

Dr. Luke Perraton
Physiotherapy
Email: Luke.Perraton@monash.edu



Biography

Qualifications:

PhD. University of Melbourne, Centre for Health, Exercise and Sports Medicine (2015)

Master of Sports and Musculoskeletal Physiotherapy, University of South Australia (2008)

Bachelor of Physiotherapy, La Trobe University (2002)

Clinical experience:

Musculoskeletal, orthopaedic and sports Physiotherapy roles in Melbourne, Adelaide, Darwin, Cairns, and Glasgow, UK
(2002 onwards)

Teaching experience:

Unit coordinator for PTY1022, 24 credit point unit - commenced 2017

Lecturer/tutor for Year 1 and Year 2 Physiotherapy theory/prac and applied anatomy

Previous roles - tutor/lecturer for Physiotherapy programs at the University of Melbourne and University of South Australia
(2009-2016)

Research experience and interests:

Knee joint function and osteoarthritis following injury and surgery

Anterior cruciate ligament reconstruction – biomechanics and functional performance

Low-cost assessment of muscle function and balance in clinical settings using force platforms and dynamometers

NHMRC Dora Lush Postgraduate Scholarship, 2012 (\$71,857)

Honours and HDR student supervision

Service and community associations:

Australian Physiotherapy Association – member

Sports Medicine Australia – member

Australian and New Zealand Society of Biomechanics – member

Australian and New Zealand Association of Clinical Anatomists – member

Peer reviewer for the following journals: British Journal of Sports Medicine, Disability and Rehabilitation, Physiotherapy
Research International

Australian Health Practitioner Regulation Agency (AHPRA). Physiotherapist – full registration

Qualifications

1 Mar 2011 → 15 Sep 2014 Doctor of Philosophy, PhD

2008 Master of Sports and Musculoskeletal Physiotherapy, M. Sport/Musc

1998 → 2001 Bachelor of Physiotherapy, B. Physio

Employment

Lecturer

Physiotherapy
MONASH UNIVERSITY

27 Feb 2017 → present

Research outputs

Patellofemoral and tibiofemoral joint loading during a single-leg forward hop following ACL reconstruction

Sriharan, P., Schache, A. G., Culvenor, A. G., Perraton, L. G., Bryant, A. L., Morris, H. G., Whitehead, T. S. & Crossley, K. M., Jan 2022, In: *Journal of Orthopaedic Research*. 40, 1, p. 159-169 11 p.

Assessment of Cardiometabolic Health, Diet and Physical Activity in Helicopter Rescue Paramedics

Meadley, B., Perraton, L., Smith, K., Bonham, M. P. & Bowles, K. A., 2022, In: *Prehospital Emergency Care*. 26, 3, p. 380-390 11 p.

Assessment of ankle plantar flexor neuromuscular properties: A reliability study

Tavakkoli Oskouei, S., Malliaras, P., D Hill, K., Garofolini, A., Clark, R. & Perraton, L., Dec 2021, In: *Journal of Electromyography and Kinesiology*. 61, 8 p., 102603.

Patient knowledge of rotator cuff related shoulder pain condition and treatment and validation of a patient-reported knowledge questionnaire

Phillips, R., Perraton, L., Cridland, K., Maloney, S., Harris, I. A. & Malliaras, P., Dec 2021, In: *Musculoskeletal Care*. 19, 4, p. 504-514 11 p.

The physiological demands of helicopter winch rescue in water and over land

Meadley, B., Horton, E., Perraton, L., Smith, K., Bowles, K. A. & Caldwell, J., Nov 2021, (Accepted/In press) In: *Ergonomics*. 14 p.

A comparison of young children's spatiotemporal gait measures in three common types of footwear with different sole hardness

Cranage, S., Perraton, L., Bowles, K. A. & Williams, C., Oct 2021, In: *Gait and Posture*. 90, p. 276-282 7 p.

Scapular dyskinesia is not an isolated risk factor for shoulder injury in athletes: a systematic review and meta-analysis

Hogan, C., Corbett, J-A., Ashton, S., Perraton, L., Frame, R. & Dakic, J., Aug 2021, In: *The American Journal of Sports Medicine*. 49, 10, p. 2843-2853 11 p.

Cardiometabolic, Dietary and Physical Health in Graduate Paramedics during the First 12-Months of Practice—A Longitudinal Study

Meadley, B., Wolkow, A. P., Smith, K., Perraton, L., Bowles, K. A. & Bonham, M. P., 27 Jul 2021, (Accepted/In press) In: *Prehospital Emergency Care*. 13 p.

Pain Induced Changes in Brain Oxyhemoglobin: A Systematic Review and Meta-Analysis of Functional NIRS Studies

Hall, M., Kidgell, D., Perraton, L., Morrissey, J. & Jaberzadeh, S., Jun 2021, In: *Pain Medicine*. 22, 6, p. 1399-1410 12 p.

Defining the characteristics of physically demanding winch rescue in helicopter search and rescue operations

Meadley, B., Bowles, K. A., Smith, K., Perraton, L. & Caldwell, J., May 2021, In: *Applied Ergonomics*. 93, 6 p., 103375.

Is Ankle Plantar Flexor Strength Associated With Balance and Walking Speed in Healthy People? A Systematic Review and Meta-Analysis

Tavakkoli Oskouei, S., Malliaras, P., Jansons, P., Hill, K., Soh, S. E., Jaberzadeh, S. & Perraton, L., Apr 2021, In: *Physical Therapy*. 101, 4, 12 p., pzab018.

Comparison of swimming versus running maximal aerobic capacity in helicopter rescue paramedics

Meadley, B., Horton, E., Pyne, D. B., Perraton, L., Smith, K., Bowles, K. A. & Caldwell, J., 2021, In: *Ergonomics*. 64, 10, p. 1243–1254 12 p.

Reply

Meadley, B., Caldwell, J., Perraton, L., Bonham, M., Wolkow, A. P., Smith, K., Williams, B. & Bowles, K. A., 12 Dec 2020, In: Occupational Medicine. 70, 8, p. 610 1 p.

A comparison of young children's spatiotemporal measures of walking and running in three common types of footwear compared to bare feet

Cranage, S., Perraton, L., Bowles, K. A. & Williams, C., Sep 2020, In: Gait and Posture. 81, p. 218-224 7 p.

Muscular coordination of single-leg hop landing in uninjured and anterior cruciate ligament-reconstructed individuals

Sriitharan, P., Perraton, L. G., Munoz, M. A., Pivonka, P. & Bryant, A. L., Aug 2020, In: Journal of Applied Biomechanics. 36, 4, p. 235-243 9 p.

Limb symmetry index on a functional test battery improves between one and five years after anterior cruciate ligament reconstruction, primarily due to worsening contralateral limb function

Patterson, B. E., Crossley, K. M., Perraton, L. G., Kumar, A. S., King, M. G., Heerey, J. J., Barton, C. J. & Culvenor, A. G., Jul 2020, In: Physical Therapy in Sport. 44, p. 67-74 8 p.

Between-Limb Differences in Patellofemoral Joint Forces During Running at 12 to 24 Months After Unilateral Anterior Cruciate Ligament Reconstruction

Sriitharan, P., Schache, A. G., Culvenor, A. G., Perraton, L. G., Bryant, A. L. & Crossley, K. M., Jun 2020, In: The American Journal of Sports Medicine. 48, 7, p. 1711-1719 9 p.

The health and well-being of paramedics - a professional priority

Meadley, B., Caldwell, J., Perraton, L., Bonham, M., Wolkow, A. P., Smith, K., Williams, B. & Bowles, K. A., Apr 2020, In: Occupational Medicine. 70, 3, p. 149-151 3 p.

Alterations in medial-lateral postural control after anterior cruciate ligament reconstruction during stair use

Hall, M., Perraton, L. G., Stevermer, C. A. & Gillette, J. C., Mar 2020, In: Gait and Posture. 77, p. 283-287 5 p.

Erratum: Correction to: The impact of shoe flexibility on gait, pressure and muscle activity of young children. A systematic review (Journal of foot and ankle research (2019) 12 (55))

Cranage, S., Perraton, L., Bowles, K. A. & Williams, C., 20 Jan 2020, In: Journal of Foot and Ankle Research. 13, 2 p., 4.

The impact of shoe flexibility on gait, pressure and muscle activity of young children. A systematic review

Cranage, S., Perraton, L., Bowles, K. A. & Williams, C., 29 Nov 2019, In: Journal of Foot and Ankle Research. 12, 1, 7 p., 55.

Is visceral manipulation beneficial for patients with low back pain? A systematic review of the literature

Switters, J. M., Podar, S., Perraton, L. & Machotka, Z., 5 Sep 2019, In: International Journal of Osteopathic Medicine. 33-34, p. 16-23 8 p.

The impact of hard versus soft soled runners on the spatio-temporal measures of gait in young children and a comparison to barefoot walking

Cranage, S., Bowles, K. A., Perraton, L. & Williams, C., 26 Jun 2019, In: Footwear Science. 11, sup1, p. S109-S110 2 p.

Deficits in quadriceps force control after anterior cruciate ligament injury: Potential central mechanisms

Ward, S. H., Perraton, L., Bennell, K., Pietrosimone, B. & Bryant, A. L., May 2019, In: Journal of Athletic Training. 54, 5, p. 505-512 8 p.

Greater knee flexion excursion/moment in hopping is associated with better knee function following anterior cruciate ligament reconstruction

Perraton, L. G., Clark, R. A., Crossley, K. M., Pua, Y-H., Morris, H. G., Whitehead, T. S., Culvenor, A. G. & Bryant, A. L., 14 Feb 2019, In: Knee Surgery, Sports Traumatology, Arthroscopy. 27, 2, p. 596-603 8 p.

Quadriceps rate of force development following total knee replacement is associated with gait speed – low-cost clinically feasible methodology

Perraton, L. G., Bower, K. J., Mentiplay, B. F., Feller, J., Whitehead, T. S., Webster, K. E. & Clark, R., 27 Nov 2018.

Three-dimensional assessment of squats and drop jumps using the Microsoft Xbox One Kinect: Reliability and validity

Mentiplay, B. F., Hasanki, K., Perraton, L. G., Pua, Y. H., Charlton, P. C. & Clark, R. A., 2 Oct 2018, In: Journal of Sports Sciences. 36, 19, p. 2202-2209 8 p.

Regularity of force control in individuals with and without a recent anterior cruciate ligament rupture

Ward, S., Perraton, L. G. & Bryant, A. L., 30 Jun 2018.

Trunk and lower limb coordination during lifting in people with and without chronic low back pain

Pranata, A., Perraton, L., El-Ansary, D., Clark, R., Mentiplay, B., Fortin, K., Long, B., Brandham, R. & Bryant, A. L., 11 Apr 2018, In: Journal of Biomechanics. 71, p. 257-263 7 p.

Poor knee function after ACL reconstruction is associated with attenuated landing force and knee flexion moment during running

Perraton, L. G., Hall, M., Clark, R. A., Crossley, K. M., Pua, Y. H., Whitehead, T. S., Morris, H. G., Culvenor, A. G. & Bryant, A. L., 1 Feb 2018, In: Knee Surgery, Sports Traumatology, Arthroscopy. 26, 2, p. 391-398 8 p.

Musculoskeletal injury profiles in professional Women's Tennis Association players

Dacic, J. G., Smith, B., Gosling, C. M. & Perraton, L. G., 1 Jan 2018, In: British Journal of Sports Medicine. 52, 11, p. 723-729 7 p.

Clinically important detailed anatomy of the abductor hallucis muscle and its attachments

Bruechert, G., Thorpe Lewis, C. G., Perraton, L. G. & Fogg, Q. A., 6 Dec 2017.

Impact of shoe hardness of children's walking and running

Cranage, S., Bowles, K-A., Perraton, L. & Williams, C., 22 Oct 2017, Melbourne Victoria: Monash University. 47 p.

Lumbar extensor muscle force control is associated with disability in people with chronic low back pain

Pranata, A., Perraton, L., El-Ansary, D., Clark, R., Fortin, K., Dettmann, T. & Bryant, A., 1 Jul 2017, In: Clinical Biomechanics. 46, p. 46-51 6 p.

Evidence-based Practice Intentions and Long-term Behaviours of Physiotherapy Graduates Following an Intensive Education Programme

Perraton, L., Machotka, Z., Gibbs, C., Mahar, C., Kennedy, K. & Grimmer, K., Jul 2017, In: Physiotherapy Research International. 22, 3, 8 p., e1666.

Impaired voluntary quadriceps force control following anterior cruciate ligament reconstruction: relationship with knee function

Perraton, L., Clark, R., Crossley, K., Pua, Y. H., Whitehead, T., Morris, H., Telianidis, S. & Bryant, A., May 2017, In: Knee Surgery, Sports Traumatology, Arthroscopy. 25, 5, p. 1424-1431 8 p.

Embedding Evidence-based Practice Education into a Post-graduate Physiotherapy Program: Eight Years of pre-Post Course Evaluations

Perraton, L., Machotka, Z., Grimmer, K., Gibbs, C., Mahar, C. & Kennedy, K., Apr 2017, In: Physiotherapy Research International. 22, 2, 8 p., e1659.

Distal tibialis tendon attachments and the medial longitudinal arch of the foot

Bruechert, G., Perraton, L. G. & Fogg, Q. A., 2017.

Knee kinematics and kinetics are associated with early patellofemoral osteoarthritis following anterior cruciate ligament reconstruction

Culvenor, A. G., Perraton, L., Guermazi, A., Bryant, A. L., Whitehead, T. S., Morris, H. G. & Crossley, K. M., 1 Sep 2016, In: Osteoarthritis and Cartilage. 24, 9, p. 1548-1553 6 p.

Does meniscal pathology alter gait knee biomechanics and strength post-ACL reconstruction?

Hall, M., Bryant, A. L., Wrigley, T. V., Pratt, C., Crossley, K. M., Whitehead, T. S., Morris, H. G., Clark, R. A. & Perraton, L. G., 1 May 2016, In: Knee Surgery, Sports Traumatology, Arthroscopy. 24, 5, p. 1501-1509 9 p.

Hop-landing in ACL reconstructed knees: Altered muscle forces but not muscle function

Sriitharan, P., Perraton, L. G., Pivonka, P. & Bryant, A. L., 2016.

Assessment of lower limb muscle strength and power using hand-held and fixed dynamometry: A reliability and validity study

Mentiplay, B. F., Perraton, L. G., Bower, K. J., Adair, B., Pua, Y. H., Williams, G., McGaw, R. & Clark, R. A., 28 Oct 2015, In: PLoS ONE. 10, 10, 18 p., e0140822.

Gait assessment using the Microsoft Xbox One Kinect: Concurrent validity and inter-day reliability of spatiotemporal and kinematic variables

Mentiplay, B. F., Perraton, L. G., Bower, K. J., Pua, Y. H., McGaw, R., Heywood, S. & Clark, R. A., 16 Jul 2015, In: Journal of Biomechanics. 48, 10, p. 2166-2170 5 p.

Clinical guidelines in sports medicine: Am I reading a guideline or a consensus statement: What's the difference? Does it matter?

Machotka, Z., Perraton, L. & Grimmer, K., 1 Jan 2015, In: The Internet Journal of Allied Health Sciences and Practice. 13, 1, 12 p., 11.

Objective criteria to determine readiness to return to sport after anterior cruciate ligament reconstruction (Nach der Kreuzband-OP: Mit objektiven Kriterien den richtigen Zeitpunkt für den Wiedereinstieg bestimmen)

Perraton, L. G., 2015, In: Sportphysio. 3, 2, p. 64-68 5 p.

Hop landing biomechanics associated with knee function after anterior cruciate ligament reconstruction

Perraton, L., Dec 2014.

Modifiable lower limb biomechanics associated with worse knee function after anterior cruciate ligament reconstruction

Perraton, L., Dec 2014.

Quadriceps and hamstring strength, control and activation after anterior cruciate ligament reconstruction: Relationship with knee function

Perraton, L., Dec 2014.

Diminished sub-maximal quadriceps force control in anterior cruciate ligament reconstructed patients is related to quadriceps and hamstring muscle dyskinesia

Telianidis, S., Perraton, L., Clark, R. A., Pua, Y. H., Fortin, K. & Bryant, A. L., Aug 2014, In: Journal of Electromyography and Kinesiology. 24, 4, p. 513-519 7 p.

A comparison of optimisation methods and knee joint degrees of freedom on muscle force predictions during single-leg hop landings

Mokhtarzadeha, H., Perraton, L., Fok, L., Munoz, M. A., Clark, R., Pivonka, P. & Bryant, A. L., 2014, In: Journal of Biomechanics. 47, 12, p. 2863-2868 6 p.

Compensatory movement adaptations after anterior cruciate ligament reconstruction

Perraton, L. G., 2014, MPA InTouch magazine.

Quadriceps muscle force control is related to knee function 12 months after anterior cruciate ligament reconstruction

Perraton, L. G., Dec 2013.

Whole-body vibration to treat low back pain: Fact or fad?

Perraton, L., Machotka, Z. & Kumar, S., 2011, In: *Physiotherapy Canada*. 63, 1, p. 88-93 6 p.

Anterior cruciate ligament repair with LARS (ligament advanced reinforcement system): A systematic review

Machotka, Z., Scarborough, I., Duncan, W., Kumar, S. & Perraton, L., 7 Dec 2010, In: *BMC Sports Science, Medicine and Rehabilitation*. 2, 1, 10 p., 29.

Exercise parameters in the treatment of clinical depression: A systematic review of randomized controlled trials

Perraton, L. G., Kumar, S. & MacHotka, Z., Jun 2010, In: *Journal of Evaluation in Clinical Practice*. 16, 3, p. 597-604 8 p.

Day therapy programs for adolescents with mental health problems: a systematic review

Deenadayalan, Y., Perraton, L., Machotka, Z. & Kumar, S., 2010, In: *The Internet Journal of Allied Health Sciences and Practice*. 8, 1, p. 1-14 14 p., 6.

Development and implementation of an online hybrid model for teaching evidence-based practice to health professions: Processes and outcomes from an Australian experience

Kumar, S., Perraton, L. & Machotka, Z., 2010, In: *Advances in Medical Education and Practice*. 1, p. 1-9 9 p.

A systematic review of the literature on the effectiveness of exercise therapy for groin pain in athletes

Machotka, Z., Kumar, S. & Perraton, L. G., 31 Mar 2009, In: *BMC Sports Science, Medicine and Rehabilitation*. 1, 5, 10 p.

Chapter 9 Sports Medicine Guidelines: The Art and Science of Sports Medicine

Perraton, L. G., 2009, *Practical tips for using and developing guidelines: An Allied Health Primer*. Manila: UST Publishing House

Components of effective randomized controlled trials of hydrotherapy programs for fibromyalgia syndrome: A systematic review

Perraton, L., Machotka, Z. & Kumar, S., 2009, In: *Journal of Pain Research*. 2, p. 165-173 9 p.

Activities

Australian National Allied Health Conference

Luke Perraton (Organiser)

2021

Monash University Faculty of Medicine, Nursing and Health Sciences ECR Symposium

Sri Ramarathinam (Organiser), Donna Buckingham (Organiser), Nicole Kellow (Organiser), Katrina Colafella (Organiser), Kimberley Crawford (Organiser), Sally Richmond (Organiser), Tammie Choi (Organiser), Luke Perraton (Organiser), Melissa Lipscombe (Organiser), Suzanne Kleve (Organiser), Zoe Davidson (Organiser), Margaret Murray (Organiser) & Shapour Jaberzadeh (Organiser)

5 Oct 2020 → 30 Oct 2021

Development of online teaching materials for clinical education

Luke Perraton (Speaker)

2019

Honours thesis examination

Luke Perraton (Examiner)

Nov 2018

Monash University School of Primary and Allied Health Care and Monash Biomedical Imaging Symposium

Luke Perraton (Organiser)

26 Jun 2018

Thesis examination

Luke Perraton (Examiner)
Jun 2018

HDR research examination

Luke Perraton (Examiner)
1 Feb 2018

Invitation to participate in NHMRC peer review

Luke Perraton (Reviewer)
2018

Surgical and Radiologic Anatomy (Journal)

Luke Perraton (Peer reviewer)
2018 → ...

Honours thesis examination

Luke Perraton (Examiner)
13 Nov 2017

Honours thesis examination

Luke Perraton (Examiner)
11 Nov 2017

Australasian Biomechanics Conference 2016

Luke Perraton (Member of programme committee)
1 Dec 2016

British Journal of Sports Medicine (Journal)

Luke Perraton (Peer reviewer)
2016 → ...

Disability and Rehabilitation (Journal)

Luke Perraton (Peer reviewer)
2015 → ...

Physiotherapy Research International (Journal)

Luke Perraton (Peer reviewer)
2014 → ...

Physiotherapy Educators Knee Symposium: Knee function after ACL reconstruction

Luke Perraton (Organiser)
16 Sep 2013

Injury Prevention

Luke Perraton (Organiser)
2 Aug 2013

Research collaboration

Luke Perraton (Contributor)
2011 → ...

Motor Control in Sports

Luke Perraton (Organiser)
6 Aug 2010

Professional development

Luke Perraton (Fellow)
2007 → 2018

Professional development

Luke Perraton (Fellow)
2006 → 2018

Sports Medicine Australia (SMA) (External organisation)

Luke Perraton (Member)
2005 → 2018

Australian Physiotherapy Association (External organisation)

Luke Perraton (Member)
2004 → 2018

Prizes**Australian Physiotherapy Association titling: Musculoskeletal Physiotherapist**

Perraton, Luke (Recipient), 2019

Australian Physiotherapy Association titling: Sports and Exercise Physiotherapist

Perraton, Luke (Recipient), 2019

Brooks Running Prize - Master of Sports and Musculoskeletal Physiotherapy program

Perraton, Luke (Recipient), 2008

Marie Hammond Prize

Perraton, Luke (Recipient), 2008

NHMRC Dora Lush Postgraduate Scholarship (\$71,857)

Perraton, Luke (Recipient), 2012

Professional titling

Perraton, Luke (Recipient), 3 Mar 2019

Professional titling

Perraton, Luke (Recipient), 3 Mar 2019

Quadriceps and hamstring strength, control and activation after anterior cruciate ligament reconstruction: Relationship with knee function

Perraton, Luke (Recipient), Oct 2014

Press/Media**Fitness of paramedics**

Benjamin Nicholas Meadley, Kelly Bowles, Maxine Penelope Bonham, Joanne Nellie Caldwell Odgers & Luke Geoffrey Perraton

2/11/18

1 item of Media coverage

Paramedic Health and Wellbeing Research Unit (PHAWRU)

Kelly Bowles, Benjamin Meadley, Joanne Caldwell Odgers, Luke Perraton, Maxine Bonham, Brett Williams, Karen Smith, Shanthakumar Wilson Rajaratnam & Alexander Wolkow

21/02/19

1 item of Media coverage

Projects

Developing effective processes and closing the feedback cycle for health professional students

Walker, L., Pope, K., Perraton, L., Cousland, R., Taylor, C., Todd, P. & Dakic, J.

Monash University – Internal University Contribution

1/09/18 → 31/08/19

Internet-based management of rotator cuff tendinopathy with remote physiotherapist led support: a pilot and feasibility randomised controlled trial

Perraton, L., Malliaras, P., Maloney, S. & Ellis, K.

Monash University – Internal School Contribution

14/01/19 → 22/07/19

NHMRC Equipment Grant - AMTI BP600600-OP Force Platform System

Malliaras, P., Haines, T., Soh, S., Kidgell, D., Williams, C., Bowles, K., Lee, A., Jansons, P. & Perraton, L.

Monash University – Internal Department Contribution

1/01/19 → 31/12/19

Optimising physical activity and sedentary behaviour counselling in education for healthcare students

Gasevic, D., Ekegren, C., Dunstan, D., Kunstler, B., Callaway, E., Volders, E., Bonham, M., Perraton, L., Bowles, K.,

Gilmartin-Thomas, J., Hills, D., Plummer, V., Ilic, D., Gasevic, D., Dakic, J., Sawyer, S. & Daly, S.

1/07/18 → 30/06/19

Physiological characteristics of paramedics undertaking water rescue in an Australian Helicopter Emergency Medical Service (HEMS)

Bowles, K., Meadley, B., Caldwell Odgers, J., Smith, K., Bonham, M. & Perraton, L.

Australasian College of Paramedicine

3/07/18 → 31/12/18