

## CURRICULUM VITAE

### JAMES A. BETTS, PhD

Professor of Metabolic Physiology  
Department for Health, University of Bath

### EDUCATION

Ph.D. Human Physiology and Muscle Metabolism, Loughborough University, 2002-2006  
B.Sc. Sport & Exercise Science (First Class hon.), Loughborough University, 1999-2002

### ACADEMIC APPOINTMENTS

Professor of Metabolic Physiology, Department for Health, University of Bath, 2018-date  
Reader in Nutrition & Metabolism, Department for Health, University of Bath, 2016-2018  
Senior Lecturer in Nutrition and Metabolism, Department for Health, University of Bath, 2012-2016  
Lecturer in Nutrition and Metabolism, Department for Health, University of Bath, 2007- 2012  
Teaching Fellow in Research Methods & Statistics, University of Bath, 2005-2007

### UNIVERSITY LEADERSHIP ROLES

Co-Director of the Centre for Nutrition, Exercise & Metabolism, 2020-date  
Institute of Mathematical Innovation Steering Group, 2017-2019  
Chair of the Biomedical Science Ethics Committee, 2016-2024

### HONOURS/AWARDS

Cuthbertson Medal for excellence in clinical nutrition research, 2015  
University of Bath Mary Tasker Award for excellence in teaching, 2018  
Fellow of the Physiological Society (FTPS) 2024-date  
Fellow of the American College of Sports Medicine (FACSM) 2010-date

### ADVISORY ROLES

Member of the Gatorade Expert Panel, 2024-date  
Editor-in-Chief *International Journal of Sports Nutrition & Exercise Metabolism*, 2019-date  
Head of Science and Research for Salus Optima, 2022-2024  
Member of the UK Medical Advisory Board (MAB) for skeletal dysplasia, 2017-date  
Member of the Academic Advisory Board of the International Olympic Committee (IOC), 2017-date  
Member of the Editorial Advisory Board for the British Nutrition Foundation, 2019-date  
Chair of the Trial Steering Committee for the MCDS trial, 2018-date  
Member of the Research Council of Norway Evaluation of Medical & Health Sciences, 2024-2025  
Associate Editor *International Journal of Sports Nutrition & Exercise Metabolism*, 2017-2018  
Member of the International Life Sciences Institute (ILSI) task force on Energy Balance, 2017-2020  
Expert panel member for the Academy of Finland Grant Review board, 2016  
Committee member for the American College of Sports Medicine (ACSM), 2016-2020  
Associate Editor *Trials* journal, 2014-2017  
Invited expert at the UKSport panel meeting on novel nutritional support for the 2012 Olympics  
Invited expert at the GlaxoSmithKline Think Tank on Protein and Muscle Mass 2008

### TRAINING

Nasogastric tube insertion - University of Bath, 2018  
Muscle Biopsy Sampling - Maastricht University, 2011  
Good Clinical Practice Update - University of Bath, 2011  
Ionising Radiation Exposure Training - London Radiological Protection Centre, 2010  
Adipose Biopsy Training - Oxford Centre for Diabetes, Endocrinology & Metabolism, 2008  
Muscle Biopsy Analysis - Queen's Medical Centre, Nottingham, 2005  
Intravenous Cannulation Training - North Bristol NHS Trust, 2005  
Venepuncture/Phlebotomy Training - University Hospitals of Leicester NHS Trust, 2003

### FUNDING

2024-2027	BBSRC (BB/Y011953/1)	(PI)	£997,638
2024-2026	Restricted Growth Association	(PI)	£40,000
2024-2028	NIHR Mental Health	(CoI)	£14,000,000
2023-2024	North Bristol RCF and ICU Departmental Funds	(CoI)	£17,687
2022-2026	Salus Optima (studentship)	(PI)	£65,922
2021-2024	BBSRC (studentship)	(PI)	£82,000
2019-2023	British Heart Foundation (PG/19/43/34432)	(Co-I)	£167,770
2018-2023	BBSRC (BB/R018928/1)	(Co-I)	£698,089
2018-2021	ARLA Foods Ingredients	(Co-I)	£152,000
2017-2019	Kennis Cent. Suiker	(Co-I)	£49,207

2016-2020	MRC MR/P002927/1	(Co-I)	£481,641
2016-2020	Rare Disease Foundation x 3	(PI)	£5,621
2016-2018	European Hydration Institute	(PI)	€5000
2015-2017	Lucozade Ribena Suntory x 3	(PI)	£269,059
2015-2016	PepsiCo	(Co-I)	£25,000
2014-2016	ESRC (studentship)	(PI)	£78,000
2014-2018	Kellogg's	(PI)	£10,000
2011-2016	Saudi Arabian Ministry of Higher Education	(PI)	£72,000
2010-2013	BBSRC (BB/H008322/1)	(PI)	£481,000
2007-2009	GlaxoSmithKline x 3	(PI)	£105,820

**TOTAL: ~£18M**

**SELECTED PUBLICATIONS (relevant recent examples from >130 publications):**

- Smith H. A. & **Betts J. A.** (2022) Nutrient Timing & Metabolic Regulation **Journal of Physiology** 600 (6): 1299-1312
- Templeman I., Smith H. A., Chowdhury E. A., Chen Y-C., Carroll H., Johnson-Bonson D., Hengist A., Smith R., Creighton J., Clayton D., Varley I., Karagounis L. G., Wlihelmsen A., Tsintzas K., Reeves S., Walhin J-P., Gonzalez J. G., Thompson D. & **Betts J. A.** (2021) A randomized controlled trial to isolate the effects of fasting and energy restriction on weight loss and metabolic health in lean adults. **Science Translational Medicine** 13(598):eabd8034.
- Ravi Savarirayan, Svein Fredwall, Penny Ireland, Melita D. Irving, Dominic Thompson, Inês Alves, Wagner A.R. Baratela & **James Betts** (2022) International Consensus Statement on the diagnosis, multidisciplinary management and lifelong care of individuals with achondroplasia **Nature Reviews Endocrinology** 18: 173–189
- Templeman I., Gonzalez J. T., Thompson D. & **Betts J. A.** (2019) Role of intermittent fasting & meal timing in weight loss & metabolic health. **Proceedings of the Nutrition Society** In-Press.
- Chowdhury E. A., Richardson J. D., Gonzalez J. T., Tsintzas K., Thompson D. & **Betts J. A.** (2019) Six weeks of morning fasting causes little adaptation of metabolic or appetite responses to feeding in adults with obesity. **Obesity** In-Press.
- Edinburgh R. M., Hengist A., Smith H. A., Travers R. L., Koumanov F., **Betts J. A.**, Thompson D., Walhin J-P, Wallis G. A., Hamilton D. L., Stevenson E. J., Tipton K. D. & Gonzalez J. T. (2019) Skipping breakfast before exercise creates a more negative 24-hour energy balance: A randomized controlled trial in healthy physically active young men. **Journal of Nutrition** In-Press
- Edinburgh R. M., Hengist A., Smith H. A., Travers R. L., Koumanov F., **Betts J. A.**, Thompson D., Walhin J-P, Wallis G. A., Hamilton D. L., Stevenson E. J., Tipton K. D. & Gonzalez J. T. (2018) Preexercise breakfast ingestion versus extended overnight fasting increases postprandial glucose flux after exercise in healthy men. **American Journal of Physiology** 315 (5): E1062-1074.
- Perrin L., Loizides-Magold U., Chanon S., Gobet C., Hulo N., Isenegger L., Weger B. D., Migliavacca E., Charpagne A., **Betts J. A.**, Walhin J-P., Templeman I., Stokes K., Thompson D., Tsintzas K., Robert M., Howald C., Riezman H., Feige J. N., Karagounis L. G., Johnston J. D., Dermitzakis E., Gachon F., Lefai E. & Dibner C. (2018) Transcriptomic analyses reveal rhythmic and CLOCK-driven pathways in human skeletal muscle. **eLIFE** 7: e34114
- Gonzalez J. T. & **Betts J. A.** (2018) Dietary fructose metabolism by splanchnic organs: size matters. **Cell Metabolism** 27(3): 483-485.
- Gonzalez J. T., Richardson J. D., Chowdhury E. A., Koumanov F., Holman G. D., Cooper S., Thompson D., Tsintzas K. & **Betts J. A.** (2018) Molecular adaptations of adipose tissue to 6 weeks of morning fasting vs daily breakfast consumption in lean and obese adults: Extended morning fasting and adipose tissue physiology. **Journal of Physiology** 596(4): 609-622.
- Loizides-Mangold U., Perrin L., Vandereycken B., Betts J. A., Walhin J-P., Templeman I., Chanon S., Weger B. D., Durand C., Robert M., Paz J., Moniatte M., Karagounis L. G., Johnston J. D., Gachon F., Lefai E., Riezman H. & Dibner C. (2017) Lipidomics reveals diurnal lipid oscillations in human skeletal muscle persisting in cellular myotubes cultured in vitro. **Proceedings of the National Academy of Sciences (PNAS)** 114 (41): E8565-E8574.
- Chowdhury E. A., Richardson J. D., Tsintzas K., Thompson D. & **Betts J. A.** (2017) Postprandial metabolism and appetite do not differ between lean adults that ate breakfast or morning fasted for 6 wk. **Journal of Nutrition** 148(1): 13-21.
- Smith H., Gonzalez J.T., Thompson D. & **Betts J.A.** (2017) Dietary carbohydrates, components of energy balance and associated health outcomes. **Nutrition Reviews** 75(10): 783-797
- Chen Y. C., Travers R. L., Walhin J-P, Gonzalez J. T., Koumanov F., **Betts J. A.** & Thompson D (2017) Feeding influences adipose tissue responses to exercise in overweight men. **American Journal of Physiology** 313(1): E84-93.
- Walhin J-P, Dixon N. C., **Betts J. A.** & Thompson D. (2016) The impact of exercise intensity on whole body and adipose tissue metabolism during energy restriction in sedentary overweight men and postmenopausal women. **Physiological Reports** 4(24): e13026