

Dr Jet Veldhuijzen van Zanten MSc, PhD

Lecturer in Biological Psychology

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Qualifications

- PhD (University of Birmingham, UK)
- MSc (*Vrije* Universiteit, Amsterdam, The Netherlands)
- MSc (*Vrije* Universiteit, Amsterdam, The Netherlands)

Biography

Jet received a MSc degree in Human Movement Sciences and in Psychology, both at the *Vrije* Universiteit in Amsterdam, The Netherlands, and PhD at the School of Sport and Exercise Sciences in Birmingham. She worked as a RCUK research fellow at the School of Sport and Exercise Sciences before starting her post as a lecturer in Biological Psychology.

Teaching

Jet is module organiser for the 1st year module Methods and Skills in Sport and Exercise Sciences.

Postgraduate supervision

- Dr Aamer Sandoo – graduated in September 2010, PhD topic: Endothelial function in patients with rheumatoid arthritis.
- Ms Nicola Paine – started in October 2009, PhD topic: Inflammation and vascular responses to mental stress

Research

- Triggering of acute cardiovascular events
- Endothelial function and vascular responses to acute mental stress
- Inflammation and responses to acute mental stress
- Rheological effects of acute mental stress
- Cardiovascular disease in patients with Rheumatoid Arthritis

Jet is interested in mental stress as a trigger for acute cardiovascular events. She has conducted a series of studies that involve the psycho-physiological responses to mental stress in a laboratory setting. In particular, the vascular, inflammatory, and rheological responses to mental stress have been explored both in healthy participants as well as clinical populations (rheumatoid arthritis and cardiac patients). Factors that are associated with these responses are also under investigation. Recently, she is focussing on the effects of baseline endothelial function and inflammation on these responses to mental stress.

Another focus of her research concerns characterising patients with rheumatoid arthritis. This involves a series of studies on endothelial function in patients with rheumatoid arthritis and its association with inflammation and cardiovascular risk factors. The effects of medication and exercise regimes on endothelial function are also being examined. In addition, Jet is an investigator on a MRC funded grant (NPRI phase 3) entitled 'An intervention fostering autonomous motivation, physical activity and cardiovascular fitness in rheumatoid arthritis'. Outcome variables in this interdisciplinary study include cardiovascular risk factors, motivational factors related to physical activity, measures of well-being as well as an economic evaluation of the intervention.

Other activities

She is an invited reviewer for psychophysiological, behavioural medicine and arthritis related journals.

Publications

Sandoo, A., Veldhuijzen van Zanten, J.J.C.S., Metsios, G.S., Carroll, D., & Kitas, G.D (In press), *The endothelium and its role in regulating vascular tone*, **The Open Cardiovascular Medicine Journal**.

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Veldhuijzen van Zanten, J.J.C.S., Ring, C., Carroll, D., McIntyre, D.B., & Brown, M.D. (2009), Hemoconcentration during a prolonged stress task: Associations with hemodynamic reactivity and microvascular permeability, **Biological Psychology**, 82, 260-6.

Bosch, J.A., De Geus, E.J.C., Carroll, D., Goedhart, A.D., Anane, L.A., Veldhuijzen van Zanten, J.J.C.S., Helmerhorst, E.J., Edwards, K.M. (2009), A general enhancement of autonomic and cortisol responses during social evaluative threat, **Psychosomatic Medicine**, 71, 877-85.

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Anane, L.H., Edwards, K.M., Burns, V.E., Drayson, M.T., Riddell, N.E., Veldhuijzen van Zanten, J.J.C.S., Wallace, G., Mills, P.J., & Bosch, J.A. (2009), Mobilization of gd T lymphocytes in response to psychological stress, exercise, and β -agonist infusion, **Brain, Behaviour and Immunology**, 23, 823-9.

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Veldhuijzen van Zanten, J.J.C.S., & Kitas, G.D. (2008), Inflammation, carotid intima-media thickness and atherosclerosis in Rheumatoid Arthritis, **Arthritis Research and Therapy**, 10, 102

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