

## Dr Maria Konstantaki – Research Activity (past 5 years)

### *Research Career Objective*

Focus research on the ‘Ageing Well’ theme through projects targeting older people/patients and utilizing physical activity as a remedy for non-communicable disease, dementia, physical frailty to improve health, wellbeing, prevent hospitalization and promote longevity.

### *Research Interests*

- Physical activity and ageing – engagement with the ‘Movers and Shakers’ initiative; fitness testing and health checks of the Caribbean and Chinese groups; plans to extend to other groups within Buckinghamshire through involvement of Bucks students in internship and research project opportunities; edited book with Cambridge Scholars.
- Nutrition and sports performance -effectiveness of nutritional practices and energy drinks on sport performance and the body’s physiological mechanisms; applied projects with Natural Fitness Ltd, Jack3d, beetroot juice and vegan runners diets.
- Swimming physiology: variations in iron status during the menstrual cycle in female swimmers; dry-land ergometry applications in swimming performance (collaborative publication with the Universities of Bologna and Verona, Italy and the University of Greenwich)
- Learning and teaching: attendance and academic performance in sport science; feedback and its usefulness for students and academics.
- Environmental sustainability (including security and social impact) of the London 2012 Olympic Games.

### *Research Projects (Funded)*

March 2020	Research collaborator involved in preparation of an NIHR Research for Patient Benefit (RfPB) funding application in collaboration with Professor Ian Swaine (University of Greenwich) and Professor David Smithard (Queen Elisabeth Hospital) on prevention of re-hospitalisation of elderly patients due to physical deterioration. The project aims to explore the benefits of an exercise intervention to combat physical deterioration and improve ability to perform activities of daily living (ADLs).
January 2020	<i>Technical Research Institute of Turkey (TUBITAK)</i> – <b>16,500 €</b> Supervisor of post-doctoral researcher from Balikesir University, Ankara, Turkey.
August 2017	<i>National Institute for Health Research (NIHR)</i> - <b>£350,000</b> Expert advisor in research project underway at Greenwich University entitled ‘Basic Exercise Training To Enhance Recovery – EPOP1: Development of a perioperative isometric-resistance exercise intervention programme for patients

- undergoing elective abdominal surgery for cancer'. My role was to provide feedback and guidance on devising an exercise programme for patients to use after surgery.
- May 2018 *Paradigm Foundation* - **£3,000**  
Lead organiser of 'Ageing Well' project entitled 'Nutrition for Healthy Ageing' aimed at educating older people in Buckinghamshire on malnutrition, nutrition for diabetes and hydration.
- June 2017 *RedKite* - **£1,675**; *HealthWatchBucks* - **£1,000**  
Lead organiser of 'Ageing Well' project entitled 'Physical Activity and Dementia' aimed at educating older people in Buckinghamshire on types of dementia and research evidence that physical activity helps combat the disease.
- May 2016 *HealthWatch Bucks* - **£1,500**; *Paradigm Foundation* - **£500**  
Lead organiser of 'Ageing Well' project entitled 'Intergenerational Working' aimed at educating older people in Buckinghamshire on research evidence from funded initiatives where the young and old can work together and exchange knowledge (project with Hairy Bikers presented by Professor Christina Victor).
- June 2015 Bucks Community Foundation **£3,350**; *Movers and Shakers* - **£1000**  
Co-organiser of 'Ageing Well' project entitled 'Ageing, Physical Activity, Recreation and Wellbeing' aimed at educating older people in Buckinghamshire on ways to healthy ageing.
- February 2015 Departmental lead for co-ordinating data collection from the sports science department in the 'Evaluation of assessment and feedback' project led by Dr Duna Sabri from King's College London. **£10,000.**

### ***Research Projects (Not Funded)***

- 2015-2019 International research collaborator/co-author in research paper entitled 'Laboratory-based ergometry for swimmers: a systematic review' in conjunction with researchers at the University of Verona and Bologna, Italy and the University of Greenwich, UK. Paper published in the *Journal of Sports Medicine and Physical Fitness*.
- March 2015 Invited Reviewer for Advanced Olympic Research Programme, Olympic Studies Centre, International Olympic Committee (IOC); international project to support the training of Olympic athletes.
- August 2015 Editor of special issue on education in the *Athens Journal of Sport*. Contributed one paper on problem based learning and edited three other papers featuring learning approaches.
- 2014-2016 International collaborator/co-author in research paper entitled 'Combining green tea with aerobic exercise reduces central adiposity and serum lipid in sedentary women' in conjunction with researchers at the University of Tehran, Iran. Published in the *Athens Journal of Sport* (2016).

- 2015-2016 Co-editor of book commissioned by Cambridge Scholars entitled 'Ageing, Physical Activity, Recreation and Wellbeing' featuring a collection of ten chapters showcasing community projects aimed at improving the health and wellbeing of older people. Book published in July 2016. ISBN: 978-1-4438-9104-2
- 2011- 2019 Lead researcher for 'Movers and Shakers'; projects funded by Bucks Community Foundation, HealthWatch Bucks, RedKite and Paradigm Foundation to research the health and fitness status of the Caribbean and Chinese group participants. Projects involved pedometer measurements, nutrition talks, measurement of blood pressure and cholesterol levels, functional fitness testing and anthropometry. Findings of projects were published in two chapters featuring in the edited book 'Ageing, Physical Activity, Recreation and Wellbeing'.

### ***Research Awards***

- June 2017 Vice Chancellor's Research Award for Community Engagement. Buckinghamshire New University.
- July 2015 £250 award for leading departmental research; 'Assessment and Feedback Project'. King's College, London.
- July 1998 £350 'Archimedes Award' Awarded for best contribution of a young investigator at the 8th International Symposium of Biomechanics and Medicine in Swimming, Jyväskylä, Finland.
- April 1993 £25,000 European postgraduate mobility programme; State Scholarship Foundation, Athens, Greece.
- May 1992 £1300 Academic award for outstanding academic achievement. Foundation 'Petros Zisis', Athens, Greece.
- June 1991 £250 Undergraduate Academic Achievement Award; State Scholarship Foundation, Athens, Greece.

### ***PhD/MPhil Supervision***

#### ***First Supervisor (MPhil)***

*Callum Sharpin* – The effect of different training methods on central and peripheral fatigue in academy football players. Completed January 2020.

#### ***Internal examiner (PhD)***

*Niamh Morrín* – The development of a self-regulated isometric handgrip strength training protocol and its effects on blood pressure (resting and ambulatory), markers of autonomic function and adherence in pre-hypertensive and stage I hypertensive adults (>55 years) – completed 2018.

#### ***Joint Second Supervisor (PhD)***

*Muhammet Kesgin* – Tourist motivations, 'push and pull' factors, for holidaying in Alanya, Turkey – completed in 2013.

## ***Published Works***

### **Edited book**

Humberstone, B., Konstantaki, M. (2016). *Ageing, Physical Activity, Recreation and Wellbeing*. Cambridge Scholars. ISBN: 978-1-4438-9104-2

### ***Authored Book***

Konstantaki M. (2010). *Dry land ergometry in physiological assessment of swimmers: methodological advances and training applications*. Lambert Academic Publishing. ISBN: 978-3838376806

### ***Book Chapters***

Konstantaki, M., Higgins, S. (2016). Effects of a six-week physical activity intervention on health measures of older people. In: Humberstone B., Konstantaki M. (eds.) *Ageing, Physical Activity, Recreation and Wellbeing*. Cambridge Scholars, pp. 147-169.

Patel, J., Konstantaki M. (2016). Effects of Tai Chi and resistance training on physiological measures and perceptions of hypertension in stage I hypertensive individuals. In: Humberstone B., Konstantaki M. (eds.) *Ageing, Physical Activity, Recreation and Wellbeing*. Cambridge Scholars, pp. 170-195.

Konstantaki M. (2012). Effect of physical activity on emotions and mood states of 50-65 year old male and female exercise participants. In: Klentrou P. (ed.) *Physical Activity and Exercise: Health Promotion and Disease Prevention, AT.IN.E.R.*, pp. 15-23.

Konstantaki M. (2008). Social and cultural impact of the London 2012 Olympic Games: a lecturers' and students' perspective. In: Aktas A., Wickens E., Kesgin M., Cengiz E., Yenialp E. (eds.) *Proceedings of the International Tourism Conference on Cultural and Event Tourism: Issues and Debates*. Deaty Anatolia Akademik Yayincilik Ltd., pp. 528-545.

Konstantaki M. (2006). The effectiveness of attendance monitoring in improving students' learning experiences. In: Wickens E., Hose T., Humberstone B. (eds.), *Critical Issues in Leisure and Tourism Education: Current trends and developments in pedagogy and research*. Oxford University Press, pp. 162-164.

Konstantaki M., Winter E.M., Swaine I.L. (1999). The effects of arms- or legs-only training on indices of performance and dry-land endurance in swimmers. In: Keskinen K., Komi P., Hollander A. (Eds.), *Biomechanics and Medicine in Swimming VIII*, pp. 393-396. DOI: 10.13140/RG.2.1.2004.8805

### ***Journal Articles (peer reviewed)***

Cortesi M., Gatta G., Swaine I.L., Zamparo P., Konstantaki M. (2019). Laboratory-based ergometry for swimmers: a systematic review. *Journal of Sports Medicine and Physical Fitness*, 59(9): 1503-1512. DOI: 10.23736/S0022-4707.18.09100-4

Konstantaki, M. (2018). Environmental sustainability of Olympic Games; a narrative review of events, initiatives, impact and hidden aspects. *Journal of Tourism and Sustainability*, 1,2, 48-66.

Llewellyn H., Konstantaki M., Johnson M., Francis P. (2017). The effect of a Pilates exercise programme on perceived functional disability and pain associated with non-specific chronic low back pain. *MOJ Yoga and Physical Therapy*, 2,1, 00013.

Konstantaki M., Wickens E., Perris F-Y. (2016). Themes and content of the London 2012 Olympic Games opening ceremony: a comparison between pre-Games perspectives of British residents and actual ceremonial elements. *Tourism and Hospitality Research*, 1,1, 1-14.

Hanachi P., Hoseini S., Nazarali P., Khosravi N., Konstantaki M. (2016). Combining green tea with aerobic exercise reduces central adiposity and serum lipid in sedentary women. *Athens Journal of Sport*, 3,4, 253-265.

Begum G., Konstantaki M., Cunliffe A., Leveritt M. (2015). Effectiveness of commercial versus homemade sports drinks on fluid balance and exercise capacity during high intensity intermittent exercise. *American Journal of Sports Science and Medicine*, 3, 2, 39-46. DOI: 10.12691/ajssm-3-2-3

Konstantaki M. (2015). Applying problem based learning in the sports science curriculum. *Athens Journal of Sport*, 2(1): 7-16.