#### **Professor Verity Watson**

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# Curriculum Vitae, May 2024

#### **Education**

Ph.D. Economics, A cost benefit analysis of decommissioning offshore installations, University of Aberdeen, 2003

MSc Economics, Glasgow University, Grade: Merit, 1998

MA (Hons) Economic Science, University of Aberdeen, Grade: Upper Second Class Honours, 1997

# **Employment**

Senior Economist, RTI Health Solutions, 2024 - present

Honorary Professor, Health Economics Research Unit, University of Aberdeen, 2024 - present

Professor, Theme lead: 'Preferences and Value', Health Economics Research Unit, University of Aberdeen, 2022 - 2024

Senior Research Fellow, Theme lead: 'Preferences and Value,' Health Economics Research Unit, University of Aberdeen, 2013 to 2022

Research Fellow (Grade 7), Theme lead: 'Experimental Economics', Health Economics Research Unit, University of Aberdeen, 2009 to 2013

Research Fellow (Grade 6), Health Economics Research Unit, University of Aberdeen, 2003 to 2009

Research Assistant, Health Economics Research Unit, University of Aberdeen, 2002 to 2003

### **Professional Interests**

Health Economics, Environmental Economics, Behavioural Economics, Experimental Economics, Labour Economics

# **Research Visits**

School of Population and Public Health, University of British Columbia - Peter Wall Institute of Advanced Studies, International Visiting Research Scholar, September-October 2015, March 2018

School of Economics and Management, Universidade do Minho, Portugal, February 2013; October 2013

Center for Social Policy, Universiteit Antwerpen, Belgium, December 2012

Centre for Clinical Epidemiology and Evaluation, University of British Columbia, Canada, August 2006

Centre for Health Economics and Policy Analysis, University of Calgary, May-June 2004, September 2004

#### **Research Grants and Awards**

Estimating the health and wellbeing value of the natural capital of the NHS estates, SEFARI Fellowship from SEFARI and Public Health Scotland, 2024. £36,000

ICANEQUAL: Reducing inequalities for those at risk and those diagnosed with Hepatocellular Carcinoma (HCC), partnership grant from **National Institute for Health Research**, 2023-2024. £102,277.61

Public values, Universal Basic Income and health: developing a mixed-methods study to elicit and deliberate public values for Universal Basic Income and comparator policies in relation to their impact on population health and health inequalities, research grant from **National Institute for Health Research**, 2022-2024. £151,934.84

"Come and work here: Exploring the role of local community-led initiatives to improve recruitment and retention of healthcare staff in remote and rural areas", research grant from **National Institute for Health Research**, 2022-2023. £243,666.70

"Glaucoma Risk Prediction in ocular hypertension (GRIP): a cohort study using electronic medical records to validate a risk predictor and determine the cost-effectiveness of different monitoring schemes according to risk of conversion to glaucoma", research grant from **National Institute for Health Research**, 2021-2023. £672,728.20

"Remote working in patient public involvement in health and social care research - responding to Covid-19 and rising health inequalities", research grant from **Economic and Social Research Council**, 2020-2021. £215,605.00

"Enhancing recruitment and retention of rural doctors in Scotland: A mixed methods study", research grant from **Chief Scientists Office of the Scottish Government** Health and Social Care Directorate, 2020-2022. £298,984

"Reducing land degradation and carbon loss from Ethiopia's soils to strengthen livelihoods and resilience (RALENTIR)", research grant from **Economic and Social Research Council** and **Global Challenges Research Fund**, 2019-2023. £997,497.

"Patients' preferences in the treatment of hormone-sensitive metastatic prostate cancer", research grant from **Imperial College London**, 2019-2022. £19,597.

"Putting men's preferences at the centre of the doctor-patient relationship", research grant from **The Urology Foundation**, 2019-2022. £35,800.

Health Economics Research Unit CORE funding grant from the **Chief Scientists Office of the Scottish Government** Health and Social Care Directorate. 2014-2024). £835,000 per year.

International Visiting Research Scholar Award (return visit) from **Peter Wall Institute for Advanced Studies** to visit University of British Columbia, 2018. CAN\$5,000.

"Pregnant women's risk benefit trade-offs for maternity care", research grant from **NHS Highland**, 2016-2021. £15,000.

International Visiting Research Scholar Award from **Peter Wall Institute for Advanced Studies** to visit University of British Columbia, 2015. CAN\$10,000.

"Understanding push-pull factors in medical careers decision making", research grant from **NHS Education for Scotland,** 2013-2014. £29,000.

"Men's preferences for treatment of Lower Urinary Tract Symptoms associated with Benign Prostatic Hyperplasia", consultancy project from **Astellas Pharma Europe**, 2013-2014. £72,000.

"National UK Ecosystems Agreement: Shared Values Work package", research grant from **Natural Environment Research Council**, 2012-2015. £161,500.

"Spending Wisely: Investigating survey mode effects in discrete choice experiment responses", research grant from **Medical Research Council**, 2012-2015. £232,000.

"Primary care delivery in Portugal", research grant from **Portuguese Department of Health**, 2012-2013. EUR20,000.

"Eye care services in Scotland: Did the Scots get it right?" research grant from **Chief Scientist Office of Scottish Government**, 2011-2012. £43,000.

"Investigation of the value placed on the National Clinical Assessment Service by referrers in the NHS", research grant from **National Patient Safety Agency**, 2009-2010. £48,000.

"Men's preferences for prostate cancer treatment", research grant from **University College London**, 2009-2012. £8,000.

"NHS priority setting", research grant from NHS Dumfries and Galloway, 2006-2007. £15,000.

"The Incidence of Moonlighting in the North Sea Offshore Oil and Gas Industry", research grant from the Carnegie Trust for the Universities of Scotland, 2006. £5,000.

**Economic and Social Research Council** Bursary for Training to attend Advances in Modelling Human Choice Behaviour, 2006.

**Royal Economic Society** Small Academic Expenses to attend Advances in Modelling Human Choice Behaviour, 2006.

Ph.D. Studentship awarded by **Oil and Gas Centre**, University of Aberdeen. Sponsorship from Shell UK Exploration and Production, John Wood Group PLC and Exxon Mobil, 1998-2001.

Scottish Graduate Programme in Economics (SGPE) Studentship awarded by **Scottish Economic Society**. 1997- 1998.

#### **Publications**

h-index: 33 Citations: 4423

### A. Behavioural and experimental research

- van der Pol, M. Watson, V. Boyers, D. (Forthcoming) Stability of Willingness to Pay: does time and treatment allocation in a Randomised Controlled Trial influence willingness to pay? *Medical Decision Making*
- 2. Schulz, R. Watson, V. Wersing, M. (2023) Working from home and housing demand. *Regional Science and Urban Economics*
- Velardo, F. Watson, V. Arwidson, P. Alla, F. Luchini, S. Schwarzinger, M. CoVaMax Study Group (2021). COVID-19 vaccine hesitancy across French regions: a natural experiment in December 2020. Vaccines
- 4. Schwarzinger, M. Watson, V. Arwidson, P. Alla, F. Luchini, S. (2021). COVID-19 vaccine hesitancy in the French population of working age: a survey experiment of vaccine characteristics. *The Lancet Public Health* 6(4), e210-e221 <a href="https://doi.org/10.1016/S2468-2667(21)00012-8">doi:10.1016/S2468-2667(21)00012-8</a> (Journal impact factor 16.29)
- Cerroni, S. Watson, V. MacDiarmid, J.I. (2020). Consumers' rationality and home-grown values for healthy and environmentally sustainable food. *Bio-based and Applied Economics* 8, 101-132 doi:10.13128/bae-8927 (Journal impact factor 0.32)
- 6. Regier, D. Sicsic, J. Watson, V. (2019). Choice certainty and deliberative thinking in discrete choice experiments: A theoretical and empirical investigation. *Journal of Economic Behavior and Organization* 164, 235-255. doi:10.1016/j.jebo.2019.05.031 (Journal impact factor 1.59)
- 7. Loría, L. Watson, V. Kiso, T. Phimister, E. (2019). Investigating bus users' preferences for Low Emission Buses: Experiences from Europe's largest hydrogen bus fleet. *Journal of Choice Modelling* 32, 100169 <a href="https://doi.org/10.1016/j.jocm.2019.05.001">doi:10.1016/j.jocm.2019.05.001</a> (Journal impact factor 2.07)

- 8. Cerroni, S. Watson, V. Kalentakis, D. Macdiarmid, J. (2019). Value-elicitation and value-formation properties of discrete choice experiment and experimental auctions. *European Journal of Agricultural Economics* 46, 3-27. doi:10.1093/erae/jby014 (Journal impact factor 2.32)
- 9. Heidenreich, S. Watson, V. Ryan, M. Phimister, E. (2018). Decision heuristic or preference? Attribute non-attendance in discrete choice problems. *Health Economics* 27, 157-171. doi:10.1002/hec.3524 (Journal impact factor 2.25)
- 10. Dickey, H. Ikenwilo, D. Norwood, P. Watson, V. Zangelidis, A. (2016). "Doctor my eyes": A natural experiment on the demand for eye care services. *Social Science and Medicine* 150, 117-127. doi:10.1016/j.socscimed.2015.12.037 (Journal impact factor 3.61)
- 11. Luchini, S. Watson, V. (2014). Are choice experiments reliable? Evidence from the lab. *Economics Letters* 124, 9-13. doi:10.1016/j.econlet.2014.04.005 (Journal impact factor 1.74)
- 12. Regier, D. Watson, V. Burnett, H. Ungar, W. (2014). Task complexity and response certainty in discrete choice experiments. *Journal of Behavioral and Experimental Economics* 50, 40-49. doi:10.1016/j.socec.2014.02.009
- 13. Luchini, S. Watson, V. (2013). Framing and certainty in a valuation task. *Journal of Economic Psychology* 39, 204-214. doi: 10.1016/j.joep.2013.08.001 (Journal impact factor 1.14)
- 14. Ryan, M. Watson, V. Entwistle, V. (2009). Rationalising the 'irrational': A think aloud study of discrete choice experiment responses. *Health Economics* 18, 321-336. doi:10.1002/hec.1369 (Awarded the ISPOR Research Excellence Award for Methodology) (Journal impact factor 2.25)
- 15. Watson, V. Ryan, M. (2007). Exploring anomalies in double bounded contingent valuation. *Journal of Health Economics* 26, 463-82. doi: 10.1016/j.jhealeco.2006.10.009 (Journal impact factor 2.82)

#### **Working papers**

- 1. Design dimensions and choice behaviour in health discrete choice experiments with M. Genie, M. Schwarzinger, S. Luchini. *Submitted*
- 2. A comparison of three ex-ante corrections for hypothetical bias with M. van der Pol, D. Boyers
- 3. Reference dependent preferences for low emissions buses with L. Loría-Rebolledo

# B. Health economics

- Vognbjerg Sydenham, R. Ejg Jorbøl, D. Plejdrup Hansen, M. Stenz Justesen, U. Watson, V. Bjørnskov Pedersen, L. (2022). Prescribing antibiotics: factors driving decision-making in general practice. A discrete choice experiment. Social Science and Medicine, 305, 115033 doi:10.1016/j.socscimed.2022.115033 (Journal impact factor 3.61)
- 2. Genie, M. G. Loría-Rebolledo, L. E. Paranjothy, S. Powell, D. Ryan, M. Sakowsky, R. A. Watson, V. (2022). Public acceptability of non-pharmaceutical interventions to control a pandemic in the United Kingdom: a discrete choice experiment. *BMJ open*,
- 3. Genie, M. G. Loría-Rebolledo, L. E. Paranjothy, S. Powell, D. Ryan, M. Sakowsky, R. A. Watson, V. (2020). Understanding public preferences and trade-offs for government responses during a pandemic: a protocol for a discrete choice experiment in the UK. *BMJ open*, *10*(11), e043477. doi:10.1136/bmjopen-2020-043477 (Journal impact factor 2.49)
- Pearce, A. Harrison, M. Watson, V. Street, D.J. Howard, K. Bansback, N. Bryan, S. (2020). Respondent understanding in Discrete Choice Experiments: A scoping review. *The Patient-Patient-Centered Outcomes Research*, 1-37. doi:10.1007/s40271-020-00467-y (Journal impact factor 3.23)

- 5. Pearce, A.M. Mulhern, B.J. Watson, V. Viney, R.C. (2020). How are debriefing questions used in health discrete choice experiments? An online survey. *Value in Health* 23, 289-293. doi:10.1016/j.jval.2019.10.001 (Journal impact factor 5.03)
- Watson, V. Porteous, T. Bolt, T. Ryan, M. (2019). Mode and frame matter: Assessing the impact of survey mode and sample frame in choice experiments. *Medical Decision Making* 39, 827-841. doi:10.1177/0272989X19871035 (Journal impact factor 2.79)
- 7. Tsuchiya, A. Watson, V. (2017). Re-thinking "the different perspectives that can be used when eliciting preferences in health." *Health Economics* 26, e103-e107. doi:10.1002/hec.3480 (Journal impact factor 2.25)
- 8. Krucien, N. Watson, V. Ryan, M. (2017). Is best-worst scaling suitable for health state valuation? A comparison with discrete choice experiments. *Health Economics* 26, e1-e16. doi:10.1002/hec.3459 (Journal impact factor 2.25)
- 9. Watson, V. Becker, F. de Bekker-Grob, E. (2017). Responses rates to discrete choice experiments: A meta-analysis. *Health Economics* 26, 810-817. doi:10.1002/hec.3354 (Journal impact factor 2.25)
- 10. Ryan, M. Watson, V. (2009). Comparing welfare estimates from payment card contingent valuation and discrete choice experiments. *Health Economics* 18, 389-401. doi:10.1002/hec.1364 (Journal impact factor 2.25)
- 11. Eberth, B. Watson, V. Ryan, M. Hughes, J. Barnett, G. (2009). Does one size fit all? Investigating heterogeneity in men's preferences for Benign Prostatic Hyperplasia treatment. *Medical Decision Making* 29, 707-715. doi: 10.1177/0272989X09341754 (Journal impact factor 2.79)
- 12. Ryan, M. Watson, V. Amaya-Amaya, M. (2003). Methodological issues in monetary valuation of health benefits. *Expert Review in Pharmacoeconomics and Outcomes Research* 3, 717-27. doi:10.1586/14737167.3.6.717 (Journal impact factor 1.82)

# **Books and book chapters**

- 1. Ryan, M. Watson, V. Marshall, D. Loría, L. (In preparation) *Using discrete choice experiments to elicit preferences for health care,* Springer, Dordrecht
- 2. Watson, V. Schulz, R. Luchini, S. Regier, D. (2019). Monetary analysis of health outcomes. In Guerriero C. Cairns J. Chalabi Z. (Eds.) *Cost benefit Analysis of Environmental Health Interventions: A Practical Approach*, Elsevier.
- 3. Guerriero, C. Loría, L. Papirio, S. Ranzi, A. Watson, V. (2019). Case Study: A realistic contaminated site remediation and difference scenarios of intervention. In Guerriero C. Cairns J. Chalabi Z. (Eds.) *Cost benefit Analysis of Environmental Health Interventions: A Practical Approach*, Elsevier.
- 4. Ryan, M. Watson, V. Gerard, K. (2008). Practical issues in conducting a discrete choice experiment. In Ryan, M. Gerard, K. Amaya-Amaya, M. (Eds.) *Using discrete choice experiments to value health and health care*, Springer, Dordrecht.

# Working papers

- 1. Public health economics and Universal Basic Income: from cost to value with N. McHugh, R. Baker, C. Donaldson, N. Craig, D. Bomark, C. Bambra, V.J. McGowan, R. Lightbody. *Submitted*
- Public Preferences and Willingness to Pay for a Net Zero NHS: a protocol for a discrete choice experiment in England and Scotland with L. Loría, M. Abbott, M. Antunes, H. Wu, P.Norwood, M. Ryan. Submitted
- 3. General practitioner and entrepreneur: A qualitative study on the business risk exposure of GP partners. with R. Schulz, H. Dickey, J. MacLeod, P. Murchie
- 4. More Than Meets the Eye: Has the Eye Care Policy in Scotland Had Wider Health Benefits? with A. Zangelidis, H. Dickey, P. Norwood

### **Reports**

1. Watson, V. Schulz, R. Dickey, H. MacLeod, J. Murchie, P. (2021). *Exploring the business organisation of General Practice partnerships*. Final report for IRAS.

### C. Health policy

- Loría-Rebolledo, L. Watson, V. Hassan, S. Hossain, M. Tahir, N. Goodall, M. Bristow, K. Gabbay, M. Frith, L. (2023). Preferences for remote working in Patient and Public Involvement and Engagement meetings. *Health Expectations*.
- 2. Watson, V. Bryers, H. Krucien, N. Erdem, S. Burnside, M. van Woerden, H. C. (2023) The perception of women in rural and remote Scotland about intrapartum care: A qualitative study. *The Patient*. (Journal impact factor 3.22)
- Connor, M. Genie, M. Gonzalez, M. Sarwar, N. Jayaprakash, K. Horan, G. Jervis, F. Klimowska-Nassar, N. Sukumar, J. Pokrovska, T. Basak, D. Robinson, A. Beresford, M. Rai, B. Mangar, S. Khoo, V. Dudderidge, T. Falconer, A. Winkler, M. Watson, V. Ahmed, H. (Forthcoming) Metastatic prostate cancer men's Attitudes towards Treatment of the local Tumour and metastasis Evaluative Research (IP5-MATTER): Protocol for a prospective, multicentre discrete choice experiment study. BMJ Open (Journal impact factor 2.49)
- 4. Connor, M. Genie, M. Burns, D. Bass, E. Gonzalez, M. Sarwar, N. Mangar, S. Didderidge, T. Khoo, V. Winkler, M. Ahmed, H. Watson, V. (Forthcoming). A Systematic Review of Patients' Values, Preferences, and Expectations for the Treatment of Metastatic Prostate Cancer. *European Urology Open Science* (Journal impact factor 1.17)
- 5. Connor, M. Khoo, V. Watson, V. Ahmed, H. (2021). Radical treatment without cure: Decision-making in oligometastatic prostate cancer. *European Urology* 79(4), 558-560 <u>doi:</u> 10.1016/j.eururo.2021.01.029 (Journal impact factor 17.58)
- 6. Norwood, P. Correira, I. Heidenreich, S. Veiga, P. Watson, V. (2021). Is relational continuity of care as important as policy makers think? Evidence from Portugal. *Family Practice*. doi:10.1093/fampra/cmab010 (Journal impact factor 2.038)
- Boyers, D. van der Pol, M. Watson, V. Lamont, T. Goulao, B. Ramsay, C. Duncan, A. Macpherson, L. Clarkson, J. (2021). The value of preventative dental care: A Discrete-Choice Experiment. *Journal of Dental Research*, p.0022034521989943 doi:10.1177/0022034521989943 (Journal impact factor 4.914)
- Mendoza-Cano, O. Rincón-Avalos, P. Watson, V. Khouakhi, A. López-de la Cruz, J. Ruis-Montero, A.P. Nava-Garibaldi, C.M. Lopez-Rojas, M. Murillo-Zamora, E. (2021). The burden of dengue in children by calculating spatial temperature: A methodological approach using remote sensing techniques. *International Journal of Environmental Research and Public Health*, 18(8), 4230. doi:10.3390/ijerph18084230 (Journal impact factor 3.127)
- 9. Watson, V. McCarten, N. Krucien, N. Abu, V. Ikenwilo, D. Emberton, M. Ahmed, H. (2020). Evaluating the trade-offs men with localised prostate cancer make between the risks and benefits of treatments: the COMPARE study. *Journal of Urology* 204, 273-280 doi:10.1097/JU.000000000000000754 (Journal impact factor 5.15)
- 10. Norwood, P. Corriera, I. Veiga, P. Watson, V. (2019). Patients' experiences and preferences for primary care delivery: A focus group analysis. *Primary Health Care Research and Development* 20, E106 <a href="doi.org/10.1017/S1463423619000422">doi.org/10.1017/S1463423619000422</a> (Journal impact factor 1.11)
- 11. Ikenwilo, D. Heidenreich, S. Ryan, M. Mankowski, C. Nazir, J. Watson, V. (2018). The best of both worlds: An example mixed methods approach to understand men's preferences for the treatment

- of Lower Urinary Tract Symptoms. *The Patient* 11, 55-67. doi:10.1007/s40271-017-0263-7 (Journal impact factor 3.22)
- 12. Hifinger, M. Hiligsmann, M. Ramiro, S. Watson, V. Berghea, F. Péntek, M. Keat, A. Severens, J.L. Fautrel, B. Boonen, A. (2017). Influence of disease activity on RA treatment choices in countries with restricted access to expensive, innovative drugs: A discrete choice experiment among rheumatologists. *RMD Open* 3, e000453. doi: 10.1136/rmdopen-2017-000453 (Journal impact factor N/A)
- 13. Hiligsmann, M. Dellaert, B. Dirksen, C. Watson, V. Bours, S. Goemaere, S. Reginster, J.Y. Roux, C. McGowan, B. Silke, B. Whelan, B. Diez-Perez, A. Torres, E. Papadakis, G. Rizzoli, R. Cooper, C. Pearson, G. Boonen, A. (2017). Patients' preferences for anti-osteoporosis drug treatment: a cross-European discrete choice experiment. *Rheumatology* 56, 1167-1176. doi:10.1093/rheumatology/kex071 (Journal impact factor 5.60)
- 14. Porteous, T. Bond, C. Ryan, M. Watson, V. Watson, M. (2017). Patient satisfaction in a community pharmacy. *The Pharmaceutical Journal* 298, 169. (Journal impact factor N/A)
- Hifinger, M. Hiligsmann, M. Ramiro, S. Severens, J.L. Fautrel, B. Watson, V. Uhlig, T. van Vollenhoven, R. Jacques, P. Detert, J. Canas da Silva, J. Scirè, C.A. Berghea, F. Carmona, L. Péntek, M. Keat, A. Boonen, A. (2017). Economic considerations and patients' preferences affect treatment selection for patients with rheumatoid arthritis: A discrete choice experiment among European rheumatologists. *Annals of the Rheumatic Diseases* 76, 126-132. doi:10.1136/annrheumdis-2016-209202 (Journal impact factor 16.10)
- Mankowski, C. Ikenwilo, D. Heidenreich, S. Ryan, M. Nazir, J. Newman, C. Watson, V. (2016). Men's preferences for the treatment of lower urinary tract symptoms associated with benign prostatic hyperplasia: A discrete choice experiment. *Patient Preference and Adherence* 10, 2407-2417. doi: 10.2147/PPA.S112161 (Journal impact factor 1.94)
- 17. Hifinger, M. Hiligsmann, M. Ramiro, S. Severens, J.L. Fautrel, B. Uhlig, T. van Vollenhoven, R. Jacques, P. Detert, J. Canas da Silva, J. Scirè, C.A. Berghea, F. Carmona, L. Péntek, M. Keat, A. Boonen, A. (2016). Patient's preferences and economic considerations play an important role in treatment decisions. A discrete choice experiment among rheumatologists. *Rheumatology* 56, 68-76. <a href="https://doi.org/doi.o
- 18. Porteous, T. Ryan, M. Bond, C. Watson, M. Watson, V. (2016). Managing minor ailments in the United Kingdom; the public's preferences for characteristics of community pharmacies. A discrete choice experiment. *Plos ONE* 11, e0152257. <a href="doi:10.1371/journal.pone.0152257">doi:10.1371/journal.pone.0152257</a> (Journal impact factor N/A)
- 19. Elliott, A. Yi, D. Watson, V. Ryan, M. Hannaford, P. McAteer, A. Norwood, P. (2015). Exploring preferences for symptom management in primary care. *British Journal of General Practice* 65, 478-488. doi: 10.3399/bjgp15X685705 (Journal impact factor 4.19)
- 20. Craig, B.M. Donovan, K.A. Fraenkel, L. Watson, V. Hawley, S. Quinn, G. (2014). A generation of childless women: Lessons from the United States. *Women's Health Issues* 24, 21-27. doi:10.1016/j.whi.2013.09.005 (Journal impact factor 1.95)
- 21. Hiligsmann, M. Dellaert, B. Dirksen, C. van der Weijden, C. Goemaere, S. Reginster, J-Y. Watson V. Boonen, A. (2014). Patients' preferences for osteoporosis drug treatment: A discrete choice experiment. *Arthritis Research and Therapy* 16, R36. doi:10.1186/ar4465 (Journal impact factor 4.68)
- 22. Dickey, H. Ikenwilo, D. Norwood, P. Watson, V. Zangelidis, A. (2013). Utilisation of eye care services: Examining the effect of Scotland's eye care policy. *Health Policy* 108, 286-293. doi:10.1016/j.healthpol.2012.09.006 (Journal impact factor 2.29)
- 23. Watson, V. Carnon, A. Ryan, M. Cox, D. (2012). Involving the public in priority setting using discrete choice experiments: A case study in NHS Dumfries & Galloway. *Journal of Public Health* 34, 253-260. doi:10.1093/pubmed/fdr102 (Journal impact factor 2.19)

- 24. Scalone, L. Watson, V. Ryan, M. Kotsopoulos, N. Patel, R. (2011). Evaluation of patients' preferences in genital herpes treatment. *Sexually Transmitted Diseases* 38, 802-807. doi:10.1097/OLQ.0b013e318218702c (Journal impact factor 2.74)
- 25. Pitchforth, E. van Teijlingen, E. Watson, V. Tucker, J. Kiger, A. Ireland, J. Farmer, J. Rennie, A-M. Gibb, S. Martin, E. Ryan, M. (2009). 'Choice' and place of delivery: A qualitative study of women in remote and rural Scotland. *Quality and Safety in Healthcare* 18, 42-48. doi:10.1136/qshc.2007.023572 (Journal impact factor 6.08)
- 26. Watson, V. Ryan, M. Watson, E. (2009). Valuing experience factors in the provision of Chlamydia screening: an application to women attending the family planning clinic. *Value in Health* 12, 621-623. doi:10.1111/j.1524-4733.2008.00451.x (Journal impact factor 5.03)
- 27. Pitchforth, E. Watson, V. Tucker, J. Ryan, M. van Teijlingen, E. Farmer, J. Ireland, J. Martin, E. Kiger, A. Bryers, H. (2008). Models of intrapartum care and women's trade-offs in remote and rural Scotland: A mixed-methods study. *British Journal of Obstetrics and Gynaecology* 155, 560-569. doi:10.1111/j.1471-0528.2007.01516.x (Journal impact factor 4.66)
- 28. Ryan, M. Watson, V. (2006). Counting the cost of fast access: using discrete choice experiments to elicit preferences in general practice. *British Journal of General Practice* 56, 4-5. <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1821424/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1821424/</a> (Journal impact factor 4.19)
- 29. Ryan, M. Diack, J. Watson, V. Smith, N. (2005). Rapid prenatal diagnostic testing for Down syndrome only or longer wait for full karyotype: the views of pregnant women. *Prenatal Diagnosis* 25, 1206-11. <a href="https://doi.org/doi.or
- Watson, V. Ryan, M. Barnett, G. Ellis, B. Emberton, M. Brown, C. (2004). Eliciting preferences for drug treatment of lower urinary tract symptoms associated with Benign Prostatic Hyperplasia. *Journal of Urology* 172, 2321-25. doi: 10.1097/01.ju.0000140957.31325.7f (Journal impact factor 5.15)

#### **Working papers**

- 1. Risk benefit trade-offs in maternity care, with L. Loría-Rebolledo, H. van Woerden, H. Bryers, S. Erdem. *Submitted*
- 2. Patient preferences for ocular hypertension monitoring: A discrete choice experiment, with H. Wu, R. Hernandez, A. Azuara-Blanco, A. King, G. Gazzard. *Submitted*
- 3. Cost-effectiveness of monitoring ocular hypertension based on a risk prediction tool with H. Wu, R. Hernández, D. Crabb, G. Gazzard, A. King, J.E. Morgan, Y. Takwoingi, A. Azuara-Blanco, D. Wright, C. Cardwell.

# **Reports**

- 1. Correia, I. Veiga, P. Norwood, P. Watson, V. (2014). What do patients want from primary care services? Report for Ministério da Saúde/INSA, I.P., Portugal.
- 2. Watson, V. Ikenwilo, D. Heidenreich, S. Ryan, M. (2014). *Men's preferences for the treatment of lower urinary tract symptoms associated with Benign Prostatic Hyperplasia*. Report for Astellas.
- 3. Cleland, J. Johnston, P. Mattick, K. Rees, C. Skåtun, D. Watson V. (2013). *Understanding push-pull factors in medical careers decision making*. Final report for NHS Education for Scotland (NES).
- 4. Dickey, H. Ikenwilo, D. Norwood, P. Watson, V. Zangelidis, A. (2012). *Utilisation of eye care services:* Examining the effect of Scotland's eye care policy. A report for the Chief Scientists Office of the Scotlish Government
- 5. Sussex, J. Watson, V. Tetteh, E. Ryan, M. (2010). *Investigation of the value placed in NCAS service by referrers in the NHS*. A report for the National Patient Safety Agency.

- 6. Ryan, M. Watson, V. (2006). *Using discrete choice experiments to inform priority setting*. A Report for NHS Dumfries and Galloway.
- 7. Tucker, J. Farmer, J. Bryers, H. Kiger, A. van Teijlingen, E. Ryan, M. Pitchforth, E. King, K. Martin, E. Watson, V. Reid, J. (2006). Sustainable maternity services in remote and rural areas of Scotland: Implementation and external evaluation of maternity care models. NHS Scotland Maternity Services Project Board.

#### D. Environmental economics

Peer-reviewed publications

- Kenter, J.O. Reed, M.S. Irvine, K.N. O'Brien, E. Bryce, R. Christie, M. Cooper, N. Hockley, N. Fazey, I. Orchard-Webb, J. Ravenscroft, N. Raymond, C.M. Tett, P. Watson, V. (2016). Shared values and deliberative valuation: Future directions. *Ecosystem Services* 21, 358-371. doi.org/10.1016/j.ecoser.2016.10.006 (Journal impact factor 6.33)
- 2. Kenter, J.O. Jobstvogt, N. Watson, V. Irvine, K.N. Christie, M. Bryce, R. (2016). The impact of information, value-deliberation and group-based decision-making on values for ecosystem services: Integrating deliberative monetary valuation and storytelling, *Ecosystems Services* 21, 270-290. doi:10.1016/j.ecoser.2016.06.006 (Journal impact factor 6.33)
- 3. Kenter, J.O. O'Brien, L. Hockley, N. Ravenscroft, N. Fazey, I. Irvine, K. Reed, M. Christie, M. Brady, E. Bryce, R. Church, A. Cooper, N. Davies, A. Evely, A. Everard, M. Fish, R. Fisher, J. Jobstvogt, N. Molloy, C. Orchard-Webb, J. Ranger, S. Ryan, M. Watson, V. and Williams, S. (2015). What are shared and social values of ecosystems? *Ecological Economics* 111, 86-99. doi:10.1016/j.ecolecon.2015.01.006 (Journal impact factor 4.48)
- 4. Jobstvogt, N. Kenter, J.O. Watson, V. (2014). Looking beneath the surface: The economic value of marine protected areas (MPAs) to recreational users. *Ecosystem Services* 10, 97-110. doi:10.1016/j.ecoser.2014.09.006 (Journal impact factor 6.33)

# Reports

 Kenter, J.O. Bryce, R. Davies, A. Jobstvogt, N. Watson, V. Ranger, S. Solandt, J.L. Duncan, C. Christie, M. Crump, H. Irvine, K.N. Pinard, M. Reed, M.S. (2013). *The value of potential Marine Protected Areas in the UK to divers and sea anglers.* UK National Ecosystem Assessment, United Nations Environment Program-World Conservation Monitoring Centre, Cambridge, UK.

### E. Labour economics

- Cleland, J. Johnson, P. Watson, V. Krucien, N. Skåtun, D. (2017). What do UK medical students value most in their career? A discrete choice experiment. *Medical Education* 51, 839-851. doi:10.1111/medu.13257 (Journal impact factor 4.57)
- Cleland, J. Johnson, P. Watson, V. Krucien, N. Skåtun, D. (2016). What do UK doctors in training value in a post? A discrete choice experiment. *Medical Education* 50, 189-202. doi:10.1111/medu.12896 (Journal impact factor 4.57)
- 3. Watson, V. Sussex, J. Ryan, M. Tetteh, E. (2012). Managing poorly performing clinicians: The value of independent help. *Health Policy* 104, 260-271. doi:10.1016/j.healthpol.2011.12.006 (Journal impact factor 2.29)

- 4. Dickey, H. Watson, V. Zangelidis, A. (2011). Is it all about money? An examination of the motives behind moonlighting. *Applied Economics* 43, 3767-3774. doi: 10.1080/00036841003724403 (Journal impact factor 0.51)
- 5. Dickey, H. Watson, V. Zangelidis, A. (2011). Job satisfaction and quit intentions of offshore workers in the U.K. North Sea oil and gas industry. *Scottish Journal of Political Economy* 58, 607-633. doi:10.1111/j.1467-9485.2011.00561.x (Journal impact factor 0.54)Working papers

### **Working papers**

- 1. Moving to the countryside and staying'? Exploring doctors' migration choices to rural areas with A. MacLaren, L. Locock, Z. Skea, R. Hollick, P. Murchie, A. Dennison, D, Skåtun. *Revise and resubmit*
- 2. 'Come and work here!' Exploring local community-led initiatives to recruit and retain healthcare staff in remote and rural areas with A. MacLaren, L. Locock, Z. Skea, R. Hollick, P. Murchie, A. Dennison, D, Skåtun. *Submitted*
- 3. Mother's opportunity cost on second birth timing? with Y. Zhang, H. Dickey, A. Zangelidis.
- 4. What triggers multiple job holding? with H. Dickey, A. Zangelidis (MPRA Paper 17575, University Library of Munich, Germany: click <a href="https://example.com/here">here</a>).

# F. Poverty measurement

# Peer-reviewed publications

 Watson, V. Dibben, C. Cox, M. Atherton, I. Sutton, M. Ryan, M. (2019). Testing the expert-based weights used in the UK's Index of Multiple Deprivation (IMD) against three preference-based methods. Social Indicators Research 44, 1055-1074 doi:10.1007/s11205-018-02054-z (Journal impact factor 1.874)

# **Working papers**

1. Eliciting weights for the Human Development Index with K. Decancq.

### Reports

1. Dibben, C. Atherton, I. Cox, M. Watson, V. Sutton, M. Ryan, M. (2007). *Investigating the impact of changing the weights that underpin the Index of Multiple Deprivation 2004*. A report for the Department of Communities and Local Government.

# **Work in Progress**

Determinants of general practice location with R. Schulz

Value clarification decision aid tool to aid localised prostate cancer treatment choice with S. MacLennan, S.J. MacLennan, H. Ahmed, J. N'Dow

Coherent arbitrariness in stated preference tasks, with M. Ryan, P. Norwood, J. Sicsic

Reweighting to correct sample representativeness with R. Schulz, A. Werwatz

Dental check-ups: A discrete choice experiment of public preferences with D. Boyers, M. van der Pol, N. Pitts, P. Fee, R. Floate, B. Goulao, C. Ramsey, J. Clarkson

"Come and work here: Exploring the role of local community-led initiatives to improve recruitment and retention of healthcare staff in remote and rural areas" with D. Skåtun, L. Locock, J. Cleland, Z. Skea, A. MacLaren, R. Hollick, P. Murchie

Preferences for a Net Zero NHS with L. Loría-Rebolledo, P. Norwood, M. Ryan, M. Abbott, M. Antunes, H. Wu

Metastatic prostate cancer patients' preferences for novel treatment (MATTER) with M. Connor, H. Ahmed, M. Genie, H. Wu, and the MATTER team

A systematic review of discrete choice experiment studies in health with L. Loría-Rebolledo, M. Ryan, M, Antunes, D. Mohan, D. Burns

Stability of preferences for non-pharmaceutical interventions for pandemics: A follow up study with L. Loría-Rebolledo, M. Ryan, D. Mohan

Public preferences for a Net Zero National Health Service with L. Loría-Rebolledo, M. Ryan, M. Antunes, M. Abbott, P. Norwood, H. Wu

# **Presentations**

#### **Invited seminars**

- 2022: Technische Universität Berlin
- **2021:** Scottish Health Economics online seminar; Health Economics Research Centre, University of Oxford
- **2019:** Department of Economics, University of Southampton; Network of Alberta Health Economists Rounds, University of Calgary; ENVECHO workshop, Università degli Studi di Verona (keynote).
- **2018**: School of Population and Public Health, University of British Columbia; Network of Alberta Health Economists Rounds, University of Calgary; Technische Universität Berlin; London School of Hygiene and Tropical Medicine.
- 2017: Workshop on Local Governance, University of Aberdeen; Workshop on Cost-Benefit Analysis of Environmental Health Interventions, LSHTM, London; Workshop on Non-Market Valuation, Leeds (plenary); Stated Preferences in Health Economics workshop, Department of Economics, University of Sheffield; Well-being and Preference workshop, Department of Economics, University of Stirling.
- **2016**: Institute for Statistics and Econometrics, Technische Universität Berlin.
- **2015**: Department of Emergency Medicine, University of Alberta; School of Population and Public Health, University of British Columbia.
- 2014: Preferences, well-being and discrete choice experiments workshop, Universiteit Antwerpen; dggö workshop on Distribution (Keynote), Hamburg; 40 years of Health Economics at Aberdeen; Choice workshop, University of Stirling; SEEL Workshop in Experimental Economics, University of Aberdeen; Haindorf Seminar, Hejnice, Czech Republic.
- **2012**: Herman Deleek Centre for Social Policy, Universiteit Antwerpen; Overseas Development Initiative (ODI): Valuing Development Workshop, London; Department of Healthcare Management, Technische Universität Berlin.
- **2011**: Imperial College Business School, London; Health Economics Research Centre, University of Oxford
- 2008: Oxford Poverty and Human Development Initiative, University of Oxford.
- **2005**: The Dugald Baird Centre, University of Aberdeen.

2004: Institute for Economic and Regional Research (IRER), University of Neuchatel.

# Conference presentations

**2022:** EuHEA, Oslo

**2021:** Health Economists Study Group, LSHTM (virtual); International Health Economics Association (virtual).

2020: EuHEA, Oslo (conference cancelled due to COVID)

2019: International Health Economics Association, Basel.

**2018**: Rethinking Remote 2018, Inverness (plenary); EuHEA, Maastricht.

2017: Health Economists Study Group, Aberdeen.

2016: Behavioural Experiments in Health workshop, Köln.

2015: LAGV Conference in Public Economics, Aix-en-Provence.

**2014**: European Conference in Health Economics, Dublin.

2013: Associação Portuguesa de Economia da Saúde, Braga; New Directions in Welfare III, Paris.

**2012**: Franco-British Meeting in Health Economics, Aix-en-Provence.

2010: Scottish Economics Society, Perth; European Health Economics Conference, Helsinki.

2008: Scottish Economic Society, Perth.

**2007**: International Association of Health Economics (iHEA), Copenhagen; Annual Scottish Public Health Conference, Airth.

2006: International Association Health Economics (iHEA), Barcelona; Scottish Economics Society, Perth.

**2004**: Franco-British Meeting in Health Economics, Paris; European Association of Environmental and Resource Economists, Budapest; Health Economic Study Group, Glasgow; European Health Economics Conference, London.

**2003**: Health Economic Study Group, Leeds; UK Environmental Economics Conference, Glasgow; Scottish Economic Society, Glasgow; Evidence, Policy, Practice: Public Health Research in Scotland, Edinburgh.

### **Courses Taught**

Health Economics, postgraduate course for MSc students on the Scottish Graduate Programme in Economics (SGPE), University of Edinburgh, 2014 to present. Course co-ordinator, 2018 to present.

Health Economics, honours level undergraduate course for economics students, University of Aberdeen, 2020-present.

Using Discrete Choice Experiments in Health Economics: Theoretical and Practical Issues. University of Aberdeen, 2003, 2005, 2008, 2010, 2011, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2022, 2023; University of Calgary, 2004, 2019; Erasmus University Rotterdam, 2005.

Willingness to pay in health care. Technische Universität Berlin, 2014; Ludwigs Maximillian Universität Munchen, 2015.

Health and Wealth of Nations, first year undergraduate course, 2010-2014.

Discrete choice experiments: what are they, and their application in health economics. Universidade do Minho, 2013.

The Economics of Business and Society (Microeconomics), first year undergraduate course, 2011.

Health Economics, fourth year undergraduate course for BSc Health Sciences students, 2007-2011

International Health Care Management, postgraduate course for MBA students, 2009-2010

Health Economics, postgraduate course for MSc and MBA students, 2005-2010

Health Economic Evaluation using Contingent Valuation and Discrete Choice Experiments. Centre for Clinical Epidemiology and Evaluation and University of British Columbia, 2006.

Microeconomics for Social Sciences, Summer School for Access to University, 2004-2006

Monetary Valuation in Healthcare. University of Aberdeen, 2004; University of Calgary, 2004.

Environmental and Natural Resource Economics, third year undergraduate course, TA, 1998

The Challenge of the Environment, first year undergraduate course, TA, 1998

Microeconomics, first year undergraduate course, TA, 1998-2002

Macroeconomics, first year undergraduate course, TA, 1999-2002

# Ph.D. Student and Post-doc Supervision

# **Current PhD students**

Mélanie Antunes, Public and patient preferences for social prescribing. Autumn 2019 – present

Pauline Ogilvie, General Practice contracts: The impact of contract changes on General Practices in Scotland. January 2021 – present

Yitna Tesfaye, Climate Change Adaptation in Agriculture and Sustainable Watershed Management: Analysing Gaps and Opportunities in stakeholders' interactions: the case of Small Holder Farmers in SNNPRS, Ethiopia. September 2021 – present

#### Completed PhD students

Emma Tassie, Using benefits transfer to incorporate broader measures of value into health technology assessments. Autumn 2016 – 2022

Yuan Zhang, Having it all? The complex relationship between fertility and female labour market participation. 2016 – 2020

Dwayne Boyers, Measuring value within an economic evaluation framework: A case study of dental care. 2012–2018

Luis Enrique Loría Rebolledo, Preferences for low emissions public transport. 2015–2018

Sebastian Heidenreich, An empirical investigation of decision heuristics in discrete choice experiments. 2012–2016

### **Examiner**

External PhD examiner for School of Mathematics and Physics, Queen's University Belfast

External PhD examiner for Department of Environmental Economics, Vrije Universiteit Amsterdam

Internal PhD examiner for Centre for Health Education Research and Innovation

External PhD examiner for Department of Economics, University of Southampton

External PhD examiner for Centre for Research Ethics and Bioethics, Uppsala University

# Refereeing

#### **Editorial board**

The Patient

### Journals

Canadian Journal of Economics, Environment and Development Economics, Environmental and Resource Economics, Ecological Economics, Experimental Economics, European Journal of Health Economics, Health Economics, International Journal of Healthcare Finance and Economics, Journal of Benefit Cost Analysis, Journal of Choice Modelling, Journal of Economic Psychology, Journal of Economic Surveys, Journal of Environmental Economics and Management, Journal of Health Economics, Journal of Socio-economics, Nature: Sustainability, Nordic Journal of Health Economics, Resource and Energy Economics, Social Science and Medicine, Value in Health.

BMC Health Services Research, Ecosystems Services, Emergency Medicine Journal, European Journal of Cancer Research, Globalisation and Health, Haemophilia, Health Expectations, Health Policy, Health Research Policy and Systems, Health Services Research, Implementation Science, Journal of Clinical Epidemiology, Journal of Environmental Management, Medical Decision Making, Midwifery, Research in Social and Administrative Pharmacy, The Patient, PLOS One, Thorax, Tourism Management.

#### Grant awarding bodies

Dutch Cancer Society; Economic and Social Research Council (ESRC) in UK; Genome British Columbia in Canada; Health Service and Public Health Research, Chief Scientist Office in Scotland; Medical Research Council (MRC) in UK; Multiple Sclerosis Society, UK; National Health and Medical Research Council (NHMRC) in Australia; National Institutes for Health Research (NIHR) in UK; Netherlands Organisation for Scientific Research (NWO); Netherlands Organisation for Health Research and Development (ZonMw).

# Committee member

Health Improvement, Protection and Services Research Committee, Chief Scientist Office of Scottish Government Health Directorate (2016 – 2023)

### Other activities

Scientific committee member: Joint UK Health Economists Study Group/Nordic Health Economists Study Group Meeting, August 2008; Joint UK Health Economists Study Group and French Health Economics Meeting, January 2012; UK Health Economists Study Group Meeting, 2017; EuHEA Conference, 2018; iHEA conference, 2019; EuHEA conference, 2020; iHEA conference, 2021.

Steering group member: COLLABORATE – NIHR-funded project led by University of Liverpool 2018-2022.

Co-director: Scottish Experimental Economics Laboratory, 2021 - present