# The RAAP Sheet

Research at Austin Physiotherapy

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#### **Research News**

Congratulations to everyone who presented at the APA Conference! It was great to see some excellent talks given by Austin Health physios and to see so many people from the department at the event (despite the beautiful weather outside!).

Our next big event is the Physiotherapy Research Seminar during Austin Health Research Week. We are very privileged to have Kim Bennell (Director of the Centre for Health, Exercise and Sports Medicine, Melbourne University) as our speaker. Come along to see Julie Bernhardt debate whether or not "Clinical trials are a waste of time" alongside an expert panel at 12pm, 25<sup>th</sup> November and David Berolowitz talking on' Using databases to extend your study' on the 25<sup>th</sup> November at 3.30. We also have several posters submitted under Austin Physiotherapy. See the HUB for further details.

# Quote of the Month

"If we knew what it was we were doing, it would not be called research, would it?"

Albert Einstein



# **Upcoming Events**

# **November 26**

Physiotherapy Research Seminar

Presenter: Prof Kim Bennell

Topic: "Osteoarthritis: Old problem, new perspective."

4.00-5.00pm, Education Precinct Lecture Theatre

# December 10

## Physiotherapy Research Meeting

Topic: TBC

4-5pm, Austin Physio Semninar Room



APA Conference – Anne Daly

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# **Research Achievements**

## **Grants Awarded**

Congratulations to our senior researchers on their recent success in the NHMRG grant rounds. **A/Prof Julie Bernhardt** has received an Established Career Fellowship, **Dr Catherine Granger** was awarded a TRIP Fellowship and **Dr David Berlowitz** was successful in obtaining a Project Grant. These are great achievements; well done!!

## **Conference Awards**

The department was very successful at the APA Conference this year with several of our physios receiving awards. Congratulations!

- Selina Parry Acute Cardiorespiratory Management Award for her FES Case Controlled Cohort study.
- Cath O'Brien and Jules Massarany Helen Whitlock Bishop Awards for the highest mark in the Level 3 aquatic physiotherapy course (2012).
- Catherine Hill, Nicole Stoddon and Caroline Chao for their involvement in the study "The effect of positive expiratory pressure (PEP) therapy on symptoms, quality of life and incidence of re-exacerbation in patients with acute exacerbations of chronic obstructive pulmonary disease: a multicentre, randomised controlled trial" that received the Cardiopulmonary Rehabilitation Prize (awarded to the CI Christian Osadnik).

### **Publications**

Congratulations to all our most recently published physios! Full articles can be found here: <u>H:\General\RESEARCH\Physio Publications\Full</u> <u>Articles</u> (\* CI = chief investigator)

• Jack Ross \*CI Berlowitz; 'Auto-titrating continuous positive airway pressure treatment for obstructive sleep apnoea after acute quadriplegia (COSAQ): study protocol for a randomised controlled trial.



APA Conference – Cathy Said

# Important Announcements

# Austin Health Research Week (Nov 25-29)

The Physiotherapy Research Seminar will be held from 4-5pm on Tuesday 26<sup>th</sup> November in the Education Precinct Lecture Theatre.

Kim Bennell is our keynote speaker and will be presenting "Osteoarthritis: Old problem, new perspectives."

Please make an effort to attend the seminar.

There are a wide variety of other research activities on during the week. For full details go to:

http://hub/ResearchWeek2013/

# **Research Profile: Dr Catherine Hill**

## Cardiorespiratory Stream Leader & Co-ordinator Pulmonary Rehabilitation Program, Austin Health. Research Fellow, Institute for Breathing and Sleep

Catherine's PhD studies involved the development of the Grocery Shelving Task – an outcome measure of functional activity for patients with COPD. Since completion of her studies, Catherine has collaborated with other researchers on a number of clinical research projects and been involved in postgraduate student supervision. She is a current member of the Non Drug Study Advisory Committee at Austin Health.

### Current Projects:

- Homebase Study the benefits and costs of home based pulmonary rehabilitation in COPD - a multicentre randomised controlled equivalence trial (principal investigator – Anne Holland)
- ILD Study the benefits of exercise training in interstitial lung disease, a multicentre randomised controlled trial (principal investigator – Leona Dowman)
- SuppORT Study a multicentre randomised controlled trial of supplemental oxygen during exercise training in COPD (principal investigator – Jenny Allison)

### Recent Projects:

- Feasibility of telerehabilitation for people with COPD (principal investigator Anne Holland)
- The effects of pulmonary rehabilitation in patients with noncystic fibrosis bronchiectasis – a multicentre randomised controlled trial (principal investigator – Annemarie Lee)
- The effects of PEP in patients with acute exacerbations of COPD – a multicentre randomised controlled trial (principal investigator – Christian Osadnik)
- An investigation of the role of education in pulmonary rehabilitation- a randomised controlled trial (principal investigator – Felicity Blackstock)



APA Conference-Jules Massarany

# Funding Announcements

Applications for **Bupa Health** Foundation Grants close December 14<sup>th</sup>.

The Foundation supports research in the areas of chronic disease, healthy ageing and keeping healthcare affordable. For more information see the website:

http://www.bupa.com.au/ab out-us/bupa-healthfoundation/grants-programexpressions-of-interest

Applications for **NHMRC project grants and research** fellowships open on Dec 4<sup>th</sup>.

J.O & J.R Wicking Trust Grants and Mason Foundation: Alzheimer's Disease Grant applications will open Jan 2014

Ian Potter Foundation Medical Research Grants are open for applications until Feb 2014

# **Quirky Research**

# **Neural Correlates of Interspecies Perspective Taking** in the Post-Mortem Atlantic Salmon: An Argument For **Proper Multiple Comparisons Correction**

Craig M. Bennett<sup>1</sup>, Abigail A. Baird<sup>2</sup>, Michael B. Miller<sup>1</sup> and George L. Wolford <sup>3</sup>

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With the extreme dimensionality of functional neuroimaging data comes extreme risk for false positives. Across the 130, 000 voxels in a typical fMRI volume the probability of at least one false positive is almost certain. Proper correction for multiple comparisons should be completed during the analysis of these datasets, but is often ignored by investigators. To highlight the danger of this practice we completed an fMRI scanning session with a post-mortem Atlantic salmon as the subject. The salmon was shown the same social perspective-taking task that was later administered to a group of human subjects. Statistics that were uncorrected for multiple comparisons showed active voxel clusters in the salmon's brain cavity and spinal column. Statistics controlling for the familywise error rate (FWER) and false discovery rate (FDR) both indicated that no active voxels were present, even at relaxed statistical thresholds. We argue that relying on standard statistical thresholds (p < 0.001) and low minimum cluster sizes (k > 8) is an ineffective control for multiple comparisons. We further argue that the vast majority of fMRI studies should be utilizing proper multiple comparisons correction as standard practice when thresholding their data.

Publication Bias! -The systematic flaw in evidence-based practice

http://www.youtube.com/watch?v=RKmxL8VYy0M



http://sellmic.com/blog/

# Important Dates 2013

#### **Physiotherapy Research Meeting Dates**

(Physiotherapy Conference Room, 4-5pm)

December 10

#### Austin Research Week

November 25-29

#### Debate: Clinical Trials are a waste of time

Monday November 25, 12pm @ John Lindell lecture theatre, level 4 Lance Townsend Building

## **Physiotherapy Research** Seminar: "Osteoarthritis: Old problem, new perspective."

Presenter: Prof Kim Bennell

Tuesday November 26<sup>th</sup>, 4.00-5.00pm @ Education Precinct Lecture Theatre, Level 4 Austin Tower.