Australian & New Zealand Society of Respiratory Science Inc.

2001 Annual Scientific Meeting
Brisbane, Queensland
16 – 19 March 2001

Guest Speaker:  
Professor David McKenzie  
Head of Respiratory and Sleep Medicine  
Prince of Wales Hospital  
Sydney, New South Wales

Scientific Programme

Oral Presentations

Beyond 11503: Advanced Respiratory Function Tests Part 1  
Professor David McKenzie  
Head of Respiratory and Sleep Medicine  
Prince of Wales Hospital, Sydney, New South Wales

Ventilation-Perfusion Inhomogeneity Increases Gas Uptake During Anaesthesia: Computer Modelling of Gas Exchange.  
Bruce Thompson, Phil Peyton  
Departments of Respiratory Medicine and Anaesthesia, Austin & Repatriation Medical Centre, Melbourne, Victoria

Selection of Normal Values for Plethysmographically Determined Static Lung Volumes  
Troy Watts, Jeff Pretto, Peter Rochford  
Department of Respiratory Medicine, Austin & Repatriation Medical Centre, Heidelberg, Victoria

Beyond 11503: Advanced Respiratory Function Tests Part 2  
Professor David McKenzie  
Head of Respiratory and Sleep Medicine  
Prince of Wales Hospital, Sydney, New South Wales

Prevalence of Exercise Induced Bronchoconstriction (EIB) in Young Athletes Identified by Eucapnic Voluntary Hyperpnea. (EVH)  
Camps J, Anderson SD, Perry CP, Brannan JD, Holzer K  
Department of Respiratory Medicine, Royal Prince Alfred Hospital, New South Wales and Department of Allergy, Asthma and Clinical Immunology, The Alfred Hospital, Victoria.

Leukotriene C4 Synthase Gene and Asthma Severity  
Shaw JG, Yang IA, Tunnicliffe AM, Dent AG, Lynn PE, Smith DG, Rabnott GC, Serginson JG, Zimmerman PV, Fong KM  
Department of Thoracic Medicine, The Prince Charles Hospital; Department of Medicine, University of Queensland, Brisbane, Queensland
The Assessment and Interpretation of Reversibility of Airflow Limitation Using Bronchodilators: Current Practice in Laboratories in Australia and New Zealand
B Borg, EA Side, DP Johns
Department of Respiratory Medicine, the Alfred Hospital and Monash University Medical School, Melbourne, Victoria

Interlaboratory Variability in the Measurement of Lung Function in Australia & New Zealand
M Swanney, P Guy, L Cardno, C Frampton, K Gain, D Sharp & L Beckert
Respiratory Physiology Laboratory, Christchurch Hospital, Christchurch, New Zealand,
Respiratory Laboratory, Monash Medical Centre, Melbourne, Australia,
Respiratory Laboratory, Wellington Hospital, Wellington, New Zealand.
Lung Function Laboratory, Royal Adelaide Hospital, Adelaide, Australia.

* Spirometry Screening in Country Pharmacies: A Pilot Study
Deborah Burton, Peter Gissing, Maree Simpson, Jayne Walker, Melanie Archer, Scott Bowman, Mark Burton
School of Biomedical Sciences, Charles Sturt University, Wagga Wagga, New South Wales

How Accurately Do We Measure Standing Height?
EA Side, MF Hartley, PJ Lyell, P Guy, B Borg, DP Johns
Department of Respiratory Medicine, The Alfred Hospital and Monash University Medical School, Melbourne, Victoria and Department of Respiratory and Sleep Medicine, Monash Medical Centre, Clayton, Victoria.

*Winner of Best Oral Presentation Award
φWinner of Young Investigator Award

Poster Presentations

Pre-season Cardiopulmonary Profiles of Australian Professional Club Football Players
P Kelly, L Seccombe, S Kannangara, G Konidaris
New South Wales Institute of Sports Medicine, Concord Repatriation General Hospital, Concord, New South Wales

Day to Day Variation in Barometric Pressure Does Not Affect the Conventional BTPS Correction Factor
MF Hartley, EA Side, GP Burns, DP Johns
Department of Respiratory Medicine, The Alfred Hospital and Monash University Medical School, Melbourne, Victoria

# Variability in the Driving Pressures of MefarTM Dosimeters May Confound PD20 Comparisons Between Different ECRHS Centres
RJ Ward, DP Johns, B Skoric, C Ward, M Abramson, EH Walters
Department of Respiratory Medicine, The Alfred Hospital and Monash University Medical School and CSMCH La Trobe University, Melbourne, Victoria
Effect of a Cleaning Regime on Bacterial Growth and Performance of Peak Flow Meters
Glenda Dunlop, Eva Dichiera, Leanne Sullivan, Ann Reynolds, Andrew Thornton, David P Johns
Department of Thoracic Medicine, Royal Adelaide Hospital, Adelaide, South Australia and Department of Respiratory Medicine, The Alfred Hospital and Monash University Medical School, Melbourne, Victoria.

Assessment of Resistive Load Detection in Patients with Chronic Obstructive Airways Disease
GD Pritchard, M Kazins, L Ramondetta, MJ-L Hew, TA Demis
Department of Thoracic Medicine, Royal Melbourne Hospital, Parkville, Victoria

# Winner of Best Poster Presentation Award

Aerosol Symposium

Fundamentals

Medical & Pharmaceutical Aerosol Research and Development in Australia.
Hak-Kim Chan
Faculty of Pharmacy, University of Sydney. New South Wales.

Fundamental Aspects of MDI Development using HFA’s
David Ganderton
Vectura Ltd. Bath, United Kingdom.

Imaging of Radioaerosol Deposition and Clearance: Planar Vs SPECT.
Stefan Eberl
Department of PET and Nuclear Medicine, Royal Prince Alfred Hospital, Sydney, New South Wales.

Development of Pulmonary Delivery Systems with Predictable & Reproducible Performance: What are the Critical Parameters that need to be Controlled?
Igor Gonda, Aradigm Corp, Hayward, California, USA.

In vitro-In vivo Correlations and Deposition Modelling.
Andy Clark
Inhale Therapeutic Systems Inc, San Carlos, California, USA.

Inhaled Particle Design Using Pulmosphere™ Technology.
Andy Clark and Jeff Weers
Inhale Therapeutic Systems Inc, San Carlos, USA.

Emerging Respiratory Delivery Technology

Jonathon Rigby
Profile Therapeutics, United Kingdom.
Michael Spallek
Boehringer Ingelheim. Germany.

The AERx® Pulmonary Drug Delivery System
Igor Gonda
Aradigm Corp. USA, Hayward, California, USA

Aerogen’s Domed Aperture Technology: Implications for Aerosol Delivery and Applications.
Jim Fink
Aerogen Inc. Sunnyvale, California, USA.

Aerolisation of Protein Drugs Using Thermal Inkjet Technology.
Stephen Goodall, Michael J Waters, Hak-Kim Chan, Stephen Mahler
Vapotronics Ltd. Queensland; Department of Pharmacology and Physiology, University of Queensland, Queensland; Faculty of Pharmacy, University of Sydney, New South Wales; Department of Biotechnology, University of New South Wales, New South Wales.

Emerging Respiratory Delivery Technology (cont). Medical Aspects

The Inhale Pulmonary Delivery System.
Andy Clark
Inhale Therapeutic Systems Inc, San Carlos, California, USA.

Bead Inhaler Technology
Clyde Witham
Elan Pharmaceuticals. USA.

Use of Aerosols for Laboratory Bronchial Provocation Testing.
Anderson SD and JD Brannan
Department of Respiratory Medicine, Royal Prince Alfred Hospital, Camperdown, New South Wales

Dosing of Aerosol Medications – Which Device, Which Dose?
Peter Le Souef
University Department of Paediatrics, Princess Margaret Hospital for Children, Perth. Western Australia.

When are Two Drugs Better than One for the Management of Airway Disease?
Christine Jenkins
Department of Respiratory Medicine, Concord Hospital and Institute of Respiratory Medicine, Royal Prince Alfred Hospital, Camperdown, New South Wales

Practical Aspects of Current Inhaler Use in the Paediatric Population.
Sunalene Devadason
University Department of Paediatrics, Princess Margaret Hospital for Children, Perth Western Australia.
Regulation on Aerosol Products

FDA Recommendations for Equivalence Testing of Locally Acting Inhalation Products
Wallace Adams
Office of Pharmaceutical Science (OPS), Centre for Drug Evaluation and Research (CDER), FDA. Rockville, Maryland, USA.

Respiratory Products & Testing in Europe.
David Ganderton
Vectura Ltd. Bath, United Kingdom.

Regulation of Aerosol Products in Australia
James McGinness
Drug Safety and Evaluation Branch, Therapeutic Goods Administration, Canberra, Australia.

How Industry is Responding to the New FDA Guidelines on Aerosol Products
John Pritchard
GlaxoSmithKline, Stockley Park West, Uxbridge United Kingdom.

Medical Aspects (cont)

The Use of Inhaled Hypertonic Saline for the Treatment of Hypersecretion in Patients with Cystic Fibrosis
Michael Robinson, Mark Elkins, Peter TP Bye
Cystic Fibrosis Centre, Royal Prince Alfred Hospital, Sydney, New South Wales.

Use of Inhaled Dry Powder Mannitol for the Treatment of Hypersecretions
Evangelia Daviskas and Sandra D Anderson
Department of Respiratory Medicine, Royal Prince Alfred Hospital, Sydney. New South Wales.

A Novel Compound for the Treatment of Chronic Obstructive Lung Disease.
Inspire Pharmaceuticals.Inc, Durham, North Carolina, USA, Aradigm Corporation, Hayward, California, USA, Welsh School of Pharmacy, Cardiff, United Kingdom, Cardiff Scintigraphics, Cardiff, United Kingdom, Simbec, Methyr, United Kingdom.

Using Advanced Pulmonary Delivery Technology to Improve Clinical Outcomes
William Zimlich
Battelle Pulmonary Therapeutics Inc., Ohio, USA.

Experience with Insulin Delivery using the AERx System
Stephen Farr
Aradigm Corporation, Hayward, California, USA.
**Aerosol Symposium Poster Presentations:**

**Determinants for Dispersion of Powders as Aerosols for Inhalation**
Nora YK Chew, Hak-Kim Chan
Faculty of Pharmacy, University of Sydney, New South Wales

**The Deposition of Salbutamol Sulphate from Interactive Mixtures using a Prototype Dispersion Device**
Zhao FY, Stewart PJ, Rhodes M, Nguyen DA
Department of Pharmaceutics, Victorian College of Pharmacy, Monash University, Victoria
and Department of Chemical Engineering, Monash University, Clayton, Victoria

**Differences between the Outcomes from Experimental and Theoretical Studies on the Deposition of Combustion Aerosols in the Human Respiratory Tract**
Lidia Morawska, Werner Hofmann
Centre for Medical and Health Physics, Queensland University of Technology, Brisbane, Queensland, Institute of Physics and Biophysics, University of Salzburg, Salzburg, Austria

**Pharmacometrics of the Triamcinolone Acetonide Formulation Azmacort®**
Majid R Feddah, Xiao W Teng, Neal M Davies
Faculty of Pharmacy, The University of Sydney, New South Wales.