



Annual Research Report 2009-2010

College of Osteopaths

Contents

Introduction	3
Undergraduate Research Programme	3
Master of Osteopathy/Bachelor of Osteopathy Programme	6
Research Collaboration with other Institutions	8
Annual Research Conference	9
Research Team (Esteem Factors and Areas of Interest)	11
Journal Publications	13
Peer Reviewed Conference Presentations and Posters	14
Non Peer Reviewed Conference Presentations and Posters	15
Undergraduate Research Projects	16

Introduction

The College of Osteopaths provides:

- a modularised five year part-time BSc (Hons) Osteopathy degree delivered in collaboration with Middlesex University
- a modularised five year part-time BSc (Hons) Osteopathy degree delivered in collaboration with Keele University
- a modularised MSc in Professional Studies (Osteopathy) in collaboration with Middlesex University

Both undergraduate programmes have successfully gained recognised qualification (RQ) status from the General Osteopathic Council; the Middlesex programme in 2001 and the Keele programme in 2008. The MSc in Professional Studies was validated in 2008.

During 2009-2010 the focus for the research team has been to:

- support undergraduate students on the research element of their programme
- develop the research element of our new Master of Osteopathy/Bachelor of Osteopathy programme (in collaboration with Middlesex University)
- collaborate with other institutions on NCOR Adverse Events Projects
- encourage dissemination of research findings through our annual research conference

The research team consists of 6 members (see page 11 for members, esteem factors and areas of interest)

Undergraduate Research Programme

Undergraduates are introduced to research during the Level 1 Supportive Skills Module where they consider the importance of evidence based practice and carry out a simple investigation. Research Skills are developed during the Level 3 Research Skills module delivered during the fourth year. This is followed by a level 3 Research Project module. Students undertake either a piece of primary research or an extended literature review. All projects are reported in the format of a research paper and are limited to 3000 words. Abstracts are available on the College website. This year saw the first cohort of Keele students complete the research modules. Claire Humpage's (nee Brason) project has been accepted for publication in International Journal for Osteopathic Medicine and is currently in press.

22 students submitted projects this year. The marks were distributed as follows:

≥70%	4 students
60-69%	8 students
50-59%	7 students
40-49%	3 students

Project Titles (Middlesex Students)

Student	Project Title
Phillip Allen	Is there a relationship between cigarette smoking and recovery from non-specific mechanical low back pain diagnosed as facet capsular strain? A randomised survey of patients receiving treatment at an osteopathic teaching clinic.
James Bentley	A comparison of the effect of Muscle Energy Technique on hypertonic iliopsoas and Ischaemic Compression on hypertonic iliacus as determined by changes in hip extension. A randomised single blind trial.
Tracey Betts-Allen	Analysis of case notes for patients presenting with low back pain (LBP) to the College of Osteopaths Educational Trust Osteopathic Clinic comparing treatment outcomes according to Body Mass Index (BMI) categorised as Normal and Obese.
Claire Brason	Opinions on research and evidence based medicine within the UK osteopathic profession: a thematic analysis of the scientific and grey literature 2003-2009.
Helen Espinosa-Brown	A perspective on Osteopathic Management of two patients suffering with dystonia: an in depth follow up study of two cases using mixed methods.
Jason Harmer	A preliminary investigation into the reliability of inter and intra examiner soft tissue texture change palpation in the lumbar paraspinal area of asymptomatic subjects by final year osteopathic students
Jayne Hathaway	Risk factors for development of non specific low back pain in adolescents.
Joy Haughton	What does the evidence suggest are the best practice treatments for work related upper limb RSI in adult office workers?

Matthew Hempzell	An experimental study to investigate trigger point pressure release technique on patients with myofascial trigger points in the levator scapula muscle: Its effects on active lateral flexion of the cervical spine.
Maria Matthews	An extended literature review conducted to answer the question: Can manual therapy help improve gait in Parkinson's Disease patients?
Cartiona McGarvie	Does continuity of care in a UK Osteopathic Teaching Clinic affect patient perceptions of the therapeutic relationship? A questionnaire based study.
Thomas Morgan	An investigation into the role of psoas major in lumbar spine stability. An extended literature review.
Mark Powell	A phase 1 trial to measure the effects on peak expiratory flow following inhibition to the diaphragm muscle. A College of Osteopaths cohort study.
Jeremy Procter	Can the use of practitioner supervision, appropriate instruction and specific programming of remedial exercises impact on the patient's adherence to prescribed remedial exercise for musculo-skeletal injuries. An extended literature review.
Catherine Qin	Temporo-mandibular dysfunction (TMD and associated patterns of musculo-skeletal dysfunction (MSD). A literature review.)
Richard Savidge	A randomised controlled trial to compare the effects of post isometric relaxation and reciprocal inhibition muscle energy techniques on internal hip rotation, when applied to the lateral rotators of the hip: a College of Osteopaths cohort study.
Victoria Shaw	How should an osteopath best employ exercise in the treatment of chronic low back pain? An extended literature review.
Jean- Luc Woods	What are the sensitivity and specificity of the clinic tests for thoracic outlet syndrome? An extended review of the literature relating to the Adson's test, the costoclavicular manoeuvre, the Roo's test, and Wright's test.

Project Titles (Keele Students)

Student	Project Title
Emmanuel Gadoud	Effects of osteopathic harmonic technique associated with passive stretching on forward flexibility as measured by the 'sit and reach' test.
Jose Maria Fernandez Gomez	Cognitive Behavioural Treatments for Chronic Low Back Pain
Samuel Morris	An RCT to investigate the effect of HVLA treatment of the thoracic spine on overhead reach
Neil Ryan	The effect of osteopathic soft tissue treatment to the back on performance (speed) in competitive 50m butterfly swimmers: a counterbalance crossover design experiment

Master of Osteopathy/Bachelor of Osteopathy Programme

The development of this programme has been a significant focus for the research team during this academic year.

The new programme is divided into 4 areas of study

- clinical osteopathy
- osteopathic theory and practice
- health, function and dysfunction
- reflection, evidence and professional skills (this includes the research modules)

Critical awareness and the importance of evidence based practice is threaded through the programme

There are 4 research modules

Module 1(15 credits)

This is a level 4 module which is delivered across the first year. The aim of this module is to lay the foundations for a range of skills upon which students can build during their training and professional lives. the theme of research is used as a vehicle for the delivery of the module.

Module 2 (15 credits)

This is a level 5 module which is delivered across the 3rd year. The aim of this module is to provide students with the tools they need to reflect on the validity and reliability of published research material. The module covers

key concepts in relation to the evidence base, research philosophies, research strategies, research methodologies, ethical considerations, data analysis and critical appraisal.

Students will join the Bachelor of Osteopathy or Master of Osteopathy pathway at the end of year 3.

Module 3 (15 units Bachelor of Osteopathy only)

This is a level 6 module delivered across three semesters in the 4th and 5th years. The aim of this module is to provide students with the tools they need to synthesise the evidence from published research in order to produce a literature review. The module covers key concepts in relation to rationale for literature reviews, hierarchy of evidence, designing and implementing literature searches, further critical appraisal, synthesis of findings and discussion of findings, writing up literature reviews in an academic style and production of information leaflets for patients and/or practitioners.

Module 4 (60 units Master of Osteopathy only)

This is a level 7 module delivered across five semesters in years 4, 5 and 6. This module is focussed on the production of a research paper and poster which may be suitable for publication or presentation at an undergraduate Research Conference. The module allows students to undertake a research project in an area of personal interest. It involves a critical review of available literature and the development of a pertinent research proposal utilising appropriate methodology. The central aim of the module is to provide students with mastery in a chosen area of study which is of direct relevance to their clinical and professional practice.

The module builds on the knowledge and understanding introduced at level 4 on research philosophies, research strategies, research methodologies and critical appraisal. It covers key concepts in relation to rationale for literature reviews, hierarchy of evidence, developing research questions, designing and implementing literature searches (using electronic databases and paper based research, libraries), further critical appraisal (using validated tools), synthesis of findings, discussion of findings and writing up literature reviews in academic style. Students will use the findings from their literature review to develop a research proposal which will include justification of the aims, study hypotheses (if appropriate), detailed descriptions of study methods, data analysis and risk analysis. Following approval, students will carry out their research project. This will involve collection, collation and analysis of primary data supported by the use of

appropriate computer software. Evaluation and synthesis of results in the context of the research literature and osteopathic practice. Students will be expected to demonstrate an understanding of the uncertainty, ambiguity and limits of their projects.

Research Collaboration with other Institutions

NCOR Adverse Event Project 2: A narrative synthesis of the literature on communicating risks of treatment to patients in osteopathic practice

starting 01/02/09 and ongoing

£6930 from the National Council for Osteopathic Research

Co-applicants: **Dr Janine Leach**, Dr Anne Mandy and Dr Vinette Cross,
University of Brighton

Matthew Hankins, Brighton and Sussex Medical School

Rachel Ives, College of Osteopaths,

Kevin Lucas and Mark Cage, University of Brighton

The primary aim of this study is to summarise the knowledge in published research and other types of literature such as clinical guidelines in order to inform three areas of osteopathic practice: effective ways of communicating risk of adverse effects to patients, good practice when seeking informed consent from patients, and practitioners' understanding of clinical risk.

NCOR Adverse Events Project 3: Trends in insurance claims and complaints to the regulator

starting 01/05/08 and ongoing

£18305 from the National Council for Osteopathic Research

Co-applicants: **Dr Janine Leach** and Dr Anne Mandy, University of Brighton

Prof Elizabeth West, University of Greenwich

Brenda Mullinger, European School of Osteopathy

Rachel Ives, College of Osteopaths

The aim of this study is to create a profile of the complaints that have been made by patients against osteopaths over the past decade. The profile will show how many complaints have occurred and of what type, and investigate whether there are any trends or patterns in the data. We also aim to gather detailed data for certain types of complaint to try to understand why they occurred.

The report of this project is currently being reviewed by GOsC

Annual Research Conference

The fourth annual research conference was held on November 29th 2009.

The purpose of the conference was to

- to disseminate findings of research carried out at the college
- to give new graduates an opportunity to develop their career by presenting at a research conference
- to give undergraduates an opportunity to learn from the achievements of recent graduates
- to raise the profile of research and evidence based practice within the college
- to provide colleagues with an opportunity to discuss developments in osteopathic research

The focus of this year's conference was both osteopathic research and education.

The conference was attended by fourth and fifth year students, as well as staff and alumni.

Conference Synopsis

Professor Ann Moore: Moving Forward through Research and Practice

Professor Ann Moore (Director of Clinical Research Centre for Health Professions, University of Brighton and chairperson of NCOR) talked about the role evidence has to play in practice and whose responsibility it is to gather, interpret and utilise the evidence. In addition, she described different models of evidence based practice and discusses the pros and cons of existing models. Positive aspects of becoming involved in research activities were considered and weighed up in relation to the barriers to active participation.

Charlotte Hunt: Prevalence of work related musculoskeletal injuries (WRMIs) experienced by osteopaths with five or more years in practice.

Increased work related injury prevalence has been previously reported by physical therapists within the first five years of practice. In this presentation, Charlotte Hunt, a recent graduate, discussed her questionnaire based study aimed to identify the current prevalence of work related musculo-skeletal injuries (WRMIs), perceptions of job risk factors and preventive measures undertaken by a population of practicing osteopaths with five or more years of experience.

Catriona McGarvie: Can continuity of care in a UK Osteopathic Teaching Clinic have an effect on patient perceptions of the therapeutic relationship.

Existing research suggests that continuity of primary care is important to both patients and practitioners, however there has been little exploration specifically relating to continuity within osteopathy. Patient frustration due to lack of continuity has emerged as a theme from previous studies within osteopathic teaching clinics. However, the implications of this have not been explored or quantified. In this presentation, Catriona McGarvie, a final year student, presented the interim findings of her undergraduate research project.

James Walsh: Does Foot Posture Index predict injury in recreational runners?

In this presentation, James Walsh, a recent graduate, discussed his undergraduate research project which aimed to see if there is a relationship between Foot Posture Index and injury in recreational runners. He reflects on project design and in particular, he considers issues related to finding a validated methodology, deciding on sample size and choosing appropriate tools for statistical analysis.

Tracy Stokley: A Sharp Learning Curve – might neophyte osteopaths need and/or desire a guardian in their first year of practice?

Tracey Stokley, Clinic Director at the College of Osteopaths, described and discussed the experiences of neophyte osteopaths in order to raise our awareness of the current situation of 'real life practice'. Her findings demonstrate key considerations which might be taken into account before implementing any potential support mechanisms for newly qualified osteopaths.

Brian Isbell: Patient Outcome Measures in an Osteopathic Clinic

Patient outcome measures are being used increasingly in biomedicine and complementary medicine to gain insight into the effectiveness of treatments. The Measure Yourself Medical Outcome Profile (MYMOP) designed by Dr C. Paterson has been used for measuring clinical outcomes of osteopathic treatments in the University of Westminster's Polyclinic. This patient generated, health status questionnaire is symptom and activity specific and also includes monitoring of wellbeing. The results of a pilot study using MYMOP were discussed by Dr Brian Isbell, currently a member of the Board of Governors of the College of Osteopaths. Issues regarding the appropriateness to osteopathy were evaluated.

Research Team, Esteem Factors and Areas of Interest

Linda Goodman –BSc (Hons) DO ND RGN MA

Linda Goodman is Past President of the General Council and Register of Naturopaths (GCRN) (2008-09), sits on the Accreditation Board; is a Mentor for the Naturopathic Degree course at Westminster University and represents the GCRN on the General Naturopathic Council, dealing with regulatory issues. She has an MA in Medicine, Science and Society - Historical and Philosophical Themes from Birkbeck College, University of London and a Certificate in International Human Rights Law and Practice from the LSE. She is a senior lecturer at the College of Osteopaths, covering Sociology of Health.

Her particular areas of interest include:

- sociology of health, illness and disease
- history and philosophy of science and medicine
- women's health problems
- cranial osteopathy
- naturopathy
- qualitative methods

Rachel Ives BSc (Hons) DO MSc

Rachel Ives has fifteen years experience in Osteopathic Education and gained an MSc in education Management from Greenwich University. She works as a reviewer for the Quality Assurance Agency and Assessor for the General Osteopathic Council. She has contributed to steering groups for research projects in to adverse events in Osteopathy, and has presented at Osteopathic Education conferences. She is a senior manager at the College of Osteopaths

Her particular areas of interest include

- sociological perspectives on health, gender and race
- cross-cultural perspectives on health
- educational research
- qualitative methods

Janine Leach BSc (Hons) DO ND PhD HonMFPH

Janine Leach is senior Research Fellow at the University of Brighton. She is a member of the National Cancer Research Institute (NCRI) Complementary Therapies Clinical Studies Development Group, the General Naturopathic

Council, the General Osteopathic Council and the Research Council for Complementary Medicine. She was associate editor for the International Journal of Osteopathic Medicine (2005 - 2008), President of the British Naturopathic Association: Executive Council (2004-2008), member of the Integrated and Complementary Research Development Group (ICCORD) of the Price's Foundation for Integrated Health, UK (2002-2007). She serves on a number of academic panels for Osteopathic Education Institutions (OEIs) and is referee for *Manual Therapy* and *International Journal for Osteopathic Medicine*.

Her particular areas of interest include

- risk and informed consent
- osteopathic treatment of headache and migraine
- cancer patients

Jeremy Longland BSc (Hons) Engineering BSc (Hons) Osteopathy MBA

Jerry Longland brings a different background to the research team. A degree in engineering, a masters in business (MBA) topped off with another degree in Osteopathy, are his formal qualifications. Many years experience in the automotive industry, with a specialist graduation from the Six Sigma Academy as a Black Belt in the use of statistics in problem solving makes him a useful mind to apply to research questions. He lectures on statistics on the undergraduate programme.

His particular areas of interest include

- cranial, equine and babies
- the importance of measurement
- quantitative methods

Amanda Phillips BSc (Hons) Geography BSc (Hons) Osteopathy MA Education

Amanda Phillips gained her MA in Education in 1990 and has particular interest in educational research. She joined the College of Osteopaths as a research tutor in 2005 and also leads their Tissue Dynamics, Osteopathic Skills and Supportive Skills modules. She has recently developed the Access to Osteopathy programme which is taught in conjunction with Barnet College.

Her particular areas of interest include

- MET
- population and patient studies
- osteopathic education
- quantitative and qualitative research methods

Julie Thompson BSc (Hons) Plant Biology BOST PhD PGCE

Julie Thompson leads the research team and delivers the undergraduate research skills programme. She started her academic career as a botanist and freshwater biologist and gained her PhD in 1982. Following a successful career in educational management she achieved her BOST in 2005 and has since undertaken post graduate training in cranial osteopathy. She is a member of the Sutherland Cranial College Research Sub Committee and is a lecturer for Boston University (British Programme). She is an external assessor for The BSO Individual Inquiry Day for final year students and represents the College of Osteopaths on the National Council for Osteopathic Research.

Her particular areas of interest include

- craniosacral treatment including BLT
- the elderly
- neurology
- research methods

Journal Publications

Research Team

Newman Turner R, **Leach J**, Robinson D. First impressions in complementary practice: the importance of environment, dress and address to the therapeutic relationship. *Complementary Ther Clin Practice* 2007;13:102-109

Leach CMJ, Strutt R, Shaw Q. Patients' perceptions and satisfaction with treatment in a UK osteopathic training clinic. (abstract) *Forsch Komplementarmed* 2007;14 (suppl 1):14. Impact factor 1.4

Leach J. Editorial comment on 'developing clinical guidelines for the physiotherapy management of whiplash associated disorder (WAD)' by C. mercer, A. Jackson and A. Moore. *Int J Ost Med* 2007; 55.

Strutt R, Shaw, Q, **Leach J.** Patients' perceptions and satisfaction with treatment in a UK osteopathic training clinic. *Manual Therapy* 2008 :13(5); 456-467

Leach J. Osteopathic support for a survivor of gastric cancer: a case report. *International Journal of Osteopathic Medicine* (2008) 11(3): 106-111. doi:10.1016/j.ijosm.2008.03.005

Leach J. Towards an osteopathic understanding of evidence (Editorial). *Int J Ost Med.* 2008: 11;3-6

Mathews M, Thomas E, **Leach J.** Two observational studies of the “Sunflower method” of treatment of children with dyslexia. Submitted to *Comp Ther Medicine*

Leach J, Strutt R, Shaw Q: Patient satisfaction with osteopathic treatment. *Focus Altern Complement Ther* 2004; **9**: 23-4

Undergraduates

Brown, G. Do pre-adolescent performance tennis players show signs of shoulder imbalances compared to post adolescent tennis players? A pilot study. *Med Sci Tennis* 2008, **13**(2): 22-25

Humpage C (in press). Opinions on research and evidence based medicine within the UK osteopathic profession: A thematic analysis of public documents 2003 - 2009. *International Journal of Osteopathic Medicine* (2010), doi:10.1016/j.ijosm.2010.11.005

Peer Reviewed Conference Presentations and Posters

Research Team

Leach CMJ, Strutt R, Shaw Q. Patients' perceptions and satisfaction with treatment in a UK osteopathic training clinic (oral). *International Congress on Complementary Medicine Research*, 2007, Munich.

Leach J. Migraine patients' views of osteopathic treatment. (oral) *Alternative and Complementary Health Research Network conference*, 2007, Nottingham.

Leach J, Fawkes C. What evidence counts in the hands of osteopaths? (invited presentation). *King's Fund and Prince's Foundation for Integrated*

Health conference “Assessing Complementary Practice: Building consensus on appropriate research methods”, October 2007, King’s Fund, London.

Leach J. Publish or Perish (Debate). Advancing Osteopathy 2008 conference, London, Feb 2008.

Leach J. Can trials tell us what we need to know? (debate). Advancing Osteopathy 2008 conference, London, Feb 2008.

Heney C, **Leach J.** Does osteopathy benefit children with ADHD? (Poster). Advancing Osteopathy 2008 conference, London, Feb 2008.

Leach J, Strutt R, Shaw Q. Patient satisfaction with osteopathic treatment (poster). Advancing Osteopathy 2008 conference, London, Feb 2008.

Fawkes CA, Johnston A, **Leach CMJ.** A pilot study to investigate patient satisfaction with osteopathy in private practice – a qualitative analysis. Advancing Osteopathy 2008 conference, London, Feb 2008.

Leach J, Fiske A, Mandy A, West E, Mullinger B, Ives R. Trends in complaints against UK osteopaths: protocol and preliminary results (Oral) 10th International Congress of the German Osteopathic Association (VOD), October 2008, Schlangenbad, Germany.

Leach J, Fiske A, Fawkes, C. Tackling the Darzi agenda in osteopathy: what is the optimum study design to investigate patient expectations of treatment. CAM STRAND Developing Research Strategies Conference, London , April 2009.

Non Peer Reviewed Conference Presentations and Posters

Research Team

Leach J. “Use of CAM by cancer patients” on behalf of NCRI CAM CSDG within MSc in Clinical Oncology, University of Birmingham. March 2008.

Leach J. Research Governance and Ethics in student projects. Staff Development seminar, College of Osteopaths, April 2008.

Leach J. What is the evidence on cranial osteopathy? International Cranial Association Workshop, July 2008.

Leach J. Designing a study to explore patient expectations of osteopathic treatment: balancing validity, rigour and patient diversity. CRC Seminar, University of Brighton, May 2009.

Occasional Papers In Non-Peer Reviewed Journals And Other Media

Research Team

Leach J. Plagiocephaly in infants and the use of helmets: Report from Study day and Workshop. ICRA News , March 2009

Tucker B. Leach J. Investigating patient expectations of osteopathic Treatment. The Osteopath , April/May2009

Tucker B, Fawkes C, Leach J. Osteopathic care - what do patients expect? The Osteopath, June/July 2009

Leach J. Research in Naturopathy. Section on the British Naturopathic Association web site. www.naturopaths.org.uk, 2009.

Leach J. Naturopathy can improve quality of life after gastric cancer. Br Naturopathic J. 26;11-14: 2009

Professional Presentations For Lay Audiences

Leach J. Can hands-on therapies help myeloma patients? Talk for Myeloma UK, London Group, July 2009.