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APSR News

17th Congress of the Asian Pacific Society of Respiriology 14-16 December 2012, Hong Kong

The new website of the 17th Congress of the APSR, www.apsr2012.org, has been launched and details are being updated.

APSR Short-Term Research/Training Fellowship

The next page of this Bulletin has the report from the July 2011 awardee, Dr. Diane Gray, who completed her research and training in Perth, Australia in November 2011.

The deadline for applications for the APSR Short-Term Research/Training Fellowship is 31 March. For details, see www.apspresp.org/scholarships/2012/apr01.html

APSR News (cont.)

Report on Infant Lung Function Training at the Telethon Institute for Child Health Research, Perth, Australia

7-28 November 2011

The APSR fellowship funded me, Dr. Diane Gray (Paediatric Pulmonologist, University of Cape Town) to travel to Perth, Australia, to train in infant lung function (ILF) testing under A/Prof. Graham Hall and the paediatric respiratory physiology group at the Telethon Institute for Child Health Research (TICHR). I was accompanied by Ane Alberts, a respiratory technologist from the University of Cape Town, who will assist in ILF testing on my proposed collaborative research project: Early Life Determinants of infant lung function and chronic lung disease at two years.

We arrived at the TICHR early November 2011 to begin the training. We were greeted by A/Prof. Graham Hall who heads the Paediatric Respiratory Physiology group at the TICHR and were immediately made to feel welcome. It was clear A/Prof. Hall and his expert team were ready and willing to guide and teach as a great deal during our three-week training visit. We were introduced to the team and completed all administration details efficiently which meant we could start out training immediately. A/Prof. Graham Hall is head of the Paediatric Respiratory Physiology research group in Perth, Australia and is also responsible for the management of the Respiratory Laboratory in Princess Margaret Hospital for children. He has been directing an independent research group since 2005 and has initiated and led a number of research themes related to paediatric respiratory physiology. As the Senior Respiratory Scientist of the clinical respiratory laboratory at Princess Margaret Hospital for Children he has raised the research profile and activities of the group with a strong focus on producing high impact research with direct clinical applications. Thus our training placement within his unit was ideal for training us in the setting up of an infant lung function laboratory in Cape Town. In addition it would allow time for discussion and supervision around the initiation and execution of my planned research project. The latter is a study nested within a novel birth cohort study, the Drakenstein Child Health Study (DCLS), starting in Cape Town, South Africa, early 2012. This study will provide valuable new insights into the origin and outcomes of lung disease in children from low and middle income settings.

Much of the research undertaken by Graham Hall's respiratory physiology research team deals with adaptation of existing physiological testing methods for use in infants and young children and has striven to objectively characterise the strengths and weaknesses of these methods, as is evident in the many high quality papers published in this area from their unit. Thus we were well placed to receive an excellent background into the various infant lung testing techniques - the implementation, undertaking and interpretation of the tests and the practical and theoretical utility to our planned research in Cape Town. This was critical in the planning of our research methodology for the DCLS. Graham Hall and his team are currently involved in two birth cohorts, the Raine birth cohort and the Peel Child Health study. The Raine birth cohort is internationally recognised for its valuable contribution to our understanding of asthma in children. The Peel Child Health study is focussed on maternal exposure to indoor air pollution and its impact on lung growth and development. The infant lung function techniques for the planned DCLS project have been informed by the experiences in these cohorts as well as other international experiences. Thus I was able to learn from their extensive and relevant experience in the translation of these infant lung function techniques to the context of a low to middle income country for the DCLS.

APSR News (cont.)

Report on Infant Lung Function Training at the Telethon Institute for Child Health Research, Perth, Australia (cont.)

The team training us included a post-doctoral scientist, Dr. Shannon Simpson, doctoral and masters students, research assistants and the manager of the respiratory physiology laboratory at Princess Margaret Hospital (PMH). The respiratory lung function department included both the clinical and research laboratories. The testing undertaken at the unit included plethsmography, forced oscillation techniques, tidal breathing measures of volume, multiple breath washout testing, exercise testing and nasal nitric oxide amongst others. We were able to join in the weekly Wednesday clinic where we observed the preschool clinical testing. However the majority of our time in the laboratory was focussed on the infant lung function testing. This began with learning how to set up and calibrate the equipment confidently and accurately. We were encouraged to practise extensively to become very familiar with the process and were provided with a step by step written guide on equipment calibration and testing which had been put together by Graham Hall's team. This is a unique and essential resource for us to bring back to our laboratory.

Our ILF training included:

- 1 Equipment calibration (EcoMedics Exhalyzer including MBW system, exhaled nitric oxide, infant oscillometry system)
- 1 Obtaining infant lung function measures (tidal breathing measures, MBW using SF6, exhaled nitric oxide, forced oscillation technique)
- 1 Collecting and storing data and familiarising ourselves with the software
- 1 Analysing the results

Equipment calibration was done both at PMH and at the Mandurah Community Health Clinic site. Testing was undertaken predominantly at the Mandurah site, which was very useful as this testing protocol will be most like what we are planning to implement back in Cape Town. The analysis training was completed at the TICHR by Dr. Simpson and consolidated with an analysis teaching package which included many examples of testing that had been validated by the team and compiled for training purposes. This was excellent training in the analysis of results, and laid the foundation for ongoing supervision once we setup our testing for the project. Once again, the team were very expert and efficient in their training and supervision of our progress. By the end of the time we both felt confident in the calibration of equipment, reliable collection of quality ILF data and the analysis thereof.

In addition to the above training we took part in the weekly academic program which included: Thursday morning presentations, Friday Lung Club, Wednesday presentation from the broader TICHR research groups. We were also privileged to join the annual paediatric respiratory research congress at Rottneest Island (17-18 November). Dr. Gray presented a paper at the conference on respiratory disease in Southern African children, contextualising the challenges faced in low and middle income countries like South Africa, informing the rationale for the planned ILF project in the DCLS.

The APSR award has facilitated my training in infant lung function testing, a highly specialised skill and one that as yet is not being done anywhere in Southern Africa. The TICHR paediatric respiratory physiology group were excellent trainers and have given us a solid foundation and understanding of the complexities of ILF for us to build on in our learning as we set up our local laboratory. The collaboration between the Universities of Western Australia and Cape Town is an excellent example of sharing of research skills and training that will facilitate the development of high quality research that further science with a global benefit.

Dr. Diane Gray
Paediatric Pulmonologist, University of Cape Town
January 2012

APSR News (cont.)

Inside Respiriology

Volume 17 Issue 1

- 1 Respiratory health issues in the Asia-Pacific region: An epilogue ([Abstract](#))
- 1 Chest MRI in children: Why bother? ([Abstract](#))
- 1 Using computed tomography to measure the site of airflow obstruction ([Abstract](#))
- 1 Monitoring air pollution: Use of early warning systems for public health ([Abstract](#))
- 1 Biomass fuels and lung cancer ([Abstract](#))
- 1 Obesity and obstructive sleep apnoea: Mechanisms for increased collapsibility of the passive pharyngeal airway ([Abstract](#))
- 1 Impact of obesity on respiratory function ([Abstract](#))
- 1 Pulmonary adenocarcinoma: A renewed entity in 2011 ([Abstract](#))
- 1 Radiation damage to the lung: Mitigation by angiotensin-converting enzyme (ACE) inhibitors ([Abstract](#))
- 1 Advance care planning in COPD ([Abstract](#))
- 1 Airway dimensions and pulmonary function in chronic obstructive pulmonary disease and bronchial asthma ([Abstract](#))
- 1 Magnetic resonance imaging is an accurate and reliable method to evaluate non-cystic fibrosis paediatric lung disease ([Abstract](#))
- 1 When pleural potassium exceeds 5.0 mEq/L, high pleural adenosine deaminase levels do not necessarily indicate tuberculous pleuritis ([Abstract](#))
- 1 Phenotypes of patients with mild to moderate obstructive sleep apnoea as confirmed by cluster analysis ([Abstract](#))
- 1 Weakness of expiratory muscles and pulmonary complications in malnourished patients undergoing upper abdominal surgery ([Abstract](#))
- 1 Pleural fluid nucleic acid testing enhances pneumococcal surveillance in children ([Abstract](#))
- 1 Economic burden of chronic obstructive pulmonary disease ([Abstract](#))
- 1 Disease-free survival of patients after surgical resection of non-small cell lung carcinoma and correlation with excision repair cross-complementation group 1 expression and genotype ([Abstract](#))
- 1 Factors associated with long-term survival of patients with advanced non-small cell lung cancer ([Abstract](#))
- 1 Effect of dust storm events on daily emergency admissions for respiratory diseases ([Abstract](#))
- 1 Effects of oxygen on exertional dyspnoea and exercise performance in patients with chronic obstructive pulmonary disease ([Abstract](#))
- 1 Increased natural killer T-like cells are a major source of pro-inflammatory cytokines and granzymes in lung transplant recipients ([Abstract](#))
- 1 A *NOD2* gene polymorphism is associated with the prevalence and severity of chronic obstructive pulmonary disease in a Japanese population ([Abstract](#))
- 1 Prescription of antibiotics for adults hospitalized with community-acquired pneumonia in Korea in 2004: A population-based descriptive study ([Abstract](#))
- 1 Pilot study comparing SPECT perfusion scintigraphy with CT pulmonary angiography in chronic thromboembolic pulmonary hypertension ([Abstract](#))
- 1 Increased risk of nontuberculous mycobacterial infection in asthmatic patients using long-term inhaled corticosteroid therapy ([Abstract](#))
- 1 P2X7 A1513 polymorphisms and tuberculosis susceptibility ([Abstract](#))
- 1 Hardy-Weinberg equilibrium and genetic association study ([Abstract](#))

APSR News (cont.)

Respiratory Updates

The latest issue (Vol 4:1) features **Tobacco/Smoking cessation**:

- 1 Effectiveness of dust control methods during manual concrete surface grinding
- 1 A randomized placebo-controlled trial of varenicline for smoking cessation allowing flexible quit dates
- 1 Effects of varenicline in adult smokers: a multinational, randomized, placebo-controlled study
- 1 Reduction in cadmium exposure in the US, 1988-2008: the contribution of declining smoking rates
- 1 Environmental tobacco smoke exposure increases Mycobacterium tuberculosis infection risk in children
- 1 Placebo-controlled trial of cytisine for smoking cessation
- 1 Association between parental smoking behaviour and children's respiratory morbidity
- 1 Effectiveness of a school nurse-delivered smoking-cessation intervention for adolescents
- 1 Intensive intervention for alcohol-dependent smokers in early recovery: a randomized trial
- 1 Impact of the 2010 tobacco tax increase in Australia on short-term smoking cessation

The next issue of APSR Respiratory Updates is scheduled for publication shortly. Previous issues can be seen at www.apsresp.org/publications/resp-updates.html

Local respiratory society news

Japan

Message from the Japanese Respiratory Society (JRS)

As the president of the 52nd Japanese Respiratory Society Annual Meeting to be held in April 2012, it is indeed a great honour for me to invite you to the International Programme of the meeting which will be held 20-22 April at the Kobe Convention Center in Japan. The 52nd Annual Meeting of the JRS is the biggest meeting for respiratory physicians in Japan. The JRS has been holding an International Programme during the Annual Meeting since the 41st meeting in 2001. We are looking forward to meeting you in Kobe.

Masaharu Nishimura, MD, PhD
President of the 52nd JRS Meeting
First Department of Medicine,
School of Medicine Hokkaido University

Congress website: www.jrs.or.jp/jrs52/en/index.html.

Harasawa Fellowship 2012

The Japanese Respiratory Society (JRS) would like to announce the Harasawa Fellowship 2012.

The aim is to foster young researchers and specialized respiratory clinicians from countries outside of Japan, who will contribute to the progress and development of respiratory study.

For more details, see www.jrs.or.jp/home/modules/english/index.php?content_id=2.

Regional health news

Hong Kong tightens the Air Quality Objectives (ACQ)

In an effort to tighten air-quality standards, Hong Kong will set up a more stringent and comprehensive air-quality monitoring system by 2014. It will include indexes on sulfur dioxide, breathable suspended particulates, minute suspended particulates and nitrogen dioxide, which is similar to the systems used in Europe and the U.S. In addition, Hong Kong will start to monitor the fine particulates less than 2.5 μm ($\text{PM}_{2.5}$) by March 2012 at all monitoring stations. $\text{PM}_{2.5}$ accounts for a significant part of loss of visibility and makes up about 70% of the particles measured as PM_{10} in Hong Kong. The annual average level of $\text{PM}_{2.5}$ in Hong Kong was about $45\mu\text{g}/\text{M}^3$ while the World Health Organization Annual Guideline level was $10\mu\text{g}/\text{M}^3$. $\text{PM}_{2.5}$ penetrates deeper into the lung and affects gases exchange. Chronic exposure to particulates increases the risk of developing cardiovascular and respiratory disease, as well as lung cancer. Acute exposure to very high quantities is also associated with a higher risk of death due to cardio-respiratory diseases. The Hong Kong Government is endeavouring to implement a series of air quality improvement policies and exercises to further improve the local air quality to match that of the WHO's standard.

(Submitted by Dr. Chun-kong NG, Hong Kong, 18 January 2012)

India - Current situation of tuberculosis

A strain of tuberculosis, which appears to be totally resistant to antibiotic treatment, has been reported for the first time by Indian doctors. Concern over drug-resistant strains of TB is growing, with similar 'incurable' TB emerging in Italy and Iran. Doctors in Mumbai said that twelve patients had a 'totally drug resistant' form of the infection, and three had died. The Indian Health Ministry is investigating the cases and has sent a team of doctors to Mumbai. These Indian reports will fuel concerns over the ability of doctors to contain the disease in years to come.

The doctors at the Hinduja National Hospital in Mumbai who discovered it said they had treated patients for up to two years with a battery of drugs, to no avail. The patients came from slum areas of the city, they said, where close contact between people meant further spread was likely. The American Centers for Disease Control (CDC) confirmed that the Indian strain did appear to be completely resistant. Dr. Kenneth Castro, director of its Division of Tuberculosis Elimination, said: "Anytime we see something like this, we had better get on top of it before it becomes a more widespread problem." Patients who do not finish their lengthy course of treatment also present the bacterium with the perfect environment for developing further resistance. However, there have been repeated calls for the pharmaceutical industry to make more efforts to develop fresh antibiotics.

Dr. Ruth McNerney, a senior lecturer at the London School of Hygiene and Tropical Medicine and a trustee of the charity TB Alert, said the new cases represented a "serious threat" to global efforts to control TB. "What we're seeing is probably just the tip of the iceberg. We don't know how widespread this is because so few people are tested for drug resistance." She said the high prevalence of TB in India, coupled with high population density within its cities, meant that the new type of TB could be a bigger problem than previous "totally resistant" strains. "It's going to take a massive effort and change in political will to get to grips with this - not just from the Indian government but from everyone else. This is a global problem, not just an Indian one."

(Extracted and modified from the BBC website 17 January 2012 bbc.co.uk/news/health-16592199)

APSR Membership

The APSR membership consists of qualified professionals presently working in research or health care related to the field of respiratory mainly from the Asia-Pacific Region. The present membership includes individual members and en bloc members. APSR members are also entitled to join the various Clinical Assemblies within the APSR.

APSR Members enjoy the benefits of receiving either online access or a print copy of *Respirology*, the official journal of the APSR, as well as regular dissemination of the members' Bulletin, APSR Newsletter and Respiratory Updates.

APSR Members can also register for the APSR Congress and various ESAP activities at a discounted rate, as detailed by the organizer of each activity. In many cases, APSR Members may also enjoy discount membership fees for dual or even triple memberships with the American Thoracic Society (ATS) and the European Respiratory Society (ERS).

To stay connected with your colleagues in the region and globally, keep your APSR membership active and help build up the strength of APSR by recommending colleagues to join the APSR today.

Further details on membership category and application are available at www.apस्प.орг/membership.html

Future Pulmonology Events

Here are the main respiratory events in Asia Pacific region for the next few months. You can see our full listing on the APSR [Calendar](#).

- 1 13th Malaysian Congress and Exhibition on Allergy and Immunology
9-11 March 2012, Kuala Lumpur, Malaysia ([Details](#))
- 1 PCCP 31st Annual Chest Convention
14-17 March 2012, Manila, Philippines ([Details](#))
- 1 TSANZ ASM 2012
31 March - 4 April 2012, Canberra, Australia ([Details](#))
- 1 The 52nd Annual Meeting of the JRS
20-22 April 2012, Kobe, Japan ([Details](#))
- 1 Lung Cancer Symposium
11 May 2012, Gangwondo, Korea ([Details](#))
- 1 113th Annual Meeting of Korean Academy of Tuberculosis and Respiratory Diseases
12 May 2012, Gangwondo, Korea ([Details](#))
- 1 World Spirometry Day
'Sport and Lung' (to coincide with the opening of the Olympic Games)
27 June 2012, Worldwide ([Details](#))
- 1 Annual Congress of the ISR
4-7 July 2012, Surabaya, Indonesia
- 1 Malaysian Thoracic Society (MTS) 2012 Congress
6-8 July 2012, Sarawak, Malaysia ([Details](#))

For more pulmonology events, see www.apresp.org/calendar.html
(These events are for information only and APSR endorsement should not be assumed.)

Contact

If you have any news or announcement that could be of interest to other APSR members, please submit details to the APSR Bulletin coordinators: Dr. David C L Lam (dcllam@hku.hk), Prof. Shu Hashimoto (shuh@med.nihon-u.ac.jp), or APSR Bulletin (bulletin@apresp.org).

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