



## **Compumedics, Proudly Supporting the 2012 ASA in Darwin, Australia.** *Come and see us at Booth 17!*

### **Compumedics 2012 ASA events:**

**Compumedics Annual Client Event – Thursday, Oct 11** • This year get ready to shine at our **Compumedics Bollywood Bash**!

Compumedics Fun Run – Thursday, Oct 11 at 6.30am • Walkers, joggers, runners: something for everyone!



Get ready to shine at

ASA 2012!

Compumedics

Compumedics Annual Client Dinner

# Unlocking the secrets to the human body from the top of the World!

Story by Kate Burgess

The Peninsula Sleep Laboratory team returned from its international six weeks research expedition in the Himalaya with data that may hold the key to developing new treatments for sea level and high altitude diseases. The team, together with their international cohorts hiked for 10 days up to the EV-K2-CNR Italian Research Pyramid (http://www.evk2cnr.org) in the Kumbu Valley, 5050 meters above sea level. After several days to acclimatize, the team embarked on 18 sequential nights of sleep studies. Twenty three researchers conducted almost as many projects over the 21 days at the Pyramid.

Professor Keith Burgess was the Principle investigator on two different sleep projects in conjunction with Professor Phil Ainslie (Canada), Dr Sam Lucas (New Zealand), Dr Jim Cotter (New Zealand), Dr David McLeod (USA) and Dr Aparna Basnet (Nepal). This research included a follow up study of sleep during alteration of cerebral blood flow which they first attempted in 2008 at the Pyramid. In addition, a new study of central sleep apnea during different pH conditions was also conducted.

High altitude induces central sleep apnea in most subjects, providing a stable model to work with for these projects. The insights gained from this model may be able to be applied to sick patients at sea level who also have central sleep apnea. In addition it stresses the normal human physiology in ways that do not occur at sea level. Studying normal subjects at high altitude may provide new understandings of how the normal human body works. *Story continued page 2* 

Please email us at marketing@compumedics.com.au www.compumedics.com

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> Adelaide Sleep Retreat

# **AUSTRALIAN NEWS**



#### Unlocking the secrets to the human body from the top of the World! Story continued from page 1.

A mobile sleep lab was setup with the help of Compumedics (www.compumedics.com) who provided blue tooth portable Polysomnography equipment *(Somte PSG)* for live acquisition. Four sleep studies per night were conducted in camp style beds with trans-cranial cerebral blood flow monitoring and arterial blood samples were taken during sleep. Ventilatory responses to hypoxia and hypercapnia were studied during the daytime with cardiac and vascular function analysis simultaneously.

Many months of analysis will now begin to unravel the data collected to gain a better understanding of mechanisms behind central sleep apnoea.



Compumedics Somté PSG -Full PSG absolutely anywhere

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## **2012 Australia wide Compumedics Sleep School reaches new heights.** "pro

Compumedics in 2012 conducted a national training roadtrip, bringing the training program for Compumedics' world class ProFusion PSG sleep to major cities around Australia, covering Brisbane, Melbourne, Adelaide and Perth. ProFusion PSG is Compumedics' premier and world-leading sleep recording software, used by sleep specialists for clinical and research application. The training roadtrip trained a total of 96 sleep professionals – a new milestone for Compumedics' training reach.

# The Appleton Institute, SA's newest sleep research facility hosts Compumedics ProFusion School.

In Adelaide, the **Compumedics Profusion training program** had the privilege of being hosted at the city's newest sleep research facility, **Central Queensland University's Appleton Institute for Behavioral Sciences**. Opened in January 2012, Appleton is home to a group of more than 30 researchers and post-graduate students working in the fields of sleep and biological rhythms, applied psychology, occupational health and safety, human factors and cultural anthropology. With an emphasis on behavioural sciences, Appleton represents a significant investment by CQ University aimed at strengthening the research program and broadening the reach of the Queensland-based national institution. Sleep remains a core field of research at the Appleton.

The new facilities in Wayville, Adelaide will be one of only a few in the world with the capacity to conduct multiple-day, live-in sleep studies. A simulation laboratory adjacent to the sleep laboratory will also house rail, road and medical simulators.

The state-of-the-art accommodation suite can house six participants concurrently, each with their own bedroom, lounge and bathroom. The suite, configured like a serviced apartment, also has a shared kitchen, dining room, laundry, and gym, so participants can reside in comfort during studies.

The suite is equipped with technologies that permit continuous monitoring of measures related to the function of the human sleep/wake, neurobehavioural, metabolic, and endocrine systems. At the heart of these technologies is a 6-bed **Compumedics 'Grael' sleep recording system** - Compumedics' high-resolution sleep system.

Compumedics Grael HD PSG/EEG



## compumedics profusion proficiency GOUISB2018

A series of training and education courses all over Australia are currently being planned for Compumedics clients for 2013. The course is a 2 day hands-on training environment, where students work on laptop computers for the duration. The curriculum is tailored to suit a variety of different Profusion PSG users.

To register your interest in attending the Compumedics Profusion Proficiency course in your state during 2013, email **marketing@compumedics.com.au** with the following information:

- Your Name
- Your contact details
- The facility or institution you work for
- The month that would best suit you for training in your state
- Any further questions you might have

Once the program has been finalized for 2013, we will be sure to let you know!

# Inaugural Tasmanian Paediatric Sleep Medicine Symposium a resounding success.

Compumedics had the privilege of sponsoring the Inaugural Tasmanian Paediatric Sleep Medicine Symposium held in July 31, 2012 at the Launceston General Hospital. Over 100 clinicians attended this inaugural symposium. The symposium was led by Dr. Arthur Teng, the Head of Sleep Medicine, Sydney Children's Hospital, and recently appointed senior lecturer to the University of Tasmania and Visiting Specialist to the Tasmanian Paediatric Sleep Service at the LGH. There were also presentations by Bruce Williamson (Senior Scientist) and Dr. Julian Wojtulowiecz (Senior Fellow). The Symposium covered normal sleep, the snoring child and non-respiratory sleep disorders.

# ISTRALIAN EVENTS UPDATE

# **Upcoming Australian Sleep Events, 2012**

## 4th NSW Paediatric Sleep Group Meeting

Compumedics is proud to be supporting the 4th NSW Paediatric Sleep Group Meeting, to be held at The Medical Foundation Building, Camperdown. The meeting will feature speakers such as Professor Colin Sullivan and many others.

### **Details in brief:**

tel - 0448 969 407

Date: 2nd November, 2012

Time: 8.45am to 3.45pm

**Venue:** The Medical Foundation Building, 92-94 Parramatta Rd. Camperdown

For more information, please contact:

sara.cooper@sydney.edu.au or

Professor Colin Sullivan

## Adelaide Sleep Retreat

Compumedics is proud to support a one day show case of New Directions in South Australian Sleep Research in the areas of Insomnia, Sleep and Performance, Paediatric and Adolescent Sleep, Human Factors and Adult Obstructive Sleep Apnea and Respiratory Function.

The retreat will also feature Guest speaker, Professor David Kennaway, expert in biological rhythms and their relationship to well being.

### **Details in brief:**

Date:	Wednesday 14 November, 2012
Time:	8:30am to 5:30pm
Venue:	Next Generation Club, Memorial Drive
Cost:	FREE (includes lunch and networking breaks)
For more information please contact:	

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## THE COMPUMEDICS DIVISIONS







Neuroscience



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