

The Open University Statistics Group

2022 Report

1. Membership

Dr K. Adhikari
Dr D. Berrar (from April)
Professor S. Biedermann
Miss A. Bromley
Miss C. Calvert
Ms C. Christiansen
Dr F.G. Elfadaly
Dr Á.E. Faria
Dr J. Gaudoin
Professor R.M. Hilliam
Mrs R. Neal
Dr C.M. Queen
Dr E. Steele
Dr S.K. Vines
Dr Y.G. Weldeselassie (from January)

Long-term associates

Professor C.P. Farrington [Emeritus Professor]
Professor P.H. Garthwaite [Emeritus Professor]
Professor M.C. Jones [Emeritus Professor]
Professor K. McConway [Emeritus Professor]

Full-time research students

Mr M.R. Khokan
Mr S.S. Paria
Miss N. Unnipillai (from October)

Part-time research student

Mr A. Giardina (from October)

2. Introduction

Here is an overview of the substantial activities in Statistics at the Open University in 2022, in both research and teaching.

On the research side, all our usual activities and outputs are described in Section 4 onwards of this report. During the year, members of the group published 27 papers in refereed journals, along with a number of other outputs (see Section 7). Pre-publication papers can be found in our technical report series, at

<https://www.open.ac.uk/stem/mathematics-and-statistics/research/annual-reports>

On the teaching side, over 3850 students were enrolled on the Statistics modules presented for study from dates in 2022 (see Section 3).

It is with the deepest regret that we record the death in July of our dear colleague Derek Goldrei. Derek was a long-standing Staff Tutor in the School of Mathematics and Statistics from 1978 until his retirement in 2015. He was a staunch supporter of Statistics at the OU, with a particular soft spot for M140 which he considered to be a special module. Derek was still working as an AL on the module M337 *Complex Analysis* until his death. He will really be much missed.

We are very pleased to welcome Dr Yonas Weldeselassie and Dr Daniel Berrar to the group as new lecturers in Statistics and Data Science from 2022. Yonas joined us from the Warwick Medical School, but previously an OU PhD student and postdoc. Daniel has enriched our diverse research groups in Statistics with a new group on Machine Learning. We are sure Yonas and Daniel will be a valuable addition to the group. Good luck, folks!

The Statistical Advisory and Consultancy Services continue, supporting research in other disciplines across the Open University. These were recently run by Álvaro Faria and Stefanie Biedermann. But from this year, beside Alvaro and Stefanie, a larger number of colleagues started to help with the service: Colette, Daniel, Karen, Kaustubh, Rachel and Yonas. The services can be reached at:

[Statistical Advisory Service | School of Mathematics and Statistics \(open.ac.uk\)](https://www.open.ac.uk/stem/mathematics-and-statistics/research/research-groups/statistics)

Further information on the Group's research activities is available through our general web page

<https://www.open.ac.uk/stem/mathematics-and-statistics/research/research-groups/statistics>

3. Teaching

Presentation

The Group continued to present six modules of 30 CATS points each with one of them (M140) being presented twice in the year. These, with numbers of students starting the presentations of each module in 2022 given in square brackets, are:

- [M140](#) *Introducing statistics* (Chairs: Bromley, Adhikari and Neal) [February 826; October 1021]
- [M248](#) *Analysing data* (Chair: Hilliam) [758]
- [M249](#) *Practical modern statistics* (Chairs: Biedermann and Queen) [323]
- [M343](#) *Applications of probability* (Chairs: Faria) [315]
- [M347](#) *Mathematical statistics* (Chair: Elfadaly) [197]
- [M348](#) *Applied Statistical Modelling* (Chair: Vines) [413].

The first level mathematics module, [MU123](#) *Discovering Mathematics*, also contains a little statistical material.

Production

The new module M348 *Applied Statistical Modelling* has now replaced M346 *Linear Statistical Modelling*. The first presentation of M348 has started in October 2022 with 413 registered students. The new module represents a very considerable update compared with the old, prompted partly by its prominent roles in our new undergraduate degree in Data Science (see below) and a new degree in Economics. Karen Vines was the production Module Team Chair and Catriona Queen was the Deputy Chair. Both were senior writers on the module and were efficiently leading and managing the production process.

Qualifications

Our modules are compulsory components of degrees in [Mathematics and Statistics](#), [Mathematics](#), [Computing & IT and Statistics](#), [Mathematics and its Learning](#), [Economics and Mathematical Sciences](#) and [Data Science](#), as well being specified options in certain other qualifications. The Mathematics and Statistics degree was awarded to 58 students in 2022. Other joint degrees that include a substantial element of statistics were awarded as well.

We also award a [Professional Certificate in Practical Statistics](#), for successful study of M140, M248, M249 and M346, and a [Graduate Certificate in Theoretical Statistics and Probability](#), for M343 and M347. In 2022, these two qualifications were awarded to 14 and 5 students, respectively.

The new undergraduate degree in [Data Science](#) continued and there were 993 students registered in 2022. The degree features all our statistics modules, some compulsory, some optional, as well as others from computing and mathematics. M140, M248 and M348 are also compulsory modules in the [Economics](#) degree with 502 students registered in 2022.

4. Research interests

Research in the Statistics Group has been centred for many years around three main themes: *Bayesian Statistics*, *Medical Statistics* and *Multivariate Statistics*. Clearly, these three general areas cover a huge variety of research projects in Statistics. *Statistical Genetics*, *Design of Experiments* and *Machine Learning* are three promising topics that are currently blossoming in the group. Research also continues on topics not directly covered by these research themes, of which single case studies, distribution theory, time series forecasting, improved confidence intervals and statistics in the media are but a selection. Ongoing collaborations continue in areas such as medicine, psychology, machine learning and earth sciences.

For details, see <https://www.open.ac.uk/stem/mathematics-and-statistics/research/research-groups/statistics> and the publications, talks and other items to follow.

5. Publications

5.1 Publications in refereed journals

Bauwens, J., de Lusignan, S., **Weldeselassie, Y.G.**, Sherlock, J., Künzli, N. & Bonhoeffer, J. (2022) Safety of routine childhood vaccine coadministration versus separate vaccination. *BMJ Global Health*, **7**, e008215.

Berrar, D. (2022) Using p-values for the comparison of classifiers over multiple data sets: pitfalls and alternatives. *Data Mining and Knowledge Discovery*, **36**, 1102-1139.

Botton, J., Jabagi, M.J., Bertrand, M., Baricault, B., Drouin, J., Le Vu, S., Weill, A., **Farrington, P.**, Zureik, M. & Dray-Spira, R. (2022) Risk for myocardial infarction, stroke, and pulmonary embolism following COVID-10 vaccines in adults younger than 75 years in France. *Annals of Internal Medicine*, **175**, 1250-1257.

Calvert, C., Hilliam, R. & Steele, E. (2022) Can the same statistics module be used for service teaching by tailoring the support based on the student's chosen qualification? *MSOR Connections*, **20**, 73-83.

Chockalingam, S., Wesley, H., Mohan, D., **Ghebremichael-Weldeselassie, Y.**, Anjana, R.M., Ram, U., Mohan, V. & Saravanan, P. (2022) Prevalence of prediabetes and type 2 diabetes mellitus in south and southeast Asian women with history of gestational diabetes mellitus: Systematic review and meta-analysis. *PLoS One*, **17**, e0278919.

Christiansen, C., Tomlinson, M., Eliot, M., Nilsson, E., Costeria, R., Xia, Y., Villicana, S., Mompeo, O., Wells, P., Castillo-Fernandez, J., Potier, L., Vohl, M.-C., Tchernof, A., Moustafa, J.E.S., Menni, C., Steves, C.J., Kelsey, K., Ling, C., Grundberg, E., Small, K. & Bell, J.T. (2022) Adipose methylome integrative-omic analyses reveal genetic and dietary metabolic health drivers and insulin resistance classifiers. *Genome Medicine*, **14**, 75.

Chui, C.S.L., Fan, M., Wan, E.Y.F., Leung, M.T.Y., Cheung, E., Yan, V.K.C., Gao, L., **Ghebremichael-Weldeselassie, Y.** (et al) Leung, G.M. & Wong, I.C.K. (2022) Thromboembolic events and hemorrhagic stroke after mRNA (BNT162b2) and inactivated (CoronaVac) covid-19 vaccination: A self-controlled case series study. *eClinicalMedicine*, **50**, 101504.

Clements, L., Kimber, A.C. & **Biedermann, S.** (2022) Multiple Imputation of Composite Covariates in Survival Studies. *Stats*, **5**, 358-370.

Fan, H.M., Mitchell, A.L., Bellafante, E. (et al) **Weldeselassie, Y.** (et al) Marschall, H.-U. & Williamson, C. (2022) Sulfated progesterone metabolites that enhance insulin secretion via TRPM3 are reduced in serum from women with gestational diabetes mellitus. *Diabetes*, **71**, 837-852.

Farrington, P. (2022) The self-controlled case series method and covid-19. *British Medical Journal*, **377**, 0625.

Fernandez-Rhodes, L., Graff, M., Buchanan, V.L., Justice, A.E., Highland, H.M., Young, K.L., Pereira, A.C., Krieger, J.E., Horimoto, A., **Adhikari, K.**, González-José, R. (et al) Loos, R.J.F. & North, K.E. (2022) Ancestral diversity improves discovery and fine-mapping of genetic loci for anthropometric traits - the Hispanic/Latino Anthropometry Consortium. *Human Genetics and Genomics Advances*, **3**, 100099.

Ghebremichael-Weldeselassie, Y., Jabagi M.J., Botton, J., Bertrand, M., Baricault, B., Drouin, J., Weill, A., Zureik, M., Dray-Spira, R. & **Farrington, P.** (2022) A modified self-controlled case series method for event-dependent exposures and high event mortality, with application to COVID-19 vaccine safety. *Statistics in Medicine*, **41**, 1735-1750.

Henley, M., Grove, M. & **Hilliam, R.** (2022) University Mathematics Assessment Practices During the Covid-19 Pandemic. *MSOR Connections*, **20**, 5-17.

Jabagi, M.J., Botton, J., Bertrand, M., Weill, A., **Farrington, P.**, Zureik, M. & Dray-Spira, R. (2022) Myocardial infarction, stroke, and pulmonary embolism after BNT162b2 mRNA COVID-19 vaccine in people aged 75 and over. *Journal of the American Medical Association*, **327**, 80-82.

Jones, M.C. (2022) On uniform and monotone discrete distributions. *REVSTAT*, **20**, 449-462.

Jones, M.C. (2022) Duals of multiplicative relationships involving beta and gamma random variables. *Statistics & Probability Letters*, **191**, article 109668.

Jones, M.C. & Balakrishnan, N. (2022) Closure of beta and Dirichlet distributions under discrete mixing. *Statistics & Probability Letters*, **188**, article 109526.

Kato, S., Pewsey, A. & **Jones, M.C.** (2022) Tractable circular densities from Fourier series. *Test*, **31**, 595-618.

Katsoularis, I., Fonseca-Rodríguez, O., **Farrington, P.**, Jerndal, H., Lundevaller, E.H., Sund, M., Lindmark, K. & Fors Connolly, A.-M. (2022) Risks of deep vein thrombosis, pulmonary embolism, and bleeding after covid-19: nationwide self-controlled case series and matched cohort study. *British Medical Journal*, **377**, e069590.

Mendoza-Revilla, J., Chacón-Duque, J.C., Fuentes-Guajardo, M. (et al) Fumagalli, M., **Adhikari, K.**, Ruiz-Linares, A. & Hellenthal, G. (2022) Disentangling signatures of selection before and after European colonization in Latin Americans. *Molecular Biology and Evolution*, **39**, msac076.

Nie, X., Xu, L., Bai, Y., Liu, Z., Liu, Z., **Farrington, P.** & Zhan, S. (2022) Self-controlled case series design in vaccine safety: a systematic review. *Expert Review of Vaccines*, **21**, 313-324.

Nieves-Colón, M.A., Rivera, K.M.B., Mendoza, K.S., Dávalos, V.V., Lencinas, L.E.E., Mendoza-Revilla, J., **Adhikari, K.**, González-Buenfil, R. (et al) Wojcik, G.L. & Moreno-Estrada, A. (2022) Clotting factor genes are associated with preeclampsia in high altitude pregnant women in the Peruvian Andes. *American Journal of Human Genetics*, **109**, 1117-1139.

Periyathambi, N., Parkhi, D., **Ghebremichael-Weldeselassie, Y.**, Patel, V., Sukumar, N., Siddharthan, R., Narlikar, L. & Saravanan, P. (2022) Machine learning prediction of non-attendance to postpartum glucose screening and subsequent risk of type 2 diabetes following gestational diabetes. *PLoS One*, **17**, e0264648.

Quinn, G.A., Abdelhameed, A., Bana, I.M., **Berrar, D.**, Doerr, S., Dudley, E., Francis, L.W., Gazze, S.A., Hallin, I., Matthews, P., Swain, M.T., Whalley, R. & van Keulen, G. (2022) Complimentary protein extraction methods increase the identification of the Park Grass Experiment metaproteome. *Applied Soil Ecology*, **173**, 104388.

Roberts, A.L., Morea, A., Amar, A., Zito, A., Moustafa, J.S.E., Tomlinson, M., Bowyer, R., Zhang, X., **Christiansen, C.**, Costeira, R., Steves, C.J., Mangino, M., Bell, J.T., Wong, C.C.Y., Vyse, T.J. & Small, K.S. (2022) Age acquired skewed X chromosome inactivation is associated with adverse health outcomes in humans. *eLife*, **11**, e78263.

Saravanan, P., Sukumar, N., Adaikalakoteswari, A., Goljan, I., Venkataraman, H., Gopinath A., Bagias, C., Yajnik, C.S., Stallard, N., **Ghebremichael-Weldeslassie, Y.** & Fall, C. (2022) Association of maternal vitamin B12 and folate levels in early pregnancy with gestational diabetes: a prospective UK cohort study (PRiDE study). *Diabetologia*, **64**, 2170-2182.

Trendafilova, T., **Adhikari, K.**, A.B. Schmid, Patel, R. (et al) Ruiz-Linares, A. & Bennett, D.L. (2022) Sodium-Calcium Exchanger-3 Regulates Pain 'Wind-Up': From Human Psychophysics to Spinal Mechanisms. *Neuron*, **110**, 2571–2587.

5.2 Other publications

Adediran, A.A., Noonan, J., Mitra, R. & **Biedermann, S.** (2022) Comparing recovery sample designs to test for the presence of MNAR. *Proceedings of the 36th International Workshop on Statistical Modelling*, eds. N. Torelli, R. Bellio & V. Muggeo, Trieste, Italy, 373-378.

6. Seminars at The Open University

Over the year we heard the following seminar speakers:

Jim Smith (Warwick University) *Bayesian models of criminal plots*

Daniel Ayoubkhani, Matt Bosworth, Piotr Pawelek and Sasha King (The ONS) *Overview of ONS long COVID research*

Phillip Dawid (Cambridge University) *Predictive consistency*

Xuewen Wu (Warwick University) *Causal analysis with Chain Event Graphs*

Kostantinos Slavakis (Tokyo Institute of Technology) *Multi-linear kernel regression and imputation in data manifolds - The dynamic MRI case*

7. External conference papers and posters given

S. Biedermann

Research Students' Conference in Statistics, University of Nottingham *Designing experiments when data may be missing not at random* [Plenary talk]

The 73rd British Mathematical Colloquium *Designing experiments when data may be missing not at random* [Invited talk]

C. Calvert

CTEL-MSOR conference, Dundee *Student engagement and statistical anxiety* [with D. Haigney, E. Steele & R. Hilliam]

Psychology of Mathematics Education Cluster Conference (online) *Statistics anxiety: does this differ by qualification?* [with E. Steele, R. Hilliam & D. Haigney]

C. Christiansen

Human Molecular Genetics MSc, Vrije Universiteit, Amsterdam *Epigenetics of Type 2 Diabetes* [Invited talk]

Mathematical and Theoretical Biology Colloquium *Enhanced resolution epigenetic profiling in regulatory elements reveals novel differential methylation in Type 2 Diabetes*

C.P. Farrington

Ecole Doctorale de Santé Publique, Paris, *La méthode SCCS*

R.M. Hilliam

British Applied Mathematics Conference, Loughborough *The Alliance for Data Science Professionals: Building trust through standards and accreditation* [with M. Forshaw]

eSTEEeM Annual Conference, The Open University *Statistical anxiety: will qualification focussed student support help?* [with C. Calvert, E. Steele & D. Haigney]

Horizon in STEM conference, UCL *Statistics anxiety: Does this differ by qualification?* [with C. Calvert, E. Steele & D. Haigney]

The 3rd Annual STEM Teaching Conferences (online) *Qualification focused student support within a single module: what problems are we trying to solve?* [with C. Calvert & E. Steele]

Y.G. Weldeselassie

Symposium on Machine Learning and Data Modelling in the Biomedical Sciences (MLDMBioMed-2022), University of York, Canada *Machine learning prediction of early postpartum glucose intolerance in women with gestational diabetes mellitus* [Invited talk]

8. Other external seminars and talks given**K. Adhikari**

Maths Week Scotland *Fallacies with Statistics*

British Science Week *The Genetics of Nationalism & Consumerism*

S. Biedermann

Research Grants Workshop, M&S Scholarship Seminar, The Open University
Beyond EPSRC – what else is out there?

R.M. Hilliam

CTEL-MSOR 2022 conference *Data Science: transformation or transition* [Keynote speaker]

Data Science Education Interest Group, The Alan Turing Institute *The Alliance for Data Science Professionals* [Invited talk]

Data Skills Taskforce, The Alan Turing Institute *The Alliance for Data Science Professions update*

eSTeEM annual conference, The Open University *Innovation Through Community: A Panel Conversation* [Invited member of panel discussion]

MRC Training and careers group *Improving Data Science Quality: Capability building in data science*

Royal Statistical Society International Conference, Aberdeen *Professional Pathways* [Invited talk]

Royal Statistical Society International Conference, Aberdeen *Data Science Certification by The Alliance for Data Science Professionals*

Royal Statistical Society *Launch of the Advanced Data Science Professional Certificate*

Royal Statistical Society Section talk *Supporting mathematics and statistics students: is it all about the teaching?* [Invited talk]

The Graham Dunn Seminar, The University of Manchester's centre for Biostatistics
The Data Science explosion: what does this mean for statistics teaching? [Invited seminar talk]

K. McConway

Short contribution to Royal Statistical Society meeting on *Communication during the pandemic: data, statistical analyses and modelling*

Talk for Intelligence Forums *The Science Media Centre and how it operates*

Half-day training for Association of British Science Writers *Statistics: the good, the bad, and the incomprehensible*

9. Editorial roles**K. Adhikari**

- Senior Editor: *Annals of Human Genetics*
- Review Editor: *Frontiers in Genetics, Human and Medical Genomics section*

D. Berrar

- Lead guest editor of the special issue 'Machine Learning in Soccer', *Machine Learning journal* (Springer)
- Associate Editor and member of the Editorial Board: *BMC Bioinformatics*

S. Biedermann

- Joint Guest Editor (1 of 3) of a special issue of *Statistical Papers* (Springer) (Proceedings of mODa13, workshop on Model Oriented Design and Analysis)
- Associate Editor: *Statistics – A journal of theoretical and applied statistics*

R.M. Hilliam

- Statistical reviewer: *BMJ paediatrics*

M.C. Jones

- Associate Editor: *Statistica Neerlandica*
- Associate Editor: *Statistics and Probability Letters*

K. McConway

- Statistical Advisor: *Endocrine-Related Cancer*
- Statistical Advisor: *Journal of Endocrinology*
- Statistical Advisor: *Journal of Molecular Endocrinology*

10. Grants awarded**K. Adhikari**

Awarded The Genetics Society Public Engagement Grant of £1,000 for *Engaging under-represented communities with genomics research* (associated with the GRACE project)

Awarded a grant from Agencia Nacional de Investigación y Desarrollo de Chile (Chilean National Agency for Research and Development) of \$60,000 for *Evaluation of the accuracy of pulse oximetry machines with respect to skin colour*

Awarded a RAMP Outreach Innovation Award, by the Isaac Newton Institute, University of Cambridge (funded by the Royal Statistical Society and EPSRC) of £5,000 for *Fallacies with statistics: misunderstandings in a pandemic*

D. Berrar

Awarded an Open Societal Challenge Grant of £26,050 for *TASMAL: Theories and Algorithms for Sustainable MACHine Learning*

11. Other activities

K. Adhikari

- led the GRACE project: Genetics Research Awareness via Community Engagement – on public engagement, outreach, and research on understanding and awareness about genetics (funded by the OSC and Genetics Society)
- was interviewed for an episode of the Ondo Health podcast, Mongolia
- presented at the European Mathematical Genetics Meeting, Cambridge, UK
- gave invited lectures at the National Institute of Biomedical Genomics, Kalyani, India; the Indian Statistical Institute, Kolkata, India and the Mongolian National University of Medical Sciences, Ulaanbaatar, Mongolia
- produced an OpenLearn video explainer jointly for OU Race and Ethnicity Hub: *Can we be categorised by our DNA?*
- reviewed grant proposals for the EPSRC New Investigator Award and the ESRC
- is a member of the EPSRC Mathematical Sciences Early Career Forum
- is an external supervisor of two PhD students, Aix-Marseille Université, France

D. Berrar

- co-organised and co-chaired the 9th UK-Japan Engineering Education League Workshop (online)
- was a committee member of the 31st International Joint Conference on Artificial Intelligence (IJCAI2022), Vienna, Austria
- was a committee member of the IEEE International Conference on Bioinformatics and Biomedicine (BIBM2022), Las Vegas, USA & Changsha, China
- was a committee member of the 21st Annual International Conference on Critical Assessment of Massive Data Analysis (CAMDA2022), Madison, USA
- was a committee member of the 2nd Advanced Online & Onsite Course & Symposium on Artificial Intelligence & Neuroscience (ACAIN2022). Certosa di Pontignano, Siena, Tuscany, Italy
- was a committee member of the 8th International Conference on Machine Learning, Optimization, and Data Science (LOD2022), Certosa di Pontignano, Siena, Tuscany, Italy
- was a committee member of the 22nd International Conference on Computational Science (ICCS2022), London, UK
- is a program committee board member of the International Joint Conference on Artificial Intelligence (IJCAI)
- is Special Researcher at the School of Engineering, Tokyo Institute of Technology (honorary position)

S. Biedermann

- was a member of the Scientific Programme Committee of the CMStatistics 2022 conference at KCL; organised & chaired a session, and chaired 2 contributed sessions
- is member of the UKRI Future Leaders Fellowships (FLF) Peer Review College (PRC)
- Examined a PhD student at Queen Mary, University of London

F.G. Elfadaly

- is Honorary Lecturer, National Heart and Lung Institute, Imperial College London
- is external examiner for BSc and MSc in Statistics and Data Science, Coventry University
- achieved the Status of Senior Fellow of the Higher Education Academy (SFHEA)

C.P. Farrington

- is expert adviser to the Tribunal de Grande Instance de Paris (France) in two current court cases: (a) the Affaire Mediator, and (b) the teratogenicity of valproic acid

J. Gaudoin

- is external examiner for Mathematics and Statistics at the University of the West of England
- is a member of the RSS Professional Affairs Committee and RSS Degree Accreditation
- is a member of the RSS Computational Statistics and Machine Learning Committee
- is a member of the RSS Statistics in Sport Committee

R.M. Hilliam

- chaired two sessions for Horizons in STEM 2022 conference
- chaired two sessions for British Applied Mathematics Colloquium
- co-chaired and co-organised six TALMO (Teaching and Learning Mathematics Online: <http://talmo.uk/>) events
- is Invited Statistics Presenter for the Induction Course for New Lecturers in Mathematical Sciences, Institute of Mathematics and its Applications, the Isaac Newton Institute for Mathematical Sciences and the Heads of Departments of Mathematical Sciences (HoDoMS), Cambridge

- is Inaugural Chair of The Alliance for Data Science Professionals
- is Vice-President of the Royal Statistical Society (RSS)
- is a member of RSS Executive Committee, RSS council and Chair of the Professional Affairs Committee
- is a committee member of the RSS Teaching Statistics Section
- is a core member of The Alan Turing Institute Data Skills Taskforce
- is an RSS accreditation assessor
- is Visiting Research Fellow in Medical Statistics, University of Derby
- is Honorary Associate Professor in Statistics, University of Warwick
- achieved the Principal Fellowship of the Higher Education Association (PFHEA) status.
- was promoted to Professor of Statistics

M.C. Jones

- examined a PhD student (Fatima-Zahra Jaouimaa – Penalized Hierarchical Multi-Parameter Regression Survival Models), University of Limerick, Ireland

K. McConway

- is a member of the Advisory Committee and a Trustee of the Science Media Centre, writing invited comments on statistical aspects of scientific papers, and contributing in other ways to the work of the Centre. He contributed 68 comments on new research and statistical bulletins, etc., the majority of them about Covid.
- was a member of the Public Data Advisory Group, which advises the Cabinet Office on the public understanding of data during the pandemic
- was external examiner for MSc in Data Analytics for Government, University College London
- was a consultant on statistical aspects of research project involving wearable devices in orthopaedics, run by Blaine Price and Daniel Gooch (School of Computing & Communication) and Oliver Pearce (consultant surgeon in orthopaedics at Milton Keynes University Hospital)

Y.G. Weldeselassie

- is Honorary Fellow, Warwick Medical School, Warwick University