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Uwch Ddarlithydd (Dysgu ac Ymchwil)  
Ysgol Gwyddorau Dynol ac Ymddygiadol



## Manylion Cyswllt

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Brief bio:

After graduating with a Sport Science degree and working as freelance Outdoor Activities Instructor for some years, I returned to academia to complete my PhD in clinical exercise physiology. I am now Head of School of the School of Sport, Health and Exercise Sciences at Bangor University ([www.bangor.ac.uk/sport](http://www.bangor.ac.uk/sport)).

I teach and complete research and impact activities in two distinct areas: i) clinical exercise physiology in chronic kidney disease; ii) and how to enhance health and performance in high altitude environments.

## Cymwysterau

Profesiynol, Profesiynol, National Institute for Health Research

Dyddiad Dyfarnu: 25 Jun 2016

Profesiynol, Profesiynol, Higher Education Academy

Dyddiad Dyfarnu: 1 Dec 2011

OI-Raddedigol, PhD, Prifysgol Bangor

Dyddiad Dyfarnu: 1 Nov 2006

Israddegigol, BSc, Prifysgol Bangor

Dyddiad Dyfarnu: 1 Jul 2001

## Cyflogaeth

**Pennaeth yr Ysgol / Uwch Ddarlithydd**

Uwch Ddarlithydd (Dysgu ac Ymchwil)

Ysgol Gwyddorau Dynol ac Ymddygiadol

Prifysgol Bangor

1 Aug 2021 → 31 Dec 2099

### Honorary contract

Betsi Cadwaladr University Health Board

Y Deyrnas Unedig

### Steering Committee

British Renal Society Rehabilitation Network

Y Deyrnas Unedig

### Editorial Board Member

High Altitude Medicine and Biology (journal)

Yr Unol Daleithiau

### Founder member

UK Kidney Research Consortium Exercise and Lifestyle Clinical Study Group

Y Deyrnas Unedig

## Allbwn ymchwil

**MEDEX 2015: Prophylactic effects of positive expiratory pressure in trekkers at very high altitude.**

Rupp, T., Maufrais, C., Walther, G., Esteve, F., Macdonald, J., Bouzat, P. & Verges, S., 21 Medi 2021, Yn : *Frontiers in Physiology*. 12, 710622.

**Global Policy Barriers and Enablers to Exercise and Physical Activity in Kidney Care**

Global Renal Exercise Network (GREX), Bennett, P. N., Kohzuki, M., Bohm, C., McDonald, J., Zimmerman, D. & Thompson, S., 13 Awst 2021, Yn : *Journal of Renal Nutrition*.

**Randomized Trial-PrEscription of intraDialytic exercise to improve quALity of Life in Patients Receiving Hemodialysis**

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**The deleterious effects of acute hypoxia on microvascular and large vessel endothelial function**

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**Bilateral regional extracranial blood flow regulation to hypoxia and unilateral duplex ultrasound measurement error**

Friend, A., Rogan, M., Rossetti, G., Lawley, J., Mullins, P., Sandoo, A., Macdonald, J. & Oliver, S., 1 Gorff 2021, Yn : *Experimental Physiology*. 106, 7, t. 1535-1548 14 t.

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Greenwood, S. A., Koufaki, P., Macdonald, J., Bulley, C., Bhandari, S., Burton, J. O., Dasgupta, I., Farrington, K., Ford, I., Kalra, P. A., Kumwenda, M., Macdougall, I. C., Messow, C-M., Mitra, S., Reid, C., Smith, A. C., Taal, M. W., Thompson, P. C., Wheeler, D. C., White, C., Yaqoob, M. & Mercer, T., 1 Meh 2021, Yn : *Health Technology Assessment*. 25, 40, 52 t.

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**Dietary nitrate supplementation increases acute mountain sickness severity and sense of effort during hypoxic exercise**  
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Sunderland, A., Freer, J., Evans, L., Dolci, A., Crotti, M. & Macdonald, J., 1 Medi 2017, Yn : High Altitude Medicine and Biology. 18, 3, t. 199-208

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**Prolonged (9 h) poikilocapnic hypoxia (12% O<sub>2</sub>) augments cutaneous thermal hyperaemia in healthy humans**  
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**Carbohydrate Supplementation and Exercise Performance at High Altitude: A Randomized Controlled Trial**

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**A matched-cohort study of body composition, physical function and quality of life in men with idiopathic vertebral fracture**

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**Physiological demands of mountain rescue work**

Callender, N., Ellerton, J. & Macdonald, J. H., 29 Medi 2011, Yn : *Emergency Medicine Journal*.

**Athletic Profile of Highly Accomplished Boulderers**

Macdonald, J. H. & Callender, N., 1 Meh 2011, Yn : *Wilderness and Environmental Medicine*. 22, 2, t. 140-143

**Body composition at high altitude: a randomized placebo-controlled trial of dietary carbohydrate supplementation.**

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**Dietary factors associated with acute mountain sickness.**

Sanders, S., Macdonald, J. H. & Oliver, S. J., 1 Ion 2009.

**Maintaining euhydration at high altitude.**

Oliver, S. J., Wright, A., Leventi, M. & Macdonald, J. H., 1 Ion 2009.

**Effect of carbohydrate supplementation during a high altitude expedition.**

Macdonald, J. H. & Oliver, S. J., 3 Rhag 2008.

**Response of electromyographic variables during incremental and fatiguing cycling.**

Macdonald, J. H., Farina, D. & Marcora, S. M., 1 Chwef 2008, Yn : Medicine and Science in Sports and Exercise. 40, 2, t. 335-344

**Effect of acute on chronic carbohydrate supplementation during sub-maximal exercise at high altitude.**

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**Effect of chronic carbohydrate supplementation on body composition during a high altitude expedition.**

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**Effect of chronic carbohydrate supplementation on exercise performance during a high altitude expedition.**

Roberts, E., Macdonald, J. H. & Oliver, S. J., 1 Ion 2008.

**Effect of chronic carbohydrate supplementation on hydration status and peripheral oedema during a high altitude expedition.**

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**The effects of carbohydrate supplementation on multi-day wilderness expedition performance**

Oliver, S. J. & Macdonald, J. H., 1 Ion 2008.

**Muscle mass deficits are associated with bone mineral density in men with idiopathic vertebral fracture.**

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**Reliability and sensitivity to fatigue of electromyographic parameters during dynamic cycling exercise.**

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**Nandrolone decanoate as anabolic therapy in chronic kidney disease: A randomized phase II dose-finding study.**

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**Anabolic therapy in chronic kidney disease.**

Macdonald, J. H., 15 Mai 2007.

**The functional, metabolic, and anabolic responses to exercise training in renal transplant and hemodialysis patients.**

Van Den Ham, E. C., Kooman, J. P., Schols, A. M., Nieman, F. H., Does, J. D., Akkermans, M. A., Janssen, P. P., Gosker, H. R., Ward, K. A., Macdonald, J. H., Christiaans, M. H., Leunissen, K. M. & Van Hooff, J. P., 27 Ebr 2007, Yn : Transplantation. 83, 8, t. 1059-1068

**Estimating glomerular filtration rate using measured muscle mass.**

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**Steak and Kidney.**

Macdonald, J. H. & Jibani, M., 17 Ion 2007.

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Macdonald, J., Marcora, S., Kumwenda, M. J., Jibani, M., Roberts, G., Glover, R., Barron, J. & Lemmey, A. B., 12 Rhag 2006, Yn : Nephrology, Dialysis, Transplantation. 21, 12, t. 3488-3494

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**GFR Estimation Using Cystatin C Is Not Independent of Body Composition**

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Macdonald, J. H. & Laing, S. J., 17 Medi 2005.

**Exercise in your unit.**

Macdonald, J. H., 25 Awst 2005.

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Macdonald, J., Marcora, S., Jibani, M., Phanish, M. K., Holly, J. & Lemmey, A. B., 1 Maw 2005, Yn : Clinical Physiology and Functional Imaging. 25, 2, t. 113-118

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Macdonald, J. H., 2 Hyd 2004.

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**Skeletal muscle insulin-like growth factor status in haemodialysis patients.**

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**Intradialytic exercise as anabolic therapy.**

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**Looking after your kidneys- keep fit!**

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Macdonald, J. H., Phanish, M., Marcora, S. M., Holly, J., Bloodworth, L., Jibani, M. & Lemmey, A. B., 10 Rhag 2003.

**The effects of intradialytic exercise on body composition, functional capacity and muscle insulin-like growth factor (IGF) status in haemodialysis patients.**

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**Dyfarniadau****Babi Actif**

Macdonald, J.

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