

PERSONAL INFORMATION

BORJA MARTINEZ GONZALEZ

WORK EXPERIENCE

February 2022 - Present

Adjunct Professor

Department of Sciences for Quality of Life, University of Bologna (Italy)

- Module taught: "Advanced strength training and conditioning for health and performance"

June 2021 - Present

Research Fellow

Department of Biomedical and Neuromotor Sciences, University of Bologna (Italy)

- Research project: "Strategies to improve endurance performance"

September 2019 – March 2020

Research Associate

School of Sport and Exercise Sciences, University of Kent (UK)

- Research project: "Brain endurance training to improve multitasking performance and resistance to fatigue in soldiers: a randomised pilot study"

April 2019 – April 2020
April 2017 – June 2017

Online Teaching Assistant

School of Sport and Exercise Sciences, University of Kent (UK)

- Mentoring, troubleshooting, and fielding student questions for 'The Science of Endurance Training and Performance' Massive Open Online Course

August 2018 – Present

Coach and Sport Science Consultant

Drone Hopper -- Androni Giocattoli UCI Pro Cycling Team

- Training monitoring and performance assessment. Performance-related scientific support.

February 2017 – August 2021

Student Ambassador

School of Sport and Exercise Sciences, University of Kent (UK)

- Run laboratory-based workshop of sport science concepts. Supervised research projects for a university program involving sixth form and college students across Kent and Medway

September 2016 – August 2019

Graduate Teaching Assistant

School of Sport and Exercise Sciences, University of Kent (UK)

- Organise and lead seminars for the following modules: Functional Anatomy and Biomechanics; Sport and Exercise Physiology; and Human Physiology

September 2016 – August 2019

Sport Scientist

Sport Performance Clinic, University of Kent (UK)

- Responsible for carrying out physiological tests to a wide range of athletes. Supervise and perform several training sessions and tests in an environmental chamber at high altitude and extreme conditions of temperature and humidity

January 2016 – January 2017

Sport Scientist
Cadence Performance Ltd. (UK)

- Conducting extensive physical testing and measurements of elite performance. Operating and maintaining an entry-level cycling coaching service, incorporating weekly training programs, nutrition, and lifestyle guidance. Processing and analysis of data: recording of research procedures and results; filing and maintenance of records; coding of data for input to facilitate electronic data processing; inputting and retrieval of data using computers

July 2014 – August 2014

July 2012 – August 2012

August 2011

Camp Instructor
GUHEKO Turismo, ocio y tiempo libre (Spain)

- Organised and lead outdoor activities (MTB, hiking, climbing, paintball)

May 2014 – Present

Endurance Sports Coach
Freelance

- Training prescription, performance assessment, and training load monitoring of endurance athletes (runners, cyclists, triathletes)

October 2013 – September 2014

Sports Instructor
Sprintem S.A. (Spain)

- U-12 Futsal & Basketball Head Coach in Niño Jesus Primary School and Vadillos Primary School (Burgos, Spain)

EDUCATION AND TRAINING

September 2016 – 2022*

Doctor of Philosophy (PhD) in Sport and Exercise Science
University of Kent. (UK)

- Thesis title: "Sleep deprivation and ultra-endurance performance: assessment and countermeasures"

* Thesis submitted in December 2021 and successfully defended in March 2022. Currently waiting for graduation

September 2014 – August 2015

Master of Science (MSc) in Sport Science for Optimal Performance
University of Kent. (UK)

- Dissertation title: "The influence of pacing strategy on cerebral and muscle oxygenation in running"

September 2006 – August 2013

Bachelor's Degree (BSc Hons) in Sport Science and Physical Education
University of Leon. (Spain)
PERSONAL SKILLS

Mother tongue(s)

Spanish

Other language(s)

UNDERSTANDING

SPEAKING

WRITING

Listening

Reading

Spoken interaction

Spoken production

English

C1

C1

C1

C1

C1

June 2014: C1 Certificate in Advanced English, Cambridge University (UK)

Italian

B2

B2

B2

B2

B2

German

A2

A2

A2

A2

A2

February 2009: A2 German Level Certificate, University of Bayreuth (Germany)

Levels: A1/2: Basic user - B1/2: Independent user - C1/2: Proficient user
Common European Framework of Reference for Languages

- Job-related skills
- Due to my experience carrying out physiological tests to athletes and conducting research, I have used a wide variety of cycle ergometers (e.g., Cyclus2, Lode Excalibur Sport, Lode Corival, SRM Ergometer, Velotron, Cosmed E1, Monark 894E, Wattbike Trainer/Pro) and treadmills (e.g., h/p/cosmos Pulsar 3p, Satum, and Quasar med, Woodway ELG and Split-Belt). I have used Microgate Optogait for gait analysis
 - I am familiar with the use of several metabolic carts, including laboratory-based (e.g., Cortex Metalyzer 3B), and portable versions (e.g., Cortex Metamax 3B, Cosmed Fitmate PRO)
 - I have conducted Lactate Threshold Tests using Biosen C-Line Glucose & Lactate Analyser. I have also used portable analysers in the field (e.g., Lactate Scout+, Lactate Pro)
 - I collected heart rate response using various equipment (e.g., Polar T31 and H7 bands, Polar FT1 and V800 monitors, Garmin HRM-dual ANT+ band)
 - IBM SPSS is my preferred software package for statistical analysis. But I have also performed Bayesian analysis using JASP. I am familiar with software for behavioural research (E-Prime), scientific graphing and data analysis (SigmaPlot), and CPET (Cortex Meta Control 3000)

ADDITIONAL INFORMATION

- Publications
- Toffoli, G., **Martinez-Gonzalez, B.**, & Marcora, S.M. (2022). Commentary on Viewpoint: Using Vo2max as a marker of training status in athletes – can we do better?. *Journal of Applied Physiology*, 133(1) 161
 - Leo, P., Giorgi, A., Spragg, J., **Gonzalez, B. M.**, & Mujika, I. (2022). Impact of prior accumulated work and intensity on power output in elite/international level road cyclists—a pilot study. *German Journal of Exercise and Sport Research*
 - Gattoni, C., **Martinez-Gonzalez, B.**, Wu, L., Ling, L., & Marcora, S. M. (2022). Assessing cognitive-motor interference in military settings: validity and reliability of two dual-tasking tests. *Proceedings of the NATO Symposium: Applying Neuroscience to Performance: From Rehabilitation to Human Cognitive Augmentation*
 - Giorgi, A., **Martinez-Gonzalez, B.**, & Leo, P. (2021). The influence of prior accumulated fatigue on power output in professional cyclists. *Journal of Science and Cycling*, 10(2)
 - Carswell, A.T., Howland, K., **Martinez-Gonzalez, B.**, Baron, P. and Davison, G. (2020). The effect of caffeine on cognitive performance is influenced by CYP1A2 but not ADORA2A genotype, yet neither genotype affects exercise performance in healthy adults. *European Journal of Applied Physiology*, 120(7), 1495-1508
 - Scott, S.N., Fontana, F.Y., **Martinez-Gonzalez, B.**, Hayes, C.A., Lagrou, P.H., Marcora, S., Zueger, T. and Stettler, C. (2020). 44-LB: Training Load and Time-in-Range Affect Sleep Time of Professional Cyclists with Type 1 Diabetes. *Diabetes Jun 2020*, 69 (Supplement 1)
 - Giorgi, A., Vicini, M., **Martinez-Gonzalez, B.** and Gatterer, H. (2020). Can regional bioimpedance vector analysis highlights functional asymmetry in the legs of professional cyclists *Journal of Science and Cycling*, 9(2), 49-52
 - **Martinez-Gonzalez, B.**, Giorgi, A., Hopker, J.G., and Marcora S.M. (2019). The sleep of professional cyclists during a 5-day UCI Europe Tour road cycling race. *Journal of Science and Cycling*, 8(2), 20-22
 - Giorgi, A., **Martinez, B.**, Vicini, M. and Hopker J. (2019). Relationship between daily Bioimpedance patterns and training load of professional cyclists during training and racing *Journal of Science and Cycling*, 8(2), 43-44

Conferences

- **June 2022:** SINTEC Summer School. Smart Bioelectronic and Wearable Systems, Castione della Presolana (Italy)
- **October 2021:** 12th National Congress of the Italian Society of Sport and Exercise Sciences (SISMES), Padova (Italy). "Cognitive-motor interference assessment in military personnel: validity and reliability of two dual-task tests". Oral presentation
- **February 2020:** 5th International Congress on Soldiers' Physical Performance, Quebec (Canada). "The effects of caffeine on running performance after one night of total sleep deprivation". Poster
- **February 2019:** Behavioural and Social Science Research in Extreme and Adventurous Settings Conference, Manchester (UK). "Sleep patterns during a winter mountain ultra-marathon". Oral Presentation
- **December 2018:** Sleep and Circadian Rhythms Conference, The Physiological Society, London (UK). "Sleep during a mountain ultra-marathon: A case study". Poster
- **March 2016:** The British Association of Sport and Exercise Sciences Student Conference, Bangor (UK). "Pacing strategy does not influence cerebral oxygenation during running". Oral Presentation

Scientific Memberships

- The British Association of Sport and Exercise Sciences
- The British Sleep Society
- The Physiological Society