008. Editorial: The Use of Depot Naltrexone Under Legal Coercion: The Case for Caution. *Addiction* 103(12): 1922-1924.
- 57. Capps, B. 2008. Commentary: Balancing Ethical Research and Placebo Administration. *Journal of Psychopharmacology* 22(6): 600-602.
- 58. Capps, B. 2008. Authoritative Regulation and the Stem Cell Debate. *Bioethics* 22(1): 43-55.
- **59.** Capps, B. and Campbell, A. 2007. Why (only some) Compensation for Oocyte Donation for Research Makes Ethical Sense. *Journal of International Biotechnology Law* 4(3): 89-102.
- 60. Capps, B. 2006. Procedural Ethics and the European Stem Cell Debate. *Jahrbuch für Wissenschaft und Ethik* (Yearbook for Science and Ethics) 11(1): 41-66.
- 61. Capps, B. 2002. The European Union and Stem Cell Research: A Turnaround on Policy Regarding Human Embryo Research? *Legal Ethics* 5(1&2) (Spring): 18-23.

f) Book Chapters

- **1.** Capps, B. In press, 2025. The Idea of Governance in One Health. In: Beyleveld, D., Düwell, M., and Brownsword, R. eds. *Research Handbook on Law, Governance and Bioethics* Research Handbooks in Legal Theory series. Edward Elgar Publishing. Publication Date: December 2025 ISBN: 978 1 78811 666 4.
- **2.** Capps, B. 2025. The Environment, Population Health Ethics, and Genomics. In Kumar, D. and Chadwick, R. eds. *Genomics, Populations, and Society*. A volume in Genomics and Precision Medicine in Clinical Practice; Kumar, D. series ed. London: Elsevier. pp. 253-271. Available online 15 November 2024.
- **3.** Capps, B. 2016. Public Goods in the Ethical Reconsideration of Research Innovation. In: Capps, P. and Pattinson, S. *Ethical Rationalism and the Law*. Oxford. Hart Publishing. pp. 149-169.
- **4.** Capps, B., Van Der Eijk, Y. and Carter, A. 2014. Ethical Issues in the Treatment of Addiction. In: Clausen, J. and Levy, N. eds. *Handbook on Neuroethics*. Netherlands. Springer. pp. 1045-1063.
- **5.** Capps, B. 2014. Redefining Property in Human Body Parts: An Ethical Enquiry in the Stem Cell Era. (Primary topic article.) In: Akabayashi, A. (ed), *The Future of Bioethics: International Dialogues*. Oxford. Oxford University Press. pp. 235-263.
- **6.** Capps, B. 2014. Response to Commentaries: Does 'Dignity in Property' tell Us Anything About Dignity and Bioethics. In: Akabayashi, A. (ed), *The Future of Bioethics: International Dialogues*. Oxford. Oxford University Press. pp. 278-283.
- **7.** Capps, B. 2013. Privacy, Rights and Biomedical Data Collections. In Kaan, T. and Ho, C. eds. *Genetic Privacy in Singapore: Science, Ethics and Law.* Singapore. World Scientific. pp. 169-202.
- **8.** Chong, S.A., <u>Capps, B.</u>, Subramaniam, M., Voo, TC., and Campbell, A. 2013. Clinical Research in Times of Pandemics. In Viens, A. ed. *Emergency Research Ethics;* Volume IV. The Library of Essays on Emergency Ethics, Law and Policy. Aldershot. Ashgate. pp. 301-304 (*reprint of Chong, et. al., above*).
- 9. Carter, A., Capps, B. and Hall, W. 2011. Emerging Neurobiological Treatments of Addiction: Ethical and Public Policy Considerations. In Carter, A., Hall, W. and Illes, J. eds. *Addiction Neuroethics: The Bioethics of Addiction Neuroscience Research and Treatment*. London. Elsevier. pp. 95-113.
- 10. Capps, B. and Campbell, A.V. 2011. Stem Cell Science and iPS cells: Fine-Tuning the Ethical Issues. In Bongso, A. and Eng, H. eds. Stem Cells: From Bench to Bedside. 2nd edition. Singapore. World Scientific. pp. 637-664.
- **11.** Capps, B. and Campbell, A. 2010. Contested Cells: Global Perspectives on the Stem Cell Debate A Critical Introduction. In Capps, B. and Campbell, A.V. eds. *Contested Cells: Global Perspectives on the Stem Cell Debate*. London. Imperial College Press. pp. 1-54.
- **12.** Mackenney, J. and Capps, B. 2010. New Developments in Stem Cell Science: iPS Cells and the Challenge to Consent. In Capps, B. and Campbell, AV. eds. *Contested Cells: Global Perspectives on the Stem Cell Debate*. London. Imperial College Press. pp. 207-240.

- 13. <u>Capps, B.</u>, Carter, A., Hall, W., Nutt, D., Ashcroft, R. and ter Meulen, R. 2010. Possibili implicazioni dei progressi della neurobiologia della dipendenza per le future politiche sulle droghe. In Serpelloni, G., Bricolo, F. and Gomma, M. eds. *Elementi di Neuroscienze e Dipendenze: Manuale per operatori dei Departmenti della Dipendenze*. 2nd Edition. Department della Dipendenze, in collaboration with: Presidenza del Consiglio dei Ministri, Departimento Politiche Antidroga. Verona. pp. 251-254. *Published previously as Carter, A., Capps, B. and Hall, W. Addiction Neurobiology 2009; Chapter 6.*
- **14.** Capps, B. 2007. Bioethics, Procedural Ethics, and Misrepresentation in the Stem Cell Debate. In: Gunning, J. and Holm, S. eds. *Ethics, Law and Society, Volume 3*. Aldershot. Ashgate. pp. 25-38.
- **15.** Ashcroft, R., Campbell, A. and Capps, B. 2007. Ethical Aspects of Developments in Neuroscience and Drug Addiction. In: Nutt, D., Robbins, T., Stimson, G., Ince, M., and Jackson, A. eds. *Drugs and the Future: Brain Science, Addiction and Society*. London. Elsevier Academic Press. pp. 439-465.
- 16. Capps, B. 2005. The Human Embryo, Stem Cell Research, and the European Union. In: Bender, W., Hauskeller, C. and Manzei A. eds. *Crossing Borders. Grenzüberschreitungen. Kulturelle, Religiöse und Politische Differenzen in Kontexte der Stammzellforschung Weltweit. Cultural, Religious, and Political Differences Concerning Stem Cell Research: A Global Approach.* Münster. Agenda Verlag. pp. 435-467.

g) Encyclopaedia Entries

- **1.** Capps, B. 2025. New Technologies: Ethics of Genomics. In: Quah, S. Ed.-in-Chief. *International Encyclopaedia of Public Health*; 3rd Edition. London. Elsevier. pp. 293-303. DOI: 10.1016/B978-0-323-99967-0.00029-6. Available online 9 September 2024.
 - A substantive revision on the second edition.
- **2.** Capps, B. 2017 (published online: 2016). New Technologies: Ethics of Genomics. In: Quah, S. Ed.-in-Chief. *International Encyclopaedia of Public Health*; 2nd Edition. London. Elsevier. pp. 240-247.
- **3.** Capps, B., Hall, W. and Carter, A. 2012. Addiction. In: Ruth Chadwick, ed. *Encyclopaedia of Applied Ethics*; 2nd Edition, Volume One. San Diego. Academic Press. pp. 22-30.
- **4.** Ashcroft, R, Capps, B., and Huxtable, R. 2000 (published online: 2002). The Advisory and Regulatory Framework for Biotechnology in the UK (International Aspects: National Profiles, United Kingdom). In: *Encyclopaedia of Ethical, Legal and Policy Issues in Biotechnology*. Murray, T.H. and Mehlman, M.J. (Editors-in-Chief). (Wiley Biotechnology Encyclopaedias). New York. Wiley. pp. 747-761. (Online: doi:10.1002/0471250597.mur034).

h) Reports and Working Papers

- 1. <u>Capps, B.</u>, Watson, S., Lederman, Z. and Lysaght, T. 2017. *One Health, Zoonotic Diseases, and Pandemic Planning: Creating a Bioethics Framework in Singapore*. Submitted to Ministry of Health, Singapore.
- 2. Lysaght, T., Kerridge, I., Sipp, D., Porter, G. and <u>Capps, B.</u> 2015. *Ethical and Regulatory Challenges with Autologous Adult Stem Cells: A Comparative Review of International Regulations*. Asia Research Institute Working Paper Series No. 232. ARI. National University of Singapore. <u>Available</u>.
- 3. <u>Capps, B.</u>, Chadwick, R., Chalmers, D., Clarke, A., Clayton, E.W., Liu, E., Lysaght, T., Mulvihill, J. and Winslett, M. 2013, published online December 2014. *Imagined Futures: Capturing the Benefits of Genome Sequencing for Society*. Report prepared by the working group of the HUGO Committee on Ethics, Law and Society. pp. 62. <u>Available</u>.
- **4.** Members of Neuroethics Working Group, Bioethics Advisory Committee, Singapore. 2013. *Ethical, Legal and Social Issues in Neuroscience Research: A Consultation Paper*. 9th January. pp. 29. Available
- 5. Capps, B. (PI), Yun HD. and Voo, TC. 2013. *An Ethical Analysis of Human Egg Freezing Policies*. Report supported by Bioethics Legal Group for Reproductive Issues in Singapore (Belris). 1st July. pp. 57. Available. (Report also published as a Supplement to the *Asian Bioethics Review* in 2014.)

- **6.** EPOCH Project Group, including <u>Capps</u>, <u>B.</u> 2012. Final Report Summary EPOCH (Ethics in Public Policy Making: The Case of Human Enhancement); Project reference: <u>266660</u>; Funded under: European Union/ European Commission FP7-SIS; <u>Available</u>
- 7. Carter, A., Hall, W., <u>Capps, B.</u> and Daglish, M. 2009. *Neurobiological Research on Addiction: A Review of the Scientific, Public Health and Social Policy Implications for Australia*. New South Wales Health & The Ministerial Council on Drugs Strategy (Ministerial Council on Drug Strategy Cost Shared Funding Model project). 30th January. pp. 241.
- 8. Capps, B., Campbell, A. and ter Meulen, R. 2008. *Access to the UK Biobank Resource: Concepts of the Public Interest and the Public Good*. Commissioned report for the Ethics and Governance Council of UK Biobank/Wellcome Trust. Submitted June 2007. pp. 32. <u>Available</u>; *Internationally peer reviewed*.
- Capps, B. 2008. Oocyte Procurement for Research: A Background Paper for the Bioethics Advisory
 Committee of Singapore. Commissioned paper for the Bioethics Advisory Committee of Singapore.
 Submitted February 2007. pp. 25. Published online April 2007; <u>Available</u>. Published as an Appendix
 to the BAC Report 'Donation of Human Eggs for Research'; 3 November 2008.
- **10.** Capps, B. and Campbell, A. 2007. *Cloning Report: New Developments and Suggestions for IRB Handbook Material*. Internal report for the Bioethics Advisory Committee, Singapore. Submitted February 2007.
- 11. Ashcroft, R., Campbell, A. and Capps, B. (PI). 2005. Ethical Aspects of Developments in Neuroscience and Drug Addiction (Chapter IV). Foresight: Drug Futures 2025? Brain Science, Addiction and Drugs Project. Department of Science and Technology: London. pp. 65. Archive available; Internationally peer reviewed. Reprinted as book chapter: Ashcroft, Campbell & Capps. 2007, above.

i) Editor

- 1. Section Editor for Genomics. Encyclopaedia of Applied Ethics, 3rd Edition. Elsevier (2023-ongoing).
- 2. Capps, B., ter Meulen, R. and Nielsen, L. (Guest eds.). December 2012 Special Edition of the *Asian Bioethics Review* 4(4).

Includes an Editorial, and nine commissioned papers, previously presented at the European Commission FP7 Science in Society funded project, Ethics in Public Policy Making: The Case of Human Enhancement (EPOCH).

j) Scholarly Works: Commentary, Non-journal, or Editorial Peer Reviewed

- King, T., Bevan, J., <u>Capps, B.</u>, Francis, M., Grist, L., Mobasheri, A., Radford, A., Ranjan, A., and Yeates, J. 2022. Response to Dr Matt Morgan: Learning from all creatures great and small. <u>British Medical Journal https://www.bmj.com/content/376/bmj.o723/rr</u>
- **2.** Capps, B. 2020. Letters: Chimeras and the Problem of Other Minds. *Hastings Center Report* January-February 50(1): 46. (*Editorial review*).
- **3.** Capps, B. 2013. Editorial: Treating Minors and the Duty to Disclose Information to Parents. *Asian Bioethics Review* 5(3): 255-261. (*Local reviewed*.)
- 4. Lim, EWL., Eun, JM. (NUS High School Students) and Capps, B. 2013. Neuroethics. In Lim, K-L., and Soong, T. W. (eds.) *The Brain Book 2*. Singapore. Department of Physiology, National University of Singapore. pp. 26-30. (*Local reviewed*.)
- **5.** Capps, B. 2013. Book Review: Ethics and Security Aspects of Infectious Disease Control: Interdisciplinary Perspectives. Edited by C. Enemark, M. Selgelid. *Asian Bioethics Review* 5(2): 162-168.
- 6. Capps, B., ter Meulen, R. and Nielsen, L. 2012. Editorial: Human Enhancement Technologies: Understanding Governance, Policies and Regulatory Structures in the Global Context. *Asian Bioethics Review* 4(4): 251-258.
- **7.** Krishna, L. and Capps, B. 2011. Opioid Use at the End of Life: Working out the Physician's Intentions. *Indian Journal of Medical Ethics* VIII(1): 39-41. (*Local reviewed*.)

- **8.** Capps, B. and Nutt, D. 2008. Cannabis and Psychosis: The Environment Trigger. *The Galton Institute Newsletter* 69 (December): 1-8.
- 9. Capps, B. 2008. Book Review: Consent in the Law, by D. Beyleveld and R. Brownsword. *Legal Studies* 28(1): 149-153.
- **10.** Capps, B., Ashcroft, R., Campbell, A. 2005. Ethical Aspects of Neuroscience and Drug Addiction: Summary. In: *Foresight: Drug Futures 2025?* Office of Science and Technology. London. (*Local reviewed.*).
- 11. Capps, B. 2005. 'Bioethics and Misrepresentation in the Stem Cell Debate'. Invited paper published online by *Cardiff Centre for Ethics, Law and Society* (CCELS). April 2005. (*Local reviewed.*).
- **12.** Capps, B., Ashcroft, R. and Campbell, A. 2004. Foresight Brain Science, Addiction & Drugs Project: Background Note on the Underlying Science: Ethical Issues. Office of Science and Technology. London. (International reviewed.)
- **13.** Capps, B. 2002. 'The Use of Stem Cells: View of the European Board of the Royal College of Obstetrics and Gynaecology: Comments from Ethics Committee to President'. Invited advisory contribution for the European Board and Royal College of Obstetrics and Gynaecology. Brussels. Unpublished (Committee reported 2003).
- **14.** Capps, B. 2000. 'Transplantation from Anencephalic Newborns: The Legal and Ethical Position in the UK'. Internal invited paper for the Directorate of Obstetrics, Gynaecology & ENT; St Michael's Hospital, United Bristol Health Care NHS Trust, Bristol. Unpublished.

(iii.) Presentations, Papers, Meetings, and Interviews

a) Invited and Keynote Papers

- 2025. A One Health Guide to Bioethics. University of California, Santa Cruz. Co-hosted by the UCSC Department of Biomolecular Engineering, the Genomics Institute, and the Science & Justice Research Center. BME80G Bioethics in the 21st Century: Science, Business, and Society. Online/California, USA [invited in person with honorarium, but unable to travel] 16th May.
- 2. 2023. Invited speaker. *One Health Ethics: An Introduction to My Research*. Nova Scotia Regional Chapter of the Canadian Association of Physicians for the Environment (CAPE NS). Online/Canada 16th January.
- **3.** 2021. Invited speaker. *One Medicine Symposium 2021: 'Stronger Together How we can take One Medicine forward'*. Sponsored and Organized by The Humanimal Trust, UK-based registered charity. Online/**UK**. 6th May.
- **4.** 2018. Invited speaker. 'Gene Drives, Ethics, and Public Engagement.' Centre for Genomics Enhanced Medicine. Halifax, **Canada**. 14th November.
- 5. 2015. Invited speaker. 'Public Goods in the Ethical Reconsideration of Research Innovation'. Ethical Rationalism and the Law. University College, Durham University, Durham, UK. 15th-16th October.
- 6. 2015. Invited speaker 'Solving Ebola: One Health and Non-Human Vaccination Programme'. Centre for Biomedical Ethics Journal Club, Yong Loo Lin School of Medicine, National University of Singapore. Singapore. 25th March.
- 7. 2015. Invited speaker. 'Given the tentative knowledge of the long-term effectiveness and effects of neurological interventions for neuropsychiatric conditions, what should be done to maximize benefit and lessen risks in patient care?' Neuroethics Network; jointly sponsored by Cambridge University Press and ICM, the noted Brain & Spine Institute on the campus of the Hôpital Pitié Salpêtrière. Paris, France. 17th-19th June.
- 8. 2014. Invited Speaker. 'Ebola: Perspectives on the Epidemic~Where to Begin'. Presented by Capital Health, Dal Med GHI, Dalhousie University Global Health Office, Dalhousie Medical Students Society, Health Association of African Canadians & The Tropical Medicine Student Interest Group. Multiple locations across The Maritimes, Canada. 20th November.

- 9. 2014. Invited speaker. 'As we learn more about how the brain works in animals, will it affect how we see their participation as research subjects?' Neuroethics Network; jointly sponsored by Cambridge University Press and ICM, the noted Brain & Spine Institute on the campus of the Hôpital Pitié Salpêtrière. Paris, France. 19th-20th June.
- **10.** 2014. Invited speaker. 'Situating the Public Good in Bioethics'. Department of Bioethics, Dalhousie University, Halifax, Nova Scotia, **Canada**. 27th January.
- 11. 2013. Speaker. 'Privacy, Rights and Genetic Databases'. The Joint Conference of The Human Genome Meeting 2013 and the 21st International Congress of Genetics; Co-Organised by the Human Genome Organisation (HUGO) and the International Genetics Federation (IGF); Singapore. 13th-18th April.
- **12.** 2013. Keynote speaker. 'Regulating Induced Pluripotent Stem Cells Ethically in the BioEconomy: A Preliminary Enquiry.' International ELSI Conference on iPSC Research. Ewha Womans University, School of Law & Ewha Institute for Biomedical Law & Ethics. Seoul, **Korea**. 13th February.
- **13.** 2012. Keynote speaker; with Onora O'Neill. 'Do Chimeras have Minds?' Brain Matters: Ethical Grey Areas in Innovative Treatments and Research Involving the Human Brain. An International Clinical Ethics Conference. Grand Copthorn Waterfront Hotel, **Singapore**. 23rd-25th February.
- **14.** 2012. Invited speaker. 'Imagined Futures: Capturing the Benefits of Genome Sequencing for Society'. Working Summit: Ethics, Society and Law: Imagined Futures. HUGO 16th Human Genome Meeting. Sydney Convention and Exhibition Centre, Sydney, **Australia**. 11th-14th March.
- **15.** 2011. Lead discussant (sponsored by Cesagen, Cardiff University). 'Global Ethical and Legal Challenges in Genomics and Genetics'. HUGO 15th Human Genome Meeting. Dubai International Convention & Exhibition Centre, World Trade Centre, **Dubai**. 14th-17th March.
- **16.** 2011. Invited speaker. 'Redefining Property in Human Body Parts: An Ethical Enquiry'. 3rd GABEX International Conference (Global Alliance for Biomedical Ethics Centres). University of Tokyo, Centre for Biomedical Ethics and Law. Hotel New Otani, Tokyo, **Japan**. 11th-12th February.
- 17. 2008. Keynote Speaker. 'Embryonic Stem Cells Research, Ethics, and Legislation in the European Union and World' (simultaneous interpretation from English). Centre for Bioethics KF UCM in Trnava and Ethics Committee of the Ministry of Health of Slovakian Republic under the auspices of MU Dr. Richard Rašla, Minister of Health of the Slovak Republic. Ministry of Health, Bratislava, Slovakia. 20th October.
- **18.** 2007. Invited Public Lecture. 'Stem Cell Science: An Ethical Approach to Future Controversies'. Yong Loo Lin School of Medicine. National University of Singapore, **Singapore**. 7th August.
- 19. 2007. Keynote Speaker. 'Stem Cell Banks: The Ethical Issues'. Singapore Stem Cell Consortium International Stem Cell Conference. Matrix Building, Biopolis, **Singapore**. 1st-2nd February.
- 20. 2006. With David Nutt (presenter). 'Cannabis and Psychosis: The Environment Trigger'. The Galton Institute 2006 Conference in association with Progress Educational Trust. Nature or Nurture or Neither? Genetics in the Post-Genome Era. Institute of Child Health, London, UK. 19th October.
- 21. 2006. Keynote Speaker. 'Stem Cell Science: The Ethical and Legal Debate in Europe'. 3rd International Meeting of the Stem Cell Network North Rhine Westphalia. State Ministry of Innovation, Science, Research and Technology, Münster, **Germany**. 14th-16th May.
- **22.** 2005. Invited speaker. 'Ethical Aspects of Addiction'. Bristol Neuroscience Symposium: Addiction and Craving. University of Bristol, **UK**. 22nd September.
- 23. 2005. Invited speaker. 'The UK Stem Cell Debate The Role of Researchers and 'Experts''. Norwegian Research Council Workshop. Department of General Practice and Community Medicine, Section for Medical Ethics, University of Oslo, Norway. 13th-14th June.
- 24. 2005. Invited speaker. 'Stem Cell Therapy and 'Procedural Ethics': Harmonisation Through Compromise?' Economic and Social Research Centre for Genomics in Society, University of Exeter, UK. 15th March.
- **25.** 2004. Keynote Speaker. 'Ethical Aspects of Developments in Neuroscience and Drug Addiction'. Foresight Brain Science, Addiction and Drugs Project: The State-of-Science Reviews' Workshop. The Royal Society, London, **UK**. 19th October.

26. 2001. Invited speaker. 'Transplantation from Anencephalic Newborns: The Legal and Ethical Position in the UK'. Public Lecture. Perinatal Club of Bristol, Department of Obstetrics, St. Michael's Hospital, Bristol, UK. 24th July.

b) Conference Papers Presented (abstract selected by scientific committee)

- 2017. 'Ethical Issues of CRISPR Technology and Gene Editing Through the Lens of Solidarity'. With Lysaght, T. (presenter) and HUGO Committee of Ethics, Law and Society. The 21st Human Genome Meeting: From Genomics to Therapy. Barcelona, Spain. 5th - 7th February.
- 2. 2016. 'Justice is the Missing Link in One Health: A Mixed Methods Study in an Urban City State'. Lederman, Z. (presenter), Lysaght, T., Capps, B., Bailey, M., Bickford, D., Coker, R. and Tambyah, P. 2016. 4th International One Health Congress & 6th Biennial Congress of the International Association for Ecology & Health. Melbourne Convention and Exhibition Centre. Melbourne, Australia. 3rd 7th December.
- **3.** 2012. 'Pandemic Influenza, Vaccines, and Public Ethics: A Challenge to Industry'. 11th World Congress of the International Association of Bioethics. Rotterdam, **Netherlands**. 26th-29th June.
- **4.** 2010. 'Libertarianism, Legitimation, and the Problems of Technology Regulation'. 10th World Congress of the International Association of Bioethics. **Singapore**. 28th-31st July.
- 5. 2008. 'An Analysis of the Public Good and Public Interest'. 9th World Congress of the International Association of Bioethics. Rijeka, Croatia. 3rd-8th September.
- 6. 2006. 'Can Proceduralism Resolve the European Stem Cell Debate?' EACME Annual Conference: New Pathways for European Bioethics. Centre for Biomedical Ethics and Law at the Catholic University of Leuven, Belgium, and the European Association of Centres of Medical Ethics (EACME). Leuven, Belgium. 28th-30th September.
- 7. 2006. Poster Discussion. 'Can Proceduralism Resolve the European Stem Cell Debate?' 8th World Congress of the International Association of Bioethics. Beijing, **China**. 6th-9th August.
- **8.** 2006. 'Authoritative Regulation and the Stem Cell Debate'. New Zealand Bioethics Conference: Making People Better. University of Otago, Dunedin, **New Zealand**. 10th-12th February.
- 9. 2004. 'Stem Cell Therapy and Procedural Ethics: Towards a European Regulatory Policy'. 7th World Congress of the International Association of Bioethics. Sydney, **Australia**. 9th-12th November.

c) Notable Meetings, Seminars & Workshops (selected)

- 1. Co-Organizer. 2025. Educational Workshop: Re-examining the Assumptions: Population-Specific Reference Genomes, Genomic Sovereignty, and Global Health Equity. Human Genome Meeting 2025: From Africa to the World: Exploring African diversity through human genomes. Durban, South Africa. 11th-14th March.
- **2.** Brocher Foundation Workshop. 2024. Expanding the Genome The Environmental Genome Project and the Promises of Ecogenomics for Society. The Brocher Foundation, Geneva, **Switzerland**. 27-29 May.
- **3.** Invited Panel (Online). 2022. Global Policy Forum Workshop. Led by representatives from multiple ELSI working groups. GA4GH 10th Plenary. Casa Convalescencia, Barcelona, **Spain**. 21st September.
- 4. Organiser and lead chair. 2019. 'Open Science: What do we need to know to Protect the Interests of Public and Scientists?' A workshop jointly presented by the HUGO Committee on Ethics, Law and Society, the Human Variome Project, and the Ewha Institute for Biomedical Law and Ethics. The Human Genome Meeting 2019: Towards Implementing Genomic Medicine. Ewha Womans University, Seoul, South Korea. 24th-27th April.
- 5. Panellist. 2019. Sandboxing DTC Genetic Testing in Korea. Invited by the Ewha Law School & Ewha Institute for Biomedical Law & Ethics. Ewha Womans University, Seoul, **South Korea**. 25th April.
- 6. Invited member. 2019. Gene Modifying Technologies Working Group/ Symposium on the Ethics of Gene Modifying Technologies. Organised by The Science, Health and Policy-Relevant Ethics in

- Singapore (SHAPES) Initiative. Centre for Biomedical Ethics, Yong Loo Lin School of Medicine, National University of Singapore, **Singapore**. 29th April-30th May.
- 7. Invited Delegate (sponsored). 2018. 'Could Open be the Yellow Brick Road to Precision Medicine? An Overview of Open Models of Collaboration in Precision Medicine'. Funded by GE3LS Network in Genomics and Personalised Health and the Fonds de Partenariat pour un Quebec Innovant et en Sante. La Meridien Versailles Hotel, Montreal, Canada. 6th March.
- 8. Co-presenter, with van der Eijk, Y., and Krahn, T. 2016. 'The Ethics of Tobacco Industry Involvement in E-Cigarette Research: A Test of the public Interest and Public Good'. NovelTech/Impact Ethics. Dalhousie University, Halifax, Nova Scotia, Canada. 30th November.
- 9. Organiser. HUGO CELS Meeting. 2016. Human Genome Meeting 2016: Translational Genomics. Hilton Americas, Houston, USA. 28th February-2nd March.
- **10.** Invited Delegate (participation in-part sponsored by organisers). 2015. Beings 2015: Biotech and the Ethical Imagination A Global Summit. The Tabernacle, Atlanta, Georgia, **USA**. 17th-19th May.
- **11.** Co-Organiser and Invited Panel Member. 2015. Ethics and Data Sharing. HUGO Human Genome Meeting 2015: Transforming Human Genomics for a Sustainable Tomorrow. Kuala Lumpur Convention Centre, **Malaysia**. 14th-17th March.
- **12.** Moderator, with Ruth Chadwick, Matthew Liao, and Ray Dunn. 2014. A Roundtable Discussion with a Panel of Distinguished Speakers: Reproductive Genomics. Collaboration with and supported by Belris: Bioethics Legal Research in Singapore. The Duxton Hotel, **Singapore**. 15th May.
- 13. Presenter. 2014. Workshop: Stem Cell Science and Ethics. Training for high school teachers. Sponsored by the CBmE Financial Initiative. (Attended by 58 teachers from junior colleges teaching the subject: General Paper.) Collaboration with Ministry of Education, Curriculum Planning and Development Division, English Language Unit, Pre-University Unit. Singapore. 27th March.
- **14.** Lysaght, T. (presenter), Kerridge, I., Sipp, D., Porter, G., & Capps, B. 2013. 'Governing Clinical Uses of Autologous Adult Stem Cells: An International Regulatory Review'. Asian Biopoleis Workshop; University Town, NUS, **Singapore**. 16th-17th July.
- **15.** Invited delegate (sponsored by <u>EPOCH</u>). 2012. 'The Coming Epoch of Enhanced Societies? The Challenge of Human Enhancement to Regulation, Ethics and Public Policy.' Università degli Studi di Padova, Via VIII Febbraio, 2, Padova, **Italy**. 6th-7th September.
- **16.** Conference organiser, lead chair. 2012. 'International Workshop on Human Enhancement Technologies Understanding Governance, Policies and Regulatory Structures in the Global Context'. Grand Park City Hall, **Singapore**. 7th-8th June.
- 17. Advisor and participant (sponsored by Singapore Ministry of Health). 2012. Selected as working group member and advisor to the Pro-Tem National Oversight Committee for Human-Animal Combinations in Stem Cell Research 'Fact-finding mission'. Ministry of Health, Singapore. Meetings @ University of California; California Institute for Regenerative Medicine; Institute for Stem Cell Biology and Regenerative Medicine (Stanford); Stanford Centre for Bioethics; National Institutes of Health (Washington, DC); & Harvard Stem Cell Institute. USA. 9th-13th January.
- **18.** Project Meeting, HUGO White Paper @ University of Tasmania (sponsored by Faculty of Law). 2011. Imagined Futures: Capturing the Benefits of Genome Sequencing for Society. Faculty of Law, UoT, Hobart, **Australia**. 26th-28th January.
- **19.** Collaborators Meeting @ WHO, Geneva. 2010. Planning with Special Programme of Research, Development and Research Training in Human Reproduction as part of CBmE becoming a WHO Collaborating Centre in Biomedical Ethics. Geneva, **Switzerland**. 16th December.
- **20.** Co-coordinator and participant, with Human Genome Organisation Ethics Committee (sponsored). 2010. Imagined Futures: HUGO Geneva Meeting, Writing Group and Consultant Group (funded by the Brocher Foundation). Brocher Centre, Geneva, **Switzerland**. 11th-15th December.
- **21.** Invited lecture. 2010. 'Emerging Infectious Diseases'. Organized by the Department of Epidemiology and Public Health, NUS; as requested by the Department of Foreign Affairs. Funded by the Singapore Cooperation Programme. **Singapore**. 26th August-7th September.

- 22. Tutor. 2010. Clinical Ethics Network for Training, Research and Support (CENTRES) 2nd & 4th workshops, Institute of Mental Health (9th March) and KKH Hospital (24th September), Singapore.
- **23.** Co-organiser, Co-Chair and Commentator, with Ruth Chadwick. 2010. Workshop: Genomics, Ethics and Law. HUGO 14th Human Genome Meeting. Le Corum, Montpellier, **France**. 18th-21st May.
- **24.** Invited delegate. 2009. HUGO Symposium on Genomics and Ethics, Law and Society Sequencing of Individual Genomics: Impact on Society and Ethics. Geneva, **Switzerland**. 1st-3rd November.
- **25.** Invited commentator (sponsored). 2009. Writer's Workshop: East Asian Science, Technology and Society Journal Special Edition on Genetic Technology. Taipei, **Taiwan**. 18th January.
- **26.** Invited delegate. 2007. Third International Meeting of the Ethics Working Party of the International Stem Cell Forum. Pan-Pacific Hotel, **Singapore**. 31st January.
- 27. Project Planning Meeting @ European Monitoring Centre for Drugs and Drug Addiction. 2007. PI's Report: New Developments in Neuroscience and Genetics: Implications for Policy and Practice. EMCDDA Building, Avenida Almirente Reis, Lisbon, Portugal. 11th-16th November.
- **28.** Invited delegate (sponsored by <u>ENHANCE</u>). 2006. Enhancing Human Capacities: Ethics, Regulation and European Policy (ENHANCE). Workshop on Mood Enhancement. Maastricht University, Maastricht, **The Netherlands**. 30th June-1st July.
- **29.** Invited delegate. Global Drug Policy. 2005. Organised by the Beckley Foundation. The House of Lords, Palace of Westminster, London, **UK**. 21st-22nd November.
- **30.** Invited participant. 2003. Stem Cell Consultation Meeting A New ESRC Initiative: Developing the Economic and Social Agenda. Economic & Social Research Council. The Royal College of Obstetricians and Gynaecologists, London, **UK**. 17th June.
- **31.** Invited participant. 2001. What's So New About the New Genetics? ESCR New Genetics Seminar. University of the West of England, Bristol, UK. 24th January.
- **32.** Invited delegate. 2001. Ethics, Intellectual Property and Genomics: International Symposium. United Nations Educational, Scientific and Cultural Organisation. UNESCO Headquarters, Paris, **France**. 30th January-1st February.
- **33.** Invited participant. 2000. Genetics and Society Research Training Course. The Wellcome Trust. Hinxton Hall Conference Centre, Hinxton, Cambridgeshire, **UK**. 3rd-7th September.

d) Other Presentations

- 1. 2021. "One Health Ethics'. Works in Progress Sessions. Department of Bioethics, Faculty of Medicine, Dalhousie University, Halifax, NS, Canada. 8th February.
- 2. 2019. 'An Introduction to Open Science: What do we need to know to protect publics and scientists?' Works in Progress Sessions. Department of Bioethics, Faculty of Medicine, Dalhousie University, Halifax, NS, Canada. 11th March.
- **3.** 2017. 'CRISPR, Gene Drives and One Health'. Works in Progress Sessions. Department of Bioethics, Faculty of Medicine, Dalhousie University, Halifax, NS, **Canada**. 10th April.
- **4.** 2014. 'Solving Ebola: One Health and Vaccinations'. Works in Progress Sessions. Department of Bioethics, Faculty of Medicine, Dalhousie University, Halifax, NS, **Canada**. 17th November.
- 5. 2011. 'Pandemic Influenza and Vaccine Production'. The Hastings Center Visiting Scholar Seminar, The Hastings Center, Garrison, New York, USA. June 5th.
- **6.** 2005. 'An Argument for Authoritative Regulation in Stem Cell Science'. Journal Club, Centre for Ethics in Medicine, University of Bristol, UK. 13th October.
- 7. 2005. 'A Moral Basis for Proceduralism'. The Hastings Center Visiting Scholar Seminar, The Hastings Center, Garrison, New York, USA. 20th May.
- **8.** 2004. 'Stem Cell Therapy and Procedural Ethics: Towards a European Regulatory Policy'. Journal Club, Centre for Ethics in Medicine, University of Bristol, **UK**. 7th October.

- 9. 2003. 'European Policy on Stem Cell Research Research Findings'. Journal Club, Centre for Ethics in Medicine, University of Bristol, UK. 23rd October.
- **10.** 2002. 'A Philosophical Reappraisal of Human Rights: No Longer 'Nonsense on Stilts''. Journal Club, Centre for Ethics in Medicine, University of Bristol, **UK**. 28th November.
- **11.** 2001. 'The Status of the Human Embryo in European Stem Cell Research'. Journal Club, Centre for Ethics in Medicine, University of Bristol, **UK**. 15th November.

(iv.) Public, Blogs, Press and Interviews

- 1. 2020. Lederman, Z. and Capps, B. Does one health ethics need a comprehensive theory? *BMJ Blog* February 24th; <u>Available</u>.
- **2.** 2017. Interview (email). The Difficult Proposition of Getting Corporations out of University Science by Rick Paulas. *Pacific Standard* Sept 14. <u>Available</u>.
- **3.** 2017. 'Justice as a Lens for One Health in Managing Emerging Infectious Diseases'. Lysaght, T, Capps, B., Bailey, M., Bickford, D., Coker, R., Lederman, Z., Watson, S. and Tambyah, P.A. *MediCine: A Publication of the Yong Loo Lin School of Medicine* 22 (May). pp. 41-42.
- **4.** 2016. Our Faculty: Student educators, clinical physicians and medical researchers Q&A with Dr. Benjamin Capps. *Faculty of Medicine*, *Dalhousie University* April 2016. http://medicine.dal.ca/facultystaff/Faculty.html
- **5.** 2015. The Emerging Themes of Ebola: One Health. *Global Health Blog, Faculty of Medicine, Dalhousie University* December 2014. https://blogs.dal.ca/globalhealth/
- **6.** 2009. Invited contribution for: *HUGO Matters*, official blog of the Human Genome Organisation. *The Impact of Next Generation Sequencing on Society, Policy and Law.* Posted: December 1st; http://www.hugo-international.org/blog/?p=112 [dead link].
- **7.** 2009. Quoted in: 'NUS Team Makes Cloning Breakthrough'. *The Straits Times* (Singapore Press Holdings Ltd. Co.) Friday October 16; part C, p. C1.
- 8. 2007. Interviewed by Flavia Natércia da Silva Medeiros (Laboratório de Estudos Avançados de Jornalismo/Laboratory of Advanced Studies in Journalism Unicamp, Brazil). Interview published in Portuguese. 1st August.
- 9. 2005. 'Grow-It-Yourself Remedy for All Ills Comment'. *Western Daily Press* (Bristol, UK). Thursday 4th August.
- 10. 2004. 'Saviour Siblings'. Radio Interview for BBC Bristol, UK. 4th February.
- **11.** 2002. 'Cloning: Where do you Draw the Line?' Speaker on cloning science and ethics, part of *BNFL/@-Bristol Public Education Programme*. @-Bristol, Bristol. 29th November.

(7) FUNDING (awarded)

(i.) Grants

a) Research

<u>Expanding the Genome – The Environmental Genome Project and the Promises of Ecogenomics for Society.</u>

Funder: Brocher Foundation, Geneva, Switzerland

- Principle applicant
- CHF 6,000 [travel budget]; plus, accommodation and subsistence for 21 participants.
- Awarded May 2023
- Workshop dates: 27-29 May 2024
- Subsequent application for publication fees successful but not used CHF 2000

Lead author of application. Additional travel support provided by Johns Hopkins University, HUGO, and The Jackson Laboratory.

2018-19 SSHRC Research Development Fund

Funder: Social Sciences and Humanities Research Council (SSHRC)

- Principal applicant
- C\$ 1500
- September 2018

Conference travel grant. Awarded through competitive application to Dalhousie Medical Research Development Office.

One Health, Zoonotic Diseases and Pandemic Planning: Creating a Bioethics Framework in Singapore

Funder: Communicable Diseases – Public Health Research Grant (CD-PHRG); Ministry of Health, Singapore

- 'Visiting Consultant'; Project submitted by and awarded to Capps as principal investigator
- Award to Capps: S\$ 21,165
- Total project award: S\$ 140,908
- September 2014-July 2016

Lead author of application and submitting Principal Investigator. Awarded prior to relocation to Dalhousie University. Grant PI status transferred to Co-PI upon relocation.

EPOCH: Ethics in Public Policy Making: The Case of Human Enhancement

Funder: European Commission, FP7 Collaborative Project, Science-in-Society; Grant number SIS-CT-2010-266660; http://cordis.europa.eu/project/rcn/96892 en.html

- Co-Principal Investigator (Work package Leader)
- Award to Capps for NUS Work package: € 57,782
- Total project award: € 1.477,603.80
- November 2010-2012

Co-author and collaborator on tender; co-author and Principal Investigator (grant holder) on NUS work package. Participants: University of Bristol, Karlsruher Institute fuer Technologie, Universita Deglie Stidi di Padova, Centre National de la Recherche Scientifique CNRS, Universiteit Maastricht, Univerza V Ljubljani, Swansea University, NUS, Aarhus University, University of Calgary.

Start-Up Grant

Funder: Yong Loo Lin School of Medicine (joint with President's Fund), NUS

- Principal Investigator
- S\$ 180,000
- July 2009-November 2011 (RF's salary bridged for one year to November 2012; not included in amount above)

Sole author of tender and Principal Investigator (grant holder and project manager). Funded research collaborations with: Institute of Mental Health, Singapore; World Health Organisation; and Human Genomics Organisation Ethics Committee.

New Developments in Neuroscience and Genetics: Implications for Policy and Practice.

Funder: EMCDDA: European Monitoring Centre for Drugs and Drug Addiction, European Commission

- Principal Investigator
- € 23,885
- Completed 18th December 2006

Co-author of tender and Principal Investigator (grant holder and project manager); with University of Queensland, Australia & Queen Mary's London.

Ethical Issues in Brain Science, Drugs and Addiction.

Funder: Department of Trade and Industry-Foresight

- Principal Investigator.
- £5,000
- 1st July-31st August 2005, full-time Research Associate, Centre for Biomedical Ethics, University of Bristol; project total duration: 1st July 2004-12th July 2005

Principal author of tender and Principal Investigator.

b) Education

Reading Group: Ethics, Philosophy and the Law in Biotechnology

Funder: Division of Humanities & Social Sciences, NUS

- Co-Applicant
- S\$ 4,000
- September 2013-September 2014

Cross-faculty project that aims at broadening knowledge-base of participants, from a wide range of disciplines, on the bioethical, philosophical and politico-legal issues concerning biotechnology.

(ii.) Awards

Wellcome Trust/University of Bristol: 'Value in People' Award.

Funder: The Wellcome Trust

- Centre for Ethics in Medicine, University of Bristol
- £ 11,500
- 1st September 2006- 31st January 2007.

Principal author of award proposal.

Wellcome Trust Postdoctoral Research Fellowship.

Funder: The Wellcome Trust

- Centre for Ethics in Medicine, University of Bristol
- £ 66,967
- 1st September 2004-31st September 2006.

Principal author of Fellowship proposal.

Wellcome Trust Ph.D. Fellowship.

Funder: The Wellcome Trust

- Centre for Ethics in Medicine, University of Bristol
- £ 52,535
- 1st October 2000-31st October 2003.

Principal author of studentship proposal.

(iii.) Commissions

Report: 'Policy Implications of Addiction Neuroscience for Australian Society'

Funder: Australian Ministerial Council on Drug Strategy and New South Wales Department of Health

- Collaborator
- Au\$ 90,000; (proportion paid as consultation fee)
- February 2008 to October 2008

Collaborator on tender, with Queensland Brain Institute, University of Queensland, & Addiction Psychiatry, Royal Brisbane & Women's Hospital.

Report: "Public Interest' and 'Public Good' as Applied to UK Biobank Access Decision-Making"

Funder: UK Biobank Ethics and Governance Council, Wellcome Trust;

- Principal Investigator
- £ 9,647
- 13th November 2006- 30th June 2007

Principal author of tender and Principal Investigator (grant holder and project manager).

Report: 'The Ethics of Oocyte Provision for Research: Background Paper'.

Funder: Bioethics Advisory Committee, Singapore

- Principal Investigator
- S\$ 1,000
- Completed 27th January 2007.

(iv.) Honorarium

Centre for Biomedical Ethics: Visiting Fellow Honorarium.

Funder: National University of Singapore, Singapore

- S\$ 19,780
- 27th January 2007-30th April 2007.

(iv.) Gifts (non-directed donation to Department)

Gift to Centre for Biomedical Ethics, National University of Singapore

Funder: Bioethics Legal Group for Reproductive Issues in Singapore (BELRIS ltd.)

- Principal Investigator
- S\$ 15,000 (plus S\$ 15,000 matched by Ministry of Education, Singapore)
- 1st January-30th June 2013

Sole author of tender; funds used to support project: 'A Comparative Analysis of Oocyte Freezing Policies in the South –East Asia Region'; Gift negotiator and Principal Investigator (gift beneficiary, on behalf of CBmE).

(8) ACADEMIC LEADERSHIP AND TEACHING

(i.) Leadership

Dalhousie University

Unit Head: *Professional Competencies in MED1*; Longitudinal programme. Faculty of Medicine. June 2015-June 2022.

Component Head: Professional Competencies during Foundations in MED1. Faculty of Medicine. August 2014-June 2022.

Healthcare in a Changing Climate: The Need for Planetary Health and Sustainable Health Systems. Co-Facilitator/advisor. Mini-Course @ Dalhousie Healthy Populations Institute. 17th September-1st October 2020; <u>Available</u>.

NUS

Programme Director, Graduate Studies. Centre for Biomedical Ethics, Yong Loo Lin School of Medicine, NUS. 2008-2014.

Module Coordinator: Applied Bioethics and Biolaw & Bioethics in Asia. Postgraduate level. Centre for Biomedical Ethics, NUS. 2008-2014. Designed and submitted both modules for approval by Graduate Board of the School of Medicine.

Component Coordinator; Ethics, Law and Genetics component of Genetics and Genomics System. MBBS Medical Degree (Phase II). 2009-2014. Designed and deliver all course material.

Component Coordinator; Ethics Programme of CO5101 Public Health Biology and Ethics. Part of the MSc in Public Health, Department of Epidemiology and Public Health. 2010-2014. Coordinate 2-day workshop; incorporated into Saw Swee Hock School of Public Health Orientation of new graduate students; 2012-2014.

University of Bristol

Degree Director. B.Sc. (Honours) in Bioethics; Intercalating Degree; 10 students; 2003-2004.

Year Coordinator. Ethics and Law in Medicine; 1st year MB ChB; School of Medicine and Dentistry, University of Bristol; c320 students. 2003-2004.

(ii) Academic Advisor – contact for details

(iii.) Teaching – contact for details

(9) ACADEMIC ADMINISTRATION & SERVICE

(i) Conference Committee

International Organizing Committee for the Human Genome Meeting (HGM2026). Athens, Greece 2025. International Organizing Committee for the Human Genome Meeting (HGM2023). Rio de Janeiro 2023.

International Organizing Committee for the Human Genome Meeting (HGM2021). Tel Aviv (2019) 2022.

Programme and Abstract Committee. Canadian Bioethics Society Annual Conference. Halifax 2018.

Programme and Abstract Committee. 10th World Congress of the International Association of Bioethics. Singapore 2010.

(ii.) Reviewer – contact for details

(iii.) Professional Service

Sounding Board meeting for the Group of Chief Scientific Advisors' One Health Scientific Opinion - Draft Recommendations [20 September 2024] Sounding Board Meeting of the Science Advice for Policy by European Academies on 'Cross-sectoral evidence-based governance for One Health in the EU' (European Commission, DG Research & Innovation). Final Report: One Health Governance in the European Union; November 2024.

Science Adviser to the UK Parliamentary Office of Science and Technology (POST); Public Health and Climate Change: A One Health Approach Research Briefing. Published Wednesday, 19 July, 2023. POST is an office of both Houses of Parliament.

Survey participant. 2023. Jagadesh S., et al. Biodiversity and pandemics: Interdisciplinary research and action priorities. A report of the Eklipse Expert Working Group on biodiversity and pandemics. Eklipse Evidence Report – 02/2023. Grant agreement 690474. European Commission.

Advisor to the SIENNA project. 2019-2021. Stakeholder-informed ethics for new technologies with high socio-economic and human rights impact. European Union's H2020 research and innovation programme; grant agreement No 741716. https://www.sienna-project.eu/.

Coordinator of the Centre for Biomedical Ethics research programme with the World Health Organisation (Singapore; 2009-2012), leading to award of Collaborating Centre in 2014

Associated with the UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP).

Lead of the Ethics Core of the Institute of Mental Health's Translational Clinical Research Programme in Psychosis (Singapore; 2008-2014)

The group published five 'ethics' papers, and advised on various issues in respect to research protocols. Secured additional funding from the programme to employ a research fellow for 6 months full time.

Ethics Advisor; University of Bristol's Cardiovascular Science Theme of the Bristol Heart Institute; UK. 2005-2007.

(iv.) University Activities

Dalhousie University

Dalhousie University Health Sciences Research Ethics Board; October 1, 2024-

Faculty of Medicine Critical Thinking Working Group (interfaculty). To refresh curriculum drawing upon established best practices in medical education and practice, both at the national and international levels; July 2022-2023.

Nominated Member, *Leon and Rose Zitner Prize*; Faculty of Health [representing Faculty of Medicine, with Faculty of Health, Faculty of Dentistry or Faculty of Arts & Social Sciences] 2021-2024.

A prize for outstanding contributions to citizen knowledge and community engagement in the area of health, broadly defined, including yet not limited to, personal, collective, environmental, clinical, spiritual, biopsychosocial, cultural, and political dimensions of well-being.

UGME Curriculum Refresh Planetary Health Working Group. July 2020-July 2021. https://medicine.dal.ca/for-faculty-staff/ugme-curriculum-refresh-.html

Departmental Survey: Department of Psychology; member; November 2019-January 2021.

Professionalism Committee: Faculty of Medicine. 2015-2019.

Med1 and 2 Curriculum Committee: Faculty of Medicine. 2015-2022.

NUS

Assistant Director of Research: Biotechnology. Centre for Biomedical Research, Yong Loo Lin School of Medicine, NUS. 2010-2014.

Director of Research. Centre for Biomedical Research, Yong Loo Lin School of Medicine, NUS. 2008-2010.

Committee for Medical Ethics and Law Teaching; Yong Loo Lin School of Medicine, NUS, Singapore. 2009-2014. Reviewed general requirements for curriculum in MB ChB degree.

National University Health Service Research Taskforce; 2008-2010. Review of Influenza A H1N1 response, and Citation requirements for tenure and promotion.

University of Bristol

Ph.D. Upgrade Coordinator. Centre for Ethics in Medicine, University of Bristol (2006-2008).

Student Selected Component Coordinator. Centre for Ethics in Medicine, University of Bristol. 2004-2008. *Independent research projects chosen in medical ethics or medical law. Completed in either 2, 3 or 5 years.*

Coordinator and Chair of Centre for Ethics in Medicine's Journal Club. 2002-2008.

Librarian, Centre for Ethics in Medicine, University of Bristol. 2005-2008.

(10) CONTINUING PROFESSIONAL EDUCATION

2025, Supporting Diverse, Inclusive and Anti-Oppressive Learning Environment in the Faculty of Medicine. Education Models for Faculty and Educators. Dalhousie University. Continuing Professional Development & Medical Education.

2024. Panel on Research Ethics: Corse on Research Ethics (CORE), Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2: CORE 2022).

2024. The Fundamentals of OCAP / First Nations Principles of OCAP; First Nations Information Governance Centre.

(11) A note on schooling

Outside of attending Stonehenge (GCSE) and Upper Avon (A Level) Comprehensive Schools (Wiltshire, UK), I worked on my uncle's farm during my teenage years. Parsonage Down, still a working rare breeds farm based around a herd of Longhorn cattle, was managed by the Nature Conservancy Council from the 1920s (now Nature England), using traditional methods passed down between generations of my family living on the farm. These included free-living sheep dogs (outside living and never bound), and land management through controlled grazing that conserves species only found on the unique chalk downlands. I wrote up my time there as a scientific study for A Level Biology, which revived a prize from the Institute of Biology [Royal Society of Biology], Wessex Branch (1993). I also competed in inter-county level competitions in Track and Field.

(11) Notes on 'Public Impact'

UK Biobank: My report provided the evidence base for the <u>Access Procedures</u> conditions for 'bona fide researchers' and 'reasonable patents.' [The 2022 version 2.0 includes provisions first introduced subsequent to my commission on the public interest and the public good, in 2012 [see, v. 2 s. B12. 1, 10 & 11].

Singapore Chimera Research: As a member of Pro Tem National Oversight Committee for Human-Animal Combinations in Stem Cell Research, I advocated for a 'higher primate' or Great Ape exclusion to the Human Biomedical Research Act 2015 [Third Schedule, 3]. [See paper, Capps, 2020, Philosophy Still Missing....]

Singapore One Health: Advocating for 'all of government' responses to infectious diseases [reported here; note: Capps was PI/advisor to the project reported 'Justice is the Missing Link in One Health: Results of a Mixed Methods Study in an Urban City State', see publications.]

Singapore Oocyte Donation: report supported case brought to "parliament [of] issues of women's reproductive rights, arguing that it is to Singapore benefit to allow single woman to freeze their eggs" [reported here, and here, in the words of the sponsor.]

Bristol Research Assessment Exercise 2008: Included in School of Law submission in 'Research environment and esteem.'

