

# Miss Natalie Ives BSc (Hons), MSc

Assistant Director of BCTU, Senior Statistician

School of Cancer Sciences

## Contact details

**Telephone** [+44 \(0\)121 415 9113 \(tel:+44 121 415 9113\)](tel:+441214159113)

**Email** [n.j.ives@bham.ac.uk \(mailto:n.j.ives@bham.ac.uk\)](mailto:n.j.ives@bham.ac.uk)

Birmingham Clinical Trials Unit (BCTU)  
College of Medical and Dental Sciences  
Robert Aitken Institute for Clinical Research



## About

Natalie Ives is Assistant Director of the Birmingham Clinical Trials Unit (BCTU), and leads the Statistics team within the Unit.

Natalie has published many research papers in scientific journals in the fields of Parkinson's disease, renal disease, melanoma and HIV. She is a co-applicant on a number of grants from the NIHR HTA programme.

She is interested in the design, conduct and analysis of randomised trials and systematic reviews. Currently, she works on a number of clinical trials in Parkinson's disease and renal disease of medical, surgical and rehabilitation interventions. She works closely with the systematic review team within BCTU, undertaking meta-analyses to provide a reliable synthesis of previous clinical trial activity on treatment efficacy, and to identify future key research questions.

## Qualifications

- MSc in Statistics, University of Sheffield, 1997
- BSc (Hons) in Mathematics (1st), University of Leicester, 1995

## Biography

Natalie Ives graduated from the University of Leicester in 1995 with a first class BSc (Hons) degree in Mathematics. After a gap year, she then went on to study for an MSc in Statistics at the University of Sheffield.

After a period of travelling around Australia and New Zealand, in 1998, Natalie started work as a Statistician within a HIV epidemiology unit, first at Imperial College School of Medicine, London and then at King's College School of Medicine, London. In 2001, she moved to take up a statistician post at the University of Birmingham Clinical Trials Unit (BCTU).

Natalie started at BCTU as a trial statistician working on the PD MED, PD SURG and ASTRAL trials. She has progressed within BCTU to Statistics team leader (since March 2007) responsible for overseeing the work of the statistics team within BCTU. As a senior statistician within the Unit, she is portfolio lead for both the renal disease and Parkinson's disease trial portfolios.

Natalie is now Assistant Director of BCTU responsible for assisting in the overall management of the BCTU. She also chairs the Unit's Strategy and New Business Committee, which oversees the research commitments of the Unit, and provides a platform for discussing the future research and strategic direction of the Unit.

Natalie is a front line advisor for the NIHR funded West Midlands Research Design Service. She sits on the DeNDRoN Clinical Studies Group for both Parkinson's disease and Huntington's disease, and is a member of the UK Kidney Research Consortium.

## Teaching

### Teaching Programmes

- MSc in Clinical Oncology
- Masters in Public Health (Clinical Trials Module)
- Small group leader for statistics modules on Graduate Entry MBChB

Natalie is course director for BCTU's tri-annual Research Methods Course (CPD approved), and gives lectures on statistics, clinical trial design and meta-analysis as part of this course.

## Postgraduate supervision

Second supervisor for student currently on MRes course

## Research

### Research Themes

Clinical Trials, Systematic Reviews, Meta-Analyses, Parkinson's Disease, Renal Disease

### Research Activity

The main focus of Natalie's work at BCTU has been on clinical trials and systematic reviews in Parkinson's disease, renal disease and melanoma. Clinical trials are truly collaborative projects involving various clinical colleagues and a trial team working within BCTU, where Natalie provides the statistical and clinical trial support.

### Parkinson's Disease

Parkinson's disease is a neurodegenerative condition for which there is currently no cure. Treatment is therefore aimed at alleviating the various (and often debilitating) symptoms of the disease. BCTU currently co-ordinates a number of clinical trials and research projects in Parkinson's disease, in which Natalie has played a key role in the analysis of data, and more recently in the trial design. These trials include PD MED, PD SURG, PD REHAB, PD COMM as well as PD GEN, a DNA-bank of samples.

Key achievements:

- PD SURG compares deep brain stimulation surgery with best medical therapy in patients with advanced Parkinson's disease. The trial showed that at 1 year, surgery improves patient quality of life and motor function in patients with advanced Parkinson's disease. These results were published in the *Lancet Neurology* in 2010;
- Undertaking a series of published data meta-analyses of medical treatments, surgery and physiotherapy for the treatment of Parkinson's disease;
- Co-applicant on NIHR HTA grants for PD MED and PD REHAB;
- Co-applicant on Dunhill Medical Trust grant for pilot study PD COMM.

### Renal Disease

The renal disease portfolio currently consists of a number of trials covering renovascular disease, vasculitis and childhood nephrotic syndrome assessing both medical and surgical interventions. Natalie played an instrumental role in the data analysis of the ASTRAL trial, and has played a key role in the set-up of the four newer trials – GloMY, PEXIVAS, PREDNOS, PREDNOS2 and STOP-ACEi

Key achievements:

- ASTRAL is the largest trial to date of revascularisation versus medical therapy in renal artery stenosis, and was published in the *New England Journal of Medicine* in November 2009. This trial found no evidence of a worthwhile clinical benefit from revascularisation;
- Further development of the renal portfolio, with five new trials funded since 2009 (GloMY, PEXIVAS, PREDNOS, PREDNOS2 and STOP-ACEi);
- Co-applicant on NIHR HTA grants for PREDNOS and PREDNOS2, and NIHR EME funded STOP-ACEi.

Natalie coordinates the Unit's support and advice (consultancy) service, which provides advice on trial design and analysis to researchers proposing to undertake clinical trial research. This service has been particularly active in recent years, with the requirement (certainly for trials funded by NIHR grants) that clinical trials are coordinated by UK CRC registered trials units. She is also a front line advisor for the NIHR funded West Midlands Research Design Service.

### Other activities

- Statistical reviewer for the NIHR
- Front Line Advisor for the NIHR funded West Midlands Research Design Service
- Member of DeNDRoN Parkinson's disease Clinical Studies Group
- Member of DeNDRoN Huntington's disease Clinical Studies Group
- Member of UK Kidney Research Consortium
- Independent statistician on numerous Trial Steering and Data Monitoring Committees

### Publications

Tomlinson CL, Patel S, Meek C, Herd CP, Clarke CE, Stowe R, Shah L, Sackley C, Deane KHO, Wheatley K, Ives N. Physiotherapy intervention in Parkinson's disease: systematic review and meta-analysis. *BMJ* 2012;345:e5004.

Clarke CE., Patel S., Ives N., et al. Should treatment for Parkinson's disease start immediately on diagnosis or delayed until functional disability develops? *Mov Disord.* 2011;26:1187-93

Stowe, R., Ives N., Clarke CE., et al. Meta-analysis of the comparative efficacy and safety of adjuvant treatment to levodopa in later Parkinson's disease. *Mov Disord.* 2011;26:587-98.

Brown L., Patel S., Ives N., McDermott C., Ross JDC. Is non-invasive testing for sexually transmitted infections an efficient and acceptable alternative for patients? A randomised controlled trial. *Sex Transm Infect* 2010;86:525-31.

Stowe R., Ives N., Clarke CE., et al. Evaluation of the efficacy and safety of adjuvant treatment to levodopa therapy in Parkinson's disease patients with motor complications, *Cochrane Database Syst Rev* 2010, Issue 7.

Williams A., Gill S., Varma T., Jenkinson C., Quinn N., Mitchell R., Scott R., Ives N., et al. Deep brain stimulation plus best medical therapy versus best medical therapy alone for advanced Parkinson's disease (PD SURG trial): a randomised, open-label trial. *Lancet Neurol* 2010;9:581-91.

The ASTRAL Investigators (Wheatley K., Ives N., Gray R., et al.) Revascularization versus medical therapy for renal-artery stenosis. *N Engl J Med* 2009;361:1953-62.

Caslake R., Macleod A., Ives N., Stowe R., Counsell C. Monoamine oxidase B inhibitors versus other dopaminergic agents in early Parkinson's disease. *Cochrane Database Syst Rev* 2009, Issue 4.

Curtis A., Mitchell I., Patel S., Ives N., Rickards H. A pilot study using nabilone for symptomatic treatment in Huntington's disease. *Mov Disord* 2009;24:2254-9.

Stowe RL., Ives NJ., Clarke C., van Hilten J., Ferreira J., Hawker RJ., Shah L., Wheatley K., Gray R. Dopamine agonist therapy in early Parkinson's disease. *Cochrane Database Syst Rev* 2008, Issue 2.