

Dr Stuart McErlain-Naylor

Lecturer in Sport and Exercise Biomechanics

School of Sport, Exercise and Health Sciences (SSEHS), Loughborough University, Loughborough, UK
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Description of current post

An open-ended full-time Research, Teaching and Enterprise (RTE) employment with no end date.

Previous posts

2022 – Lecturer in Sport and Exercise Biomechanics, Loughborough University, UK (RTE)
2022 – Visiting Senior Fellow in Sport Science, University of Suffolk, UK
2021 – 2022 Senior Lecturer in Sport and Exercise Biomechanics, University of Suffolk, UK (RTE)
2018 – 2021 Lecturer in Sport and Exercise Biomechanics, University of Suffolk, UK (RTE)
2018 Research Associate / Translational Scientist in Sports Biomechanics, Loughborough University, UK
2016 – 2017 Technical Tutor (Biomechanics and Motor Control), Loughborough University, UK (Teaching)
2013 – 2018 University Teacher, Loughborough University, UK

Educational qualifications

2017 PhD in Computer Simulation of Sports Biomechanics, Loughborough University, UK
2020 Postgraduate Certificate in Academic Practice (75%), University of Suffolk, UK
2013 BSc Sport and Exercise Sciences (Honours 1st Class; 88%), Loughborough University, UK

Awards

2023 Senior Fellow of the Higher Education Academy (SFHEA)
2020 Fellow of the Higher Education Academy (FHEA)
2020 People's Choice Award (Favourite Presentation), International Society of Biomechanics in Sports (ISBS)
2019 Personal Tutor of the Year (Nomination), University of Suffolk, UK
2015 Best Poster Presentation, Biomechanics Interest Group, BASES
2013 Glendonbrook Doctoral Fellowship, Lord Glendonbrook, Loughborough University, UK
2013 Dean of School Undergraduate Prize (final-year student with the best performance), SSEHS
2013 G V Sibley Memorial Prize (best final-year student on Sport and Exercise Science programme), SSEHS
2013 Loughborough University Development Trust Prize (an outstanding final year student), SSEHS
2012 Loughborough University Development Trust Prize (an outstanding second year student), SSEHS

University management positions

2023 – Programme Leader: BSc (Hons) Sport and Exercise Science, Loughborough University
2023 – Research Theme Seminar Lead: Sport Performance, SSEHS, Loughborough University
2021 – 2022 Co-Lead: Sport Performance and Exercise Sciences Research Theme, University of Suffolk
2019 – 2021 Course Leader: BSc (Hons) Sport and Exercise Science, University of Suffolk

Other university committee positions

2023 – National Rehabilitation Centre, Prevention and Rehabilitation Research Theme Member
2019 – 2022 Senate, University of Suffolk
2021 – 2022 School Executive Committee, School of Health and Sports Sciences, University of Suffolk
2020 – 2021 Assessment and Regulation Working Group, University of Suffolk
2019 – 2022 Research Ethics Committee, School of Health and Sports Sciences, University of Suffolk

Membership

2020 – International Society of Biomechanics in Sports (ISBS)
2017 – International Society of Biomechanics (ISB)
2019 – The British Association of Sport and Exercise Sciences (BASES)

Teaching and research supervision

2019 – 1 Post-Doctoral Fellow, 13 PhD (3 completed, 2 submitted), 3 PhD examinations
2018 – Dissertation supervisor at undergraduate and postgraduate level for over 15 students
2024 – MSc, Module Leader PSP333, Emerging Digital Health Technologies, 27 students
2022 – Year 3 BSc, Module Leader PSC725, Advanced Motor Control of Sports Movements, 103 students
2018 – 2022 Module Leader for 9 undergraduate modules (maximum 4 per year), University of Suffolk

Professional appointments

2021 – Vice President (Publications), International Society of Biomechanics in Sports (ISBS)
2021 – Board of Directors, International Society of Biomechanics in Sports (ISBS)
2020 – Publications Committee, International Society of Biomechanics in Sports (ISBS)
2023 – Chair of Organising Committee, 2026 ISBS Annual Conference, Loughborough, UK
2020 Organiser and Host, ISBS Sports Biomechanics Lecture Series
2021 – 2024 Organising Committee, ISBS Mid-Year Symposia (2021, 2022, 2023, 2024)
2021 – ISBS Teaching Initiative Working Group
2014 – 2017 Student Board Member, ISB Technical Group on Computer Simulation
2016 – 2017 Organising Committee, XVI International Symposium on Computer Simulation in Biomechanics
2022 – 2023 Scientific Committee, XXIX Congress of International Society of Biomechanics
2021 – External Examiner, BSc (Hons) Sport and Exercise Science, University of Hull
2021 – Editorial Advisor, Sport Performance Section, Routledge Encyclopedia of Sport Studies
2022 – Research Topic Editor, Frontiers in Sports and Active Living

2020 – 2022 Special Issue Editor, Sports
2019 – Editorial Board, Sports Biomechanics
2019 – 2023 Social Media Editor, Sports Biomechanics
2021 – 2023 Review Editor, Frontiers in Sports and Active Living
2020 – 2023 Reviewer Board Member, Applied Sciences
2022 – Advisory Committee on Social Media for Expert Communities, Taylor & Francis
2022 – Co-Organiser and Host, Experts in Sport Podcast, Loughborough University
2022 England Netball Rules Review Panel
2017 – 5 sessions chaired at international conferences
2015 – > 120 reviews for 27 journals ([Web of Science](#)) + 2 grants

Invited keynote presentations and workshops

2022 2nd Mid-Year Symposium, International Society of Biomechanics in Sports
2022 40th International Society of Biomechanics in Sport Conference, Liverpool, UK (Workshop)
2022 The British Association of Sport and Exercise Sciences, Biomechanics Interest Group Virtual Conference
2022 Global Sports Medicine & Science Conclave (Panel Discussion)
2022 Taylor & Francis Engagement and Impact
2022 Department of Education, University of Oxford, UK
2021 XIX Brazilian Congress of Biomechanics
2021 XXVIII Congress of the International Society of Biomechanics (Panel Discussion)
2021 JASP Users Meeting
2021 SHAPE Research Group, Nottingham Trent University, UK
2020 ISBS Sports Biomechanics Lecture Series
2019 XXVIII Isokinetic Medical Group Conference, London, UK (Workshop)
2019 Allied Health Professionals Suffolk's 1st Symposium, Suffolk, UK

Research grants and in-kind contributions (totalling over £275,000, PI unless stated)

2023 –	£56,425	National Football League
2013 – 2016	£56,000	The Glendonbrook Foundation, PhD Studentship (Student Applicant)
2020	£38,500	STATSports Group Ltd (In-Kind, PI: M. Beato)
2023 – 2026	£36,000	English Institute of Sport and UK Athletics (PI: V. Tolfrey)
2022	£30,933	Vicon Ltd (In-Kind)
2021	£26,400	Vicon Ltd (In-Kind)
2022	£16,985	STATSports Group Ltd (In-Kind)
2021	£10,742	Badminton World Federation
2021 – 2023	£4,000	Newman University (PI: T. Myers)
2021	£3,000	University of Suffolk Annual Fund (PI: M. Beato)
2022	£2,500	International Sports Engineering Association
2020 – 2022	£2,500	Access and Participation Plan, University of Suffolk

Enterprise income

2022	£15,000	Ochy, Innovation Voucher Scheme
2020	£10,000	SportScientia Ltd
2019 – 2023	£3,465	Taylor & Francis Group

Journal articles

38 peer-reviewed journal publications, 9 as first author, 9 as last (senior) author
632 citations, H-index 15 ([Google Scholar](#))

Highlighted publications

- McErlain-Naylor, S.A., King, M.A., & Allen, S.J. (2021). Surface acceleration transmission during drop landings in humans. *Journal of Biomechanics*, 118, 110269. doi: 10.1016/j.jbiomech.2021.110269
 - McErlain-Naylor, S.A., King, M.A., & Felton, P.J. (2021). A review of forward-dynamics simulation models for predicting optimal technique in maximal effort sporting movements. *Applied Sciences*, 11(4), 1450. doi: 10.3390/app11041450
 - McErlain-Naylor, S.A., & Beato, M. (2021). Factors influencing the jump momentum – sprint momentum correlation: a data simulation. *European Journal of Sport Science*, in press. doi: 10.1080/17461391.2021.2002420
 - McErlain-Naylor, S.A., Peploe, C., Grimley, J., Deshpande, Y., Felton, P.J., & King, M.A. (2021). Comparing power hitting kinematics between skilled male and female cricket batters. *Journal of Sports Sciences*, 39(21), 2393-2400. doi: 10.1080/02640414.2021.1934289
 - McErlain-Naylor, S.A., Towler, H., Afzal, I.A., Felton, P.J., Hiley, M.J., & King, M.A. (2020). Effect of racket-shuttlecock impact location on shot outcome for badminton smashes by elite players. *Journal of Sports Sciences*, 38(21), 2471-2478. doi: 10.1080/02640414.2020.1792132
 - McErlain-Naylor, S., King, M., & Pain, M.T.G. (2014). Determinants of countermovement jump performance: a kinetic and kinematic analysis. *J Sports Sci*, 32(19), 1805-1812. doi: 10.1080/02640414.2014.924055
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Conference proceedings

2014 – 30 abstracts in peer-reviewed conference proceedings

Book chapters

2016 2 published book chapters
