

Brief Bio and CV - Prof Liisa Laakso:

Honorary Associate Professor Dr Liisa Laakso is Senior Research Fellow Allied Health at the Mater Medical Research Institute, Brisbane; and Professor of Physiotherapy in the School of Allied Health Sciences at Griffith University, Gold Coast.



Prof Laakso's research interests include the role of electrophysical agents (EPAs) and physical activity in symptom control and recovery after cancer, and in palliative care. Prof Laakso investigates exercise and muscle performance, physical activity and electrophysical agents especially photobiomodulation (PBM) therapy for pain and lymphoedema management, tissue healing, inflammation and neurodegeneration in a range of non-malignant and malignant laboratory and clinical models and populations. Prof Laakso has a track record of grants procurement and publications in these fields as well as in physiotherapy education. She has spoken at numerous national and international conferences on her laser research.

Prof Laakso is an executive committee member of the Australian Medical Laser Association (AMLA), and past-President of the World Association for Laser Therapy (WALT). Prof Laakso is Vice-President of the International Society for Electrophysical Agents in Physical Therapy (an official sub-group of the World Confederation of Physical Therapy) and member of the Scientific Advisory Board of the Korean Medicine Association for Laser Therapy. She is also on the editorial board of the journal *Photobiomodulation, Photomedicine and Laser Surgery*, and the *Brazilian Journal of Physical Therapy*.

Selected publications:

- Toma RL, Oliveira MX, Renno ACM, **Laakso E-L** (2018) Photobiomodulation (PBM) therapy at 904nm mitigates effects of exercise-induced skeletal muscle fatigue in young women. *Lasers in Medical Science*. 33:1197–1205.
- Oliveira MX, Toma RL, Jones BJL, Cyprien TP, Tier MR, Wallace CA, Renno ACM, Sabapathy S, **Laakso E-L** (2017) Effects of photobiomodulation therapy (pulsed LASER 904 nm) on muscle oxygenation and performance in exercise-induced skeletal muscle fatigue in young women: a pilot study. *Mechanisms of Photobiomodulation Therapy XII*, edited by Michael R. Hamblin, James D. Carroll, Praveen Arany, Proc. of SPIE Vol. 10048, 100480J. San Francisco.
- Renno A C M, McDonnell P A, Crovace M C, Zanotto E D, **Laakso E-L** (2015) Effect of 830-nm laser phototherapy on olfactory neuronal ensheathing cells grown in vitro on novel bioscaffolds. *Journal of Applied Biomaterials and Functional Materials*, 13(3): e234 - e240.
- Rodrigues NC, Bocaletti S, Ohmsen P, Loureiro A, Nogueira R, Bulmer AC, Renno ACM, Renshaw G, **Laakso L** (2015) Low-level laser therapy (LLLT) attenuates muscle damage in delayed onset muscle soreness (DOMS). *Photobiomodulation: Mainstream Medicine and Beyond* combined congress of World Association for Laser Therapy (WALT) and North American Association for Light Therapy (NAALT), Arlington, USA, Sept 2014
- Chow R and **Laakso L** (2015) Light therapy in pain disorders. Invited presentation. *Photobiomodulation: Mainstream Medicine and Beyond* combined congress of World Association for Laser Therapy (WALT) and North American Association for Light Therapy (NAALT), Arlington, USA, Sept. 2014
- Chow R, Armati P, **Laakso E-L**, Bjordal JM and Baxter GD (2011) Inhibitory effects of laser irradiation on peripheral mammalian nerves and relevance to analgesic effects: a systematic review. *Photomedicine and Laser Surgery*, 29:365–381.
- Powell K, Low P, McDonnell A, **Laakso L** and Ralph S (2010) The effect of laser irradiation on proliferation of human breast carcinoma, melanoma and immortalized mammary epithelial cells. *Photomedicine and Laser Surgery*, 28:115-123.
- Renno A, McDonnell A, Crovace M, Zanotto E and **Laakso L** (2009) Effect of 830nm laser phototherapy on osteoblasts grown in vitro on Biosilicate® scaffolds. *Photomedicine and Laser Surgery*, 28:131-133.
- Renno ACM, McDonnell PA, Parizotto N and **Laakso EL** (2007) The effects of laser irradiation on osteoblast and osteosarcoma cell proliferation and differentiation in vitro. *Photomedicine and Laser Surgery*, 25:275-80.
- **Laakso E-L** and Cabot PJ (2005) Nociceptive scores and endorphin-containing cells reduced by Low-Level Laser Therapy (LLLT) in inflamed paws of Wistar rat. *Photomedicine and Laser Surgery*, 23:32-35.
- **Laakso, L.**, Richardson, C. and Cramond, T (1997) Pain Scores and Side Effects of Low Level Laser Therapy in the Treatment of Myofascial Trigger Points. *Laser Therapy*, 9:67-72.
- **Laakso, L.**, Cramond, T., Richardson, C. and Galligan, J.P. (1994) Plasma ACTH and beta-endorphin levels in response to low level laser therapy (LLLT) in myofascial trigger points. *Laser Therapy*, 6:133-142.