

The RAAP Sheet

Research at Austin Physiotherapy

Austin Physiotherapy Research Team

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Research News

First of all, it's great to see the improved attendance at meetings! I'd like to give a big thanks to Jannette, Wayne, Zoe and David for their very interesting presentations on exercise prescription in stroke patients and sleep disorders following spinal cord injury. I personally learnt that sleep research is much more involved than I once thought (who knew you needed all those wires/tubes/pills stuck in awkward places...©) This month we have Rob Laird presenting about lumbo-pelvic kinematics. Everyone is most welcome to attend (no experience required!).

If anyone has anything they would like to contribute to the newsletter (comments, articles, pictures... serious or otherwise) please send me an email. Also, if you know you know of any upcoming conferences etc. that I have missed please let me know.

Katie

Quote of the Month

"The most exciting phrase to hear in science, the one that heralds new discoveries, is not 'Eureka!' (I found it!) but rather 'hmmm... that's funny.'"

Isaac Asimov

Upcoming Events

July 23

Physiotherapy Research Meeting

Presenter: Rob Laird

Topic: 3D movement measurement of lumbo-pelvic kinematics.

4-5pm, Physiotherapy Conference Room

Austin Campus

July 31

Introduction to Research Methods

Presenter: David Taylor

Topic: How to overcome common sources of bias and confounding variables

4:30-5:30pm

Education Precinct Lecture Theatre

Level 4, Austin Tower

Research Profile

Dr. David Berlowitz

Lead Investigator at the Institute for Breathing and Sleep

Research Physiotherapist at VRSS

Projects: Sleep disorders after spinal cord injury (SCI).

Recent Research Activity:

- What are the physiological causes of obstructive sleep apnea (OSA) following SCI and can these factors be managed with CPAP and other modalities?
- How does melatonin supplementation affect sleep quality in patients following SCI?
- What is the relationship between melatonin and temperature in patients following SCI?

Progress: David has completed a placebo controlled crossover RCT investigating the effects of supplemental melatonin on sleep patterns in patients with SCI. He found that supplements can increase serum melatonin and increase sleep time by 1 hour (large effect size). David is now applying for grants to start a detailed investigation of the melatonin/temperature cycle in patients following SCI.

Following a population study that identified that as many as 91% of patients with high level ASIA A SCI have OSA, David is completing a large, international RCT (COSAQ) investigating the effects of CPAP treatment for OSA on neuro-cognitive performance in acute quadriplegia.

Research Activity

We are currently consolidating databases of all grants, research, and publications in the department. **If you have a new project, have modified a project or have recently been published** please send Katie an update.

Important Dates 2013

Physiotherapy Research Meeting Dates

(Physiotherapy Conference Room, 4-5pm)

July 23

August 20

September 17

October 15

November 12

December 10

Introduction to Research Methods

Last Wednesday of the month, 4:30-5:30pm

APA Conference 2013

October 17-20

Austin Research Week

November 25-29

Research Opportunities

Research Publication of the Month

Austin LifeSciences is awarding a monthly prize to recognize best original research with **'high impact factor'**.

Publications must be original and the first or corresponding author must be a researcher from Austin LifeSciences (includes physiotherapists).

The monthly prize is \$100 and an additional prize of \$1000 will be awarded to the best paper of the year.

For more information go to: <http://www.austin.org.au/research/grants-and-scholarships/>



(High Impact courtesy of Mr. Guy)

Research Achievements

Congratulations to our talented research team on the publication of their articles as follows:

Cathy Said and colleagues - *"A longitudinal study of change in falls risk and balance and mobility in health older people and people with Alzheimer Disease"* and *"Smart home technologies to assist older people to live well at home."*

<http://www.ncbi.nlm.nih.gov/pubmed/?term=A+longitudinal+study+of+change+in+falls+risk+and+balance+and+mobility+in+health+older+people+and+people+with+Alzheimer+Disease>

<http://www.ncbi.nlm.nih.gov/pubmed/?term=Over-ground+walking+on+level+and+sloped+surfaces+in+people+with+stroke+compared+to+healthy+matched+adults>

Phuong Phan, Jannette Blennerhassett and Wayne Dite - *"Over-ground walking on level and sloped surfaces in people with stroke compared to healthy matched adults."*

<http://www.ncbi.nlm.nih.gov/pubmed/?term=Association+of+postoperative+pulmonary+complications+with+delayed+mobilization+following+major+abdominal+surgery%3A+an+observational+cohort+study>

Kimberley Haines and Sue Berney - *"Association of postoperative pulmonary complications with delayed mobilization following major abdominal surgery: an observational cohort study."*

http://www.researchgate.net/publication/237052835_Smart-Home_Technologies_to_Assist_Older_People_to_Live_Well_at_Home/file/9c96051b10781f1f82.pdf

You can find the full articles of all these publications in the Research folder on the physiotherapy drive or follow the above links:

<M:\Physio\General\RESEARCH\Physio Publications\Publications>

Quirky Research -

Preventing winter falls: a randomized controlled trial

Lianne Parkin, Sheila M Williams, Patricia Priest
Journal of the New Zealand Medical Association, 03-July-2009, Vol
122 No 1298

Abstract: Aim To investigate the hypothesis that wearing socks over shoes improves traction on icy footpaths.

Methods Randomised controlled trial involving 30 pedestrians (median age 21 years, range 18–70) travelling in a downhill direction on icy public footpaths at two sites in Dunedin, New Zealand. Intervention: different coloured socks applied over normal footwear or usual practice (unadulterated footwear). Primary outcome: difference in mean self-reported slipperiness on a 5-point scale. Secondary outcomes: falls, observer-rated slipperiness, observer-rated confidence, time to descend study slope.

Results Two-thirds of participants (65%) had previously fallen on ice. Wearing socks over normal footwear was associated with a statistically significant improvement in traction; the difference in mean self-reported slipperiness scores between the control (n=15) and intervention (n=14) groups was 1.3 (95%CI: 0.4–2.3). Agreement between self-rated and observer-rated slipperiness was high (r=0.70). A higher proportion of the intervention group (71% vs 53%) appeared confident. One member of the control group fell. There was no evidence of risk compensation in the intervention group (difference in mean descent times 1.9 seconds, 95%CI: -6.1–10.0). The only adverse events were short periods of indignity for some members of the intervention group.

Conclusion Wearing socks over shoes appears to be an effective and inexpensive method to reduce the likelihood of slipping on icy footpaths.

Important Announcements

Austin Research Week 2013

Abstract submissions are now open for Research Week (Nov 25-29).

Submissions are made electronically via the Hub.

ACT Research Symposium

The ACT branch of the APA is inviting all physiotherapists to submit papers for their Research Symposium on Saturday 7 September.

Submissions close 1 August 2013.

For more information see InMotion (June) or email Katie.