

DR HILARY BOWMAN-SMART

Adelaide, Australia | hilary@hilarybowmansmart.com
[ORCID: 0000-0002-2142-9696](https://orcid.org/0000-0002-2142-9696) | [Google Scholar](#) | [LinkedIn](#)

Hilary Bowman-Smart is a Research Fellow at the [Australian Centre for Precision Health](#), University of South Australia. Prior to this, she held the position of Researcher in the Ethics of Prenatal Genetics and Genomics at the [Ethox Centre, University of Oxford](#). She also holds honorary appointments at the [Monash Bioethics Centre](#) and the [Murdoch Children's Research Institute](#). She received her PhD from the University of Melbourne in 2022. Her thesis was passed without corrections and was awarded the prestigious 2022 Dean's Award for Excellence in Graduate Research.

Hilary engages in philosophical and ethical analysis that is frequently informed by empirical research (mixed methods). Her primary research areas are reproductive ethics; ethics of genomics; science and technology studies; and the philosophy of medicine. Her publications are currently ranked by the publishers as top-cited in their respective journals, which span a range of fields (including medical, legal, philosophical and bioethics journals). She has been awarded a Brocher Foundation residency.

She has extensive undergraduate and postgraduate teaching experience including course design across philosophy and bioethics, with excellent student feedback. She has strong experience with communicating research to a diverse range of audiences, having submitted to governmental policy reviews as well as having written for popular science and educational magazines. Her work has been cited in UK Parliament briefing notes and highlighted by media outlets.

Before her PhD at the University of Melbourne, Hilary undertook a Bachelor of Arts/Bachelor of Science at Monash University, with specialisations in philosophy, classical studies, and genetics. She also spent a year at the Free University of Berlin and studied at the Sherwin B. Nuland Summer Institute at Yale University. She has graduate-level training in biostatistics and epidemiology as well as philosophy. She conducts her research in both English and German.

Education

PhD, University of Melbourne	2022
<i>Non-invasive prenatal testing: beyond clinical utility</i> . Passed without corrections. 2022 Dean's Award for Excellence in Graduate Research. Supervisors: Prof. Martin Delatycki, Prof. Julian Savulescu, Dr Cara Mand & Dr Christopher Gyngell. Committee: Prof. David Amor (Chair), A/Prof Ros McDougall	
MPH, University of Newcastle	2024
BSc(Hons), Monash University . Biochemistry. First-class Honours (H1); thesis mark: 91	2018
BA/BSc, Monash University . Specialisations: Genetics (BSc), Philosophy (BA), Classical Studies (BA). Exchange year (2014/15), Free University of Berlin	2017
Dip. Lang., Monash University . German	2016
Sherwin B. Nuland Summer Institute, Yale University . Bioethics	2014

Academic Roles (Research)

Research Fellow, Australian Centre for Precision Health, University of South Australia. Postdoctoral researcher (Level B) in bioethics, at the South Australian Health and Medical Research Institute.	2023 –
Researcher in the Ethics of Prenatal Genetics and Genomics, University of Oxford. ESRC-funded project on non-invasive prenatal testing led by A/Prof Ruth Horn. Ethical analysis and qualitative research; research conducted bilingually (English and German). Held policy workshop with English, French and German attendees. Participant in UK-FR GENE workshops, hosted at French Embassy in London.	2021 – 2023
Visiting Fellow, Centre for Ethics in Medicine, University of Augsburg. One-month funded visiting fellowship, delivering a lecture series on reproductive ethics for medical students.	2022
Research Associate, Uehiro Centre for Practical Ethics, University of Oxford	2021 – 2022
Adjunct Research Associate, Monash University. Part of ARC-funded Linkage Grant on non-invasive prenatal testing in Australia, led by Prof. Catherine Mills in partnership with Victorian Clinical Genetics Services and Illumina Australia.	2021 –
Honorary Fellow, Biomedical Ethics Research Group, Murdoch Children’s Research Institute	2022 –
Research Assistant, Monash University. Research assistance for Prof. Catherine Mills.	2021
Research Assistant, Centre for Ethics in Paediatric Genomics, Murdoch Children’s Research Institute	2020 – 2021
Research Assistant, Murdoch Children’s Research Institute & Wellcome Centre For Ethics & Humanities. Research assistance for Prof. Julian Savulescu	2018 – 2021

Academic Roles (Teaching)

Lecturer, University of Oxford. Oxford Medical School; MSt in Practical Ethics	2022 – 2023
Guest Lecturer, Monash University. Master of Clinical Embryology	2022 – 2023
Teaching Assistant, University of Melbourne. LAWS70259 (Medical Ethics)	2020
Teaching Associate, Monash University. ATS1263 (Bioethics: Current Controversies); ATS2875 (Moral Psychology of Evil); ATS2637 (Global Bioethics)	2019 – 2021

Academic Roles (Editorial)

Associate Editor, <i>Monash Bioethics Review</i>	2023 –
Review Editor (ELSI in Science & Genetics), <i>Frontiers in Genetics</i>	2023 –

Academic Publications

Bowman-Smart H, Perrot A, Horn R (accepted December 2023). Common values, different lenses: a comparison of key values and practices in the provision of non-invasive prenatal testing in England and France. *BMC Medical Ethics*.

Bowman-Smart H, Johnston M, Taylor-Sands M, Hui L, Pertile MD, Mills C (accepted December 2023). The function of non-invasive prenatal testing (NIPT) request forms in the Australian context. *Journal of Bioethical Inquiry*.

Claesen-Bengtson Z, **Bowman-Smart H**, Vermeersch E, Vermeesch JR, Henneman L, Borry P (accepted November 2023). Should non-invasive prenatal testing (NIPT) be used for fetal sex determination? Perspectives and experiences of healthcare professionals in Belgium. *European Journal of Human Genetics*. <https://doi.org/10.1038/s41431-024-01536-8>

Johnston M, Hui L, **Bowman-Smart H**, Taylor-Sands M, Pertile MD, Mills C (submitted October 2023, preprint). Disparities in integrating non-invasive prenatal testing into antenatal healthcare in Australia: A survey of healthcare professionals. *BMC Pregnancy and Childbirth*. <https://doi.org/10.21203/rs.3.rs-3587352/v1>

Haining C, **Bowman-Smart H**, O'Rourke A, de Crespigny L, Keogh L, Savulescu J (2023). The 'Institutional Lottery': Institutional variation in the processes involved in accessing late abortion in Victoria, Australia. *Women's Studies International Forum* 101: 102822. <https://doi.org/10.1016/j.wsif.2023.102822>

Bowman-Smart H, Keogh L, Haining C, O'Rourke A, de Crespigny L, Savulescu J (2023). 'The tabloid test': a qualitative interview study on the function and purpose of termination of pregnancy review committees in Victoria, Australia. *Reproductive Health* 20(1): 104. <https://doi.org/10.1186/s12978-023-01624-w>

Gyngell C, Lynch F, Vears DF, **Bowman-Smart H**, Savulescu J, Christodoulou J (2023). Storing paediatric genomic data for sequential interrogation across the lifespan. *Journal of Medical Ethics*. <https://doi.org/10.1136/jme-2022-108471>

Bowman-Smart H, Gyngell C, Mand C, Amor DJ, Delatycki MB, Savulescu J (2023). Target Article: Non-invasive prenatal testing for 'non-medical' traits: ensuring consistency in ethical decision-making. *American Journal of Bioethics* 23(3): 3-20. <https://doi.org/10.1080/15265161.2021.1996659>

In one of the top bioethics journals, this publication was selected as a Target Article, which means it "(i) offers an unusually significant theoretical or conceptual contribution...or (ii) a novel interpretation, synthesis, or critique of existing experimental or theoretical work." This work is accompanied by an editorial and 17 commentaries from leading researchers at institutions such as Harvard, Stanford, Oxford, ETH Zürich, CUNY, Sydney, NIH, and the Chan Zuckerberg Initiative.

Porsdam Mann S, Earp BD, Nyholm S, Danaher J, Møller N, **Bowman-Smart H**, Hatherley J, Koplin J, Plozza M, Rodger D, Treit PV, Renard G, McMillan J, Savulescu J (2023). Generative AI entails a credit-blame asymmetry. *Nature Machine Intelligence*. <https://doi.org/10.1038/s42256-023-00653-1>

This paper was the result of an international collaboration between researchers at Oxford, Yale, LMU München, Monash, UC Berkeley, NASA, and others. In the top 5% of outputs in Altmetric.

Taylor-Sands M, Warton C, **Bowman-Smart H** (2023). Regulating non-invasive prenatal testing (NIPT) for fetal sex determination. *Medical Law Review*. <https://doi.org/10.1093/medlaw/fwad014>

Bowman-Smart H, Wiesemann C, Horn R (2022). Non-invasive prenatal testing in Germany: a unique ethical and policy landscape. *European Journal of Human Genetics* 31(5): 562-567 <https://doi.org/10.1038/s41431-022-01256-x>

Bowman-Smart H, Vears DF, Brett GR, Martyn M, Stark Z, Gyngell C (2022). ‘Diagnostic shock’: the impact of results from ultrarapid genomic sequencing of critically unwell children on aspects of family functioning. *European Journal of Human Genetics* 30(9): 1036-1043
<https://doi.org/10.1038/s41431-022-01140-8>

Savulescu J, **Bowman-Smart H** (2022). Moral Bioenhancement and Future Generations: Selecting Martyrdom? In *The Oxford Handbook of Intergenerational Ethics*, ed. Gardiner SM.
<https://doi.org/10.1093/oxfordhb/9780190881931.013.53>

Taylor-Sands M, **Bowman-Smart H** (2022). Non-Invasive Prenatal Testing for Adult-Onset Conditions: Reproductive Choice and the Welfare of the Future Child. *Melbourne University Law Review* 45(2), 730-778

Bowman-Smart H, Taylor-Sands M (2021). Fetal information as shared information: using NIPT to test for adult-onset conditions. *Monash Bioethics Review* 39:82-102.
<https://doi.org/10.1007/s40592-021-00142-4>

Bowman-Smart H (2021). Orphans by design: the future of genetic parenthood. *Bioethics* 35(1): 23-30. <https://doi.org/10.1111/bioe.12828>

Bowman-Smart H, Savulescu J (2020). The Ethics of Motivational Neuro-Doping in Sport: Praiseworthiness and Prizeworthiness. *Neuroethics* 14: 205-215.
<https://doi.org/10.1007/s12152-020-09445-5>

Bowman-Smart H, Savulescu J, Gyngell C, Mand C, Delatycki MB (2020). Sex selection and non-invasive prenatal testing: a review of current practices, evidence, and ethical issues. *Prenatal Diagnosis* 40(4):398-407. <https://doi.org/10.1002/pd.5555>

This review, which formed part of my PhD thesis, is one of the top 10 most downloaded papers in Prenatal Diagnosis (>10,000 reads); recognised by Wiley as one of the top-cited articles in this journal. It has been covered by Irish media outlet The Journal (“FactCheck: Does Irish law allow for ‘gender selection abortions?’”, Aug 19th 2021), and referenced by a journalist from Canadian media outlet Globalnews.ca in coverage of the topic. Cited in the Wikipedia articles for “Human Genetic Enhancement” and “Amniocentesis”. In the top 5% of all research outputs scored by Altmetric.

Bowman-Smart H, Gyngell C, Morgan A, Savulescu J (2019). The moral case for sign language education. *Monash Bioethics Review* 37:94–110. <https://doi.org/10.1007/s40592-019-00101-0>

Bowman-Smart H, Savulescu J, Mand C, Gyngell C, Pertile MD, Lewis S, Delatycki MD (2019). “Small cost to pay for peace of mind”: women’s experiences with user-pays non-invasive prenatal testing. *Australian and New Zealand Journal of Obstetrics and Gynaecology*. 59(5):649-655 <https://doi.org/10.1111/ajo.12945>

Bowman-Smart H, Savulescu J, Mand C, Gyngell C, Pertile MD, Lewis S, Delatycki MD (2019). “Is it better not to know certain things?”: views of women who have undergone non-invasive prenatal testing on its possible future applications. *Journal of Medical Ethics*. 45(4):231-238.
<https://doi.org/10.1136/medethics-2018-105167>

This paper was discussed in an article published on popular media outlet Wired.com titled “How Much Prenatal Genetic Information Do You Actually Want?” (Megan Molteni, March 27th 2019). In the top 5% of all research outputs scored by Altmetric.

Gyngell C, **Bowman-Smart H**, Savulescu J (2019). Genome editing, Goldilocks and polygenic risk scores. *Journal of Medical Ethics*. 45(8):530-531. <https://doi.org/10.1136/medethics-2019-105713>

Gyngell C, **Bowman-Smart H**, Savulescu J (2019). Moral Reasons to Edit the Human Genome: Picking Up from The Nuffield Report. *Journal of Medical Ethics*. 45(8):514-523. <https://doi.org/10.1136/medethics-2018-105084>

Cited in UK Parliament Briefing notes prepared by Parliamentary Office of Science and Technology (“Human Germline Genome Editing” 2020). Selected as a Feature Article for the JME. Referenced in the Wikipedia article for the “He Jiankui Affair”. In the top 5% of all research outputs scored by Altmetric.

Media & General Public

Bowman-Smart H (2018). Moon Bugs: Astronauts Under Quarantine. *Lateral Magazine* (30)

Bowman-Smart H (2014). Look closer: Unseen world 3D. *Screen Education* (75), 30-35.

Bowman-Smart H (2014). The Prime of Your Life. *Voiceworks* (93), 49-52

Bowman-Smart H (2013). Beyond the night sky. *Screen Education* (72), 34-41.

Bowman-Smart H (2013). Multipotent. *Voiceworks* (95), 7-9

This non-fiction piece interweaving my own personal experience with an ovarian tumour with developments in stem cell research was described by Artshub Australia as “a cleverly written work, brimming with information that Hilary tunes down to a reader lacking scientific knowledge.”

Grants & Awards

Publication Accelerator Seed Grant. \$5,000 from Clinical & Health Sciences Academic Unit at the University of South Australia. Held a strategy workshop on Dec 5th 2023 with 35 attendees from institutions and disciplines across Adelaide, including two attendees from Department of the Premier & Cabinet (SA). 2023

Dean’s Award for Excellence in Graduate Research. Received the prestigious award for my PhD research, with a cash prize of AUD\$1,000. Within the Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne, there are >1,000 higher degree research students eligible for this award. 2022

Brocher Foundation Residency. Selected for 2-month residency at the Brocher Foundation in Geneva, Switzerland. 2022

Summer Research Scholarship. Monash University. Payment of \$2,400 to support 3 months of laboratory research. 2016 – 2017

Conference Presentations & Talks

Ethics of Future Technologies Strategy Workshop. Adelaide, Australia. December 2023. “Building the Ethics of Future Technologies as an Area of Research Strength in Adelaide and South Australia”

Australasian Association of Bioethics and Health Law. Brisbane, Australia. November 2023. “Pigeon Pairs and Why Did I Care?: Experiences And Beliefs Surrounding Non-Invasive Prenatal Testing (NIPT) And Fetal Chromosomal Sex Determination”

Australasian Association of Bioethics and Health Law. Brisbane, Australia. November 2023. With Michaela Okninski, Margaret Castles & Joel Grieger. “Medico Legal Investigation: client capacity and professional ethics in managing people with cognitive impairment”

Monash Global and Women’s Health Seminar, Monash University. Melbourne, Australia. November 2023. “The views of Australian non-invasive prenatal testing users on fetal chromosomal sex determination”

Perinatal Genetics Journal Club. Melbourne, Australia. October 2023. “Reporting on two papers from a qualitative study on termination of pregnancy review committees in Victoria”

Emerging Researcher Symposium, University of South Australia. July 2023. “The ethical and policy landscape of future developments in prenatal screening and reproductive technologies”

European Association of Centres of Medical Ethics. Varese, Italy. September 2022. “Non-invasive prenatal testing in Germany: a unique ethical and policy landscape”

World Congress of Bioethics. Basel, Switzerland. July 2022. “Non-invasive prenatal testing: beyond clinical utility”

Feminist Approaches to Bioethics. Basel, Switzerland. July 2022. “‘The tabloid test’: the role of hospital review committees for termination of pregnancy services when lawful at all gestations”

Ethox Seminar, University of Oxford. Oxford, United Kingdom. February 2022. “Non-invasive prenatal testing beyond clinical utility: users’ views on non-medical sex determination”

Australasian Association of Bioethics and Health Law. Online. November 2021. “‘The Herald Sun test’: the function and purpose of Victorian termination of pregnancy review committees”

MDHS Graduate Research Conference, University of Melbourne. Online. December 2020. “Impact of Rapid Exome Sequencing of Critically Ill Newborns on the Parent-Child Relationship” (poster)

Human Genetics Society of Australasia. Online. November 2020. “Impact of Rapid Exome Sequencing of Critically Ill Newborns on the Parent-Child Relationship”.

Health Law and Ethics Network Seminar, University of Melbourne. Melbourne, Australia. December 2019. “Testing for adult-onset conditions using non-invasive prenatal testing: ethical and regulatory issues”

Research Student Association Symposium, Murdoch Children’s Research Institute. Melbourne, Australia. October 2019. “The Ethics of NIPT: Women’s Experiences and Attitudes on Expanding the Reach”

Australasian Association of Bioethics and Health Law. Dunedin, New Zealand. November 2019. “Testing for adult-onset conditions using non-invasive prenatal testing: ethical and regulatory issues”

Human Genetics Society of Australasia. Wellington, New Zealand. August 2019. “The Ethics of NIPT: Women’s Experiences and Attitudes on Expanding the Reach”

Health Law and Ethics Network Seminar, University of Melbourne. Melbourne, Australia. February 2019. “Women’s Experiences and Attitudes towards Non-Invasive Prenatal Testing”

Policy Reviews

Submission to the Australian Government Department of Health on Mitochondrial Donation in Australia (submitted 15 March 2021).

Submission to the National Health and Medical Research Council (NHMRC) Public Consultation. Mitochondrial Donation: Ethical and Social Issues for Community Consultation (submitted 29 Nov 2019).

Service and Committees

- Member, Athena SWAN Research Staff Career Progression Working Group**, University of Oxford 2022 – 2023
- Graduate Representative, Graduate Programs and Executive Education Committee**, Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne 2021
- Member, Human Research Ethics Committee**, Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne 2020 – 2021
- Member, Paediatric Human Ethics Advisory Group**, Royal Children's Hospital, Melbourne 2019 – 2020
- Member, Genomics in Schools Steering Committee**, Genetic Support Network Victoria 2019 – 2020

Reviewing

Bioethics (4x); *Journal of Medical Ethics* (3x); *Prenatal Diagnosis* (3x); *Australian Journal of Primary Health* (1x); *Australian and New Zealand Journal of Obstetrics and Gynaecology (ANZJOG)* (2x); *Journal of Bioethical Inquiry* (2x); *BMJ Open* (1x); *Journal of Genetic Counseling* (1x); *Journal of Obstetrics and Gynaecology* (1x); *Medicine, Health Care and Philosophy* (1x)

Students

Elizabeth Lily Gordon. MPhil, University of Notre Dame. 2023 - 2026.

Non-Academic Roles & Volunteering

- Family Services Volunteer, Very Special Kids**. Directly supporting families with children who have terminal conditions or disabilities, on a weekly basis. 2018 – 2021
- Laboratory Technical Officer, University of Melbourne**. Faculty of Veterinary and Agricultural Sciences. Technical support of agricultural research being undertaken in PC2 laboratories. 2017
- Policy Researcher, The Verb**. Contract policy research and production of climate policy briefs for World Wildlife Fund, for the UNFCCC Conference of the Parties (COP21) in Paris. 2015

Skills

Combined with rigorous philosophical analysis, my empirical research is mixed methods and I have extensive experience in both quantitative and qualitative approaches.

- Surveys
 - Mixed-methods survey design, survey building (REDCap, Qualtrics), and piloting
 - Recruitment methods including direct contact using datasets, social media and online engagement, physical distribution of recruitment materials
 - Quantitative survey data analysis (multivariate regression and other statistical methods)
 - Qualitative survey data analysis (content analysis, thematic analysis)
- Interview research
 - Interview guide design and piloting
 - Recruitment (including direct contact, snowball recruitment, etc)
 - Conducting semi-structured interviews (in person and online)
 - Qualitative data analysis (primarily thematic analysis)
- Document analysis, both visual and text (analysis method varies depending on type of document)
- Data linkage: data cleaning, de-identification, and statistical analysis of large datasets
- Experience with a wide variety of relevant software (Stata, NVivo, REDCap, Qualtrics, LinkageWiz)

Languages

- English (native)
- German (upper intermediate)
- Latin (lower intermediate)