Prof. Susheel Varma *MBA MACM FBCS*

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Selected Peer-Reviewed Publications & Policy Reports

- **House of Lords Science and Technology Committee (2026).** Co-lead, GA4GH AI Work Stream written evidence (PMA0096), *Innovation in the NHS: personalised medicine and AI*.
- **Parliamentary Office of Science and Technology (2026).** Contributing expert, *POSTnote 774: Accessing national health data for research*.
- **Akhtar, M., ... Varma, S., et al. (2024).** Croissant: A Metadata Format for ML-Ready Datasets. *Advances in Neural Information Processing Systems (NeurIPS)*, 2024.
- **Pearson, A., ... Varma, S., et al. (2022/2023).** *Guidance on AI and Data Protection* (2023 update) and *AI and Data Protection Risk Toolkit*, Information Commissioner's Office.
- **Karrar, N., ... Varma, S., et al. (2022).** Developing and evaluating the Health Data Research UK Data Use Register standard. *Health Data Research UK*.
- **Varma, S., Hubbard, T., Seymour, D. (2021).** *Building Trusted Research Environments: Principles and Best Practices; Towards TRE Ecosystems*. Health Data Research UK (first author).
- **Wood, A., ... Varma, S., CVD-COVID-UK Consortium (2021).** Linked electronic health records for research on a nationwide cohort of more than 54 million people in England. *BMJ*, 373:n826.
- **Rehm, H. L., ... Varma, S., Birney, E. (2021).** GA4GH: International policies and standards for data sharing across genomic research and healthcare. *Cell Genomics*, 1(2).
- **Lawson, J., ... Varma, S., Courtot, M. (2021).** The Data Use Ontology to streamline responsible access to human biomedical datasets. *Cell Genomics*, 1(2).
- **Saunders, G., ... Varma, S., Scollen, S., Blomberg, N. (2019).** Leveraging European infrastructures to access 1 million human genomes by 2022. *Nature Reviews Genetics*, 20:693–701.
- **Fiume, M., ... Varma, S., Scollen, S. (2019).** Federated discovery and sharing of genomic data using Beacons. *Nature Biotechnology*, 37:220–224.

40+ peer-reviewed outputs in total; complete record at orcid.org/0000-0003-1687-2754.

International Standards, Open-Source Platforms & Policy Contributions

- **AI & Agentic Infrastructure (2024 to present):** Synapse MCP Server (Anthropic Claude for Life Sciences launch); Sage Brain AI knowledge graph; Croissant ML-dataset metadata specification; GA4GH AI Work Stream standards (35 projects across model documentation, provenance and evaluation).
- **National Health-Data Transparency & Discovery (2020 to 2022):** HDR UK Data Use Register standard (adopted across NHS DARS and national Secure Data Environments in England and Scotland); HDR Innovation Gateway; HDR UK Schemata and Phenotype Library; Five Safes Data Access Request workflow.
- **UK Regulatory Policy (2022 to 2024):** ICO Guidance on AI and Data Protection (2023 update); ICO AI and Data Protection Risk Toolkit; Digital Regulation Cooperation Forum (DRCF) AI workstreams; BSI/ISO ART/1 AI standards committee.
- **Federated Genomic & Cloud Standards (2017 to 2022):** GA4GH Cloud Work Stream lead for Tool Registry Service (TRS) and Task Execution Service (TES); contributor to WES, DRS, Beacon Network, Data Use Ontology (DUO) and Computational Cohort Representation; ELIXIR Cloud and AAI network; Bioschemas specification.
- **Clinical & Computational Platforms (2006 to 2017):** VPH-DARE@IT clinical research cloud platform; VPH-Share cloud workflow platform; GIMIAS biomedical imaging workbench; FLAME agent-based modelling framework; CHASTE cardiac and cancer simulation framework.

Additional Advisory Appointments & Selected Keynotes

- **Scientific Advisory Board, MONARCH Initiative** (2024 to present). **Advisory Board, South Yorkshire Digital Data Hub** (2024 to present).
- **Chair, AI Session, 14th GA4GH Plenary** (Singapore, September 2026). **Keynote Speaker**, Joint European Commission and WHO session on FAIR Data for Pandemic Preparedness (2021) and International Data Week (2022).
- **Author**, *Designing Trusted Research Environments* (practitioner manuscript in preparation).