

CURRICULUM VITAE

Ermias Kebreab

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EDUCATION

<u>University</u>	<u>Degree</u>	<u>Year</u>	<u>Major</u>
University of Reading (United Kingdom)	Ph.D.	1998	Integrative Biology
University of Reading (United Kingdom)	M.Sc.	1991	Integrative Biology
University of Asmara (Eritrea)	B.Sc.	1987	Biology/Mathematics

POSITION AND EMPLOYMENT HISTORY

2016 -	Associate Vice Provost, Global Affairs, University of California, Davis, CA.
2014 -	Deputy Director, Agricultural Sustainability Institute, University of California, Davis, CA.
2009 -	Professor, Sesnon Endowed Chair. Department of Animal Science, University of California, Davis, CA.
2007-2009	Associate Professor, Canada Research Chair. Department of Animal Science, University of Manitoba, Winnipeg, MB.
2003-2006	Adjunct Professor. Centre for Nutrition Modeling, Department of Animal and Poultry Science, University of Guelph, Guelph, ON.
1998-2003	Post Doctoral Research Fellow. School of Agriculture, University of Reading, UK.
1992-1994	Department Head. Department of Plant and Animal Sciences, University of Asmara, Eritrea.
1987-1989	Lecturer. Department of Arid Zone Agriculture, University of Asmara, Eritrea.

HONORS

2014	American Feed Industry Ruminant Nutrition Award, American Society of Animal Science
2010	Technical Innovation in Enhancing Production of Safe Affordable Food Award, Canadian Society of Animal Science
2010	Sesnon Endowed Chair, University of California, Davis
2009	Merit Award in Research, University of Manitoba, Canada
2008	Early Career Achievement Award, American Society of Animal Science
2006	Young Scientist Award, Canadian Society of Animal Science
2005	Senior Research Fellowship, Wageningen University, The Netherlands
1997	Graduate Fellowship, Society for Protection of Science & Learning, UK
1996	Graduate Student Award, Africa Educational Trust, UK

GRANTS AWARDED (last 3 years)

USDA – ‘Enhancing environmental sustainability of dairying in the US.’	250,000
USDA – CIG, ‘Bovine innovative GHG emission reduction strategies in U.S.’	1,100,000
Agricultural Greenhouse Gas Program, ‘Farm-scale assessment of greenhouse gases mitigation strategies in dairy livestock-cropping-systems.’	2,827,000
USAID, ‘Feed the future innovation lab for genomics to improve poultry.’	6,000,000
National Pork Board, ‘Developing a process-based model for estimating air emissions from swine operations.’	980,000
Water Resources Advisory Committee, ‘Energy partitioning in prepubertal Sturgeon.’	750,000
Ajinomoto Heartland, ‘Nitrogen cycling in ruminant livestock systems: a modeling approach.’	42,000
USDA - Foreign Agricultural Service, ‘Ration formulation software for sustainable beef production in Vietnam.’	30,000
Anyou Group - ‘Life cycle analysis of pig production in China.’	42,000

PUBLICATIONS (2016)

1. Reed, K.F., G.B. Arhonditsis, J. France, E. Kebreab. 2016. Technical Note: Bayesian calibration of dynamic ruminant nutrition models. *J. Dairy Sci.*, 99:6362–6370.
2. Jayasundara, S., J. A. D. R. N. Appuhamy, E. Kebreab and C. Wagner-Riddle. 2016. Methane and nitrous oxide emissions from Canadian dairy farms and mitigation options: An updated review. *Can. J. Anim. Sci.*, 96: 306–331.
3. Caro, D., Kebreab, E. and F. Mitloehner. 2016. Mitigation of enteric methane emissions from global livestock systems through nutrition strategies. *Climatic Change*, 137:467-480.
4. Appuhamy, J. A. D. R. N., J. France, and E. Kebreab. 2016. Models for predicting enteric methane emissions from dairy cows in North America, Europe, and Australia and New Zealand. *Global Change Biol.*, 22:3039–3056.
5. Appuhamy, J. A. D. R. N., J. V. Judy, E. Kebreab, and P.J. Kononoff. 2016. Prediction of drinking water intake by dairy cows. *J. Dairy Sci.*, 99:7191–7205.
6. Johnson, A.C., K.F. Reed, and E. Kebreab. 2016. Short Communication: Evaluation of nitrogen excretion equations from cattle. *J. Dairy Sci.*, 99:7669–7678.
7. Bouguin, A., A. Leytem, J. Dijkstra, R.S. Dungan and E. Kebreab. 2016. Ammonia emissions from dairy cattle barn: A meta-analysis. *J. Environ. Quality*, 45:1123–1132.
8. Kebreab, E. A. Liedke, D. Caro, S. Deimling, M. Binder and M. Finkbeiner. 2016. Environmental impact of using specialty feed ingredients in swine and poultry production: A life cycle assessment. *J. Anim. Sci.*, 94:2664–2681.
9. Yáñez-Ruiz D.R., A. Bannink, J. Dijkstra, E. Kebreab, D.P. Morgavi, P. O’Kiely, C. K. Reynolds, A. Schwarm, K.J. Shingfield, Z. Yu, and A.N. Hristov. 2016. Design, implementation and interpretation of in vitro batch culture experiments to assess enteric methane mitigation in ruminants – a review. *Anim. Feed Sci. Technol.*, 216:1-18.
10. Martineau, R., D. R. Ouellet, E. Kebreab, and H. Lapierre. 2016. Casein infusion rate influences feed intake differently depending on metabolizable protein balance in dairy cows: A multilevel meta-analysis. *J. Dairy Sci.* 99:2748-2761.

11. Santiago-Juarez, B., L.E. Moraes, J.A.D.R.N. Appuhamy, W.F. Pellikaan, D.P. Casper, J. Tricarico and E. Kebreab. 2016. Prediction and evaluation of enteric methane emissions from lactating dairy cows using different levels of covariate information, *Anim. Prod. Sci.* 56: 557-564.
12. Niu, M., J.A.D.R.N. Appuhamy, A. Leytem, R. Dungan and E. Kebreab. 2016. Effect of dietary crude protein and forage contents on enteric methane emissions and nitrogen excretion from dairy cows simultaneously. *Anim. Prod. Sci.* 56:312-321.
13. Alvarez-Fuentes, G., J.A.D.R.N. Appuhamy and E. Kebreab. 2016. Prediction of phosphorus output in manure and milk by lactating dairy cows. *J. Dairy Sci.*, 99:771-782.
14. Lehmann, J.O., J.G. Fadel, L. Mogensen, T. Kristensen, C. Gaillard, and E. Kebreab. 2016. Effect of calving interval and parity on milk yield per feeding day in Danish commercial dairy herds. *J. Dairy. Sci.*, 99:621-633.

A further **180 papers** were published between 1999 and 2015. In addition, I have edited **7 books** and published **39 book chapters**.