

## Sean J. Humphrey, PhD

Position: Postdoctoral Research Fellow

Department: Metabolic Systems Biology

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### Education and Experience

2016-Present

Senior post-doctoral fellow  
Metabolic Systems Biology lab (Prof. David James)  
School of Life and Environmental Sciences and Charles Perkins Centre  
The University of Sydney, Australia

2013-2016

European Molecular Biology Organization (EMBO) Long-term post-doctoral fellow  
Department of Proteomics and Signal Transduction (Prof. Matthias Mann)  
Max-Planck Institute of Biochemistry, Martinsried, Germany

2009-2013

Doctor of Philosophy (PhD)  
School of Medicine, The University of New South Wales  
Garvan Institute of Medical Research, Sydney, Australia

2005-2009

B.Sc. (Hons) Pharmacology, The University of New South Wales, Sydney, Australia  
First class Honours and University scholar (Rising Star scholarship)

### Key Publications

Robles, M.S., [Humphrey, S.J.](#), Mann, M. Phosphorylation Is a Central Mechanism for Circadian Control of Metabolism and Physiology. *Cell Metabolism* (2017), DOI: 10.1016/j.cmet.2016.10.004.

Sacco, F., [Humphrey, S.J.](#), Cox, J., Mischnik, M., Schulte, A., Klabunde, T., Schäfer, M., Mann, M. Glucose-regulated and drug-perturbed phosphoproteome reveals molecular mechanisms controlling insulin secretion. *Nature Communications* (2016), 7:13250, DOI: 10.1038/ncomms13250.

[Humphrey, S.J.](#), James, D.E., Mann, M. Protein phosphorylation: a major switch mechanism for metabolic regulation. *Trends in Endocrinology and Metabolism* (2015), 26(12):676-87.

Yang, P., [Humphrey, S.J.](#), James, D.E., Yang, Y.H., Jothi, R. Positive-unlabeled ensemble learning for kinase substrate prediction from dynamic phosphoproteomics data. *Bioinformatics* (2015) Sep 22. pii: btv550.

[Humphrey, S.J.](#), Azimifar, B., Mann, M. High-throughput phosphoproteomics reveals in vivo insulin signaling dynamics. *Nature Biotechnology* (2015), 33(9):990-5.

Yang, G., Murashige, D.S., [Humphrey, S.J.](#), James, D.E. A Positive Feedback Loop between Akt and mTORC2 via SIN1 Phosphorylation. *Cell Reports* (2015), 12(6):937-43.

[Humphrey, S.J.](#), Yang, G., Yang, P., Fazakerley, D.J., Stöckli, J., Yang, J.Y., James, D.E. Dynamic Adipocyte Phosphoproteome Reveals that Akt Directly Regulates mTORC2. *Cell Metabolism* (2013), 17(6):1009-20.