Dr Kevin Ho

Physiotherapist, Associate Lecturer, PhD kevin.ho@sydney.edu.au | @kev_physio



Summary

- Associate Lecturer with tutoring, lecturing, and unit coordination experience (5 years)
- AHPRA accredited physiotherapist with hospital and private practice experience (8 years)
- World pioneer researcher in musculoskeletal health in non-competitive and competitive videogaming
- PhD on sleep and musculoskeletal pain: Why do they interrelate? How can it be managed?

Education

PhD (Physiotherapy), University of Sydney, Faculty of Medicine and Health	2016-2020
B. App. Sci. (Physiotherapy) Honours Class I, University of Sydney	2010–2013
James Ruse Agricultural High School (ATAR: 99.50)	2004–2009

Teaching Employment

Associate Lecturer (Education Focused), University of Sydney, 1.0 FTE

2020-Present

- Responsibilities included lecturing, tutoring, practical/written marking, unit coordination/development, and contribution in physiotherapy and subdiscipline (musculoskeletal) meetings.
- Teaches Foundational, Musculoskeletal and Advanced units for the undergraduate and postgraduate courses
- Teaches Simulation Placement tutorials and case studies
- Guest Lecturer for other disciplines (Dentistry)

Postgraduate Teaching Fellow, University of Sydney, 0.2 FTE

2017-2019

- Musculoskeletal Physiotherapy A/II, B/III for the undergraduate and postgraduate courses

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Casual Tutor, University of Sydney	2019
Indigenous Tutorial Assistance Scheme Tutor, University of Sydney, Casual	2018, 2021

Indigenous Tutorial Assistance Scheme Tutor, University of Sydney, Casual

Primary/Secondary Education Private Tutor, James An College, Casual

2018, 2021

2010–2013

Academic Achievements and Involvements

Grants:

- Australian Postgraduate Award (with Merit): AU\$ 105,000
- Other Grants: AU\$ 10,230

Publications and Research Profile:

- Four peer-reviewed journal publications (Highest Impact Factor = 5.454)
- Eleven conference presentations, four international, one international prize
- Four public media presentations (One magazine article, One online article, two radio interviews)
- International collaborations with Norway, Europe and USA
- Reviewer for Journal of Physiotherapy, Archives of Physical Medicine and Rehabilitation, BMC Musculoskeletal Disorders, Chiropractic & Manual Therapies, JOSPT.

Community Involvement:

- 2020-2021 Sydney Neuromusculoskeletal Research Collaborative Executive Member and Meeting Manager
- 2020 SydMSK Annual (Virtual) Scientific Meeting Subcommittee Member and Organiser
- 2018-2021 Sydney Neuromuscular Research Collaborative Executive Committee Member
- 2019/2020 HDR Student Mentor
- 2018 Alumni Health Sciences Mentor
- 2018 Physiotherapy Research Recap and Networking Night Organiser
- 2018-2020 USYD Open Day

Clinical Physiotherapy Employment

Northwest Physio Principal Physiotherapist	2020-Present
1 Health Providence Esports Physiotherapist	2020-Present
Senior Private Practice Physiotherapist, 123PHYSIO, Northmead	2015–2020
Physiotherapy Aged Care Consultant, Senior Care Physiotherapy	2016
Level 1 Physiotherapist, Auburn, Westmead, St Joseph Hospitals	2014–2015

Volunteer and Community Work

Bilingual Christian Church Worker, Living Spring Church, Kellyville	2007–2019
- Deacon Board Secretary, Congregation Committee Member, High School Group	p Co-ordinator
Senior Student Leader, Evangelical Christian Union, University of Sydney	2011–2013

Other Achievements and Involvements

2020	SEMCAN 2 Minute Pitch Finalist
2019	City2Surf Competitor
2019	Sydney Undergraduate Physiotherapy Student Alumni Night for Students (Mentor)
2017	Sleep Theme Symposium: Precision Sleep Medicine
2017	Twins Research Australia Workshop
2017	Applied ICH-GCP Training Certificate 1-3
2017	APS Practice Certificate in Sleep Psychology, Part 2: Insomnia
2017	APS Practice Certificate in Sleep Psychology, Part 1: Introduction
2016	University of Sydney 3 Minute Thesis Faculty Winner and University Finalist
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Memberships and Qualifications

- Sydney Musculoskeletal, Bone and Joint Health Alliance Member
- USYD Musculoskeletal Research Group Member

Academic Physiotherapy Teaching History

Bachelor of Applied Science (Physiotherapy):

- PHTY2058 Musculoskeletal Physiotherapy A (Solo and Team Teaching)
- PHTY2059 Musculoskeletal Physiotherapy B (Solo and Team Teaching)
- PHTY3081 Musculoskeletal Physiotherapy C (Solo and Team Teaching, Acting Unit Co-ordination)
- PHTY5204 Advanced Physiotherapy Practice B (Unit Co-ordination)

Masters of Physiotherapy:

- PHTY5136 Musculoskeletal Physiotherapy IA (Team Teaching, Acting Unit Co-ordination)
- PHTY5137 Musculoskeletal Physiotherapy IB (Team Teaching, Acting Unit Co-ordination)
- PHTY5203 Musculoskeletal Physiotherapy II (Solo Teaching)
- PHTY5204 Musculoskeletal Physiotherapy III (Solo and Team Teaching)
- PHTY5206 Musculoskeletal Physiotherapy IV (Solo Teaching)
- PHTY5207 Physiotherapy Health Care and Society (Solo and Team Teaching, Unit Co-ordination)
- PHTY5209 Advanced Clinical Reasoning (Solo Teaching)

Work Integrated Learning

- Clinical Simulation Practicum for undergraduate and graduate physiotherapy

Publication and Presentation History

PhD Synopsis

Thesis: The relationship between sleep and pain in people with lower limb osteoarthritis and chronic low back

Supervisors: A/Prof Milena Simic, Prof Paulo Ferreira, Dr Marina Pinheiro

Project 1: Sleep interventions for osteoarthritis and spinal pain: a systematic review and meta-analysis of randomized controlled trials (Published)

Collaboration with leaders from the Woolcock Institute of Medical Research

Project 2: Efficacy of an online cognitive behavioural therapy for insomnia in people with low back pain: a feasibility randomized co-twin and singleton-controlled trial (Under Review)

 Collaboration with leaders from Twins Research Australia, Institute of Bone and Joint Research, Woolcock Institute of Medical Research, The George Institute for Global Health, Erasmus MC (Netherlands), and University of Murcia.

Project 3: The association between insomnia, c-reactive protein, and chronic low back pain: cross-sectional analysis of the HUNT study, Norway (Published)

- Four weeks overseas collaboration with the FORMI research team, Oslo University Hospital, Norway.

Project 4: The associations between sleep, c-reactive protein and chronic low back pain and lower limb osteoarthritis: longitudinal analysis of the Tromsø Cohort Study, Norway (Under review)

 Collaboration with Oslo University Hospital, Norwegian University of Science and Technology and Arctic University of Norway

Published Journal Articles

- 1. **Ho KKN**, Ferreira PH, Pinheiro MB, Aquino Silva D, Miller CB, Grunstein R, Simic M. Sleep interventions for osteoarthritis and spinal pain: a systematic review and meta-analysis of randomized controlled trials. **Osteoarthritis and Cartilage** 2019;27(2):196-218. (Impact Factor = 5.454)
 - High Impact Journal Publication in the field of Osteoarthritis: Impact Factor = 5.454. Altmetric Attention Score = 28. Findings support the biopsychosocial and multidisciplinary approach to care taught in the Discipline and adopted in the community health. Findings have also been introduced into the curriculum for low back pain and osteoarthritis. Two radio interviews (ultra106.5 Hobart, SBS Radio Cantonese) and one online article (Sydney News and Opinion Media Release)
- 2. **Ho KKN**, Simic M, Cvancarova Småstuen M, Pinheiro MB, Ferreira PH, Bakke Johnsen M, Heuch I, Grotle M, Zwart JA, Nilsen KB. The association between insomnia, c-reactive protein, and chronic low back pain: cross-sectional analysis of the HUNT study, Norway. **Scandinavian Journal of Pain**, (Epub ahead of Print) 2019.
 - Impact Factor = 1.5. Altmetric Attention Score = 19. First paper to link insomnia, chronic low back pain and inflammation within the same study and cohort. Found that individuals with insomnia have twice the odds of reporting chronic LBP. Discover that while insomnia, CRP and chronic LBP appear to be linked, the role of CRP appears to be limited.
- 3. Pinheiro M, **Ho K,** Ferreira M, Refshauge K, Grunstein R, Hopper J, Maher C, Koes B, Ordoñana JR, Ferreira P. Efficacy Of A Sleep Quality Intervention In People With Low Back Pain: Protocol For A Feasibility Randomized Co-Twin Controlled Trial. **Twins Research and Human Genetics**, 2016: Oct;19(5):492-501
 - Impact Factor=1.5. Altmetric Attention Score = 4. A novel trial which employs a robust design that will effectively control for the influence of genetics on treatment effect. Feasibility results of this study is under journal peer-review. This trial incorporated the use of digital health in Australia, and the digital program (Sleepio) is currently freely available under the UK's National Health Scheme.

- 4. McGee C, **Ho KK.** Opinion: Tendinopathies in Esports. Frontiers in Sports and Active Living (Article Accepted).
 - This novel article detailed to non-health professionals engaged in the esport industry why tendinopathies are likely to affect esports competitors and proposed specific areas for additional research.

Under Review

- 1. McGee C, Hwu M, Nicholson L, **Ho KK**. Physical Therapy and Musculoskeletal Injuries in Esports: Current Management and Research (Under revision with JOSPT IF=3.8)
- 2. **Ho KK**, Nilsen KB, Ferreira PH, Pinheiro MB, Hopstock L, Steingrimsdottir OA, Nielsen CS, Stubhaug A, Simic M. The associations between sleep, c-reactive protein and chronic low back pain and lower limb osteoarthritis: longitudinal analysis of the Tromsø Cohort Study, Norway. (Under revision with the Journal of Pain, IF = 4.621)
- 3. **Ho KK,** Pinheiro M, Ferreira M, Refshauge K, Grunstein R, Hopper J, Maher C, Koes B, Ordoñana JR, Ferreira P. Efficacy of a Sleep Quality Intervention for People with Low Back Pain: Feasibility Randomized Co-Twin Controlled Trial. (Under review with BMC Pilot and Feasibility Studies, IF= 0.801)

Current Projects

- 1. Comis J, Gordon C, Hodges P, **Ho KK**, Ferreira P. Expert Opinions to Develop a Sleep Intervention for Patients with Low Back Pain: A Nominal Group Study
- 2. **Ho KK**, Pinheiro M, Ferreira M, Refshauge K, Grunstein R, Hopper J, Maher C, Koes B, Ordoñana JR, Ferreira P. Efficacy of a Sleep Quality Intervention for People with Low Back Pain: Clinical Outcomes from a Feasibility Randomized Co-Twin Controlled Trial.
- 3. Ren S, **Ho KK**, Burgess C, Colaguiri B, Simic M. The Placebo Response to Physiotherapist-Delivered Interventions on Pain in People with Knee Osteoarthritis: A Systematic Review and Meta-Analysis.
- 4. McGree C, van Marcke A, Smithson E, **Ho KK**. Musculoskeletal Injuries in Competitive and Non-competitive Video Gaming: A Scoping Review (Registration: osf.io/2qh58)
- 5. Nicholson L, **Ho KK.** Prevalence of Musculoskeletal Injuries in non-competitive and competitive videogaming: a cross-sectional study
- 6. Judd B, **Ho KK**, Brentnall J. Exploring the relationship of student self-evaluations with educator assessments of students using the EFPC tool in preparation for placement programs during simulation.
- 7. Bonnar D, McGee C, **Ho KK.** The association between caffeine consumption and sleep in competitive videogame (esports) players: a cross-sectional study

Conference Presentations

- 1. **Ho KKN**, Ferreira PH, Pinheiro MB, Aquino Silva D, Miller CB, Grunstein R, Simic M. Sleep interventions for osteoarthritis and spinal pain: a systematic review and meta-analysis of randomized controlled trials. **International Neck and Back Pain Forum 2017.** (Poster Presentation Winner)
- 2. Ho K, Pinheiro M, Ferreira M, Refshauge K, Grunstein R, Hopper J, Maher C, Koes B, Ordoñana JR, Ferreira P. Efficacy of a Sleep Quality Intervention for People with Low Back Pain: Feasibility Randomized Co-Twin Controlled Trial. Sydney Musculoskeletal, Bone and Joint Health Alliance Annual Scientific Meeting 2017 (Oral Presentation Shortlisted Winner)
- 3. **Ho KK,** Pinheiro M, Ferreira M, Refshauge K, Grunstein R, Hopper J, Maher C, Koes B, Ordoñana JR, Ferreira P. Efficacy of a Sleep Quality Intervention for People with Low Back Pain: Feasibility Randomized Co-Twin Controlled Trial. **eHealth@Sydney 2020**

- 4. **Ho KK,** Pinheiro M, Ferreira M, Refshauge K, Grunstein R, Hopper J, Maher C, Koes B, Ordoñana JR, Ferreira P. Efficacy of a Sleep Quality Intervention for People with Low Back Pain: Feasibility Randomized Co-Twin Controlled Trial. **Sydney Musculoskeletal, Bone and Joint Health Alliance Annual Scientific Meeting 2019**
- 5. **Ho KK**, Nilsen KB, Ferreira PH, Pinheiro MB, Hopstock L, Steingrimsdottir OA, Nielsen CS, Stubhaug A, Simic M. The associations between sleep, c-reactive protein and chronic low back pain and lower limb osteoarthritis: longitudinal analysis of the Tromsø Cohort Study, Norway. **Sydney Musculoskeletal, Bone and Joint Health Alliance Annual Scientific Meeting 2019**
- 6. **Ho KK,** Simic M, Cvancarova Småstuen M, Pinheiro MB, Ferreira PH, Johnsen MB, Heuch I, Grotle M, Zwart JA, Nilsen KB. The association between insomnia, high sensitive C-reactive protein, and chronic low back pain: cross-sectional analysis of the hunt study, Norway. Osteoarthritis and cartilage 2019;27:S457-S458. **Osteoarthritis Research Society International (OARSI)** World Congress 2019
- 7. **Ho KKN**, Ferreira PH, Pinheiro MB, Aquino Silva D, Miller CB, Grunstein R, Simic M. Sleep interventions for osteoarthritis and spinal pain: a systematic review and meta-analysis of randomized controlled trials. Sydney Musculoskeletal, Bone and Joint Health Alliance Annual Scientific Meeting 2018
- 8. **Ho KKN**, Ferreira PH, Pinheiro MB, Aquino Silva D, Miller CB, Grunstein R, Simic M. Sleep interventions for osteoarthritis and spinal pain: a systematic review and meta-analysis of randomized controlled trials. **4**th **Charles Perkins Centre Early and Mid-Career Researchers Symposium 2018**
- 9. **Ho KK,** Simic M, Cvancarova Småstuen M, Pinheiro MB, Ferreira PH, Johnsen MB, Heuch I, Grotle M, Zwart JA, Nilsen KB. The association between insomnia, high sensitive C-reactive protein, and chronic low back pain: cross-sectional analysis of the hunt study, Norway. **International Association for the Study of Pain (IASP) World Congress** 2018
- 10. Ferreira P, Ferreira M, Pinheiro M, Zadro J, Dario A, Amorim A, Fernandez M, **Ho K**. We might be getting it wrong if we do not consider genetics in osteoarthritis and back pain: insights from twin studies. Osteoarthritis and cartilage 2018;26:S264. **Osteoarthritis Research Society International (OARSI) World Congress 2018**
- 11. Ferreira PH, **Ho KK**, Pinheiro MB, Aquino Silva D, Miller C, Grunstein R, Simic M. Sleep interventions for osteoarthritis and spinal pain: a systematic review of randomized control trials. Osteoarthritis and cartilage 2018;26:S243. **Osteoarthritis Research Society International (OARSI) World Congress 2018**
- 12. **Ho KKN**, Ferreira PH, Pinheiro MB, Aquino Silva D, Miller CB, Grunstein R, Simic M. Sleep interventions for osteoarthritis and spinal pain: a systematic review and meta-analysis of randomized controlled trials. **Musculoskeletal Network Forum 2018**
- 13. **Ho K,** Pinheiro M, Ferreira M, Refshauge K, Grunstein R, Hopper J, Maher C, Koes B, Ordoñana JR, Ferreira P. Efficacy of a Sleep Quality Intervention for People with Low Back Pain: Feasibility Randomized Co-Twin Controlled Trial. **International Neck and Back Pain Forum 2017.**
- 14. Aquino Silva D, **Ho KKN**, Ferreira PH, Pinheiro MB, Miller CB, Grunstein R, Simic M. Sleep interventions for osteoarthritis and spinal pain: a systematic review and meta-analysis of randomized controlled trials. **International Congress of Physiotherapy 2017**
- 15. Pinheiro M, Ferreira M, Refshauge K, Grunstein R, Hopper J, Maher C, Koes B, Ordoñana JR, **Ho K**, Ferreira P. Is a sleep intervention effective for low back pain when genetics is considered? Study protocol of a randomised co-twin trial. **Australian Physiotherapy Association Conference Abstract E-Book 2015**; 121.
- 16. Pinheiro M, **Ho K**, Ferreira M, Refshauge K, Grunstein R, Hopper J, Maher C, Koes B, Ordoñana JR, Ferreira P. Is a sleep intervention effective for low back pain when genetics is considered? Study protocol of

a randomised co-twin trial. Chiropractors' Association of Australia (NSW) Annual Scientific Symposium 2015.

Media Presentations and Content Creation

Online Article, University of Sydney, News Opinion, February 2019 Treating insomnia improves back pain

Insomnia and Back Pain (https://ultra106.5 Hobart, February 2019

**SBS Radio Interview, SBS Radio Cantonese, February 2019
Treating insomnia to help resolve chronic back pain

Magazine Article, Australian Physiotherapy Association, April 2021
The growth of esports and what it means for physio (https://australian.physio/inmotion/growth-esports-and-what-it-means-physio)

YouTube (1 Health Providence): bit.ly/1-HP, <u>9,000 Subscribers</u>
Online educational content to promote musculoskeletal health and physical activity in a (young) generation of videogame players.

Twitter: @kev_physio, 450 followers