

Professor Karen Saunders

CV

PRINCIPAL PROFESSIONAL SPECIALISMS

Consultant Neurological Physiotherapist

Acquired & traumatic brain injury and stroke, CSP & HCPC Registered, Professor (Honorary) BSc (Hons) Physiotherapy, MCSP

QUALIFICATIONS & ACCREDITATION

- Qualitative Research Methods MSc Module, University of Oxford, 2017
- Introduction to Evaluation within the Professional Context, University of Kent, 2018
- BSc (Hons) Physiotherapy Degree, University of Salford, 1998
- Diploma in Social Sciences, University of Dundee, 1989
- BSc (Hons) Biology Degree, University of York, 1987

EXPERT WITNESS EXPERIENCE & TRAINING

Completion of medico-legal expert client assessment and report experience.

- The role of the Physiotherapist as an Expert Witness, Medico-Legal Association of Chartered Physiotherapists, 2012 and 2016
- Ongoing professional development

PAST & PRESENT POSITIONS

- **PhD Doctoral research student**, CHSS, University of Kent, part-time, 2020 – 2026
- **Director and Clinical Specialist Physiotherapist in Neurology**, Da Vinci in Motion Educational, Research and Clinical Neuro-physiotherapy Services, 2011 – present
- **Consultant Research Fellow** (Neuro-rehabilitation), 2015 - present
- **Review Editor**, Rehabilitation in Neurological Conditions Journal (Frontiers Open Science platform) 2022 - present
- **Consultant Research Fellow**, core member of the Cross Speciality Research Team, led by Professor and Dr Mohamed Sakel, MRCP (UK), Consultant in Rehabilitation Medicine, 2015 – present
- **Professional Lead (Rehabilitation)** Cotswolds, Gloucestershire Care Services National Health Service (NHS) Trust- permanent part-time contract (Band 7) 2013 – 2017
- **Specialist Physiotherapist in Neurology** (Band 7) at the Oxford Centre for Enablement (OCE), Nuffield Orthopaedic Centre, Oxford University Hospitals NHS Trust, Oxford. 10 months temporary maternity cover contract, 2011 - 2012
- **Clinical Specialist Physiotherapist** in Neurology at Manchester Neurotherapy Centre, 2005 – 2011
- **Senior Physiotherapist in Rehabilitation** at BMI The Alexandra Hospital, Manchester, 2003-2009
- **Senior Neuro-physiotherapist**, Salford Royal Hospitals NHS Trust, Hope Hospital, Salford, 2001-2005
- **Junior Physiotherapist**, Central Manchester & Manchester Children's University Hospital NHS Trust, Manchester, 1998-2001

MEMBERSHIPS OF PROFESSIONAL ORGANISATIONS

- Chartered Society of Physiotherapy (UK) Membership no: 60119
- Health and Care Professions Council (UK) Membership no: PH54173

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AWARDS

- Certificate Award for Research poster presentation at Levelling the Field conference - Championing Ethnic Diversity in the NHS (03/12/2021)
- Rising Star – Nomination with Certificate awarded in Research and Innovation Awards from East Kent Hospital University Foundation Trust (EKHUFT) December 2020
- Highly Commended Team Award for Exceptional Contribution with Certificate awarded to the Neuro-rehabilitation Clinical Research Team in Research and Innovation Awards (EKHUFT) December 2020
- Runner Up National Award for Clinical Leadership (Chief Health Professions Officer's Award) in conjunction with NHS England for my innovation: Interactive Problem Solving Workshop – Gloucestershire. April 2014.

CLINICAL RESEARCH STUDIES

- 2022-2023: Home-based EEG neurofeedback to reduce chronic neuropathic pain, a cohort clinical trial. NCT Registration: NCT05464199
- 2018-2020: Evaluation of a balance intervention focused on abdominal muscle strengthening using a powered exoskeleton for individuals living with Multiple Sclerosis (Rapper IV) NCT Registration: 06429085
- 2017-2018: Rex Robot Assisted rehabilitation exercise to enhance balance, mobility and upper limb function in people with Multiple Sclerosis (MS). 'RAPPER III-MS'. NIHR Portfolio study.
- 2015-2016: Safety and feasibility evaluation of Robot assisted physiotherapy exercises with Rex device 'RAPPER 2'. Multi-centre international study.

TBI PHD RESEARCH

Professor Saunders is a part-time PhD researcher at the Centre for Health Service Studies, University of Kent. Her NIHR-funded research explores the long-term impact of moderate to severe traumatic brain injury and the co-design of meaningful resources for survivors, clinicians, and charity stakeholders.

SELECT JOURNAL PUBLICATIONS

Professor Saunders has published extensively in the field of neurorehabilitation. Her ongoing research interests include traumatic brain injury, brain health, social determinants of health, stroke, co-design and co-production, EEG neurofeedback for chronic neuropathic pain, exoskeleton-assisted balance rehabilitation, spasticity, TBI epidemiology, robotics, health inequalities in minority ethnic communities, and clinical leadership.

- Evaluation of a balance intervention focused on abdominal muscle strengthening using a powered exoskeleton for individuals living with Multiple Sclerosis (Rapper IV). (2025) Minor revision of manuscript under final peer review. BMC Journal of NeuroEngineering and Rehabilitation. Sakel M, Saunders K, Bassett PA, Bai L, Wilkinson D.
- Research co-production to identify the epidemiology of moderate to severe Traumatic Brain Injury, individual risk factors and contextual-level social determinants of health and financial impacts in Kent and Medway, United Kingdom. Submitted to the Journal of Health and Social Care in the Community for potential publication. (2025) In peer review. Sakel M, Saunders K et al.
- Living With Spasticity During the COVID-19 Pandemic: A Qualitative Study of Patient, Carer and Physician Experiences (September 2024). Sakel, M, Saunders, K., Faruqui, R, Keene, J and Wilkinson, D. Journal of Health Expectations. <https://doi.org/10.1111/hex.70032>
- Feasibility and safety of a home-based EEG neurofeedback intervention to reduce chronic neuropathic pain, a cohort clinical trial. (September 2024). Sakel M, Saunders K, Ozolins C, Biswas R. Archives of Rehabilitation Research and Clinical Translation, Volume 6, Issue 3, 100361. [https://www.archives-rrct.org/article/S2590-1095\(24\)00059-4/fulltext](https://www.archives-rrct.org/article/S2590-1095(24)00059-4/fulltext)

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CONFERENCE PRESENTATIONS AND EDUCATIONAL LECTURES

- Keynote oral presentation of 'Journeys of recovery after surviving a moderate to severe Traumatic Brain Injury' at Australian Society for the Study of Brain Impairment (ASSBI) and New Zealand Special Interest Group in Neuropsychology (NZSIGN) conference in Christchurch, New Zealand in May 2026
- Co-presenter of 'Medico-legal perspectives on the use of Magnetic Resonance Diffusion Tensor Imaging in traumatic brain injury: An interdisciplinary review' at ASSBI/NZSIGN conference, May 2026
- Co-presenter of 'How to use Magnetic Resonance Diffusion Tensor Imaging for traumatic brain injury in medico-legal and clinical practice? Case examples from medico-legal practitioners in England.' at ASSBI/NZSIGN conference May 2026
- Co-presenter of 'Acute Traumatic Brain Injury Diagnosis and Rehabilitation: Global perspectives.' at ASSBI/NZSIGN conference, May 2026
- 12th Annual Kent Regional Brain Injury conference on 07/11/2025. Presentation of PhD research to 70 attendees in person at the University of Kent and 150 online attendees from UK and international communities.
- Co-presenter of 'A study of the epidemiology of Traumatic Brain Injury in relation to place: Kent County, UK to identify individual and geographical risk factors, social determinants of health and financial impacts.' at 7th Pacific Rim Conference on Brain Health and Intersectionality in Brisbane, Australia (02/07/25-05/07/25)
- Co-presenter of research poster on 'Brain Health across the Life-time: A scoping Review' at 7th Pacific Rim Conference on Brain Health and Intersectionality in Brisbane, Australia (02/07/25-05/07/25)

- Neuro-physiotherapy for movement recovery after basal ganglia stroke at International Society of Physical and Rehabilitation Medicine (ISPRM) conference in Paris (2018).
- www.linkedin.com/pulse/neuro-physiotherapy-focused-sensory-stimulation-system-karen-saunders/
- The identification of effective neuro-physiotherapy treatment of spasticity post-stroke focused on patient centred goals, carer support and use of botulinum toxin at ISPRM, Argentina (2017).
www.linkedin.com/pulse/11th-international-society-physical-rehabilitation-world-saunders/

PROFESSIONAL ROLE APPOINTMENTS AND COMMITTEE POSITIONS

- Kent Brain Injury Forum Charity Committee (2019 to present date)
- Review Editor for the Rehabilitation in Neurological Conditions section of the Frontiers Open Science platform and publishing journal (January 2022 to present date).
- Research and Innovation Committee of East Kent Hospitals University NHS Foundation Trust (2017 to present date)
- International Advisor to Kent Brain Injury Foundation charity organisation (October 2021)
- Honorary Professor in Physiotherapy and Rehabilitation at Jashore University of Science and Technology in Bangladesh (April 2021 to present date).