MARIA SUELLA RODRIGUES

mariasuerod.github.io

Manchester Centre for Health Economics, The University of Manchester

(+44)7760542782 ⋄ maria.rodrigues@manchester.ac.uk

PROFESSIONAL SUMMARY

Health economist with PhD training and professional experience in discrete choice experiments (DCEs), decision modelling, and health technology evaluation. Specialist expertise in stated-preference survey design, experimental design, and quantitative analysis, with additional strengths in evidence synthesis, including systematic reviews and network meta-analyses, and decision-analytic modelling using state-transition (Markov) frameworks. Experienced in numerical optimisation and in translating complex quantitative evidence into insights for policy and service delivery decision-making.

PROFESSIONAL EXPERIENCE

Research Fellow (Health Economics),
Manchester Centre for Health Economics, The University of Manchester   **Jun 2024 – Present**

- Lead and contribute to applied health economic research to inform NHS and policy decision-making, including evidence synthesis deliverables like systematic reviews and network meta-analyses, economic evaluation, decision-analytic modelling, and stated-preference methods.

- Design, implement, and analyse discrete choice experiments and related preference-based studies, independently managing key stages of survey development, experimental design, and analysis, while also supporting and supervising research assistants.

- Develop and adapt decision-analytic state-transition (Markov) cohort models to estimate long-run costs and outcomes, including model structuring, parameterisation, and deterministic and probabilistic sensitivity analyses.

- Conduct micro-costing of alternative pharmacogenomic panel testing service delivery pathways, including pathway mapping, resource use identification, and unit cost assembly, to inform downstream cost-effectiveness and budget impact analyses.

- Work collaboratively within multidisciplinary teams to deliver the economic evaluation of pharmacogenomic panel testing in the PROGRESS study, translating complex quantitative findings into decision-relevant outputs for academic, clinical, and policy audiences.

- Contribute to technical reports, funding applications, and peer-reviewed publications, demonstrating strong written communication, attention to detail, and the ability to present complex methods and results clearly and persuasively.

Centre Lead, Northwest Health Economics Group,
The University of Manchester   **Jun 2024 – Present**

- Co-founded the Northwest Health Economics Group in collaboration with centre leads across multiple universities, establishing a regional network to connect academic and applied health economists and strengthen interdisciplinary collaboration.

- Lead the planning, coordination, and delivery of interdisciplinary workshops, including events with approximately 40 participants held on 10 April 2025 and 17 November 2025, bringing together researchers, early-career economists, and policy stakeholders around applied health economics methods.

- Provide ongoing strategic and organisational leadership to sustain the network as a regional forum for applied health economics, facilitating knowledge exchange, professional development, and regular interdisciplinary engagement across academia and policy.

Research Support Service (RSS) Adviser (Methodologist),
National Institute for Health and Care Research (NIHR)
via The University of Manchester **Jun 2024 – Present**

- Provide tailored one-to-one methodological and strategic advisory support to multidisciplinary research teams across the NIHR portfolio, helping shape fundable and policy-relevant proposals in health economics, preference elicitation, and quantitative study design, while also directing researchers to relevant funding opportunities.

- Deliver tailored written and verbal feedback on draft funding applications, study procedures, and methodological plans, helping researchers strengthen analytical rigour, feasibility, and alignment with funder expectations.

- Advise on the selection of appropriate analytical and evaluation approaches, drawing on methodological expertise to address applied research questions and support decision-making across diverse project contexts.

- Communicate complex methodological issues clearly to researchers from different disciplinary backgrounds, demonstrating strong stakeholder engagement, problem-solving, and the ability to translate technical concepts into practical recommendations.

Research Associate,
University of Strathclyde **May 2022 – Jun 2024**

- Delivered quantitative and policy-facing analysis across two NERC (Treescapes projects)- and Plant Health Centre- funded projects, applying numerical optimisation, portfolio decision-making, and scenario analysis to environmental and land-use policy questions.

- Contributed to the project *Assessing long-term resilience of Scottish Sitka spruce forests to climate change and novel pests: a bark-beetle case study* (Plant Health Centre, Scotland), including modelling forest resilience under climate and pest risk and translating outputs for policy audiences.

- Developed constrained optimisation and portfolio-based modelling frameworks under the *Connected Treescapes* project, solving for optimal allocations of land parcels to maximise societal and environmental benefits subject to fixed budget constraints.

- Co-applied for and secured Plant Health Centre grant (£39,998).

- Delivered stakeholder-facing outputs, including a two-day workshop for policymakers and academics; and co-supervised an MSc dissertation (University of York).

Research Assistant,
University of Glasgow **Mar 2022 – Apr 2022**

- Contributed to a NERC-funded project on payment for ecosystem services (PES) scheme design, supporting economic framing and applied analysis by conducting a literature review.

Graduate Teaching Assistant,
University of Glasgow **Sep 2017 – Jun 2021**

- Delivered tutorials for multiple undergraduate and postgraduate courses in economics and quantitative methods.

- Supported student with statistical software (Stata, R) and interpretation of empirical results.

- Assisted with assessment design, ensuring clarity in instructions and alignment with learning objectives.

Consultant / Compliance Officer,
KCare Nursing Agency Ltd (Reading, UK) **Jul 2010 – Nov 2016**

- Managed and analysed operational data to ensure regulatory compliance.

- Led audits and implemented systematic documentation processes.

- Interpreted complex policy and regulatory guidelines to develop actionable processes.

GRANTS, AWARDS AND FUNDING

- Plant Health Centre grant (£39,998), co-applicant (2023).

- Wellcome Trust PhD Studentship (2018–2022).

- Best PhD presentation, Agricultural Economics Society annual conference (2021).

- University of Glasgow MRes Studentship (2017–2018).

EDUCATION

PhD, Population and Ecosystem Health, *University of Glasgow affiliated with SGPE, University of Edinburgh* **Oct 2018 – Mar 2023**

Thesis: *On the economics of producer and consumer preferences to farm animal health and welfare*
Relevant training and methods: stated-preference methods, discrete choice experiments, survey design, quantitative analysis, and the translation of behavioural evidence into policy-relevant insights.

MRes, Economics, *Adam Smith Business School, University of Glasgow* **Sep 2016 – Sep 2018**

BSc (Hons), Economics, *University of Lancaster* **Sep 2011 – Aug 2014**

SELECTED PUBLICATIONS AND POLICY OUTPUT

- Black, A., Bradley, S., Clark, B., Colman, E., Gosling, N., Hanley, N., Holloway, L., Kao, R., Mahon, N., Proctor, A., & **Rodrigues, M.** (2024). **Why do endemic livestock diseases persist? An interdisciplinary perspective**. *SocArXiv* (Preprint, 28 October 2024).

- **Rodrigues, M.** (2024). **Estimating the cost of exemplar models of service delivery for pharmacogenetic testing compared with the financial burden of adverse drug reactions in England**. *Policy report; unpublished.* Prepared for the NHS England Network of Excellence in Pharmacogenomics.

- Kleczkowski, A., **Rodrigues, M.**, Blake, M., & Steinke, S. (2024). **Assessing long-term resilience of Scottish spruce forests to climate change and novel pests: *Ips typographus* as a case study**. *Project final report.* Zenodo. `https://doi.org/10.5281/zenodo.14265105`

- **Rodrigues, M.** & Hanley, N. (2021). **How much do we actually care? A study on consumer preference heterogeneity and WTP for farm animal health and welfare in the UK**. *Conference paper presented at the Agricultural Economics Society Annual Conference, UK.*

SELECTED WORKING PAPERS

- Implementing Models of Service Delivery for Pharmacogenetic Panel Testing in England: A Micro-costing Study (Joint work S. Gavan, S. Watson, G. Dalal, A. Mahboub-Ahari, J. McDermott, W. Newman and K. Payne)

- Continuing, Reducing, or Stopping Biological and Targeted Synthetic Drugs in Inflammatory Arthritis: Systematic review and Network Meta-Analysis. (Joint work with G. Rogers, K. Payne, L. Lenzi)

- Implementing a CYP2C19-guided approach for prescribing Dual Antiplatelet Therapy in Acute Coronary Syndrome for patients undergoing Percutaneous Coronary Intervention: a cost-effectiveness analysis (Joint work with A. Mahboub-Ahari, J. Hilton, J. McDermott, W. Newman and K. Payne)

- Disentangling farm animal health from farm animal welfare and information asymmetry: A case study on UK consumer preferences. (Joint work with N. Hanley and E. Sandorf)

- Risky returns, infection levels and their role in shaping producer preferences for farm animal health and welfare in the UK. (Joint work with N. Hanley, A. Badger, B. Clark)

- Resource Allocation: A general decision-making framework of woodland planting in the UK. (Joint work with A. Kleczkowski, T. Kleczkowski and J. Touza)

SHORT COURSES

- Decision Modelling for Health Economic Evaluation, Centre for Health Economics, University of York (2024).

- Dynamic games in environmental economics (PhD mini course), University of Oslo (2021).

- Advanced choice modelling, Choice Modelling Centre, University of Leeds (2020).

- Short course on Agent-based modelling for social research, ERC Bayesian Agent-based Population Studies project team, based at the University of Southampton and the University of Rostock (2020)

- Economics of sustainable development, University of Edinburgh (2019).

- Choice modelling and survey design, Choice Modelling Centre, University of Leeds (2018).

TECHNICAL SKILLS

- Programming / analysis: R, Stata, Julia, MATLAB, EViews, Excel; reproducible reporting in LaTeX; Git.

- Choice and survey tools: Ngene, Sawtooth, Qualtrics.

- Additional software: SPSS, Minitab.

- Languages: English (native), Hindi (proficient), Greek (beginner), Portuguese (beginner), Korean (beginner).