

## CURRICULUM VITAE

### Leanne Hodson

#### Professor of Metabolic Physiology and BHF Senior Research Fellow in Basic Science

Oxford Centre for Diabetes, Endocrinology and Metabolism, University of Oxford, Oxford, OX3

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### Education

1997-2002 PhD **University of Otago**, New Zealand

1992-1996 BScHons (First Class) (Human Nutrition), **University of Otago**, New Zealand

### Previous appointments

**2011 – 2015 British Heart Foundation Intermediate Fellow in Basic Science, OCDEM, University of Oxford, UK**

**2004 - 2011 Postdoctoral Research Fellow, OCDEM, RDM, University of Oxford, UK**

**1997 – 2004 Teaching Fellow / Senior Teaching Fellow, Human Nutrition Department, Otago University, Dunedin, New Zealand (part- and full-time positions)**

**1994 – 1996 Laboratory administrator Human Nutrition Department, Otago University, Dunedin, New Zealand**

### Advisory roles

- Scientific Strategy Board Member for Ochre-Bio (2022 - ongoing)
- Scientific Advisory Board Member for Hoxton Farms (2021 – 2022)
- Scientific Advisory Board Member for ZOE (2018 - 2022)

### Awards

2018 Starling Medal, Society of Endocrinology, UK.

2017 Cuthbertson Medal, Nutrition Society, UK

2012 Diabetes UK, conference grant

2010 Best presentation at The Rank Prize Funds symposia on Nutritional Biomarkers: Present Science and Future Opportunities

2010 The Association of Clinical Biochemists Professors' Prize in Clinical Biochemistry

2010 Keystone Symposia Scholarship

2006 Free Communications Prize Winner. H.E.A.R.T UK

2000 Emerging Speaker award, New Zealand Nutrition Society Conference

1996 The Muriel Bell Memorial Prize in Human Nutrition

1995 Marion Robinson Prize in Human Nutrition

### Current/Recent Grants

<b>2022-2025</b>	<b>BHF project grant</b>	<b>£223,135</b>
	Low fat or low carbohydrate? A precision medicine approach to cardioprotective diets for individuals genetically predisposed to dyslipidaemia. (Co-I)	
<b>2022-2027</b>	<b>BHF Senior Research Fellowship in Basic Science (renewal)</b>	<b>£1,043,543</b>
	Compartmentalisation of liver lipid flux determines atherogenic lipoprotein production and liver fat accumulation: the relevance of dietary macronutrient composition. (PI)	
<b>2021-2023</b>	<b>NIHR</b>	<b>£911,252</b>
	Defatting of donor transplant livers during normothermic perfusion – a pilot randomised clinical trial. (Co-I)	
<b>2019-2023</b>	<b>British Heart Foundation PG/19/43/34432</b>	<b>£167,770</b>

Revealing the mechanisms by which milk sugars exaggerate postprandial lipaemia: Implications for cardiovascular disease risk (Co-I)  
**2018-2023 BBSRC £749,200**  
Strategic Programme in Food Innovation and Health. Quadram Institute Bioscience. Norwich. (Total award ca £6.8M) (Named HEI partner).

**Publications (relevant examples from >120 publications) (**

- Nagarajan SR, Livingstone EJ, Monfeuga T, Lewis LC, Ali SHL, Chandran A, Dearlove DJ, Neville MJ, Chen L, Maroteau C, Ruby MA, **Hodson L**. MLX plays a key role in lipid and glucose metabolism in humans: Evidence from in vitro and in vivo studies. *Metabolism*. 2023;144:155563.10.1016/j.metabol.2023.155563
- Nagarajan SR, Cross E, Johnson E, Sanna F, Daniels LJ, Ray DW, **Hodson L**. Determining the temporal, dose, and composition effects of nutritional substrates in an in vitro model of intrahepatocellular triglyceride accumulation. *Physiol Rep*. 2022;10(20):e15463.10.14814/phy2.15463
- Parry SA, Rosqvist F, Cornfield T, Barrett A, **Hodson L**. Oxidation of dietary linoleate occurs to a greater extent than dietary palmitate in vivo in humans. *Clin Nutr*. 2021 40: 1108-1114 doi: 10.1016/j.clnu.2020.07.013.
- Parry, S.A., Rosqvist, F., Mozes, F.E., Cornfield, T., Hutchinson, M., Piche, M.E., Hulsmeier, A.J., Hornemann, T., Dyson, P., **Hodson, L**. Intrahepatic Fat and Postprandial Glycemia Increase After Consumption of a Diet Enriched in Saturated Fat Compared With Free Sugars. *Diabetes Care* 2020 43(5): p. 1134-1141. 10.2337/dc19-2331
- Green, C.J., Pramfalk, C., Charlton, C.A., Gunn, P.J., Cornfield, T., Pavlides, M., Karpe, F., **Hodson, L**. Hepatic de novo lipogenesis is suppressed and fat oxidation is increased by omega-3 fatty acids at the expense of glucose metabolism. *BMJ Open Diabetes Res Care* 2020 8(1) 10.1136/bmjdr-2019-000871
- Rosqvist, F., McNeil, C.A., Pramfalk, C., Parry, S.A., Low, W.S., Cornfield, T., Fielding, B.A., **Hodson, L**. Fasting hepatic de novo lipogenesis is not reliably assessed using circulating fatty acid markers. *Am J Clin Nutr* 2019 109(2): p. 260-268. 10.1093/ajcn/nqy304
- Luukkonen, P.K., Sadevirta, S., Zhou, Y., Kayser, B., Ali, A., Ahonen, L., Lallukka, S., Pelloux, V., Gaggini, M., Jian, C., Hakkarainen, A., Lundbom, N., Gylling, H., Salonen, A., Oresic, M., Hyotylainen, T., Orho-Melander, M., Rissanen, A., Gastaldelli, A., Clement, K., **Hodson, L.**, Yki-Jarvinen, H. Saturated Fat Is More Metabolically Harmful for the Human Liver Than Unsaturated Fat or Simple Sugars. *Diabetes Care* 2018 41(8): p. 1732-1739. 10.2337/dc18-0071
- Pramfalk, C., Pavlides, M., Banerjee, R., McNeil, C.A., Neubauer, S., Karpe, F., **Hodson, L**. Fasting Plasma Insulin Concentrations Are Associated With Changes in Hepatic Fatty Acid Synthesis and Partitioning Prior to Changes in Liver Fat Content in Healthy Adults. *Diabetes* 2016 65(7): p. 1858-67. 10.2337/db16-0236. PMID: 27207513 DOI: 10.2337/db16-0236
- **Hodson, L.**, McQuaid, S.E., Humphreys, S.M., Milne, R., Fielding, B.A., Frayn, K.N., Karpe, F. Greater dietary fat oxidation in obese compared with lean men: an adaptive mechanism to prevent liver fat accumulation? *Am J Physiol Endocrinol Metab* 2010 299(4): p. E584-92. 10.1152/ajpendo.00272.2010
- **Hodson, L.**, McQuaid, S.E., Karpe, F., Frayn, K.N., Fielding, B.A. Differences in partitioning of meal fatty acids into blood lipid fractions: a comparison of linoleate, oleate, and palmitate. *Am J Physiol Endocrinol Metab* 2009 296(1): p. E64-71. 10.1152/ajpendo.90730.2008