



Dr Dan Bates

Sports & Exercise Physician Interventional Pain Medicine
BMed BSc (Hons) FACSEP
 Co-Medical Director

Metro Pain Group
 Monash House, Ground Floor
 271 Clayton Rd, Clayton VIC 3168

Ph: (03) 9595 6111 | **F:** (03) 9595 6110

E: teambates@metropain.com.au

W: metropain.com.au

Dr Bates is a Sports and Exercise Physician working in the area of chronic musculoskeletal and neuropathic pain.

He is the current Managing Director of Metro Pain Group and Monash House private hospital. He has published in the areas of management of neuropathic pain, neuromodulation and randomised control trials osteoarthritis.

He teaches neuromodulation and interventional pain techniques both nationally and internationally.

SPECIAL INTERESTS

- Management of neuropathic pain
- Neuromodulation
- Exercise as medicine
- Non-Surgical management of osteoarthritis
- Interventional pain management

PROFESSIONAL QUALIFICATIONS

- Bachelor of Science with Honours (BSc (HONS))
- Bachelor of medicine (B.med)
- Fellow of the Australian College of Sports and Exercise Physicians (FACSEP)

PROFESSIONAL MEMBERSHIPS & AFFILIATIONS

- Australasian College of Sports Physicians
- Spine Interventional Society (SIS)

RESEARCH PUBLICATIONS:

- Freitag J, **Bates D**, Wickham J, Shah K, Huguenin L, Tenen A, Paterson K, Boyd R. Adipose-derived mesenchymal stem cell therapy in the treatment of knee osteoarthritis: a randomized controlled trial. *Regenerative medicine*. 2019 Feb 14(0).
- Mitchell B, **Bates D**, Verrills P, Vivian D, Barnard A. Biological cell therapies for discogenic low back pain. *Journal of Science and Medicine in Sport*. 2017;20:e43.
- Freitag J, Ford J, **Bates D**, et al. Adipose derived mesenchymal stem cell therapy in the treatment of isolated knee chondral lesions: design of a randomised controlled pilot study comparing arthroscopic microfracture versus arthroscopic microfracture combined with postoperative mesenchymal stem cell injections. *BMJ Open* 2015;5:e009332. doi:10.1136/bmjopen-2015-009332.
- Counsel P, **Bates D**, Boyd R, Connell D. Cell Therapy in Joint Disorders. *Sports Health: A Multidisciplinary Approach*. 2015;7:1.
- **Bates D**. Parental Role in Sporting Injury. *Aspertar Journal of Sports Medicine*. 2014;3:1.

DR DAN BATES
BMED BSC(HONS) FACSEP

DR DAN BATES

BMED BSC(HONS) FACSEP

- O'Donnell J, Economopoulos K, Singh P, **Bates D**, Pritchard M. The ligamentum teres test: novel and effective test in diagnosing tears of the ligamentum teres. *Am J Sports Med.* 2014 Jan;42(1):138-43.
- Paterson KL, Nicholls M, Bennell KL, **Bates D**. Intra-articular injection of photo-activated platelet-rich plasma in patients with knee osteoarthritis: a double-blind, randomized controlled pilot study. *BMC Musculoskeletal Disorders.* 2016;17:67.
- **Bates D**. Airway function during long-term exercise in athletes with exercise-induced asthma. *Bachelor of Science Honours Thesis: Awarded 1st Class Honours.* 1995.

CURRENT RESEARCH:

- A Multi-Center, Prospective Clinical Trial of Spinal Cord Stimulation with Varying Parameters for the Treatment of Chronic Back and/or Leg Pain
- Spinal Cord Stimulation in the treatment of Chronic, Intractable Pain using the Nalu Neurostimulator System
- A prospective, crossover study evaluating the programmability of Closed-Loop Spinal Cord Stimulation (CL-SCS) for the treatment of chronic upper-limb/neck pain
- Prospective study comparing the effect of post-emptive analgesia on flare-up pain in RFN patients (Primary Investigator)
- An Open label, Post-market, Prospective, observational study to investigate the effect of HF10™ Therapy for the Treatment of Chronic Post-Surgical Shoulder Pain (Primary Investigator)
- A Blinded Randomized Study to Assess the Safety and Efficacy of Two Doses of SX539 Administered by Lumbar Transforaminal Epidural Injection in Patients with Radicular Pain Secondary to Lumbar Disc Herniation.
- A Multi-center, Open-label, prospective, feasibility study evaluating the Nalu Alpha External Trial Stimulator for the treatment of Chronic Pain via Spinal Cord Stimulation (SCS)
- Interventional Techniques: developing an Australian evidence-based approach to the management of chronic spinal pain
- Prospective Clinical Trial of Advanced Stimulation Frequencies Using the Senza™ Spinal Cord Stimulation (SCS) System
- Assessing the effectiveness of spinal cord stimulation versus spinal fusion surgery for the treatment of chronic low back pain: a prospective randomized study.
- Evaluation of adipose-derived mesenchymal stem cells for the treatment of chronic lower back discogenic pain - a prospective, case series pilot study
- A Single-Blind, Prospective, Randomised Control Trial Comparing Anatomical Thermal Radiofrequency Neurotomy of Lumbar Medial Branch Derived Facet Pain to the Generic Radiofrequency Neurotomy Technique
- Prospective study comparing the effect of post-emptive analgesia on flare-up pain in RFN patients

PRESENTATIONS:

- Verrills P, **Bates D**, Salmon J, Mitchell B, Du Toit N, Yu J, Georgius P, Levy R, Makous J. Preliminary outcomes from a prospective, multi-center, first-in-human trial (NPower) utilizing a new battery-free, Microstimulator SCS System and Novel, Pulsed Stimulation Pattern. Poster presented at *International Neuromodulation Society (INS) 2019*; May 2019; Sydney, Australia.
- Salmon J, Verrills, Vajramani G, Williams A, Love-Jones S, Patel N, Mitchell B, Du Toit N, **Bates D**, Nikolic S, Mehta V, Ahmad A, Yu J, Christelis N, Harkin S, Baranidharan G, Levy R, Staats P, Makous J. Prospective, Randomized, Multi-national study results testing a novel, Pulsed Stimulation Pattern (PSP) in the treatment of Chronic Low Back Pain. Poster presented at *International*

DR DAN BATES

BMED BSC(HONS) FACSEP

- Neuromodulation Society (INS) 2019; May 2019; Sydney, Australia.*
- Levy R, Salmon J, Verrills P, Mitchell B, **Bates D**, Du Toit N, Yu J, Christelis N, Harkin S, Staats P, Makous J. Anatomically placed leads provide superior pain relief when using a novel, Pulsed Spinal Cord Stimulation Pattern: Results from a prospective, multi-center study. Poster presented at *International Neuromodulation Society (INS) 2019; May 2019; Sydney, Australia.*
- Bates D**, Hanes M, Schulthesis C, Jolly S, Chakravarthy K, Deer T, Levy R, Hunter C. A Comprehensive Algorithm for Management of Neuropathic Pain. Poster presented at *International Neuromodulation Society (INS) 2019; May 2019; Sydney, Australia.*
- Bates D**. Consequences of Pelvic Instability. Presented at *Sports Medicine Australia (SMA) 2018; October 2018; Melbourne, Australia.*
- Bates D. Prolotherapy in the Treatment of Pelvic Instability. Presented at *Sports Medicine Australia (SMA) 2018; October 2018; Melbourne, Australia.*
- Mitchell B, Verrills P, Vivian D, **Bates D**, DuToit N, Barnard A. Biological Cell Therapies for Discogenic Low Back Pain. Poster presentation presented at *Sports Medicine Australia (SMA) 2016; October 2016; Melbourne, Australia.*
- Bates, D.** (2013) Intra-articular injection of platelet rich plasma or hyaluronic acid for the treatment of knee osteoarthritis. A Randomised control Pilot Study. *Australasian College Of Sports Physicians Annual Scientific Conference, Wellington, New Zealand*
- Bates, D.** (2013) Why solve osteoarthritis? *Day Surgery Nurses Continuing Medical Education, Melbourne, Victoria.*
- Bates, D.** (2012). Biological therapies for Osteoarthritis. *NSW Stem Cell Network, Sydney, New South Wales*
- Bates, D.** (2012) Cell Medicine - PRP and Stem cells for the treatment of Osteoarthritis. *Southport Day Procedure Centre, Gold Coast, Queensland.*
- Bates, D.** (2012) PRP - Science, Evidence and Practical Use. *Queenstown, New Zealand*
- Bates, D** (2011) *Adipose derived stromal vascular fraction for the treatment of chondral defects. Australasian college of sports physicians annual scientific conference, Coolum, QLD.*
- Bates, D.** (2011). Stem cells for the treatment of osteoarthritis. *Monash University Stem Cell Awareness day, Melbourne, VIC.* **Bates, D.** (2011). Harvest and preparation of adipose-derived stem cells. *Stem Cell Preparation Workshop for the Cosmetic Physicians Society of Australasia. Liverpool, NSW.*
- Bates, D.** (2011). Preventing and treating joint pain. *Melbourne Sports and Aquatic Centre Member Information Forum. Albert Park, Victoria.*
- Bates, D.** (2010). Management of chondral lesions using mesenchymal stem cells. *Mercy Private Hospital GP Seminar. East Melbourne, Victoria.*
- Bates, D.** (2010). Platelet rich plasma – Science, evidence and clinical use. *Lifecare Sports Medicine Education Series, Malvern, Victoria.*
- Bates, D.** (2009). Injury prevention and performance enhancement. *Basketball Victoria Coaching Conference. Box Hill, Victoria.*
- Bates, D.** (2008). A heads up on concussion. *Sports Medicine Australia Victorian Sports Trainer Conference. Albert Park, Victoria.*
- Bates, D.** (2008). Femoroacetabular impingement. *Sports Medicine Australia Victorian Sports Trainers Conference. Albert Park, Victoria.*