# Jonathan Rushton

### **Personal details**

Full Name Professor Jonathan Rushton

Address Roslin Institute, University of Edinburgh, Easter

Bush, Midlothian, EH25 9RG, Scotland, UK

Email jrushton@ed.ac.uk

### **Background**

Jonathan Rushton is an agricultural economist who specialises in the economics of animal health and food systems. He has lived and worked in Europe, Asia, Africa and the Americas over the last 35 years. His principal research interests are the: Global Burden of Animal Diseases (GBADs) where he directs a global programme co-led in phase II with WOAH (founded as OIE) (<a href="https://animalhealthmetrics.org">https://animalhealthmetrics.org</a>); economics of antimicrobial use and resistance in livestock; and assessment of the multidimensionality of food quality and public health. He is involved in the EU funded projects: ROADMAP (<a href="https://www.roadmap-h2020.eu">https://www.roadmap-h2020.eu</a>) on the economics and social sciences of antimicrobial use in livestock; and DECIDE (<a href="https://decideproject.eu">https://decideproject.eu</a>) on data-driven approached for the



prioritisation and control of non-regulated diseases. Jonathan embraces One Health approaches in the search for solutions to society's health problems.

### **Employment history**

May 2025	Professor of Economics of Animal Health & Director of Global Burden of Animal Diseases (GBADs) programme, Roslin Institute, University of Edinburgh
Oct 16 – Apr 25	N8 Agrifood ,Chair of Animal Health and Food Systems Economics, University of Liverpool
Jan 13 –Sep 16	Chair of Animal Health Economics, RVC, London
Feb 09 – Dec 12	Senior Lecturer Animal Health Economics, RVC, London.
Aug 06 – Dec 08	Animal Health Economist, FAO, Rome, Italy
Feb 01 – Jul 06	Managing Director of CEVEP, La Paz, Bolivia
Oct 97 – Jan 01	Livestock Economist, DFID duty station Santa Cruz, Bolivia
Jan 92 – Sep 97 Qualifications	Research Fellow, VEERU, University of Reading, UK
	DLD Habanatta of Dandhan
1992-1996	PhD, University of Reading
1989-1991	MAgSci – Tropical Agricultural Development – Economics & Planning
1983-1986	BA Natural Sciences (Applied Biology), Cambridge University (2:1)

#### **Distinctions**

- Senior Fellow, Institute for Infectious Animal Diseases, Texas A&M University, USA
- Guest editor on Global Burden of Animal Diseases Rev Tech Sci (2017)
- Founding President of the International Society of Economics and Social Sciences of Animal Health
- Adjunct Professor, Institute of Rural Future, U of New England, Armidale, Australia
- Member of the National Academy of Sciences One Health panel to lead work on food systems
- Member of the OECD expert panel on antimicrobial use and AMR in livestock
- Rapporteur on Zoonoses and AMR International Science Forum 2018 of CGIAR
- Rapporteur on the economics of animal health for OIE's General Session 2019
- Invited conference speaker at International One Health Congress, Saskatoon, Canada (2018)
- External PhD examiner at Wageningen, Edinburgh, Sydney, Liverpool universities
- Guest editor on the use of economics in animal health Eurochoices (2012), J Ag Econ (2016), Rev Tech Sci (2017)

# **Current research funding**

- Global Burden of Animal Diseases programme. BMGF, FCDO ACIAR, Brooke US\$15,000,000 – PI
- N8 Agrifood Liverpool Chair HEFCE and University funding £16 million

- DECIDE (<a href="https://decideproject.eu">https://decideproject.eu</a>) on data-driven approached for the prioritisation and control of non-regulated diseases €10 million Col
- ROADMAP Economics and social science of AMU in European livestock systems EU H2020 €6 million Col
- HORN funded by GCRF RCUK 2017-2022 £7.7 million Col
- Wellcome Trust fellowship –J Carrique-Mas economics AMU in Vietnamese poultry systems
- ZooLink work package leader economics of surveillance. 2014-21 £3.6 million Col

# **Selected Educational Materials**

- **Rushton, J.**, Gilbert, W. & Jones, D. (2018) A guide -Introduction to the use of Cost-Effectiveness Analysis in Animal Health. FAO, Rome, Italy
- Taylor, N.M. and **Rushton, J.** (2011) A value chain approach to animal diseases risk management Technical foundations and practical framework for field application. Animal Production and Health Guidelines. No. 4. FAO, Rome, Italy. 135 pages
- Rushton, J.; Viscarra, R.E. (2003) The Use of Participatory Methodologies in Veterinary Epidemiology. (In English and Spanish) CEVEP, La Paz, Bolivia ISBN 99905-0-400-8 60 pages

# **Selected Publications**

- Rushton, J. and Cecchini, M. Editors (2024) Global Burden of Animal Diseases special edition. WOAH Rev Tech Sci Vol 43 203 pages
- Gilbert, W., Marsh, T.L., Chaters, G., Jemberu, W.T., Bruce, M., Steenveld, W., Afonso, J.S., Huntington, B., **Rushton, J.** (2024) Quantifying cost of disease in livestock: a new metric for the Global Burden of Animal Diseases. Lancet Planet Health 2024; 8: e309–17
- Peeler, E. J., Caballero-Celli, R., Davila, C. E. S., Canales Gomez, A. C., Gilbert, W., Gómez-Sánchez, M., Phan, V.T., Huntington, B., **Rushton, J.**, Schrijver, R.S., Kennerley, A. (2023). Farm level bio-economic modelling of aquatic animal disease and health interventions. Preventive veterinary medicine, 221, 106055. doi:10.1016/j.prevetmed.2023.106055
- Sucena Afonso, J., El Tholth, M, Mcintyre5, K.M., Luís Pedro Carmo, Coyne, L., Manriquez, D., Raboisson8, D., Lhermie, G., **Rushton**, **J.** (2023) Strategies to reduce antimicrobials in livestock and aquaculture, and their impact under field conditions: a structured scoping literature review. J Antimicrob Chemother https://doi.org/10.1093/jac/dkad350
- J Rushton, B Huntington, W Gilbert, M Herrero, P R Torgerson, A P M Shaw, M Bruce, T L Marsh, D L Pendell, T M Bernardo, D Stacey, D Grace, K Watkins, M Bondad-Reantaso, B Devleesschauwer, D M Pigott, M Stone, S Mesenhowski (2021) Roll-out of the Global Burden of Animal Diseases programme The Lancet Published: February 04, 2021
- Rushton, J., B. J. McMahon, M. E. Wilson, J. A. K. Mazet, and B. Shankar. 2021. A Food System Paradigm Shift: From Cheap Food at Any Cost to Food within a One Health Framework. NAM Perspectives. Commentary, National Academy of Medicine, Washington, DC. https://doi.org/10.31478/202111b.
- Rushton, J. (2017). Improving the use of economics in animal health Challenges in research, policy and education.. Preventive veterinary medicine, 137(Pt B), 130-139.
- Rushton, J.; Bruce, M. (2016) Using a One Health approach to assess the impact of parasitic disease in livestock how does it add value?. Parasitology 144(1):15-25
- Rushton, J. (2015) Antimicrobial use in animals, how to assess the trade offs. Zoonoses and Public Health 62 (suppl. 1) (2015) 10–21
- Liverani, M.; Waage, J.; Barnett, T.; Pfeiffer, D.U.; **Rushton, J.**; Rudge, J.W.; Loevinsohn, M.E.; Scoones, I.; Smith, R.D.; Cooper, B.S.; White, R.; Goh, S.; Horby, P.; Wren, B.; Gundogdu, O.; Woods, A.; Coker, R.J. (2013) Understanding and Managing. Zoonotic Risk in the New Livestock Industries. Environ Health Perspect 121:873–877 (2013).
- Jones, B.A.; Grace, D.; Kock, R.; Alonso, S.; **Rushton, J.**; Said, M.Y.; McKeever, D.; Mutua, F.; Young, J.; McDermott, J.; Pfeiffer, D.U. (2013) Zoonosis emergence linked to agricultural intensification and environmental change. PNAS vol. 110 no. 21 pp 8399–8404
- Rushton, J. (2009) The Economics of Animal Health and Production. CABI Publishing, Wallingford, UK. Pages 364
- Rushton, J.; Thornton, P. and Otte, M.J. (1999) Methods of Economic Impact Assessment. In "The economics of animal disease control" OIE Revue Scientifique et Technique Vol 18 (2) pp 315-338.