

Mouthpiece



President's Address

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Welcome to the Winter Edition of Mouthpiece – well I believe it is winter in Southern Australia and New Zealand. Here in beautiful Queensland we have had our 3 weeks of winter and have returned to beautiful sunny days and mild nights. Enough of the weather and on to Society business.

I thought I'd take the opportunity to update the "Who's Who" of the Society, partially as there have been a

few resignations from the Board during this term, plus the creation of two sub-committees. An early word of warning – the term of the current Board expires at the end of this calendar year. Elections for all regional representatives will take place towards the end of the year. I ask all members to seriously consider nominating to become a Regional Board Representative.

The Board

Brenton Eckert – President
 Mike Brown – Secretary
 Andrew Coates – Treasurer
 Maureen Swanney – Immediate Past President
 Danny Brazale – Vic Board Rep.
 Bruce Thompson – Vic Board Rep
 Robert Tagliaferri – WA Board Rep
 David Johns – Tas Board Rep
 David Sharp – Public Officer
 Cecilia Arrigoni – Mouthpiece Editor
 Stephen West – CFRS coordinator
 Kevin Gain – Web-page Coordinator

Gary Nolan – NSW Board Rep
 John Brannan – NSW Board Rep
 David Schembri – SA Board Rep
 Michelle Rozee – SA Board Rep
 Pauline Lynn – Qld Board Rep
 Linda Reudinger – Qld Board Rep
 NZ North Island - *
 NZ South Island - *

* awaiting outcome of regional by-election

Also invited to attend the Board Meeting are the Chair of any ANZSRS sub-committees, and ANZSRS representatives on TSANZ sub-committees. Such positions are:
 Michelle Rozee – TSANZ Central Programming Committee
 Maureen Swanney – TSANZ Professional Standards Sub-committee
 Stephen West – TSANZ Clinical Care & Resources Sub-committee
 Gary Nolan – Chair, ANZSRS Registration Sub-committee
 Maureen Swanney – Chair, ANZSRS Spirometry Training Sub-committee.

Web-page

I hope you have all been regular visitors to the Society web-page. (www.ANZSRS.org.au). Kevin Gain has done a wonderful job making this a far more dynamic site and is to be

congratulated. The success of the Jobs section is particularly pleasing, with many enquiries being generated from this page. I also ask all Board members to act promptly to any request from Kevin (or indeed Cecilia with Mouthpiece) to ensure both mediums

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Website

www.anzsrs.org.au

NOW!

President's Report (cont)

function smoothly.

Annual Scientific Meetings

The Cairns Meeting proved both a scientific and financial success. Andrew Coates has yet to finalise the Cairns budget, however it appears as a profit slightly in excess of \$10k was realised. This will be offset considerably by the travel grants awarded by the Society.

Planning for the 2003 Adelaide ASM is in full swing with Michelle Rozee chairing the Local Organising Committee. Once again we will be running our ASM in conjunction with that of the TSANZ – our meeting is April 4-6, 2003. You will note a “Call for Abstracts” in this edition, it’s just around the corner.

Spirometry Training

Those closely following the Executive Updates in both Mouthpiece & the web-page will have noted some activity with respect to Spirometry Training. This was initially instigated by an invitation from the Department of Health & Ageing to participate in meetings related to appropriate GP training in spirometry (which in turn stemmed from an increased requirement for GP spirometry under the National Asthma Campaign 3+ Incentive Scheme). David Johns and myself have represented the ANZSRS on this Spirometry Sub-committee – other groups with representation include the TSANZ, RACGP and NAC. Partly as a result of this meeting, but also in response to previous suggestions by ANZSRS members, the current Executive have embarked on a pathway which will lead to the formulation of clear guidelines on Spirometry Training Programs, with these guidelines being adopted by both the ANZSRS and TSANZ. We wish to provide guidelines to those running a

Spirometry Training Course to ensure that the course is appropriate and covers all core issues (content, length, assessment, practical component, reference material etc). A sub-committee, chaired by Maureen Swanney has been formed to address these and other issues. Other members of this sub-committee are: Debbie Burton, Alan Crockett, Brenton Eckert, Paul Guy, David Johns & Bruce Thompson, plus Michael Pain representing the TSANZ.

CSHTA

In the last edition of Mouthpiece it was indicated that the CSHTA Respiratory Technicians Project was close to completion. This was updated in the July Executive Update on the Web-page with the news that “no state or territory would be pursuing the inclusion of the Respiratory Technology component of the Health Technicians Training Package”. The CSHTA Project Manager was to recommend to the Project Steering Committee that they withdraw these modules. This was the Society’s view and was welcomed.

Reminders

A few important timeframes/deadlines to keep in consideration. Call for nominations for Regional Board Representatives (Sept/Oct 2002). Elections for Regional Board Representatives (November 2002). Call for applications for Society Education Scholarships (Deadline - Nov 30). Call for abstracts for the 2003 ASM (Deadline – Early December, 2002). Call for nominations for Society Awards – Life Member & Fellow - (Deadline – February, 2003).

Until next time,

Brenton Eckert. CRFS.

Treasurer's Report

At our 2002 ASM in Cairns it was my understanding that with our current financial situation we needed to register for GST (Australia) and submit regular Business Activities Statements (BAS). However, this is now not the case. As we are a non-profit Society and our annual turnover is less than \$100K, BAS are not required. Non-profit status is implied in our Constitution.....*Phew!*

Reminders

- 1) 2002 Subscriptions were due in April. If you haven't already, send it now or contact Andrew Coates, Treasurer (details back page)
- 2) Not all 2002 Travel Grants have been claimed. If you are owed money, please get in touch.

Andrew Coates, Treasurer

From The

editor

Welcome everyone to the August Issue of Mouthpiece. The theme of this issue is 'Research Around Australia and New Zealand'. I put the Board Members to work, searching for contributions from Research labs.

The idea is to make everyone aware of what is happening around them and if you find a common theme with another lab, perhaps this can lead to some productive correspondence. It was by no means intended to expose, threaten or compromise anyone's research. If people took my requests that way, think again.

I would like to thank very much everyone who contributed. It seems this time of year is a very busy one for all.

There are lots of other interesting bits and pieces. Bruce Graham has provided some excellent websites, especially the Lessons from the American College of Chest Physicians. The CRFS workshop

held by the Queensland branch of the ANZSRS and the 'Study Aid' to boot. Remember there is one more opportunity to sit the CRFS exam this year.

As we head into the latter part of the year the Executive is calling for Regional Member Nominations by Sept/Oct 2002. Anyone considering studying or research, the application details are on page 15. There will be a call for Abstracts before you know it, so better start preparing!

Hope You Enjoy this Issue
Best Regards

Cecilia

P.S. cecilia.a@bigpond.com

Job Spot

The Sydney Children's Hospital, a paediatric teaching hospital, is seeking a trained respiratory technician/scientist for a part-time or full-time position. The position involves both clinical and research activity.

All enquires email Dr John Morton
on

mortonj@sesahs.nsw.gov.au

Department of Respiratory Medicine,
Wellington Hospital
Wellington, NZ

A full time position is available for a Senior Respiratory Scientist. Further information can be obtained from:

Dr David Johns
Clinical Leader, Respiratory Medicine
Ph: 64 4 3855816
david.jones@ccdhb.org.nz

OR

Tali Milburn
Respiratory Scientist
Ph: 64 4 3855867
tali.milburn@ccdhb.org.nz

Evaluation of alternative measures of bronchodilator efficacy in patients with chronic obstructive pulmonary disease (COPD).

David Schembri, Respiratory Function Unit, Repatriation General Hospital, Adelaide

Chronic Obstructive Pulmonary Disease (COPD) is a major health problem and is projected to rank fifth in 2020 as a worldwide burden of disease according to guidelines published by the Global Initiative for COPD (GOLD)¹. COPD is defined as a disease state that is characterised by expiratory flow limitation, which is not fully reversible. Consequent lung hyperinflation resulting from gas trapping causes an effective restrictive mechanical defect. To compensate for this deficit, breathing is performed at a higher lung volume to allow more efficient tidal expiratory flow generation² which increases the work of breathing and contributes to dyspnoea³. A diagnosis of COPD is confirmed by performing spirometry, which is the most reproducible standardised and objective way of measuring airflow limitation^{1,2}. Spirometry measurements including Forced Expiratory Volume in one second/Forced Vital Capacity (FEV₁/FVC) less than 70% and a post bronchodilator FEV₁ less than 80% predicted confirms the presence of airflow limitation that is not fully reversible. In severe COPD, bronchodilator therapy (beta agonist & anticholinergic) may contribute

towards lung volume reduction, thus decreasing FRC and resulting in improved mechanics of breathing, expiratory flow and dyspnoea⁴. However, bronchodilator response in COPD has traditionally been assessed by improvement in the spirometric FEV₁ measurement. The criterion for a significant response has been determined by the American Thoracic Society⁵ to be an increase in FEV₁ by 12% and at least 200ml. There is growing evidence (O'Donnell, Forkert & Webb)⁴ that the utilisation of change in FEV₁ to assess therapeutic efficacy can underestimate true clinical benefit in COPD. Static lung volume measurements including inspiratory capacity (IC) and residual volume (RV) may be more appropriate measures of bronchodilator responsiveness in severe COPD. This has led to O'Donnell to hypothesise that IC and RV measurements, which characterise lung hyperinflation and gas trapping, provide a more sensitive assessment of bronchodilator efficacy in severe COPD. O'Donnell, Forkert & Webb⁴ have indicated an increase in IC of 300ml after bronchodilator reflects a significant reduction in hyperinflation, which results in an improvement in patient's dyspnoea and exercise performance. However, O'Donnell's study population was limited to COPD subjects with severe airflow limitation. This hypothesis has not been tested in a COPD population with less severe airflow limitation which would better indicate the clinical utility of these measurements in a routine respiratory service.

The objective of this study is to investigate whether significant changes in IC after combined beta agonist and anticholinergic bronchodilator therapy can be used to reflect reductions in static lung volumes and dyspnoea in COPD subjects with a broad spectrum of severity.

Dates to Remember:

Board Nominations Oct '02

Board Elections Nov '02

Society Education

Scholarship Nov 30, 2002

2003 ASM Abstract Dec

2002

Preliminary Notice for the 2003ASM

Planning for the 2003 meeting is well underway and the time has come to start thinking about preparing an abstract for either an oral or poster presentation. Abstracts should relate to technical, clinical and research aspects of Respiratory Science. Further information will be available on the ANZSRS website (www.anzsrs.org.au) in September.

Some changes, of note, have been made to the Program and Trade Exhibition. The joint TSANZ/ANZSRS Symposium will be held on Saturday the 5th and is titled *Resistance: Variations on a theme*. Society Oral and Poster presentations will be on Sunday. The Trade Exhibition will be combined with that of the TSANZ and will open at Lunch on Saturday.

Also watch out for a change to the registration fee structure. The good news is there will be a combined TSANZ/ANZSRS registration at a reduced rate for ANZSRS members.

We are looking forward to an exciting, interesting and informative meeting with a high level of member contribution and participation.

Michelle Rozee (michelle.rozee@fmc.sa.gov.au)
2003 ASM Local Organising Committee



**TSANZ
&ANZSRS
Adelaide 2003
ASM
Adelaide
Convention
Centre
4-9 April 2003**

Janet Shaw – Research, my part in the big picture

Thoracic Research Scientist, The Prince Charles Hospital, Rode Rd, Chermside, Brisbane QLD 4032. Email: Janet_Shaw@health.qld.gov.au

I am undertaking a Masters of Philosophy, by research, in the field of genetics and airway diseases. After over 20 years in the “airways” field, I believe that understanding the genetic basis of asthma and chronic obstructive pulmonary disease (COPD), two of the most important causes of respiratory burden of disease in Australia, will provide greater insight into the causation, prognosis and treatment of these diseases.

Genetic differences between individuals are likely to affect their interaction with environmental factors and their subsequent risk of developing airway diseases. Several lung diseases have a clearly defined genetic basis, for example, cystic fibrosis (CFTR mutation) and early-onset emphysema (α_1 -antitrypsin deficiency). Asthma and COPD clearly have a heritable component; however, the inheritance is not a single Mendelian trait, making identification of the critical genetic factors more complex and challenging.

Advances in molecular medicine are providing the tools to study how natural genetic variations (polymorphisms) determine clinically observed phenotypes. To apply these techniques to the study of airway diseases, I am enrolled as a Masters of Philosophy student with the Department of Medicine, University of Queensland at The Prince Charles Hospital, Brisbane. With the involvement of the Respiratory Investigations Unit and the Thoracic Research Laboratory, my research program will study genetic influences in the complications of treatment in asthma, and the complications of advanced disease in COPD.

Glucocorticoid receptor polymorphism and side-effects from inhaled corticosteroids in asthma

The glucocorticoid (steroid) receptor mediates the effects of endogenous and exogenous glucocorticoids, including inhaled corticosteroid (ICS), which are widely used in asthma management. Recently, a single nucleotide polymorphism (N363S) was identified in the glucocorticoid receptor gene. We hypothesised that this polymorphism is linked to biologically important, inter-individual differences in the potential complications of ICS, specifically adrenal axis suppression and increased bone turnover. To test this hypothesis, we are performing a prospective study of the genotype-phenotype relationship of the glucocorticoid receptor in asthma, with generous funding from the Asthma Foundation of Queensland.

Clinical significance: If this glucocorticoid receptor polymorphism is associated with excessive

corticosteroid side effects, then asthmatics carrying this genetic variant may need to be treated with lower doses of ICS, and considered for newer agents such as long-acting beta-agonists and leukotriene receptor antagonists. Results of this study would have clinical implications for the use of corticosteroids in a wide range of inflammatory and autoimmune disorders.

Pulmonary hypertension genes in COPD

Pulmonary hypertension (high pressure in the pulmonary vessels) is a serious complication of COPD, leading to heart failure and death. What is not yet clearly defined is why there is so much variability in risk and severity of pulmonary hypertension in COPD patients. We hypothesised that genetic variations in genes coding for molecules acting on pulmonary vessels influence pulmonary hypertension in COPD, as detected by echocardiography and MRI. This prospective study is being undertaken in the Thoracic, Cardiology and Medical Imaging Departments, with funding support granted by The Prince Charles Hospital Foundation.

Clinical significance:

Knowledge about genetic risk factors has the potential to explain much of the variability in risk of development of pulmonary hypertension in COPD patients, and to provide better prognostic and screening tools. Genetic tests have the potential to guide clinicians about early treatment for pulmonary hypertension or use of newer therapies in selected high-risk patients. For example, inhibitors of molecules that promote pulmonary hypertension are now available (ACE inhibitors, endothelin receptor antagonists). Importantly, better understanding about the pathways involved in pulmonary hypertension will lead to development of more effective treatment for this complication of many chronic respiratory diseases.

Working with Drs Paul Zimmerman, Kwun Fong and Ian Yang, and as a member of the research team in the Division of Thoracic Medicine, I am also playing an integral role in other studies that our unit has in progress, including studies of host defence genes in asthma and COPD.

I am very excited at applying my experience as a respiratory scientist and my new skills in molecular biology, to the study of airway diseases. I look forward to presenting more of my research findings to the ANZSRS in forthcoming meetings.

Spirometry screening in country pharmacies

D Burton, P Gissing, M Simpson, M Archer, J Walker, P Munoz, M Simpson, S Bowman & M Burton.
School of Biomedical Sciences, Charles Sturt University, Wagga Wagga, NSW.

The National Asthma Council (NAC) recommends annual spirometry measurement as an essential component of asthma management however spirometry measurement occurs in less than 11% of people with asthma in the Riverina region of NSW compared with 45% in metropolitan areas. Clearly access to spirometry services in rural areas needs to be improved.

This study investigated the feasibility of provision of spirometry testing in country pharmacies in the Riverina. Pharmacies offered medication review and spirometry measurement or medication review only to customers purchasing respiratory medications or those requesting spirometry measurement. A summary of significant findings and their implications are described.

Fee for service provision of spirometry testing was well accepted

Significantly more participants were recruited in pharmacies providing spirometry (n=141) compared with pharmacies providing medication review only (n=46) which highlights the previously unmet need of persons concerned about their lung health.

Spirometry test quality high when weekly feedback provided by respiratory scientists

Pharmacists demonstrated a high rate of acceptable (66%) and reproducible (86%) spirometry tests

compared with other general practice settings. The acceptability and reproducibility rate in this study is far higher than has been reported in a similar study conducted in general practice where 18.9% of tests met ATS acceptability criteria after a 2hr training workshop (Eaton et al 1999). The weekly visits from a respiratory scientist who reviewed spirometry tests and provided feedback to pharmacists may be largely responsible for this high standard of spirometry tests. Respiratory scientists who perform pulmonary function testing daily achieve acceptability and reproducibility rates of 90% or greater in children and young adults (Enright et al 2000) and 85% in the elderly (Bellia et al 2000) and this indicates that there is still room for improvement.

Abnormal lung function detected in nearly one third of participants with acceptable tests.

Spirometry testing in pharmacies was successful in detecting abnormal lung function in 31% of the spirometry group participants who had acceptable tests. Most of the participants with abnormal spirometry results demonstrated mild obstructive airway disease but 3 had moderate to severe disease and 7 had results suggestive of lung restriction requiring referral for follow-up testing for confirmation of this abnormality.

Referral to general practitioner for respiratory reassessment occurred in approximately one half of participants.

Medication review was the most common reason for referral, followed by spirometry results, symptoms and provision of an asthma action plan. Medication changes were instituted in just under half of those who attended their general practitioner.

Conclusions

Increased spirometry availability resulted in significant detection of abnormal lung function and referral to general practitioners for medical reassessment. The model of spirometry training and support via feedback from respiratory scientists resulted in high test quality with potential relevance for the newly implemented NAC-Federal Government initiative, the 3+ Visit Plan.

Eaton T et al 1999 Chest, 116, p416; Enright PL et al 2000 Chest, 118, p665

Bellia V et al 2000 American Journal of Respiratory and Critical Care Medicine, 161, p1094

**Changed Jobs?
Changed Address?
Changed email?**

Have you notified Mike Brown?

Airway Smooth Muscle Velocity of Shortening



Phillip Munoz BMedSc (Resp Sc) C'Sturt - Research Assistant - The Institute of Respiratory Medicine – Sydney

Asthma is the most common chronic respiratory disease in Australia with 30% of the population wheezing at some stage of their lives. The most important abnormality in the

function of airways in asthmatic subjects is their increased capacity for narrowing. Our current understanding suggests that when airways narrow, they probably do so in a non-uniform or heterogeneous fashion.

We are looking at airway smooth muscle (ASM) and its velocity of shortening. Velocity of shortening has not been systematically studied in human ASM, yet it probably is critically important in determining maximal airway narrowing in a dynamic setting. The project leaders are Dr Greg King and Professor Norbert Berend, and this project is part of project 12B of the Co-operative Research Centre for Asthma (CRC).

The project will address questions relating to narrowing in the bronchial tree in relation to velocity of shortening.

This project is very physiologically based, but the exciting thing that I am looking forward to doing, and in which I have been gaining a lot of experience in is

the CT scans and the different pulmonary function tests.

In essence, we will be examining how quickly normal patient airways narrow, compared to asthmatic airways when challenged with methacholine.

- **HRCT scanning and Image analysis**

The velocity of airway narrowing induced by methacholine challenge in asthmatic and normal subjects, will be measured as an *in vivo* indicator of the velocity of shortening of airway smooth muscle. Dynamic High Resolution Computed Tomography (HRCT) scanning will be used to scan ten slices 2 mm thick before, and straight after administration of the methacholine allowing us to see airways narrow before our eyes on the CT screen.

The area of the airway lumen will be measured using a semi-automated computer algorithm developed by Dr King and others here at the Institute and the rate of change in airway calibre will be measured directly.

Below in Figure 1, is a picture of a scan similar to those that I will measure

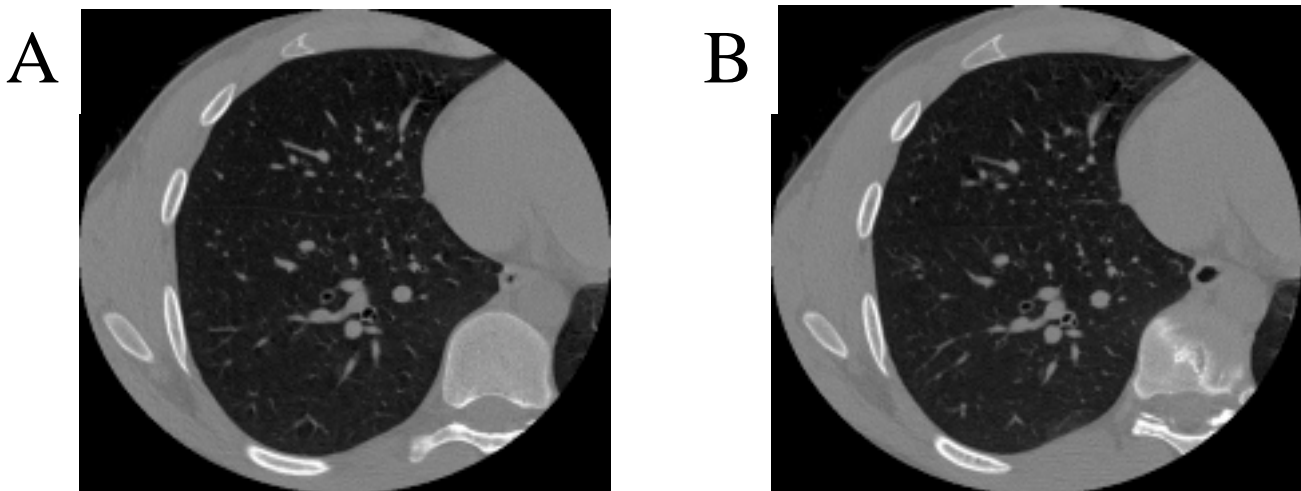


FIGURE 1: HRCT scans acquired in spiral mode, 1 mm collimation, pitch 1 of a 27 year old normal male subject (A) at baseline and (B) after methacholine challenge which induced a 30% decrease in FEV1. Lumen areas of airways marked (a) and (b) were measured to be 9.5 mm² and 7.3 mm² respectively at baseline and 6.3 mm² and 6.0 mm² after methacholine. Note the matching patterns of the pulmonary vessels, which ensure that the same regions of the airways are being compared.

Airway Smooth Muscle Velocity of Shortening (cont)

- **Oscillometry**

Airway resistance will be measured using the forced oscillation technique, a 6 Hz oscillation will be imposed onto normal tidal breathing during which flow and pressure will be measured at the mouth opening using a pneumotachograph and pressure transducer. The data will be collected directly to a PC via an A-D card for analysis and displayed on-line. Therefore, there will be a continuous display of flow, volume and resistance at 6 Hz during the recording procedure. The rate of change in resistance will give a physiological measure of the rate of narrowing. All this has been achieved through the biophysics and engineering teams at the Institute, this will act as a measure of second by second

changes in airway narrowing during the real time CT scan.

- **Spirometry, DLCO, Plethysmography and a skin prick test will also be measured to determine subject status.**

We hope to get 10 normal non-atopic subjects, 20 asthmatic subjects and 10 atopic but non-asthmatic subjects.

This is a very brief overview of the work I will be assisting in. Any questions about the research can be directed to me on e-mail phillipm@mail.med.usyd.edu.au or write to Phillip Munoz, Institute of Respiratory Medicine, PO Box M77, Missenden Road, NSW 2050, Australia.

I will be in Belmont for the first half of August completing the

children's epidemiology study – I have just spent 5 weeks in Belmont doing the adult study where we have tested over 300 people doing Skin Prick Tests, Oscillometry, exhaled Nitric Oxide (eNO), Plethysmography and histamine challenge tests – I have been doing so much smoothing of body box pant curves I am having nightmares about it!!



CALL FOR OUSTANDING MEMEBERSHIP FEES

YOUR 2002 ANZSRS MEMBERSHIP FEES ARE NOW WELL OVER DUE

PLEASE FORWARD PAYMENTS TO ANREW COATES, TREASURER.

See Back Page for Mailing Details



Kustas Tivas - WebMaster

Kustas Tivas looks after all the technical aspects for the ANZSRS website. Kevin Gain made a great suggestion we interview Kustas for Mouthpiece to make everyone aware of some of the 'behind the scenes' people. I asked him the girlie questions, Kevin provided the technical ones.

Q: Could you describe what it is that you do for our website

A: Manage the look, layout and technical aspects of the ANZSRS website, driven by ideas and content all delivered through e-mail from Kevin, and previously Jeff.

Q: "Kustas Tivas" that's a very interesting name, what are the origins of your name?

A: My parents were post war "displaced people" from Estonia, immigrating to Australia in 1949. I was born in Adelaide and named after my grandfather Gustav (Kustas being a more modern derivative of Gustav and August).

Q: When you are not staring at a computer, what other activities do you like to pursue?

A: I compete in masters rowing (singles, doubles, quads, fours and eights), it was beautiful on the Torrens this morning at 6am, play the Estonian bagpipes (called torupill) and do Estonian Folk dancing, and then in my spare time...

Q: At school we had to pick our future careers, if computers didn't exist, what would you have picked? Why?

A: At school (a very long time ago) I had no clear idea of what career I was going to pursue. I just went to Uni, did a Math-Science degree and got into computing early, while working part time in the Psychology department, writing realtime software to control interesting experiments on the first "mini computers".

Q: Computers have been incorporated in practically every aspect of work and home life. Sometimes I see this as the beginning of the end,

we're dominated by them. What do you think?

A: I have been using computers regularly since the early 70's (shows my age), and have seen how over time they have become incorporated into nearly everything we do, but it is important to just regard them as another tool that lets you get the job done.

Q: Where do you see all this technology taking us? Are we close to Star Trekking?

A: "Beam me up Scotty" is still well into the future, but access to the sorts of information we now have available, and how, was unbelievable in the not too distant past. The user interface needs to be friendlier, Internet access through a WAP mobile phone may be technically impressive but trying to read and write an e-mail on a 3 line display is only for the enthusiasts.

Q: I have to know, in your opinion, what is the best search engine? Your reasons?

A: I use www.Google.com.

Reasons:

It has a very clean and simple interface

I mostly get results without too much bugging about with search terms

The newsgroups are a good source for technical solutions for problems I am trying to resolve

Q: Where do you see websites going in the future?

A: Websites in the future will change due to the significant increases in Bandwidth and Wireless transmission. Bandwidth will allow realtime video and audio streaming and fast high quality content and Wireless will allow interaction to handheld portable devices anywhere.

Q: Do you see web publishing replacing the printed word?

A: Web publishing will deliver the content, which will still be printed, but the payment, copyright and ownership mechanisms which are in place for the printed word, need to be resolved for the electronic equivalent.

Q: How would you like to see the Society Webpage



WWW.ANZSRS.ORG.AU

Kustas (cont)

develop?

A: I see the Society Webpages as being predominantly for the members, so the webpages should deliver all and everything required by the members as soon as it becomes available, and for communication between the members, and between and to the organising committees.

The webpage content should be everything to do with what the Society is about and trying to promote. This will change over time, and the website would be one place to generate and manage this change.

Q: What are the issues involved in getting a "bulletin board" type page running - technical, privacy, balancing free access with the security etc?

A: There are several freeware software packages that can be used to set up a "bulletin board" type page with

control over the above issues. The more complex they are, the more work required to manage them. A simple password protected site for members only with minimal management might be preferable.

Q: How do search engines find websites. Do we have to submit our site to a search engine provider or do we just get hit by the engine.

A: Websites can be submitted directly to search engines, but they all eventually are listed anyway because of "spiders" sent out by the search engines. The site log records these accesses. Listings are based on Meta tag content within the pages themselves.

www.WeBSiTeS of InTeResT.com

Once again, many thanks to Bruce Graham for providing these sites:

- Access to documents, abstracts, guidelines and reports from ATS
www.thoracic.org/statements
- Merck website, lots of definitions, may find this useful ideas if studying for CRFS
www.merck.com/pubs/mmanual/section6/chapter64/64a.htm
- American College of Chest Physicians, sample stress test documentation forms, if anyone is updating theirs
www.chestnet.org/public.affairs/stress.test.html
- Lessons set up by the American College of Chest Physicians, test your knowledge/memory
www.chestnet.org/education/pccu/vol15/lesson23.html
www.chestnet.org/education/pccu/vol14/lesson04.html
www.chestnet.org/education/pccu/vol14/lesson15.html

Monash Medical Centre (MMC) Respiratory Laboratory Research Activities From Paul Guy

The respiratory laboratory at Monash Medical Centre has been working over the last three years to establish a network of groups whose research activities coincide with the interests of laboratory staff. We are keen that our scientists get the chance to be involved in an active research program. This includes regular tutorials on research methods by Professor Philip Bardin our Director of Research. Staff development will include opportunities to undertake appropriate courses such as in public speaking and encouragement to present research at local and national ANZSRS meetings.

Our current research activities include:

•Coordination of breathing and swallowing in patients with COPD

This is a joint study with the Department of Physiology at Monash University. This study is a master of Biomedical Science project for Ms Lydia Cvejic in our department. The project uses video fluoroscopy to investigate the prevalence of penetration to the larynx and aspiration of food in a group of COPD patients compared to an age matched normal group

•Improved synchronisation of cardiac contraction in patients with pacemakers and heart failure.

Study with the Department of Cardiology MMC
This is a single blinded, randomised, controlled trial investigating improvement in cardiac function and exercise performance in patients with heart failure using traditional and biventricular pacing.

•The effect of changing body composition on lung function in severe obesity.

We are assisting Dr Linda Schachter, with the Department of Body Composition at Monash in assessing changing body composition in obese patients undergoing rapid and significant weight reduction and its effect on lung function.

•Review of normal values for lung volumes and airway resistance for use in the Southern Health population.

This study being run by Jen Peeler will review our normal values set for static lung volumes and airways resistance in our paediatric population at Monash Medical Centre.

•Predictors for asthma exacerbations in patients with near fatal asthma episodes at Monash Medical Centre.

This study being undertaken by Trish Lyell is a retrospective review of all patients with episodes of near fatal asthma admitted to Monash Medical Centre over a five year period and looks for common predictors of these attacks.

•PEP masks as an adjunct to standard chest physiotherapy and its effect of on lung function in patients with cystic fibrosis.

This study being run by Paul Finlay with the Department of Physiotherapy looks at a range of outcome measures, including lung volumes to assess the utility of PEP masks during chest physiotherapy.

•Effect of premature birth on subsequent development of the lung.

This is a retrospective review of data accumulated with the Department of Growth and Development over seven to ten years and is being conducted by Paul Finlay.

•Evaluation of Airways in Acute Asthma using HRCT.

A number of studies have looked at CT changes in the lungs after methacholine challenge. This study involving Paul Finlay, Paul Guy and Prof Phil Bardin will be undertaken with the Department of Diagnostic Imaging and look at lung CT changes in patients during asthma exacerbations compared to those during periods of quiescence. The major issue for the laboratory has been standardising lung volumes and land marking specific airways.

Adelaide 4-6 April 2003, ANZSRS ASM

Research Activities

Respiratory Laboratory St. Vincent's Hospital, Melbourne

Alpha-1-antitrypsin Research Program:

Alpha-1-antitrypsin (A1AT) deficiency is a rare hereditary disorder which characteristically presents with emphysema at an early age. Current research is investigating the role of other proteins (eg secretory leucocyte proteinase inhibitor and elafin) in the preservation of lung tissue to identify why some patients with severe A1AT deficiency do not present to health care facilities with symptoms.

We hope to be involved in an international replacement therapy study assessing the efficacy of a recombinant form of inhaled A1AT in the next 12 months.

Platinum screening service:

Platinum salts have been linked with occupational asthma and skin prick test sensitivity when exposure is prolonged. For the past three years we have been regularly monitoring workers who are exposed to platinum salts to see if they become sensitized to platinum.

Montelukast study:

The lab is involved in a study with the Royal Victorian Eye and Ear Hospital to assess the effect of taking Montelukast (Singulair) on nasal polyps and asthma.

Lung Cancer & Quality of life:

The Department is coordinating a study to assess the quality of life in patients recently diagnosed with lung cancer and prior to the commencement of treatment.

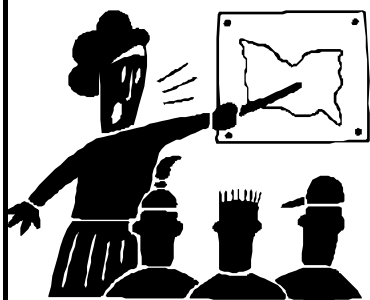
Clinical pharmacology trials:

The lab is involved in three asthma clinical drugs trial. The details are unable to be released due to confidentiality issues.

Sue Brenton

CRFS WORKSHOP—QUEENSLAND BRANCH OF ANZSRS

SUNDAY 28TH JULY 2002



The Queensland branch of the ANZSRS held a CRFS workshop to assist those of us who have not yet sat the exam get one step closer. At previous meetings some members had

expressed concerns that their experience in the diversity of techniques for lung function testing was limited and this fueled the idea of holding a workshop.

It was an excellent day and the Queensland Board members must be congratulated for organising this workshop. We had guest speakers as well as the locals. Topics were based on the CRFS study guide and we covered everything !! Respiratory anatomy, drugs, techniques and of course, the physics .

The workshop helped me achieve several things. Firstly, it put into perspective what I need to revise and now I can create an organised "study plan". I don't feel so overwhelmed by the task. Secondly, it

gave me an idea of what is expected in the exam, so now I know *how* to study for the exam, what to (try and) keep in my head. Thirdly, to realise there is plenty of help out there.

Everyone who attended agreed the day was a success, we each took home something different. I would like to encourage other members and their board members to consider such a workshop.

Once again, many thanks to the Queensland Board members for their efforts and also the ANZSRS for funding the lunch and the tea breaks.

Cecilia Arrigoni

P.S. By the end of the day we were pretty saturated with information, thankfully Janet had made her 'power slice'. We thought we would include it in Mouthpiece for the benefit of everyone. Just turn the page and let your mouth water.

CRFS “Study Aid”

After a long Sunday at the Queensland CRFS Workshop, we decided to add the following to our Study Aids. This certainly helped with the afternoon's progress.

As we all know our brain requires the correct fuel to function properly and this recipe fulfills these requirements:



Dairy: condensed milk and milk chocolate, pure milk from contented Jersey cows, a source of calcium and minerals so essential for good brain function

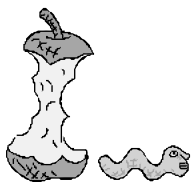
Polyunsaturates: margarine, low in cholesterol, promoting uninterrupted blood flow to the brain and vital organs, to improve perfusion of gases in the lungs, giving that all over pink glow, essential for life

Carbohydrates: flour, a complex carbohydrate, for roughage, internal health and long hours of brain activity - for endurance thinking brown sugar and golden syrup, simple carbohydrates, unrefined for purity, for that burst of intellectual power needed for complex equations - immediate brain food

Fruits and Vegetables: cocoa beans blended with the pure milk to provide the taste and texture of the finest of chocolates, creating that feel good, can do or be anything enthusiasm needed to complete your study programme

coconut, shredded for easy digestion, rich in the good oils and full of roughage, your body will thank you for it

Chocolate: need I say more? full of anti-oxidants, stress releasing compounds and all natural, a general panacea, the perfect study companion



THE SLICE

CRFS CHOCOLATE SLICE - BRAIN FOOD OF A DESPERATE FEW!

1) Base:

- 1 cup plain flour
- 1 cup shredded coconut
- 1/2 cup brown sugar
- 125g margarine

Pre heat oven to 180 degrees C

Melt margarine and combine with dry ingredients

Press into biscuit tin and bake for 15 minutes or until sides are golden brown

2) Filling:

- 1 tin condensed milk
- 2 tablespoons golden syrup
- 2 tablespoons margarine

In a saucepan combine ingredients and stir over a low heat until just starting to caramelize, DO NOT BOIL

Spread evenly over the base and bake at 180 degrees C, for 8-10 minutes watching carefully until the filling browns around the edges

3) Topping:

- 1 family (250g) Cadbury's milk chocolate
- 1 tablespoon cophia (optional)

In a saucepan (or double boiler) carefully melt the ingredients (take care not to let the chocolate catch) and pour over the filling

4) Enjoy:

Let cool and refrigerate until set. allow slice to come to room temperature before cutting to prevent the chocolate from cracking and it is easier to cut!



Australian and New Zealand Society of Respiratory Science

Education Scholarships

Scholarships valued at \$2,000 or 50% of tuition costs, whichever is the lesser, will be awarded.

- ANZSRS Scholarship for Tertiary Study
 - ANZSRS Research Grant

ANZSRS study grants have been established to support the development of the members of the Society. The grant towards Tertiary study tuition costs was designed to support members completing the Graduate Certificate / Diploma or Masters of Respiratory Science at Charles Sturt University. Other courses will be considered if deemed to be relevant by the Executive. Applicants should have been members of the Society for at least 2 years, must be accepted for the course, must hold a full time position and have received less than 50% of tuition costs from their employing institution.

The Research Grant is designed to foster the development of academic excellence amongst members who may not have alternative means of support. The grants will be awarded for projects that will lead towards improved application of Respiratory Science to the investigation and understanding of patient conditions. Applicants must have been members of the Society for 5 years and hold the CRFS credential. Any research project must have been approved by the Head of the Department in which it will be completed and by the local Ethics committee, and the requested funds must not include any salary costs. It is expected that any such project will be presented at the next Annual Scientific Meeting of the Society.

Applications must reach the Secretary by 30 November of the year prior to study / award. The outcome of the application will be advised by the end of January following the application.

All Scholarship Enquiries to:

Mike Brown, Secretary

See Back Page for Contact Details

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CRFS Examination

Final CRFS examination (and Application Deadline) for 2002 is: 23rd November (18 October)

Congratulations to **Alison Hansford**, she has achieved CRFS status.

For details of the examination and application forms, please contact:

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You are invited to contribute short articles, meeting reports and calendar details etc.

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