Thanks to the Pain in Childhood Special Interest Group for bringing new understanding of pain biology into focus. It is fascinating that treatment effects in children with CRPS reverse morphometric differences in the dorsolateral prefrontal cortex and improve its functional connectivity to the periaqueductal grey matter. Clinically, this may mean improved utilisation of descending inhibitory pathways by the dorsolateral prefrontal cortex (PS See article for what this means!!).

Thank you also to Olly Zekry, Stephen B Gibson and Arun Aggarwal who have shared their recent publication on subcutaneous ketamine infusions and the subsequent opioid reduction.

In the FYI section, a person in pain, has suggested an alternative Pain Scale – which I found stopped and made me think – and I think I like it.

Dr Hogg and the team at RMH, have contacted pain services for information regarding the provision of persistent pain management services within Australia. This electronic survey was sent out in May 2016, for the Waiting in Pain 2 project. This first publication of the Waiting in Pain project has been referred to extensively, in publications and policy documents, so your time spent to provide this updated information, will be incredibly productive for people in pain and pain services.

Also, we draw your attention to our new PhD Scholarship open to APS members; this award is for three years full time study (2016-2019), from APS/APRA with new partner, Seqirus. Further information is in this newsletter, and via the APS Secretariat, with PhD Scholarship Applications to be submitted by 5pm Thursday 30 June 2016.

The level of research dedicated to both understand and treat complex persistent pain is both overwhelming and also a credit to those individuals and institutions who provide razor sharp focal insights into the multi-faceted responses to targeted pain interventions.

So, this edition of the APS newsletter feels a bit like the quiet before the storm, before the incoming merging of research and clinical practice, with resultant system changes, and those yet to come.

Kind regards,

Stephanie Davies
Editor
STUDY GROUP
In this study 23 patients (14 female, 9 male) aged 9 – 17 years (average +/- SD = 13.2 +/- 2.4 years) who met Budapest diagnostic criteria for complex regional pain syndrome (CRPS) of the lower limb (13 left sided, 10 right sided) were recruited from Boston Children’s Hospital (BCH) Paediatric Pain clinic. All were right handed. 21 patients were matched for age and sex to healthy controls.

AIMS
• To investigate gray matter alterations in children with CRPS compared to healthy age and sex matched controls – i.e. to assess the disease effect of CRPS.
• To investigate the effect of intensive interdisciplinary psychophysical pain treatment on gray matter and dorsolateral prefrontal cortex – periaqueductal grey functional activity changes in patients with CRPS who are otherwise unresponsive to standard medical care.

METHODOLOGY
The CRPS patients were entered into an intensive psychophysical rehabilitation program at the paediatric pain rehabilitation center at BCH pain clinic, that involved physiotherapy, occupational therapy and psychology, 8 hours a day 5 days a week for 3 – 4 weeks.

There were two study visits, one pretreatment and one post treatment. At each study visit entailed a neurological examination from a study physician, questionnaires, and an fMRI scan.

The questionnaires assessed:
• Pain intensity using the 11 point numerical rating scale
• Depression using the Child Depression Inventory (CDI)
• Anxiety using the Multidimensional Anxiety Scale for Children (MASC)
• Pain Catastrophizing using the Pain Catastrophizing Scale Child version (PCS-C)
• Function using the Functional Disability Inventory (FDI).

The fMRI scan assessed regional cortical gray matter thickness, regional subcortical gray matter volume and the strength of functional connectivity between to the dorsolateral pre-frontal cortex (dIPFC) and the periaqueductal gray matter (PAG).

RESULTS
Disease effect:
• Disease effects were studied in 21 patients and data from pre-treatment study visit were compared with healthy controls matched for age and sex.
• There are significant morphometric differences between paediatric patients with CRPS and healthy controls.
  - Cortical gray matter was reduced in CRPS patients in multiple areas involved in motor function and planning, and the dlPFC (cognition, executive function and pain modulation)
  - Subcortical gray matter was reduced in several regions including the Caudate, Putamen and Nucleus Accumbens, and the anterior thalamus, anterior hippocampus and amygdala
  - Subcortical gray matter was increased in the mediodorsal thalamus and posterior hippocampus.

Treatment effect:
• Treatment effect was studied in 20 patients comparing data from pre-treatment study visit to post-treatment study visit.
• Following treatment, clinical improvement was associated with structural and functional brain alterations.
  - dIPFC gray matter increased after treatment.
  - Subcortical gray matter volume increased in the caudate, putamen, parahippocampal gyrus, hypothalamus and mediodorsal thalamus after treatment.
  - Gray matter did not decrease in any cortical or subcortical area after treatment
  - Overall gray matter volume in the Caudate, Putamen, Thalamus, hippocampus and amygdala did not change pre-treatment vs post-treatment (i.e. changes in each of these areas were regional changes, not the whole area).
Pre- and post treatment scans to assess functional connectivity between dlPFC and PAG was performed in 18 patients.

Functional connectivity between the dlPFC and PAG was enhanced after treatment. Clinically this may mean improved utilization of descending inhibitory pathways by the dlPFC.

Post-treatment there was a reduction in pain intensity (3.7 +/-0.7), depression, anxiety, functional disability and fear of pain.

Pain intensity was not correlated with gray matter changes.

Greater gray matter volume increase in the dlPFC post treatment was associated with lower CDI score and anhedonia and self-esteem subscale scores.

Higher Caudate gray matter volume was positively correlated with increased physical anxiety symptoms, and pain catastrophizing

Higher hippocampus gray matter volume was associated with pain catastrophizing.

Pain catastrophizing data was limited as only 9 patients returned the PCS-C questionnaires.

This study provides evidence for gray matter changes in the cerebral cortex (reduced cortical thickness) and subcortical centers (regional decrease or increased gray matter volumes) in paediatric patients with CRPS. It showed associations between gray matter changes and psychological parameters as assessed by validated questionnaires including depression, anxiety and pain catastrophization. Gray matter changes, and associated psychological issues can change rapidly with intensive psychophysical treatment. It can also enhance functional connectivity between the dlPFC (cognition, executive function and pain modulation), and the PAG, which mediates descending modulation of spinal cord nociceptor neurons. In the discussion the authors highlight that changes found in this cohort of patients were overlapping but not identical to those found in fMRI studies of adult CRPS patients. In particular, there was no correlation between gray matter changes and pain intensity in this paediatric study, as there has been in adult studies.

This is an important study looking at brain gray matter changes in paediatric CRPS patients and the response of these changes to treatment. Although similar studies have been done in adults, this is the first such study in a paediatric population. The study design does not allow causal relationships to be identified i.e. you cannot say that CRPS causes this neuroplasticity or vice versa. It is not clear how to interpret all of the fMRI findings, for example increases in the gray matter of the mediodorsal thalamus and posterior hypothalamus in CRPS patients pre-treatment did not change with treatment, and some centers not identified as abnormal pre-treatment (e.g. parahippocampal gyrus and hypothalamus) increased in size with treatment. Other limitations include the treatment program offered to these patients was highly intensive, and difficult to replicate and we do not know if the changes post-treatment are sustained. The number of patients studied at 23 was low, and only 9 patients completed the PCS-C questionnaires, so caution should be taken when interpreting the data relating PCS-C to gray matter changes.
CONTINUOUS CHEST WALL ROPIVACAINE INFUSION FOR ANALGESIA IN CHILDREN UNDERGOING NUSS PROCEDURE: A COMPARISON WITH THORACIC EPIDURAL


Reviewer: A/Prof George Chalkiadis, Pain Medicine Specialist, Children’s Pain Management Service, The Royal Children’s Hospital, Melbourne.

STUDY GROUP
32 participants who underwent NUSS procedure; two groups:
• Thoracic epidural catheter (TEC) group:
  - n = 15 (12 male, 3 female); mean age 15 (±2.75)
• Continuous wound catheter (CWC) group:
  - n = 17 (14 male, 3 female); mean age 15.06 (±2.20)

AIMS
The NUSS procedure is a minimally invasive operation to correct pectus excavatum deformity. It is associated with significant postoperative pain. Multimodal analgesia is used to treat postoperative pain and may include thoracic epidural analgesia, intravenous opioid analgesia, NSAIDs and paracetamol.

The aim was to evaluate the quality of pain control through two different forms of analgesic delivery – the multimodal CWC approach compared with the TEC.

METHODOLOGY
This study retrospectively compared a group of patients who received thoracic epidural analgesia (ropivacaine and hydromorphone) and another who received continuous wound catheter (CWC) ropivacaine infiltration.

The placement of the CWC was emphasised. Two 12.5cm fenestrated catheters were placed in the posterior axillary line in each patient, with the tip directed to the axilla. The catheters were positioned in close proximity to the rib cage, deep to the latissimus dorsi muscle.

Whilst this was not a direct and clean comparison (patients receiving CWC were also administered gabapentin and clonidine patches), several points were noteworthy.

RESULTS
Comparable analgesia was achieved using the two techniques. Patients receiving epidural analgesia experienced more pain on its cessation, received more emesis and pruritis interventions and needed more changes in the postoperative regimen. CWC were left in-situ for 7 days and patients were discharged home with them. Time in theatre was less in the CWC group and patients were discharged home earlier.

CONCLUSIONS
Continuous wound infiltration (as part of a multimodal analgesic regimen) is as effective as thoracic epidural analgesia in treating postoperative pain after the NUSS procedure. Advantages include less nausea and vomiting, less opioid induced pruritis, shorter operating room time and reduced length of hospital stay.
BEHAVIOURAL PROBLEMS IN CHILDREN WITH HEADACHE AND MATERNAL STRESS: IS CHILDREN’S ATTACHMENT SECURITY A PROTECTIVE FACTOR?


Reviewer: Dr Emily de Jager, Psychologist, Children’s Pain Management Service, Royal Children’s Hospital.

STUDY GROUP
Participants were 71 school aged children with headache (headache group), age M=9.8 years, SD=1.3, and 71 children from a normative population (control group), age M=9.2 years old, SD=1

AIMS
The aim of the study was to evaluate the extent to which children’s behavioural problems were associated with maternal stress and how the child’s perception of attachment security in the maternal attachment relationship moderates this association in children with and without recurrent headache.

METHODOLOGY
Child-mother dyads of the HG completed a semi-structured interview regarding headache symptoms and characteristics. Participants in both HG and CG completed a series of self-report questionnaires; The Child Behaviour Checklist, Parenting Stress Index- Short Form and the Security Scale (attachment).

RESULTS
There was a significant relationship between group membership and internalizing behavioural problems, children in the headache group rated higher on internalizing problems. There was no difference between the headache group and control group for parenting stress or attachment insecurity. In the headache group, attachment security decreased the strength of the relationship between maternal stress behaviour problems, with a stronger effect for externalizing behaviours.

CONCLUSIONS
A secure attachment style between child/mother may be a protective factor in managing painful and negative emotions involved in health issues.

TAKE HOME MESSAGE
The relationship between maternal stress and behavioural problems in children has been well established. However, this article highlights the potential moderating effect of a secure attachment style on this relationship for children with recurrent headaches. In challenging situations where attachment is activated through the child’s need to seek out comfort and protection (e.g. recurrent pain) having a secure attachment style may be protective against externalising behaviours. Thus, when working with families challenged by chronic pain, focusing intervention on promoting a secure attachment through supportive relationships is likely to have a positive impact on the functioning on the family through moderating the negative impact of maternal stress and child externalising behaviour.

Interestingly, this study showed no difference in maternal stress in the caring giving role between children with and without headaches. This is surprising given the stress that chronic pain has on caregivers and the well documented stress levels of caregivers in general.
SELF-REPORTED RECOVERY IS ASSOCIATED WITH IMPROVEMENTS IN LOCALIZED HYPERALGESIA AMONG ADOLESCENT FEMALES WITH PATELLOFEMORAL PAIN

STUDY GROUP
This cluster randomised controlled trial was based on the premise, based on findings by the same research group, that adolescent females with patellofemoral pain (PFP) have lower mechanical pressure pain thresholds, both around the knee and distally into the tibialis anterior muscle.

A random sub-sample of 57 was taken from the original cluster randomised group of 112 adolescent females aged between 15 – 19 years old.

The 57 were further randomised into two groups:
• PFP management through education alone; n=28.
• PFP management through education and physiotherapy three times a week for three months; n=29

NB: Data analysis was performed on 39 (68%) of those randomised between the two groups, reflecting the number available at final follow up.

AIMS
To compare the change in local and distal hyperalgesia among adolescent females with PFP who perceived themselves to have recovered after three months of intervention (irrespective of treatment group). The authors hypothesised that those who deemed themselves to be recovered would have a larger reduction in local and distal hyperalgesia.

METHODOLOGY
This study was a supplementary analysis of previously collected data from a cluster randomised controlled trial by the same authors.

• Recruitment – 2846 students from four Danish high schools answered an online questionnaire regarding musculoskeletal pain and physical activity. Telephone triage was given to those who reported knee pain. Of 82 potential participants who met the study inclusion criteria were contacted, 60 initially agreed to participate; 3 failed to attend initial testing and physical examination, thus 57 were enrolled.
• Interventions –
  - Patient education was delivered in a single session to each individual and their parents within the first week. The content, lasting approximately 30 minutes, was standardised information on pain management; activity modification using pacing; and optimal biomechanical alignment during daily tasks. This included time to answer questions from the individual and/or their parent(s). The information was replicated in booklet form.
  - Patient education and exercise was delivered during supervised group training sessions at school three times a week and included patellofemoral soft tissue mobilisation; patellar taping and exercise. There were also unsupervised home exercises to perform. Progression was based on the clinical judgement of the treating physiotherapist, following prescribed guidance.
• Outcome measures – Primary outcomes were taken with a hand-held pressure algometer, at four standardised pain pressure threshold (PPT) sites. Secondary outcomes (self-perceived recovery) was through a 7 point Likert scale; the Knee Injury and Osteoarthritis Outcome Score (KOOS) as well as worst pain intensity over the last week (10cm visual analog scale.)

RESULTS
Of the 39 participants available for follow up (68%), 10 (26%) self-reported as having recovered. When compared with the 29 who had not recovered, these 10 had PPT algometer recordings with a 67kPa larger improvement (statistically significant) around the knee and a 76kPa larger improvement (not statistically significant) at Tibialis Anterior. Those with lower pain pressure thresholds at baseline had larger improvements at three month follow up. Self-reported recovery was
also associated with a larger decrease in self-reported pain intensity. As there was no association between the intervention groups and self-reported recovery, changes in mechanical pain hyperalgesia were not related to the intervention.

**CONCLUSIONS**
The authors conclude that, when compared with those who had not recovered, those who self-reported recovery from PFP have reduced mechanical hyperalgesia around the knee.

**TAKE HOME MESSAGE**
An interesting study relating to a common presenting problem for adolescent females, and it is the first to report hyperalgesia is reduced in those who self-report they have recovered. The authors also report that there is no association between baseline mechanical pain hyperalgesia recordings and self-reported recovery, suggesting that pain pressure hyperalgesia around the knee or tibialis anterior are not prognostic indicators for recovery. The authors report adherence to exercise therapy was low, and it is not possible to know if improved adherence might improve outcomes in this study. They suggest that a reduction in nociceptive input after tissue healing better explains their results, rather than the result of the treatment given.

While there are good elements (randomisation, blinded rater, large and clearly defined cohort) the loss to follow up of 32% was high. The authors are sensible in suggesting that the results should not be considered conclusive. Nonetheless, they also propose generalisability is possible because there was little difference between those who completed and those who did not. One should consider the frequency and mode of delivery of the exercise component and whether or not that is achievable under your current healthcare funding models, particularly in Australia. With the clinical implications and calls for further research, the focus is on the biomedical and exercise components. Given it was a study led by physiotherapy researchers, it may explain the lens from which the problem is viewed. Unfortunately, they did not give adequate weight other possible reasons that may have contributed to self-reported recovery, such as emerging self-regulatory capacities; psychological flexibility; and social and developmental imperatives.
PERSONAL AND CONTEXTUAL FACTORS AFFECTING THE FUNCTIONAL ABILITY OF CHILDREN AND ADOLESCENTS WITH CHRONIC PAIN: A SYSTEMATIC REVIEW.


Reviewer: Blaise Doran, Physiotherapist, Children’s Pain Management Service, The Royal Children’s Hospital, Melbourne.

STUDY GROUP
This systematic review (SR) evaluated nearly two decades of literature on personal and contextual factors contributing to chronic pain in children and adolescents.

The SR covered all paediatric age groups, assigned to 3 categories, which formed part of the keyword search:
• Childhood – Birth to 12 years
• School age – Six to 12 years
• Adolescence – 13 to 17 years.

Of 307 journal articles identified from database searches, a total of 42 articles were fully reviewed, with 33 articles being included in the final SR. (See further details in methodology.)

AIMS
There were two clear aims:
1. To scrutinise the current evidence relating to children and adolescents with chronic pain and how personal and contextual factors might affect functional ability.
2. With the intention of informing options for intervention, to propose recommendations for further research.

METHODOLOGY
Conceptual framework:
Used an ecological framework – The Ecological Model of Sensory Modulation (EMSM), which has seven domains to consider:
• Contextual / external – Culture, environment, relationships and tasks
• Personal / internal – Attention, emotion, and sensation.
Cognition also included as a personal / internal factor due to the weight given to it in the paediatric chronic pain literature.

Clearly stated keywords:
• Chronic pain; headache; migraine disorders; fibromyalgia; adaptation psychological; activities of daily living; disability evaluation; social adjustment; quality of life; childhood; school age; adolescence

Used in the following electronic databases and searching publications from 1995 - 2014:
• PsycINFO; MEDLINE via Ovid; CINAHL; and PubMed

Inclusion criteria:
1. English language
2. Participant group <18 years old, with chronic pain (>3 months duration), attending a tertiary level chronic pain management clinic.
3. At least one personal / internal or one contextual / external factor that potentially affected function included
4. Reported a measure of functional ability
5. Used correlation coefficients to measure either one of point 3. above against point 4. above.
6. A descriptive study which did not include intervention to address functional ability.

Exclusion criteria:
1. Any study including populations of healthy children or adolescents who self-reported chronic pain

Literature assessment:
The authors used the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement Checklist for Cross-Sectional Studies. (A tool designed for systematic critical appraisal, not for providing weighting scores of quality.)

Methodological quality was assessed by dividing the number of positive scores by the total number of items. All articles were deemed of adequate methodological quality using this method. The data extracted can be seen at http://links.lww.com/JDBP/A102.
RESULTS
The following factors were found to be consistently correlated with higher levels of functional disability:

• Personal / internal: Depression; anxiety; pain intensity; and catastrophizing.
• Contextual / external: Parenting characteristics (such as parental emotional distress, catastrophizing, perceived child vulnerability and protective behaviours)
• Better family functioning was associated with higher levels of school attendance and functional ability.
• Evidence for other factors were less consistent.
• Personal and contextual factors were reported as having complex interactions.

Overall, other potential factors from the conceptual framework received scant attention. Contextual/external factors such as culture (reported as ethnicity) were not associated with functional disability, but only 2 studies reported these. Task-related factors were not reported by any study.

CONCLUSIONS
Clinical implications (targets for intervention):

• Considering the complex interplay between the individual, their family, their school and social environments
• Continue working towards better assisting and developing capacity of children and adolescents to meet the challenge of developmental tasks, developing social skills, and regulate sensation through sensory modulation.
• Considering competency-building for both parents and children, enhancing positive interactions.
• Developing resources to assist schools and other, broader social environments.

TAKE HOME MESSAGE
This is a clear, conceptually focused and well executed SR covering an appropriate and interesting selection of literature. The limitations (which are also plainly stated) prohibit offering strong conclusions for this SR. In addition to the recognition of their methodological and conceptual limitations, it is clear that the available literature was heterogeneous. Where this SR helps is identifying that there are underdeveloped areas of intervention that could be integrated into tertiary paediatric chronic pain interventions, and in particular with parents, as well as broader resources for schools and wider social situations.
RESILIENCE RESOURCES AND MECHANISMS IN PEDIATRIC CHRONIC PAIN


Reviewer: Dr Tanya Gruenewald, Clinical Psychologist, Children’s Pain Management Service, The Royal Children’s Hospital, Melbourne.

BACKGROUND
This article is a review article and the methodology implemented was a literature review which then informed the development of a comprehensive model based on clinical theory and practice. The authors were informed by the risk-resilience model in adult chronic pain (Sturgeon & Zautra, 2013), Bronfenbrenner’s ecological systems theory (Bronfenbrenner, 1979) as well as other conceptual ideas that have empirical support within the pediatric pain literature.

AIMS
This article presents a resilience-risk model for pediatric chronic pain.

SUMMARY
The authors proposed model is illustrated in a comprehensive diagram on the second page of their article. Within the model there are resilience resources (e.g. optimism) which promotes adaptive functioning by enhancing resilience mechanisms and minimising both risk factors (e.g. anxiety) and risk mechanisms (catastrophising). There is also the parallel process in which risk factors interfere with resilience and lead to poor functioning by enhancing risk mechanisms and minimising resilience factors and mechanisms. These processes occur for the individual, their family and social environment and also occurs within the context of the cultural background and time period. These factors all influence and interact with each other.

TAKE HOME MESSAGE
The article shows the importance of considering both risk and resilience factors and how building upon client strengths can be just as important as working with managing client difficulties. Although there has been little empirical evidence to test out this model this will be an important next step to determine the model’s clinical utility. As the authors indicate, future research should also examine people with chronic pain who do not experience suffering or distress to better understand how resilience factors and resources influence their pain experience.
NEEDLE ANXIETY IN CHILDREN WITH TYPE 1 DIABETES AND THEIR MOTHERS


Reviewer: Kate Austin, Clinical Nurse Consultant, Procedural Pain Management, Department of Anaesthesia and Pain Management, RCH.

STUDY GROUP
Period July 2003- March 2005. 323 children were hospitalised for newly diagnosed type 1 diabetes. 96 subjects (Children and their mothers surveyed).
- 96 subjects recruited
- 46 subjects completed the study (23 children and mother pairs)
- 12 boys and 11 girls
- 21 white & 2 African American (despite extension to recruitment diversity of sample did not increase)
- Ages 4.9-16.2 (mean 9.9)
- Young children (<9 years) 9 (39%)
- Older children (9 and older) 14 (61%)

AIMS
To report the prevalence of fear, distress, pain glucose fingersticks in children with newly diagnosed diabetes and their mothers, and the association with diabetes control. Diabetes control was investigated to examine the association with children’s fear and distress, and children’s cooperation.

This study identifies the prevalence of:
1. Children who report moderate-to-severe fear and pain with injections and fingersticks;
2. Mothers who perceive their children’s pain as moderate-to-severe;
3. Mothers who report high levels of their own fear and distress when giving injections;
4. Mothers who report poor cooperation, verbal protests, and physical protest from their children.

METHODOLOGY
- Survey
- Standard descriptive statistics
- Fisher’s exact tests
- Spearman correlation coefficients

Perceptions of Insulin Shots and Fingersticks Surveys were given to children and their mothers. Surveys were collected at diagnosis, and three subsequent outpatient visits (range 6-9 months post diagnosis)
- Children < 9 years completed the FACES Pain Scale to rate fear and pain.
- Children 9 and older and mothers completed the Visual Analogue Scale (VAS) to self-report their fear and their pain.
- Mother’s perceptions of the child’s pain, physical and verbal protest, and cooperation were also captured.

Diabetes control was evaluated by HbA1c levels, which represent the percentage of glucose bound to haemoglobin.
- HbA1c level is an indication of diabetes control over the previous 3 months.
- Levels were obtained at diagnosis and at clinic visits.

RESULTS
At diagnosis children reported fear more than pain
- Insulin injections (40.9% fear v 22.7% pain)
- Fingersticks (31.8 fear v 22.7% pain)
- Both fear and pain lessen over time
- 9.5% of children continue to report fear with both insulin injections and fingersticks
- 9.5% of children continue to report pain with injections at 6 to 9 months
- 4.8% of children continue to report pain with fingersticks at 6 to 9 months

Children’s report of fear and pain:
(Scores ≥ 4 classified as moderate-to-severe pain and fear using FACES and VAS)
- Young children report fear as moderate to severe, with injections, 75% compared to 21.4% in older children.
- At diagnosis 50% younger children rated moderate-to-severe pain with fingersticks compared to over 9 years 7.1%
- At 6-9 months after diagnosis, only the younger children still reported moderate-severe fear and pain with fingersticks.

Mothers report of fear, distress and pain:
- When administering insulin injections mothers reported fear (43.5%), distress (52.2%) and both fear and distress (21.7%)
- When giving fingersticks mothers reported both fear and distress (21.7%)
• 13.6% of mothers continued to report distress when giving injections
• 30.4% of mothers rated their perception of their child’s pain at moderate-to-severe at diagnosis for both insulin injections and fingersticks.
• At 6-9 months mothers reported pain as moderate-to-severe
  - 4.8% for injections
  - 8.7% for fingersticks.

Mothers report of child cooperation, verbal and physical protest:
• Mothers that reported 21.7% of children did not cooperate with insulin injections at diagnosis.
• 18.2% of mothers continued to report poor cooperation at 6 to 9 months.
• 26.1% of children demonstrated verbal protest and 17.4% physical protest with insulin injections.
• Mothers reported 26.1% of children reported children not cooperating with fingersticks at diagnosis.
• 30.4% of children demonstrated verbal protest and 17.4% physical protest with fingersticks.

Mothers Distress and Report of Child’s pain and Cooperation:
• Mothers reporting high distress and pain as moderate-to-severe with insulin injections were associated with children’s poor cooperation at diagnosis (p=0.037 and p=0.017).
• Mothers report of moderate-to-severe pain with fingersticks was also associated with poor cooperation at diagnosis (p=0.003).
• No significant association at 6 to 9 months for insulin injections or fingersticks.

Diabetes control HbA1c levels and associated factors:
• Verbal protest (p=0.03) and mothers perception that children’s pain was moderate-to severe (p=0.047) with fingersticks at diagnosis were positively correlated with HbA1c at 1 year.
• Poor child cooperation with injections at 6 to 9 months (p=0.02) was positively correlated with HbA1c at 1 year.
• No child self-reports of fear and pain were associated with HbA1c levels.

CONCLUSIONS
Greater numbers of younger children compared to older report pain and fear with injections and fingersticks. 26% of younger children continued report fear and pain. Age is inversely related to reported needle pain and fear, decreasing with age. Mothers who report high distress at diagnosis remain distressed overtime. Higher HbA1cs levels and poor cooperation were seen in the children with mothers who reported distress and pain as moderate-to-severe, for insulin injections and fingersticks.

TAKE HOMEMESSAGE
• Clinicians should incorporate formal assessment and intervention for needle anxiety children and parents at diagnosis of diabetes.
• Documentation of needle anxiety will allow for a baseline, from which clinicians may then establish coping strategies and education for the child and parent.
• More children report fear than pain with both injections and fingersticks.
• Clinicians should explain and reframe the insulin injection (most children associate needles with IM injection) to address fear, include medical play for desensitization.
• Alleviation of parental distress may improve children’s behaviours.
EXPANDING HORIZONS
2017 Australian Pain Society 37th Annual Scientific Meeting
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2017 Australian Pain Society
37th Annual Scientific Meeting
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Immediately follows the 2017 Neuromodulation Society of Australia and New Zealand 12th Annual Scientific Meeting

The Australian Pain Society Newsletter, Volume 36, Issue 4 - June 2016 | 13
Thank you to APS members Olly Zekry, Stephen B Gibson and Arun Aggarwal who have shared the following recent publication:

SUBANESTHETIC, SUBCUTANEOUS KETAMINE INFUSION THERAPY IN THE TREATMENT OF CHRONIC NONMALIGNANT PAIN

Olly Zekry, Stephen B Gibson and Arun Aggarwal

Journal of Pain & Palliative Care Pharmacotherapy, DOI: 10.3109/15360288.2016.1161690
Article first published online: 19 APR 2016

ABSTRACT

This study was designed to describe the efficacy and toxicity of subcutaneous ketamine infusions and sublingual ketamine lozenges for the treatment of chronic nonmalignant pain. Data were collected prospectively on 70 subjects managed in an academic, tertiary care hospital between 2007 and 2012 who received between 3 and 7 days of subanesthetic, subcutaneous ketamine infusion. Data were analyzed for efficacy, adverse effects, and reduction in use of opioid medication. We also analyzed whether subsequent treatment with sublingual ketamine lozenges resulted in longer-term efficacy of the beneficial effects of the initial ketamine infusion. There was a significant reduction in pain intensity measured by numerical rating scale (NRS) from mean of 6.38 before ketamine to 4.60 after ketamine ($P < .005$) that was sustained for between 3 months and 6 years. In subjects on opioids, there was a significant reduction in opioid use at the end of the ketamine infusion from a mean morphine equivalent dose (MMED) of 216 mg/day before ketamine to 89 mg/day after ketamine ($P < .005$). The overall reduction in opioid use after ketamine infusion was 59%. No subjects increased their use of opioids during their hospitalization for the ketamine infusion. A small proportion of subjects who responded to the infusion were continued on ketamine lozenges. This group was followed for between 3 months and 2 years. The use of ketamine lozenges after the infusion resulted in 31% of these subjects being able to cease their use of opioids compared with only 6% who did not receive ketamine lozenges. Eleven percent of subjects who received lozenges subsequently increased their opioid usage. Adverse effects were fairly common, but only mild, with 46% of patients experiencing light-headedness and dizziness, 25% tiredness and sedation, 12% headaches, 12% hallucinations, and 8% vivid dreams. Adverse effects were easily managed by reducing the rate of the ketamine infusion. The administration of subanesthetic, subcutaneous ketamine infusion was well tolerated, with mostly mild adverse effects and no serious adverse effects. The infusion provided significant pain relief in subjects who had failed a wide range of pharmacological and cognitive behavioral therapies. In addition, the results indicate that sublingual ketamine lozenges offer a promising therapeutic option for longer-term relief of chronic nonmalignant pain. The ketamine lozenges have been shown to have acceptable storage stability, and the sublingual bioavailability is sufficiently high and reproducible to support its use in this context.

DECLARATION

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this paper.

HAVE YOU HAD AN ARTICLE ACCEPTED FOR PUBLICATION THIS YEAR?

Reminder that we are keen that members inform us when they have publications so that this can be shared with your APS colleagues. Please send the newsletter editor (via the APS Secretariat, aps@apsoc.org.au) the title, authors and reference (i.e. the journal, volume etc.) of the article, preferably with a short explanatory note to give our readers the gist of the article, e.g. the conclusions part of the abstract; if you would like to supply a short commentary on the article, even better.

Christin Bird, Co-Editor
The Australian Pain Society (APS) is a multidisciplinary organisation aiming to relieve pain and related suffering through advocacy and leadership in clinical practice, education and research. The Australian Pain Relief Association (APRA) is a registered charity with the Australian Taxation Office and works closely with the APS to support education and research in pain.

APS/APRA are pleased to announce a new partner, Seqirus, to our flagship PhD Scholarship program that has supported research into pain for over 20 years.

In brief, the award is to enable full time research leading to a Doctor of Philosophy or equivalent:
• Three years full time study from 2016 to 2019
• At any recognised Australian University
• The applicant must be an Australian citizen or permanent resident
• The applicant and his/her supervisor must be members of the Australian Pain Society; and
• The funded project can be related to any aspect of the mechanisms, diagnosis or treatment of acute or chronic pain.

Further information about the PhD Scholarship, including the Conditions of Award, can be obtained from APRA via the APS Secretariat.

PhD Scholarship program forms are available online and must be submitted by 5pm on Thursday 30 June 2016.
## SCHOLARSHIP FEATURE

Current Scholars

<table>
<thead>
<tr>
<th>PhD Scholarship Sponsor</th>
<th>Scholar</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mundipharma #3-APS-APRA</td>
<td>Audrey Wang</td>
<td>“An investigation of the role of the brain in recovery from CRPS, using fMRI”</td>
</tr>
<tr>
<td>Janssen Cilag #2-APS-APRA</td>
<td>Sarah Kissiwa</td>
<td>“Pain induced synaptic plasticity in the amygdala”</td>
</tr>
<tr>
<td>APS #5-APRA</td>
<td>James Kang</td>
<td>“Epigenetic influence in cognitive impairments in chronic neuropathic pain”</td>
</tr>
</tbody>
</table>

**Vacant positions at Aalborg University**

PhD and Post-Doctoral Fellowships  
Deadline: 06 June 2016
<table>
<thead>
<tr>
<th>PhD Scholarship Sponsor</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS #1-APRA</td>
<td>“Antinociceptive pharmacology of morphine and its major glucuronide metabolites”</td>
</tr>
<tr>
<td>CSL #1-APS-APRA</td>
<td>“Antinociceptive properties of the neurosteroid alphadolone”</td>
</tr>
<tr>
<td>CSL #2-APS-APRA</td>
<td>“Conditional comfort: A grounded theory study in nursing approaches to acknowledging and responding to pain in nursing home residents with dementia”</td>
</tr>
<tr>
<td>APS #2-APRA</td>
<td>“Preclinical studies in painful diabetic neuropathy”</td>
</tr>
<tr>
<td>CSL #3-APS-APRA</td>
<td>“Individual differences in vulnerability to the development of chronic pain following injury”</td>
</tr>
<tr>
<td>APS #3-APRA</td>
<td>“Caring for patients experiencing episodes of severe pain in an acute care hospital: Nurses’ perspective”</td>
</tr>
<tr>
<td>APS #4-APRA</td>
<td>“Defining inhibitor binding sites unique to the glycine transporter, GLYT2: A potential target for the treatment of chronic pain”</td>
</tr>
<tr>
<td>Janssen Cilag #1-APS-APRA</td>
<td>“An investigation of the role of sleep in chronic pain”</td>
</tr>
</tbody>
</table>
In 2008-2010, the Australian Pain Society, in conjunction with the Royal Melbourne Hospital (RMH) team lead by Dr Malcolm Hogg, collated information regarding the provision of persistent pain management services within Australia. This information has been subsequently published (Hogg M, MJA 2012; 196: p386), along with a more in-depth analysis of multidisciplinary staffing levels within pain services (Burke A, Pain Medicine 2015; 16: p1221).

The information gained from the “Waiting in Pain” study has formed the basis of significant political activity by the Australian Pain Society and Painaustralia seeking systematic policy approaches to the provision of pain management services. In addition, it has helped develop our Facility Directory, which reflects the development of services throughout Australia.

The Australian Pain Society (APS) has initiated an update of the Waiting in Pain Study, recognising significant gains in clinical service delivery but cognisant of ongoing gaps in the provision of care. To enable a more accurate and rapid process, we have commissioned a commercial firm (Insync) with expertise in electronic data capture and research to work alongside Dr Hogg and the team at RMH to implement an update via an electronic survey. This project has undergone ethics committee review and gained approval as a low risk project (RMH HREC QA 2016072).

Identified pain management services have now been approached via email to service leaders; we stress participation is voluntary and all data attained will be treated confidentially and de-identified for analysis. Aspects of interest include descriptions of service delivery models, staffing levels and activity: we encourage your consideration and discussion of this project, both within your own clinical practice and/or with other pain management teams. We hope to finish up the data collection phase of this project by mid June, but would be happy to extend to allow maximal participants.

We would be happy to discuss any queries or concerns you may have (contact us) and thank you for your ongoing membership of the Australian Pain Society.
SUBMISSIONS TO THE NEWSLETTER

We welcome submissions, whether brief or extended, about matters of interest to our readers - for example, reports of educational activities or articles about basic science or clinical research. Please allow time for modifications to be made to optimise a submission’s suitability for publication. In general it will be unlikely that a submission received after the 15th of each month will be published in the newsletter of the following month.

Stephanie Davies, Editor

PAIN Reports

PAIN Reports® is an official IASP publication. An open access multidisciplinary journal, PAIN Reports promotes a global, rapid, and readily accessible forum that advances clinical, applied, and basic research on pain. The online journal publishes full-length articles as well as brief reports, reviews, meta-analyses, meeting proceedings, and selected case reports. PAIN Reports gives special attention to submissions reporting the results of enterprise and high-risk research and pilot studies as well as locally developed clinical guidelines from scientists and clinicians in developing countries. IASP also publishes the journal PAIN.

David Yarnitsky, MD, is the Editor-in-Chief. The Editorial Board will be announced soon.

Pain Management in Practice

Extend your clinical skills with this interactive 2 day workshop

Develop specialised assessment techniques for your clients with persistent pain

Implement practical techniques to empower your clients to achieve their goals

“Given me skills and insights for difficult patients who are getting stuck” - Physiotherapist

“Really useful approach to implement into clinical practice” - Titled Musculoskeletal Physiotherapist

“Helps identify ways to work with resistance and challenge” - Psychologist

Melbourne  12th May 2016
Brisbane  16th June 2016
Sydney  21st July 2016

Learn more and register at EmpowerRehab.com/Workshops or call (03) 9459 3344
ENHANCING TREATMENT ADHERENCE

PMRI Specialist Symposium
9 - 6pm – Charles Perkins Center Auditorium
University of Sydney, Camperdown, NSW 2000

sydney.edu.au/medicine/pmri/education/continuing/symposia.php

AUSTRALIAN ASSISTIVE TECHNOLOGY CONFERENCE
July 27-29 2016 | Jupiters Casino | Gold Coast Queensland

Collaborate, Empower, Transform realising opportunities with assistive technology solutions

www.arata.org.au/conference2016/

RMSANZ

2016 Rehabilitation Medicine Society of Australia and New Zealand
1st Annual Scientific Meeting
16 - 19 October 2016
Crown Promenade Melbourne

For sponsorship and exhibition opportunities or more information please contact the RMSANZ Secretariat
DC Conferences Pty Ltd
P 61 2 9954 4400
E rmsanz2016@dcconferences.com.au

For further information and to complete an Expression of Interest visit www.dcconferences.com.au/rmsanz2016
EXPANDING HORIZONS
2017 Australian Pain Society 37th Annual Scientific Meeting
9 - 12 April 2017 | Adelaide Convention Centre

Expressions of interest online at www.dcconferences.com.au/aps2017
For sponsorship and exhibition opportunities or more information please contact the Conference Secretariat
DC Conferences Pty Ltd | P 61 2 9954 4400 | E aps2017@dcconferences.com.au

ISPP 2017
11th International Symposium on Pediatric Pain
Kuala Lumpur, Malaysia

Organised by

Supported by

Visit us at www.ispp2017.org  Email us at secretariat@ispp2017.org

Deadline for Workshop Proposals 15 August 2016  Deadline for Poster Abstract 31 January 2017
Thank you to all the members who responded to our Post-Conference Evaluation survey for our recent Annual Scientific Meeting in Perth.

Congratulations to the prize winner:

Jillian Kemp

Jillian has won a full registration to our next conference in Adelaide, 9-13 April 2017, see you there!
ITEMS OF INTEREST FOR OUR MEMBERS


ePPOC: electronic Persistent Pain Outcomes Collaboration
For more information about ePPOC, refer to the website: http://ahsri.uow.edu.au/eppoc/index.html

Indigenous health education and guides

PainHEALTH website
Phase 1 Updates released 29NOV15; http://painhealth.csse.uwa.edu.au/
Comprehensive update of all conditions and pain management content with the addition of new resources and key literature effective to OCT15 (systematic reviews; meta-analysis; RCT). Update of Further Assistance (including the addition of the Australian Pain Society Facility Directory).

Pain Series
An excellent series of articles run late 2015 by The Conversation: https://theconversation.com/au/topics/pain-series

Low Back Pain (LBP) in Aboriginal Australians
A very informative series of 5 videos developed by WA Centre for Rural Health about low back pain in Aboriginal Australians: https://www.youtube.com/playlist?list=PLGsL0Kp0YWFWulyKi1oCG7INwFucLFyVJ

The Australian

ABC Catalyst

ANZCA/FPM Free Opioid Calculator App
Smart phone app that converts opiates to milligrams of morphine, available for both iPhone and Android: http://fpm.anzca.edu.au/Front-page-news/Free-Opioid-Calculator-App

Stanford University
CHOIR Collaborative Health Outcomes Information Registry: https://choir.stanford.edu/

Research Review – MAR16

Pain Scale suggestion from a consumer and APS response
The APS was approached via Facebook by an Australian patient on the advice of his surgeon to do so. The patient describes himself as having chronic pain, with the dilemma of not knowing how to communicate pain intensity in situations such as Accident and Emergency presentations. Hence, he came up with his own list of increasing pain intensities:

1. I feel a tension in my afflicted area.
2. I feel a light pain, but it is weak.
3. I am aware of my pain, but can hide it.
4. I can hide my pain from most friends.
5. I cannot hide my pain from friends.
6. I can hide my pain from most strangers.
7. I cannot hide my pain from strangers.
8. My response is involuntary.
9. My response is violent and involuntary.
10. I have never felt pain like this before.

APS response:
It does not appear as if the intention of this pain scale is to add another set of criteria for clinicians to follow, or indeed yet another pain scale to offer patients. In particular, the scale is clearly a very personalised version of what features relate to a different “intensity” of pain.

However, it is interesting to reflect on the groupings of the specific items in the scale; in particular, the relationship that this patient draws between pain intensity and the difference abilities to “control” the experience of pain. This is represented in items related to “hiding” pain and the (in)voluntary nature of pain responses.
Another interesting feature of the scale relates to the highest and lowest ratings. The lowest relates to tension, as opposed to discomfort, and the greatest to the unfamiliarity of the pain. This brings to mind the concepts of disempowerment, or perhaps even reduced self-efficacy, in the relationship to the experience of chronic pain. It is almost as if the scale goes from “tight”, through increasing degrees of “ability self-manage”, before ending with a “new world of hurt”!

Above all else, the scale gives clinicians another opportunity to enter into the internal world of the patient with chronic pain, and that is not a bad thing!

Australia Commission on Safety and Quality in Health Care (ACSQHC) Resources:


NPS MedicineWise Resources


NSW Agency for Clinical Innovation Resources:


2016 Annual Scientific Meeting, Perth – Media Coverage:

Refer to Twitter hashtag: #auspain2016

1. Pain management and measurement for little children with Dianne Crellin, RCH Melbourne:
   b. 10MAR16 – Weblink: http://www.abc.net.au/local/stories/2016/03/10/4422525.htm
   c. 23MAR16 – ABC Melbourne 774 Afternoons interview with Clare Bowditch (link unavailable)

2. The role of partners with Dr Toby Newton-John, UTS Sydney:
   a. 10MAR16 – ABC Perth 720 interview with Gillian O’Shaughnessy (link unavailable)
3. Chronic pain among adolescents:
   a. 10MAR16 – Dr Susie Lord, John Hunter Children’s Hospital, ABC Newcastle (link unavailable)

4. Mindfulness for managing pain:
   b. 12MAR16 – Dr Tasha Stanton and Prof Lorimer Mosely Uni SA, Dr Toby Newton-John UTS NSW and Dr Sylvia Gustin Uni NSW: Audio: https://itunes.apple.com/au/podcast/pain-on-the-brain/id73330911?i=364717951&mt=2
   c. 13 & 15MAR16 - Dr Tasha Stanton and Prof Lorimer Mosely Uni SA, Dr Toby Newton-John UTS NSW and Dr Sylvia Gustin Uni NSW: Weblink: http://www.abc.net.au/radionational/programs/allinthemind/pain-on-the-brain/7232844
   d. 15MAR16 - Georgie Davidson, Mindful Movement SA, ABC SA late afternoons interview with Annette Marner (link unavailable)
   e. 21MAR16 - Dr Tasha Stanton and Prof Lorimer Mosely Uni SA, Dr Toby Newton-John UTS NSW and Dr Sylvia Gustin Uni NSW: Weblink: http://www.abc.net.au/radionational/programs/allinthemind/what-chronic-pain-does-to-your-brain/7255032
   f. 23MAR16 - Prof Lorimer Mosely Uni SA, ABC Adelaide 891 Afternoons interview with Sonya Feldhoff (link unavailable)
   g. 30MAR16 - Georgie Davidson, Mindful Movement SA, The Courier newspaper, Adelaide Hills (link unavailable)

5. Pain during oral surgery with Dr Claire Ashton-James, PMRI, Sydney, NSW:

6. Chronic Pain Management with Dr Stephanie Davies, WA, ABC Perth 720 Drive interview with Jane Marwick (link unavailable)

7. Digital technologies to help pain patients with Dr Helen Slater Uni WA, Jenni Johnson NSW ACI and WA patient living with persistent pain in the community Ted Witham:
   b. 18MAR16 - ABC Rural Online: http://www.abc.net.au/news/2016-03-17/nrn-rural-health-hold/7251156
NEW MEMBERS & POSITION VACANT

<table>
<thead>
<tr>
<th>Title</th>
<th>First Name</th>
<th>Last Name</th>
<th>Discipline Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr</td>
<td>Jacob</td>
<td>Koshy</td>
<td>Anaesthesia</td>
</tr>
<tr>
<td>Mr</td>
<td>Tony</td>
<td>Hollins</td>
<td>Psychology</td>
</tr>
</tbody>
</table>

Learn more: [www.empowerrehab.com/jobs/](http://www.empowerrehab.com/jobs/) or call (03) 9459 3344

Pain Management Psychologist

Join the team at Empower Rehab in providing quality psychological therapy to clients in the North Eastern suburbs of Melbourne.

Be involved in providing quality interdisciplinary pain management treatment to clients with persistent pain, including group and individual treatment.

In addition, you will have the opportunity to work with clients with a broad range of presenting issues, including mood issues, anxiety, sleep difficulties, and relationship difficulties, with opportunities to focus on areas of special interest.

You need a minimum 3 years experience working with clients with persistent pain.

We offer 2-3 days per week with possible out of hours sessions, and professional supervision and in-house training.

Learn more: [www.empowerrehab.com/jobs/](http://www.empowerrehab.com/jobs/) or call (03) 9459 3344
CALENDAR OF EVENTS

1-3 Jun 2016
Ukrainian Association for the Study of Pain
2nd East-European Congress on Pain
Odessa Hotel Complex, Odessa, Ukraine

10-11 Jun 2016
Occupational Therapy Australia
Breaking Down Barriers Through Participation
Pan Pacific, Perth, WA

Various dates from 16 Jun to 17 Nov 2016
Empower Rehab
Pain Management in Practice 2 day workshop
Various venues, Brisbane, Sydney, QLD, NSW

22-25 Jun 2016
Australian Association for Cognitive and Behaviour Therapy (AACBT)
8th World Congress of Behavioural and Cognitive Therapies
Melbourne Convention and Exhibition Centre, Melbourne, VIC

01 Jul 2016
University of Sydney - Sydney Medical School - Pain Management Research Institute
Enhancing Treatment Adherence Specialist Pain Symposium
The University of Sydney, Sydney, NSW

27-29 Jul 2016
Australian Rehabilitation & Assistive Technology Association and Occupational Therapy Australia
Australian Assistive Technology Conference
Jupiters Hotel & Casino, Gold Coast, QLD
CALENDAR OF EVENTS

29-31 Jul 2016
Pharmaceutical Society of Australia - PSA16
*Leading Pharmacy Innovation*
Four Points by Sheraton, Darling Harbour, Sydney, NSW
http://www.psa.org.au/psa16

6-7 Aug 2016
PCS 2nd Annual Global Pain Conference 2016
*New Gateway from East to West*
Radisson Blu Hotel, Moscow, Russia

18-21 Aug 2016
Asian and Oceanian Association of Neurology: 15th Asian and Oceanian Congress of Neurology
*Advanced Education in Neurology in Asian Oceania Region*
Kuala Kumpur Convention Centre, Kuala Lumpur, Malaysia
http://aocn2016.com

26-28 Aug 2016
Australian Physiotherapy Association
*2016 Business and Leadership Conference*
Darwin, Darwin, NT

30 Aug-2 Sep 2016
Australian College of Nurse Practitioners 11th Conference incorporating 7th Aust Emergency Nurse Practitioner Symposium
*The Centre of Care*
Alice Springs Convention Centre, Alice Springs, NT

13-16 Sep 2016
Australian Psychological Society 2016 Congress
*Psychology United for the Future*
Melbourne Convention and Exhibition Centre, Melbourne, VIC
CALENDAR OF EVENTS

16-18 Sep 2016
Faculty of Pain Medicine Spring Meeting
Toil and trouble: managing pain in the workplace
Adelaide Hills Convention Centre, Hahndorf, Adelaide Hills, SA
http://fpm.anzca.edu.au/events/2016-spring-meeting

26-30 Sep 2016
International Association for the Study of Pain (IASP)
16th World Congress on Pain
Pacifico Yokohama Convention Complex, Yokohama, Japan
http://www.iasp-pain.org/Yokohama

29 Sep-1 Oct 2016
RACGP - GP16
Clinical, Digital, Leadership
Perth Convention & Exhibition Centre, Perth, WA

1-2 Oct 2016
Fibromyalgia Research Symposium 2016
Official Satellite Symposium to IASP 16th World Congress on Pain
Hotel St Priere, Nagasaki, Japan
http://www.mdp.nagasaki-u.ac.jp/pain/frs2016_hp/index.html

16-19 Oct 2016
Rehabilitation Medicine Society of Australia and New Zealand (RMSANZ) 1st Annual Scientific Meeting
Change. Challenge. Opportunity
Crowne Promenade, Melbourne, VIC

20-21 Oct 2016
Australian Disease Management Association (ADMA) 12th Annual National Conference
Person Centred Healthcare: Achievements & Challenges
Melbourne Convention & Exhibition Centre, Melbourne, VIC
CALENDAR OF EVENTS

26-28 Oct 2016
Australian College of Nursing
The National Nursing Forum 2016 - The Power of Now
Melbourne Park Function Centre, Melbourne, VIC

Society for Paediatric Anaesthesia in New Zealand and Australia
SPANZA 2016 From Vine to Vintage
Adelaide Convention Centre, Adelaide, SA
https://willorganise.eventsair.com/QuickEventWebsitePortal/2016-spanza/asm-website

8-10 Nov 2016
Lowitja Institute International Indigenous Health and Wellbeing Conference 2016
Identity Knowledge Strength
Melbourne Convention & Exhibition Centre, Melbourne, VIC
http://www.lowitjaconf2016.org.au

1-3 Dec 2016
Indigenous Conference Services
International Indigenous Allied Health Conference
Pullman, Cairns, QLD

1-3 Dec 2016
Indigenous Conference Services
Closing the Gap 2016 International Indigenous Health Conference
Pullman, Cairns, QLD
http://www.indigenousconferences.com/#!2016-indigenous-health-conference/sta1q

24-26 Mar 2017
RANZCP, RACP & RACGP
International Medicine in Addiction Conference IMiA17
International Convention Centre Sydney, Sydney, NSW
http://www.imia17.com.au
### CALENDAR OF EVENTS

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Website</th>
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</thead>
</table>

### VISION:
All people will have optimal access to pain prevention and management throughout their life.

### MISSION:
The Australian Pain Society is a multidisciplinary organisation aiming to relieve pain and related suffering through advocacy and leadership in clinical practice, education and research.

### AIMS:
- To promote the provision of healthcare services for pain management
- To promote equity of access to pain management services
- To actively engage with key stakeholders and contribute to their activities
- To provide a contemporary forum to discuss issues relating to pain research and treatment
- To foster and support pain-related evidence-based research
- To share and promote the expertise of all disciplines involved in the treatment of pain
- To foster and support the prevention of persistent pain
- To promote and facilitate evidence-based pain related education for health professionals and the community
- To promote the development and use of standards and outcome measures in everyday clinical practice
### DIRECTORS

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
</tr>
</thead>
</table>
| President| **Dr Geoffrey Speldewinde** | Capital Pain & Rehabilitation Clinic  
25 Napier Close  
Deakin ACT 2600  
Tel: 02 6282 6240 Fax: 02 6282 5510 |       |           |
| President-Elect | **Ms Fiona Hodson** | Hunter Integrated Pain Service  
John Hunter Hospital Campus  
New Lambton NSW 2305  
Tel: 02 4922 3435 Fax: 02 4922 3438 |       |           |
| Secretary | **Dr Will Howard** | Director, Pain Service  
Austin Health  
Studley Road  
Heidelberg VIC 3084  
Tel: 03 9496 3800 Fax: 03 9459 6421 |       |           |
| Treasurer | **Dr Gavin Chin** | Royal Darwin Hospital  
PO Box 41326  
Casuarina NT 0811  
Tel: 08 8922 8888 Fax: 08 8922 8900 |       |           |
| ACT Director | **Mrs Joy Burdack** | Calvary Health Care ACT  
PO Box 254  
Jamison Centre ACT 2614  
Tel: 02 6201 6854 Fax: 02 6201 6949 |       |           |
| NSW Director | **Mr Tim Austin** | Camperdown Physiotherapy  
Royal Prince Alfred Medical Centre  
100 Carillon Avenue  
Newtown NSW 2042  
Tel: 02 9517 1787 Fax: 02 9516 2491 |       |           |
| NT Director | **Ms Diann Black** | Royal Darwin Hospital  
PO Box 41326  
Casuarina NT 0811  
Tel: 08 8931 1029 |       |           |
| QLD Director | **Ms Trudy Maunsell** | Princess Alexandra Hospital  
199 Ipswich Road  
Woolloongabba QLD 4102  
Tel: 07 3176 5547 Fax: 07 3176 5102 |       |           |
| SA Director | **Ms Anne Burke** | Royal Adelaide Hospital Pain Clinic  
North Terrace  
Adelaide SA 5000  
Tel: 08 8222 4770 Fax: 08 8222 5904 |       |           |
| TAS Director | **Mr Simon Watt** | Physiotherapy - Outpatients  
North West Regional Hospital  
23 Brickport Road  
Burnie TAS 7320  
Tel: 03 6430 6608 Fax: 03 6430 6607 |       |           |
| VIC Director | **Dr Diarmuid McCoy** | Pain Matrix  
73 Little Ryrie Street  
Geelong VIC 3220  
Tel: 03 5229 6996 Fax: 03 5229 0941 |       |           |
| WA Director | **Mr Shadreck Tozana** | Functional Revival and Baptistcare Bethal  
2 Bethal Way  
Albany WA 6330  
Tel: 0437 541 165 Fax: 08 9841 8480 |       |           |
OFFICE BEARERS:

Immediate Past President:  
Dr Malcolm Hogg  
Department of Anaesthesia and Pain Management  
Royal Melbourne Hospital  
Parkville VIC 3052  
Tel: 03 9342 7540 Fax: 03 9342 8623

SPC Chair:  
Professor Michele Sterling  
Griffith Health Centre  
Griffith University  
Parklands Drive  
Southport QLD 4222  
Tel: 07 5678 0368

IASP Liaison:  
Professor Michael Nicholas  
Pain Management Research Institute  
Royal North Shore Hospital  
St Leonards NSW 2065  
Tel: 02 9926 7894 Fax: 02 9662 6279  
Website: www.iasp-pain.org

Communications/Website/Social & other Media Coordinator:  
Dr Will Howard  
Director, Pain Service  
Austin Health  
Studley Road  
Heidelberg VIC 3084  
Tel: 03 9496 3800 Fax: 03 9459 6421  
Tel: 1300 773 247 Fax: 03 9816 8564

Newsletter Editor:  
Dr Stephanie Davies  
WA Specialist Pain Services  
Unit 5/136 Railway St  
Cottesloe WA 6011  
Tel: 0412 933 419 Fax: 08 9286 8023

Newsletter Co-Editor:  
Ms Christin Bird  
Precision Brain, Spine and Pain Clinic  
Lower Ground, 115 Cotham Road  
Kew VIC 3101  
Tel: 1300 773 247 Fax: 03 9816 8564

PhD Scholarship Chair:  
A/Prof Michael Farrell  
School of Biomedical Sciences  
Monash University  
Clayton VIC 3800  
Tel: 03 9905 6094

Secretariat:  
DC Conferences Pty Ltd  
PO Box 637  
North Sydney, NSW 2059  
Tel: 02 9016 4343 Fax: 02 9954 0666  
Email: aps@apsoc.org.au  
Website: www.apsoc.org.au