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Thoracic Society News

The Thoracic Society of Australia and New Zealand Inc Newsletter

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MESSAGE FROM THE PRESIDENT, DR RIMA STAUGAS

INSIDE THIS ISSUE:

The Canberra meeting was an unqualified success. Unfortunately due to family illness I was unable to attend for the full meeting and I would like to sincerely thank the secretariat and members of TSANZ Executive who stepped in for me. The meeting did not miss a beat – which points to a well organised and supportive Society. Please take time to read the newsletter which documents some of the highlights of the recent meeting particularly in relation to awards and keynote addresses.

As I highlighted in my President's report to the Annual General Meeting, our Council spent its last meeting developing some plans for the future. Together with Council a member from many of our special interest groups identified and prioritized the key issues facing TSANZ today.

This is your Society and it must be relevant to you in your professional capacity. We ask you to consider the list of priorities and provide us with feedback, ensuring in particular that issues of importance to your professional practice and continuing professional development are being addressed. Please make sure to rank the priorities. You will be advised via email when the survey has been published on our website.

Your considered opinion will ensure that the Society has a robust set of future actions driven by the needs of its members.

I look forward to your feedback which will determine the Society's priorities to be published in our next newsletter. These will then provide the blueprint guiding TSANZ over the next two to three years.

Until next time

Rima

The Australian Lung Foundation Update

Lungevity Challenge End of Tax Year Appeal

Kylie, who has never smoked, was diagnosed with lung cancer aged 27, just three years ago. Still under active treatment, Kylie has determined to increase awareness of the disease and raise $1 million to set up groups to support lung cancer patients and their carers across the land. Enclosed with this edition of the TSANZ News is a letter describing the journey in more detail.

Please go to http://challenge.lungevity.com.au and make a tax efficient donation to support Kylie.before 30th June

Inaugural Australian Lung Cancer Conference:

30 June – 2 July 2006 | Novotel Palm Cove Resort | Cairns, QLD.
At the time of writing a few places are still available for this conference. Five international speakers have agreed to present and they will be supported by host of "local" speakers.

For further information on the programme - packed with science and fun - please visit the conference website at www.alcc.net.au. Alternatively, call Isabelle Marais at Event Planners Australia on 07 3858 5427 (direct) or email; is abellem@eventplanners.com.au.

COPD National Programme

Pulmonary Rehabilitation Toolkit

The Australian Lung Foundation and the Australian Physiotherapy Association successfully launched the Pulmonary Rehabilitation Toolkit at the TSANZ Annual Scientific Meeting in March this year. The toolkit is a Web-based application and has been warmly received by those involved in pulmonary rehabilitation.

Please enjoy the new website which you can find at www.pulmonaryrehab.com.au.

COPD research network

The Australasian COPD Research network (ACORN), established to conduct multicentre studies in Australia and NZ, held a COPD Colloquium to identify and explore key clinical research questions in COPD at the Annual Scientific Meeting in March. This forum was very well attended and guest speaker Rinaldo Bellomo provided a fascinating insight to the College of Emergency Medicine research network, developed in 2001.

Strategic planning

The ALF COPD National Programme Strategic Plan, covering the period to 2010, has now been approved by the COPD Executive and Coordinating Committees. Please contact Heather Allan at the ALF on heather@lungnet.com.au should you wish to learn more.

COPD Evaluation Committee

Michael Abramson and his COPD Evaluation Committee members have developed an update to the COPDX Management Guidelines. This was published as a supplement in the Medical Journal of Australia on 3 April 2006.

The article brings the COPDX Guideline updates into focus and provides further insight into recent publications concerning the use of combination therapy in treatment for COPD. Please visit the MJA Supplement web site if you would like a copy of the publication. To do this please go to the MJA website and dial up http://www.mja.com.au/public/issues/184_07_030406/abr10742_fm.html

Winter Warning Campaign

The ALF COPD Coordinating Committee recently released a press statement in relation to 2006 winter and its associated threats.

State Coordinators symposium

ALF staffers Ailsa Wilson, Heather Allan and Juliet Gale hosted a symposium for the LungNet State Coordinators from around the nation. This was a two-day meeting and provided a great forum for exchanges of ideas and brainstorming as to how we can better serve the LungNet congregation, which has now swelled to almost 15,000 individuals!

General Practitioner Conference & Exhibition

26-28 May 2006 Sydney Showground, Sydney Olympic Park
The General Practitioner Conference and Exhibition is Australia's premier primary care event, organised by GPs for GPs. Following the success of the 2005 initiative ALF have once again undertaken to work with the National Asthma Council to develop a series of workshops at the GPCE.

The title of the workshops this year will be "COPD and Asthma -- what's the difference and why does it matter"

Please visit www.gpce.com.au/sydney/ for more information.

ALF Research Awards

A record number of awards were made this year and presented by Dr Robert Edwards (ALF President) at the TSANZ Annual Sci-

entific Meeting on 27 March 2006.The ALF National Council plan to seek proposals for the 2006/7 awards round in early August this year. Details will be published on the TSANZ website.

Respiratory Infectious Diseases Consultative Group

Under the chairmanship of Dr Tom Kotsimbos, the group met during the TSANZ ASM in March to finalise the RID Case Statement which will be published later in 2006. The RID Group has secured sponsorship for 2006 and is seeking additional support for downstream development of Group activities following publication of the RID Case Statement.

Research grants from the Commonwealth Government

Australasian Lung cancer Trials Group (ALTG)

In early May the Minister of Health announced that the ALTG had been successful in its application for funds under the Commonwealth Strengthening Cancer Care Initiative. A sum of $524,000 has been awarded for the ALTG programme to improve the participants capacity to conduct high-quality, Evidence-Based and appropriate clinical trials for lung cancer patients. This will also include design and protocol development for potential new trials.

RHSET Project 3: Develop networks for improving access to pulmonary rehabilitation

The ALF has also been successful in its application in relation to the above programme planned to commence in August 2006.Funds to be awarded total approximately $130,000 for this 15 month project.

ALF Annual Report 2005

The ALF Annual Report 2005 has now been completed and the audited accounts show a pleasing result for the year. The surplus generated in 2005 was principally due to a number of exceptionally generous bequests and donations, which will help the ALF in its mission to enrich the lives of those burdened with lung disease. Please do not hesitate to contact the ALF National Secretariat on 07 3357 6388 if you would like a hard copy of the report.

Ethanol

Work has continued with this initiative with the following developments since our last update:

- In April we were visited by Mr Mark Maher, Executive Director of General Motors Powertrain Division in Detroit. He gave an interesting presentation on the latest developments in the manufacture of fully flexible engines, capable of running smoothly with up to 85% ethanol (E85).
- William Darbishire presented at the Ethanol 2006 Australia conference in Brisbane, which was attended by approximately 500 delegates keen to learn about the benefits for the air we breathe through the use of cheaper, cleaner and greener Ethanol.
- The ALF met with the Queensland Chief Scientist Professor Peter Andrews, to discuss the latest research into the benefits of ethanol and the operation of the Clean Air Alliance.

NATIONAL ASTHMA COUNCIL AUSTRALIA

National Asthma Council Update

COPD and Asthma: GP Workshops with the Australian Lung Foundation

The National Asthma Council and the Australian Lung Foundation (ALF) are again collaborating on a series of practical update workshops for GPs at the annual General Practitioners' Conference and Exhibition in Sydney in May. The workshops, entitled 'COPD and Asthma – What's the difference and why does it matter?', focus on the differential diagnosis of asthma and COPD, and management of COPD based on the COPD-X guidelines. The content was updated and added to following the successful COPD presentations at the 2005 Sydney GPCE.

The ALF Pulmonary Rehabilitation Toolkit will also be promoted, and the pulmonary rehab summary resource for GPs will be distributed at the workshops.

International Primary Care Respiratory Group (IPCRG) Third World Conference, Norway

The National Asthma Council is participating in the forthcoming IPCRG world conference, the event it hosted in Melbourne in 2004. That conference attracted over 400 primary health professionals from Australasia and around the world, and the Oslo

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conference builds on this with a program featuring symposia and practical sessions and a postgraduate program. Topics include primary care research, epidemiology and treatment in developing countries, infectious diseases management and a big focus on allergy and asthma, COPD, lung function testing and smoking cessation.

Among the Australian GPs attending will be TSANZ members Dr Ron Tomlins, Prof. Justin Beilby, Prof. Nicholas Glasgow and Dr H. John Fardy, and Kathy Hope will represent the NAC and will be summarising the conference presentations and main issues in a special newsletter for Australian GPs and other primary care professionals, to be distributed after the event. Registrations for this publication are already running hot via the NAC website:

http://www.nationalasthma.org.au/html/management/prof_develop/pd007_ipcrg.asp

Plans for post-conference publications from IPCRG itself include a range of practical summary papers to assist GPs, especially on topics pertinent to IPCRG members working in the developing nations, where conditions and funding place great limitations on respiratory care.

For information on the IPCRG conference, go to: www.theipcrg.org/oslo2006/

NAC cause-related marketing program: Sensitive Choice

Since 1991, the National Asthma Council has accepted sponsorship from the general corporate sector as well as the pharmaceutical companies. Over the years it has developed cause-related marketing activities with the companies from the general corporate sector. The Sensitive Choice program is the formalisation of this process and it will enable greater transparency and consistency in handling applications.

Objectives of the Sensitive Choice program are:

1. to increase Australians' awareness of the need to manage their asthma and/or allergy
2. to encourage manufacturers and suppliers to produce products and services that may benefit people with asthma and/or allergy
3. to provide consumers with a way of identifying products and services that may benefit their asthma and/or allergy and improve their health and well being.

In addition, this will increase the National Asthma Council's revenue from the general corporate sector and assist to make it less dependent on the pharmaceutical industry. The NAC plans to build on a range of industry partnerships after discussion with Asthma Foundations Australia, which also has cause-related marketing partners.

Accepted products are able to use the Sensitive Choice butterfly logo on their packaging or promotional material, as approved by the National Asthma Council Australia.

TIP ON STORING YOUR PASSWORD FOR THE TSANZ MEMBERS' ONLY PAGE

We are frequently asked how to access the Members' Only Page without having to dredge one's Membership Number from some hidden recess. If you are working in a Windows environment using Microsoft Internet Explorer try this: .

In Internet Explorer open your Internet browser.

Click on Tools

Click on Internet Options

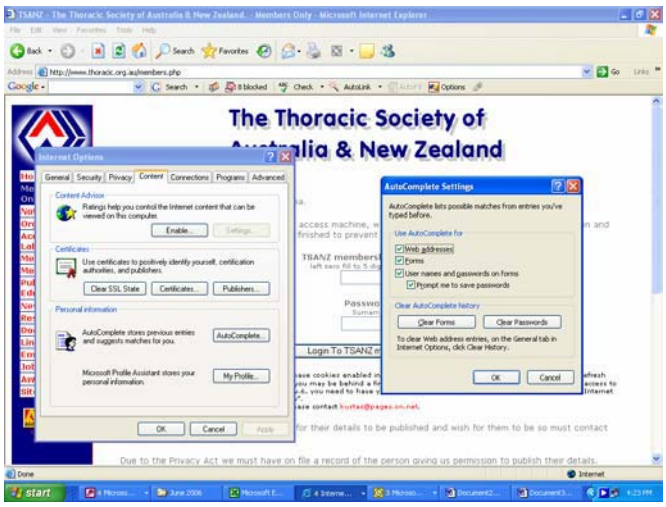
Click Content tab

Click autocomplete

Check all boxes

You will need to enter your five digit Membership number once followed by your password (your family name).

Thereafter, the next time you log on to the Members' Only page and need to enter your Membership Number your computer will prompt you after you have entered the first digit (a zero) and will then autofill.



Obituary

Anilkumar Muljibhai Patel, PSM
MBBS DECT FRCP(E) FRACP
FAFPHM

Born: Kampala, Uganda, 1931

Died: Brisbane, Qld, 2006

Never saw the morning till I stayed up all night
Never saw the sunshine till I turned out the light
Never saw my hometown till I stayed away too long
And I never heard the melody till I needed the song

Tom Waits

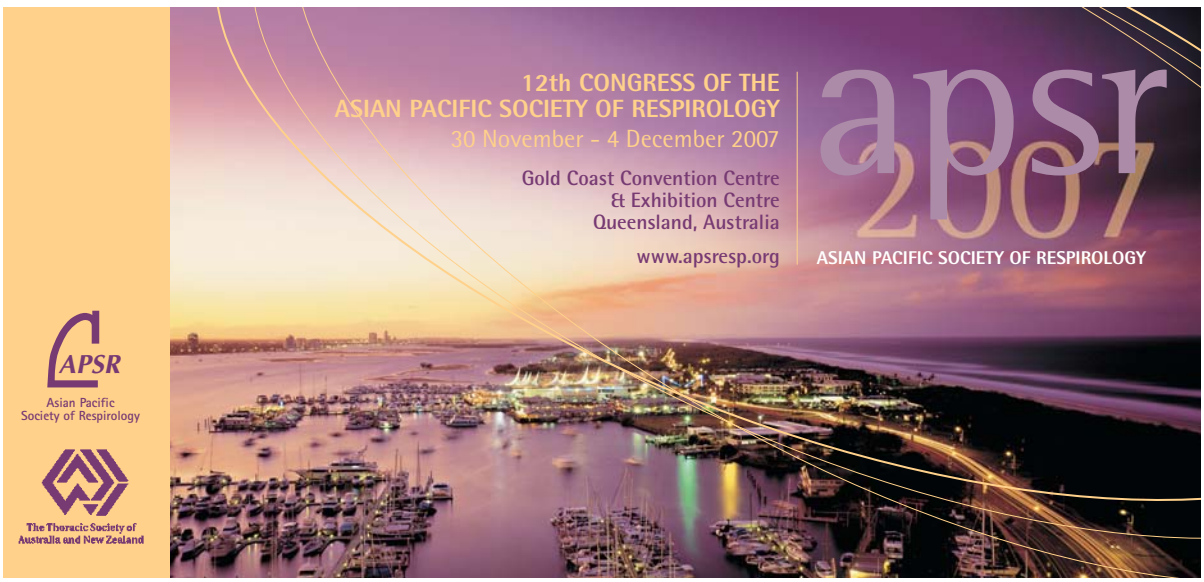
Those who knew Anil during his years in Queensland will remember him as a physician who advocated passionately for his patients and for tuberculosis control. He had an extraordinary intellect and his knowledge about tuberculosis in all its facets was encyclopaedic.

All those health care workers who consulted him and turned to him for advice on any aspect about TB will feel a void that will not be easily replaced. His sense of social justice led him to a career in tuberculosis control where he successfully embraced the dual needs of high level individualised patient care with a focus on reducing human suffering and of public health by ensuring reduction of tuberculosis transmission within the wider community. Those doctors, nurses and auxiliary health staff who have worked with or who have been taught by Anil are aware of the passion that he brought to his work, whether as a chest physician, a public health physician, an epidemiologist, a tropical health specialist or a medical administrator. Friends and colleagues who knew Anil away from work experienced this same passion in his private life. Whether at work or at play, he was always generous and he displayed genuine enthusiasm in his interaction with his colleagues and friends and was always a keen observer of and commentator on social and political events which shaped the environment in which he worked and played. Those who were privileged to work with him or to have him as a friend could always depend on his loyalty

Before his enforced exile from Uganda in 1972, he had been involved with the first randomised controlled trials of short course chemotherapy for TB as the principal participant for Uganda in the BMRC/East African trials of TB treatment. He came to Australia as a refugee in 1973 and continued his work as respiratory physician in Cairns and then at Prince Charles Hospital. As Director of Specialised Health Services in Queensland, he was responsible for establishing the first HIV services in Queensland as well as overseeing tuberculosis control, sexual health services, the hepatitis B programme and migrant screening services in Queensland, all while continuing his specialist thoracic physician commitment to PCH. However, his lasting contribution to Queensland and Australia was his leadership in and advocacy for tuberculosis control. His contributions to clinical medicine and to public health, particularly in the area of tuberculosis management and control, will be missed.

Anil is survived by his wife Nalini, children Aseet and Anushka, and two grandchildren, Simran and Jahan, through the union of Aseet with Mona.

Tom Konstantinos (Qld)



THE PRESIDENT'S AWARD

PROFESSOR SIMON CHAPMAN

Professor Simon Chapman receiving the award from TSANZ President, Dr Rima Staugas

The recipient of the President's Award was introduced by Rima Staugas whose opening Statement was as follows:

"The President's award recognizes a significant effort by the recipient in the fight fot tobacco control. Previous recipients have included politicians and members of the public who by their efforts have initiated policy, legislation or led good fight through galvanising public support and awareness. Simon has been a leader in all these areas and more. He has a very strong and active interest in banning tobacco advertising, and exposing to the Govt and the public the questionable ethics of the tobacco industry. "

Prof Simon Chapman accepted the award with some impromptu comments.

This is the best organization in the country to get an award like this from. The Thoracic Society has always been the very first organization that we phone if we want to get support or indeed a partner in the front line of work in tobacco control. It has been like that for a very long time, and some of the most robust and interesting meetings in tobacco control I have been at have been hosted by the Thoracic Society.

I started this work way back in 1978 when I had a day job that I thought was not particularly effective in meeting tobacco control goals, and so with a few colleagues formed a public interest group we called Mop Up. At our very first meeting a group broke away, saying we were not radical enough. Hence the origin of Bugger Up which went around spraying billboards the length and breadth of the country, thereby greatly radicalizing the tobacco control cause. It brought the AMA into the fray, and it started to argue that tobacco advertising should be banned. Those were the halcyon days with a lot of targets at which we could hit out.

In those days tobacco advertising was all over the media, except for directly on television and radio. It was visible in the printed media and via sponsorship at sporting and cultural events such as the Winfield Cup and Benson & Hedges cricket.

If someone had said to me then that this would all have finished within 15-20 years I would probably have laughed at them, as indeed at the proposition that smoking in a restaurant or even, very soon, in a pub, would be prohibited.

The most important outcome of all of that advocacy and lobbying and legislation has been that smoking prevalence has fallen dramatically in men and has not risen in women. When I first started out something like 46% of men and about 32-33% of women smoked every day in Australia. The most recent figures from the Australian Institute of Health and Welfare show that 17.4% of adults aged 14 and above (in Australia) smoke every day, Another 1.5% admit to smoking weekly bringing the prevalence of smoking in adults over the age of to about 19%. In all the years in which the prevalence of smoking has been monitored we have not seen any upturn, in fact it has been going down and down, it's a 'brakeless' train, which leads us to consider a scenarios when we might see the end of smoking in countries like Australia.

Last year Mike Daube from Curtin University and I agreed that based upon different scenarios the gradient could actually increase further - with the new aggressive warnings on cigarette packs, the ban on smoking in pubs where so much smoking is socialized, and increasingly large injections of money from Government into tobacco control. This remains at a fairly derisory level (around 24 million dollars over a four year period) when compared to the amount of money the Government gets from tobacco excise – about 5 billion dollars every year. –. This amount is unacceptably low - though it is better than it has been for a while.

Painting a scenario whereby we have reached rock bottom, wherein the people who now still smoke represent the really hard cases is not borne out by the evidence. We are still seeing the same rates of smoking cessation in the community. A lot of people are going to die within the next 15 to 25 years from tobacco related causes, before the most marginalized people (eg those with mental health problems), members of the indigenous community and a few diehards give up smoking.

The issue is far from over in Australia, and it is far from over internationally. Australia is providing leadership in the form of training, guidance, expert advice on drafting legislation, programme development and strategic input and so forth in the region with some excellent outcomes. The Thai Government is probably one of the most exemplary governments of any in the world. It has now banned the display of any tobacco products in any shops. If you walk into a Thai shop, you have to furtively ask for a packet of cigarettes - like you might have had to ask for a packet of condoms when we were young! It is truly terrific to see these things happening!

It is customary and very important on occasions such as these to thank a lot of people. This is not a David and Goliath act where single individuals are responsible for making a difference. A more appropriate metaphor would be Voltaire's to "peck to death by ducks". Those of us who have been active are very strategic and are expert in where we land those pecks, but it's the effort that happens right around the country, people writing letters to newspapers, ringing up radio stations, contacting their local member, opportunistically raising the issue of tobacco control at every appropriate opportunity, that has got tobacco where we have in Australia today.

I am very pleased to have been a part of that. It has been a very interesting career. Many many more challenges remain - and it's really great to be acknowledged by my peers like this today. Thank you very much.

The Wunderly Oration 2006
Professor Stephen R Zubrick

Curtin Centre for Developmental Health, Institute for Child Health Research (WA)

CERTAIN CARES AND UNCERTAIN COMFORTS: HUMAN DEVELOPMENT AND THE DEVELOPMENT OF CHILDREN

The opportunity for a behavioural scientist to talk to scientists, academics, and practitioners of respiratory medicine and research is, to say the least, unusual. I noted that part of Harry Wunderly's contributions in respiratory medicine, and tuberculosis specifically, was motivated by his own experience of TB – his own father succumbed to the disease and he himself suffered from it. As my own area of specialisation is in child and adolescent mental health I wonder if this obligates me to also confess? In any event, I'm not without some knowledge of tuberculosis as my mother suffered from this as a girl growing up in West Virginia (USA) hillbilly country and was later, while I was a child, in a sanatorium for treatment. In a child's mind there was no distinction between a sanatorium and an insane asylum, so perhaps in this, my future career was determined. In any case, here I am.

In being approached to deliver the Wunderly Oration I was asked to talk about the social aspects of child health and hence the title of my talk is taken from a 17th century proverb, "children are uncertain comforts and certain cares." It reflects both the ambivalence and ambiguity that children hold in the mind of communities and society generally – and I'm sure from time to time, in the minds of their parents. There is a lot of talk about children at the moment. "Early years" strategies for children between the ages of birth to about 8 years of age have proliferated in several Australian jurisdictions. Visits by Nobel laureates in economics have provided compelling evidence for the economic investments early in the life course that reap substantial human capital benefits that drive economies of nations. Even recent reports from COAG – the Council of Australian Governments – make mention of these strategies suggesting some level of awareness, at least in rhetoric. It remains to be seen if enduring action will follow.

Many talks about the social aspects of child health opt for the relatively easy strategy of appealing to emotion, shame and guilt in order to advance a case for why children are important to the future or why they are simply important as "beings" in their own right. I actually think children are over-played in this discourse and that the central argument about child development is an argument about human beings – and more particularly their development across the lifecourse. This is the general direction of my talk today. In this regard, and here I disappoint many of my colleagues, children become a means to an end – where the end is defined in terms of human development and the betterment of the human predicament.

My themes are deliberately broad and in three sections. First, I want to identify the capability to participate – socially, civically and economically – as the central outcome of interest in human development and talk about the threats to participation in terms of health. Second, I want to link participation to the key social skills that children develop and use (for better or worse) for the rest of their lives. Third, I want to show how these social skills are themselves linked to measures of the social gradient and why it is necessary to "unpack" the social gradient in order to understand the link between measured social gradients, social skills, and participation. I'll finish with two examples from our own scientific studies that illustrate these general points.

PARTICIPATION AS AN OUTCOME OF HUMAN DEVELOPMENT

Within Australia and other developed countries there has been an emerging concern about the prevalence and persistence of non-communicable diseases (NCDs), among which predominate: Cardiovascular disease, diabetes, cancer, respiratory conditions[1] and mental health conditions – particularly unipolar major depression[2]. NCDs are forecasted to account for over 70% of global death and 60% of disease burden by 2020, with developed countries predominating in the league tables of this rising epidemic. That is not to say developing countries are unaffected by NCDs, it but does suggest that there will be competing global interests in responding and that these interests will be driven by differing national economic, political and social priorities. At present, unless there are dramatic, and yet unforseen, advances, primary prevention is the principal mode of intervention to lower the burden of NCDs. This is because it's largely agreed that the causal pathways to these diseases are complex and entwined. Intervening will require changing exposures to modifiable risks for these diseases.

However, the causal complexity of the current range of non-communicable diseases to be acted upon, the nature of their individual and cumulative risk exposures, and health outcome differentials that reflect social inequality, lead to an inevitable observation: *the majority of the determinants of these diseases*

lie outside of the immediate influence of the health system.

Now it's probably useful to pause for a moment and reflect on what lies outside of the health system's view and that sits, instead, more broadly across human services sectors which are reliant on the public purse and, of course, compete with the health system.

Whatever might be said about health promotion and the maintenance of health, what the health sector tends to see is the prevention, detection, treatment and management of

disease as its principal mission (Figure 1).

In contrast, the problem view across other government agencies and non-government organisations is considerably wider and encompasses problems of human development. In this regard the NCDs are nested among other urgent problems requiring attention.

These include risk behaviour outcomes such as substance abuse, early sexual activity and teen parenting; academic outcomes such as truancy, early school leaving and alienation; social outcomes such as individuals in institutions, children in custody, criminal behaviour; and developmental outcomes such as poor attachment, poor cognitive development and poor speech and language. Across the many departments involved with these outcomes there will certainly be different languages to describe aspects of concern, or departmental missions about, the problem focus. It is in these contexts, though, that non-communicable diseases can be seen to be part of a wider family of concern for government, non-government and private sectors alike. Diabetes, cardiovascular disease, cancer, respiratory disease and mental illness are merely a subset of problems that confront policy and decision makers of other sectors in deciding on a course of action.

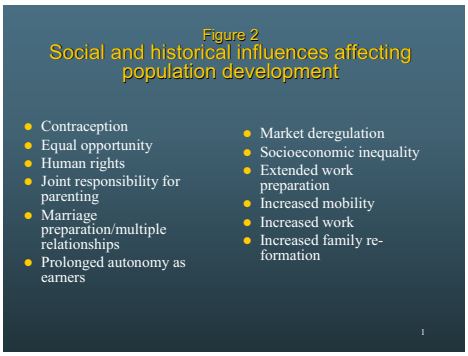
Ultimately however, what most political systems see is concerned with very little of this. In Australia, the broad view of the political system is focussed upon forms of *participation: economic, civic and social* (Figure 1). So the political system measures its success in terms of participation, while across government departments there is a broad interest in reducing developmental burden and, within this, the health system confronts, more latterly, the reduction of burden associated with non-communicable diseases – many of which have determinants on causal pathways more accessible through the missions other government departments or through political means.

There are surprising linkages among these outcomes that are producing considerable burdens at the population level and diminishing human capital and government wherewithal to address the many fronts that require action. In considering leverage points for reducing the burden of these problems of human development, and here I am including the NCDs as part of this, three of their features merit particular attention: their persistence across the lifecourse, their causal complexity, and the social gradients that underlie their distributions in populations.

Lifecourse persistence. Normally a finding that a risk factor is only a weak cause of a disorder has resulted in little if any effort being spent either in determining the nature of the association or in attempting to prevent it. However, as Doll points out, if a large population of individuals is exposed to a weak causal factor then preventing or interrupting the exposure to this risk factor can result in valuable reductions in health and social burden[3]. Just as importantly, where large populations are exposed to multiple risks that have weak causal associations to the development of these disorders these may have a cumulative effect on outcome. A consequence of this pattern of exposure is that a large number of individuals exposed to small risks may generate many more cases than a small number exposed to a high risk[4]. Moreover, a pattern of cumulative risk which includes inequities of access, persistent stress, and patterns of social exclusion, imparts considerable persistence of disorder across the lifespan[5, 6]. Many of the outcomes illustrated here, once established, are remarkably persistent and tend to establish themselves and diminish capabilities across the lifespan. This increases the cost consequence.

Causal complexity. Prevention approaches in public health over the past 50 years have mostly been based on individual risk-factor epidemiology. Typically these approaches seek to modify risk factors by targeting "lifestyle" behaviour, aetiological agents and aspects of the environment, particularly as related to individuals. These approaches have had some success in reducing problems, mostly where there is just one or only a few circumscribed risk factors. However, they have been relentlessly focussed upon individuals and individual behaviour and have been de-contextualised from wider social and historical influences that govern whole populations[7]. Added to this, there

is often a failure to distinguish those determinants that predict persistence of disorder (prognostic variables) from those that predict onset (risk variables). The former determinants are critical to treatment while the latter are critical to prevention. They may also operate at fundamentally different levels of exposure – these being well beyond the control of an individual. I noted that Harry Wunderly was about 8 years old in 1900. As a general point it is worth reflecting on some of the wider social and historical influences in developed countries that have occurred over the last century that have affected nations, families, and individuals and accompanied the rise of non-

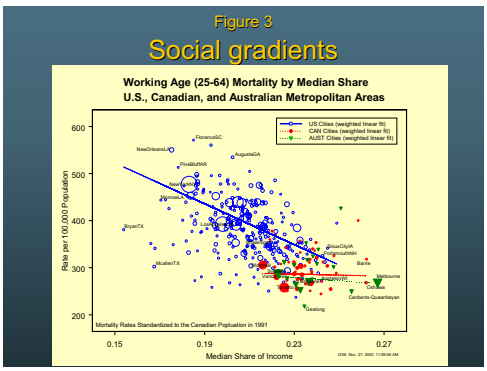


communicable diseases and the other outcomes cited above (Figure 2).

These influences include contraception and planned birth, legal frameworks for equal opportunity and human rights, joint responsibility for parenting, the emergence of marriage preparation via multiple relationships, prolonged autonomy as individual earners, and less dependency by women on male support[8]. Within nations there has been globalization producing a deregulation of job markets, economies, and workplace settings, the rising necessity for two incomes with resultant changes in child care requirements, increased mobility with resultant discontinuities in social attachments and greater exposure to the forces of migration and social and cultural dislocation.

As a result, prevention approaches for the NCDs have been much less successful in dealing with more complexly determined problems which now constitute the major global burden of illness and disability. Pathways of these diseases are more than just classical "biological" risk exposures – they include constraints on choice, activities, and environments that in turn determine or limit the knowledge and skills necessary for maintaining health and good development. This is why the pernicious use of the phrase "lifestyle diseases" totally belies the challenge in addressing prevalence reduction of the NCDs by assuming that their causes are entirely under the control of the individual. This is why understanding the emergent research on the social gradient is critically important.

Social gradients. Evidence shows that within and between



nations there are sharp social gradients linked to health outcomes and that result in their unequal distribution within populations (Figure 3).

The mechanisms that are theorised to link social gradients to unequal population health include: 1) inadequacies in material circumstances which are related to health and that arise from the absolute income of individuals and the resultant (in)ability for them to influence their immediate and wider environment to the benefit of their health[9, 10; 2)] stress diathesis and psycho-neuro-endocrine changes that arise from perceptions of relative income inequality and that cause poorer health[11, 12, and ; 3)] unequal accumulation of exposures and experiences that have their source in the material world and that produce an unequal distribution of health and illness[13]. The social gradient story is not a "poverty" story that isolates the population in the lower centiles of income or disadvantage as the carriers of all the risk – indeed, it is *gradient* – a dose response, rather than a threshold effect. Each person along the gradient will have a better or worse outcome relative to individuals immediately above or below him or her. If you like, being "very well off" imparts a better health outcome than being just "well off".

As it turns out, in considering lifecourse persistence, causal complexity and social gradients, understanding the mechanism of the social gradient offers major prospects for changing these outcomes – not only in NCDs but across the array of other developmental outcomes. So far though most of the excitement in the "social gradient and health" story has been in demonstrating that the gradient exists within countries, and indeed in cross-national comparisons of health outcomes. However at the more fundamental level, work is only commencing to unpack the social gradient.

It's to that story we now turn.

SOCIAL SKILLS THROUGH THE LIFECOURSE

Nations move forward on the basis of the relationships between individuals in their families, communities and organisations. These relationships – in the form of memberships, affiliations, partnerships, friendships, marriages, agreements, contracts

and laws – provide collective benefits and enable capacities larger than the individual acting alone. Such relationships and the actions arising from them can support and strengthen social networks, norms and values and produce reciprocity and trust. National prosperity and productivity are the outcomes of civic, social and economic participation. Participation is not merely the result of a well managed economy, but is the result of the good literacy, numerical and technical competence and the emotional and social capacities of individuals working together and committing to common goals and a common good.

Until quite recently, much of the academic and public policy discourse on children in Australia and internationally has tended to focus on atypical development and children with special needs. While this emphasis has brought improvements in the range and level of services now available for "at-risk" or ill children, it may have been at the expense of scientific understanding and policy that addresses the usual developmental requirements of all children. Studying both atypical and normal development to gain a more complete understanding of human functioning and adaptation is important, and during the past decade there has been a heightened interest in describing and understanding the dynamics of healthy child and youth development beyond merely the absence of disorders and problems[14]. This has brought into sharp focus the social environment in which children develop and the social capacities that they acquire from it.

A substantial body of research now exists that defines the range of social capacities which underpin participation. Large-scale population surveys such as the Canadian Longitudinal Study of Children and Youth[15] and the Western Australian Child Health Survey[16] have highlighted that a large proportion of the variance in children's social capacities is accounted for by inputs from several environments, including the family and the immediate neighbourhood and school. These studies have described the key skills that lead to more optimal developmental outcomes. Children, and indeed adults, achieve higher levels of participation where they are

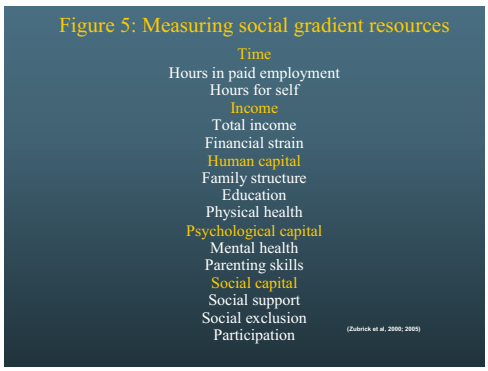
1) able to regulate their emotions,
2) engage in exploratory behaviour,
3) communicate effectively,
4) are self-directed,
5) have intellectual flexibility,
6) possess some degree of introspection, and
7) possess self-efficacy in meeting life's challenges (Figure 4).

These *social skills are used by individuals across the life span to influence their social and physical environment* *for their own development and the development of others.*

An important feature of these social skills is the manner in which they are *prompted, facilitated* and *constrained* by physical and social environments. This is because these environments contain resources that are essential for the development of social skills. As it turns out, these resources link social capacities and health and, at the same time, they allow us to drill into the social gradient and begin to unpack it into its constituent parts. This allows us to move well beyond global measures of "socioeconomic status" and instead characterise the social environment and its inputs in more measured ways.

UNPACKING THE SOCIAL GRADIENT

Environmental resources for the development of social capacities. One of the ways in which environments prompt, facilitate or constrain development is through the provision of resources relevant for child development generally, and the development of instrumental social skills specifically[17, 18]. There are five resource domains. They comprise time, income, human capital, psychological capital, and social capital[19] (Figure 5).



Time is a commodity and is identified as such by most people. While time is frequently characterised along dimensions of both quality and quantity, it is also regularly understood by its value it in economic and social terms. Individuals supply time as well as income to a variety of activities: receiving income from time spent in the marketplace and receiving "utility" from time spent, eating, sleeping, participating in other activities including caring

for children[20]. Time might be considered as the "vessel" for other the other developmental resources. Time as a resource for children generally refers to the *time that caregivers have available for themselves and other family members. We* should note here the distinction between the *quantity of time available* for family members and the *quality* of the time used for family members. This distinction is an important one. Caregivers frequently state that while the quantity of time available to them to care for family members in actual hours and minutes may be small, their use of this time (i.e. its quality) may be directed to achieve quite particular outcomes for individual family members. These may be directly related to the opportunities that exist for contribution to learning new skills and competencies, and receiving recognition or feedback. While these assertions appear reasonable, there also may be a point where the *quantity* of time available to give care to oneself and others becomes so restricted that both the subjective and practical effects of this erode the quality component. Finally, it may be more useful to limit measures of time to quantity (i.e. minutes, hours, days, etc) and to measure quality through the other capital domains (eg. human, psychological and social).

Income, the "classic" measure of economic status, is a critical resource that may be used on behalf of children, whether one sees it as the primary measure of the economic base of the family or as defining a standard below which issues of basic subsistence and survival dominate[21,22]. Income can also be used to purchase other resources including time that can be spent in activities that influence child development. If all you measure is income, as an effect on health or other outcomes, then all you can do is recommend changes to it when you measure an association. The fascinating aspect of income, is that when other information is available about other resource domains, income either drops out of the predictive equation, or shows diminished effect.

Human capital refers to those resources that carers may be able to use on behalf of children (including a caregiver's knowledge, skills and experience about how the world works)[18, 23]. They include such things as a caregiver's own education and training, their employment, their culturally-acquired knowledge, beliefs, attitudes and aspirations for children, and values and traditions concerning parenting and family life. Some children are intrinsically advantaged by the human capital of the families into which they are born. Some families accrue more favourable human capital in terms of both biology (DNA) and family culture in the form of education, skill and practical know-how[24].

Families also have access to *psychological capital resources that can be used on* behalf of children and young people. Psychological capital includes parental mental health, the level of family cohesion, the perceived level of family support and the level of stress and conflict within the family. The establishment of a non-threatening and non-violent emotional climate and levels of control or coercion are also critical components of psychological capital. Many of these factors are strongly associated with child well-being. Other resources include a sense of personal control, self-direction and autonomy, and the availability of others to provide emotional support. An important aspect of psychological capital is self-efficacy which refers to how well individuals believe that they can manage and meet the demands and tasks of daily living.

Social capital is a concept that has received considerable attention in recent times [25,26]. In the context of a community setting, the term 'social capital' refers to the specific processes among people and organisations, working collaboratively in an atmosphere of trust, that lead to accomplishing a goal of mutual social benefit[27]. Social capital does not refer to individuals, the means of production or to the physical infrastructure. Instead it involves interactions among people through systems that enhance and support that interaction. Four constructs of social capital are typically measured: trust, civic involvement, social engagement and reciprocity[28].

SUMMARY SO FAR

Let's reiterate where we are.

First, we have identified the capability to participate – socially, civically and economically as the central outcome of interest in human development. Second, participation is linked to key social skills whereby individuals are 1) able to regulate their emotions, 2) engage in exploratory behaviour, 3) communicate effectively, 4) are self-directed, 5) have intellectual flexibility, 6) possess some degree of introspection, and 7) possess self-efficacy in meeting life's challenges. Third, these social skills are themselves linked to inputs (i.e. developmental resources) that environments (families, communities, schools, and work) provide: Time, income, human capital, psychological and social capital. These inputs more accurately measure constituent parts of the social gradient.

Where does this take us now?

In unpacking the social gradient, studies are now focused upon the *accumulation, transfer* and *loss* of these resources and their relationship to child and human developmental outcomes. I'd like now to consider two applications of this framework to two distinct problems. The first is in approaches our group has used to demonstrate the intergenerational *transfer* of human capital: In this case from parents to children in the form of a study of the prevention of serious conduct problems in 3-4 year old children in the mainstream population; and, the second example, in the form of documenting the absence of a social gradient and the accumulated loss of developmental resources in the Australian Aboriginal population.

(Continued on page 28)

EXAMPLE 1: PREVENTING SERIOUS CONDUCT PROBLEMS IN 3-4 YEAR OLD CHILDREN THROUGH THE INTERGENERATIONAL TRANSFER OF HUMAN CAPITAL

Several population based studies of Australian child, adolescent and adult mental health have been conducted in the past 15 years[29-34] confirming many of our greatest concerns about the immediate and long term burden that mental health disorders impose on individuals, families, and indeed whole nations[35]. These findings have also been made available at a time when we have increasing evidence to guide both clinical and population level interventions for promoting mental health, and preventing and treating mental health disorders[36, 37].

Epidemiological studies are a type of scientific "technology". They represent one of the fundamental building blocks in quantifying the prevalence and distribution of disease, disability, physical health and mental health. If properly conducted, these studies can also characterise the significance of mental health disorder in terms of its impact on function and imposition of burden on the individual, family and wider community. In the past decade Australia has moved vigourously to use epidemiological studies to establish an evidence base on the prevalence and significance of mental health disorders in the general adult population[29,38,39], in subpopulations of the seriously mentally ill[30], in Australian children and adolescents[31-34,40,41], and for the first time, in Australian populations of Indigenous children and adolescents[42,43]. These findings have also stimulated developments in state health authorities to commence routine monitoring of mental health at the regional and community level thereby beginning to empower local solutions to problems through the provision of local epidemiological data[44].

These contemporary Australian population mental health surveys, the first of their kind in Australia, showed that it was possible to reliably identify mental health problems and disorders by standardised interview and self report methods. These studies have converged on a common finding: mental health disorders are prevalent and associated with a substantial personal, social and economic burden. The findings show a steady growth in the prevalence of mental health disorders in the mainstream Australian population from about 14% in young children[31,33], increasing to 17% by early adolescence[33] and peaking at 27% in early adulthood. In the Indigenous population a grimmer picture emerges with a 1.6 fold increase in prevalence – 24% - relative to 4-16 year old non-Indigenous children[42]. These rates are high and we have no evidence that they are decreasing.

A particularly confronting aspect of mental health problems in very young children is a class of problems called conduct disorders. If developed early in life – particularly before the age of 6 – they can be remarkably resistant to treatment and entail a cascade of poor social outcomes that support their persistence through the lifecourse. For those of you unfamiliar with the term, conduct disorders involve problems with children in the regulating their emotions, pro-social behaviour and concentration. The prevalence is high even in this very young age group – 11-14%. These kids are real problems and turn up in clinics with diagnoses of aggression, delinquency and hyperactivity. Randomised trials of *clinical* interventions have been shown to be effective if implemented early – however in Western Australia, barely 2% of children needing access to mental health care are able to access it – and it there is no guarantee that it will be evidenced based treatment that they obtain.

The classic epidemiological finding about these children tends to find a preponderance of risk in the lower socioeconomic categories. Poorer, single parent families. This would suggest the primary strategies for dealing with conduct disorder rest with preventing family break-up and income supplementation and work benefits. Not exactly inspiring stuff. However, our application of social gradient measures showed a considerably different resource requirement: chiefly a change in a major human capital input: parenting practice. Results from our studies revealed high levels of conduct disorders in children with 2.2 – 3.3 fold increases in their odds where children were exposed to adverse parenting[32]. Of particular note, was the fact that about half of the Western Australian population reported using suboptimal parenting styles – thus while the risk-ratios are relatively low, the population exposure to the risk is high. I should comment that these suboptimal parenting styles entailed harsh, or coercive, or disengaged practices rather than more warm or involved parenting practices. These practices are seen across the population spectrum – they are not confined to the less wealthy, nor is optimal parenting the sole province of the upper classes. In terms of attributable risk, when we unpacked the social gradient these data suggested that some 36% of the burden of serious behaviour problems in Australian children and adolescents could, in theory, be attributable to suboptimal parenting. So, if a reasonably effective intervention strategy were available it might be one of several population interventions that should be available for families and young children.

With these considerations in mind the Western Australian health authority commissioned a culturally appropriate and universally accessible, population-level application of parent training program to parents of children aged 3-4 years. This was delivered to groups of 10 parents attending a total of four two hour sessions followed by four 15 minute phone calls over a four week period – a total dose of nine hours over two months[46-49]. The program was highly manualised and brief.

Program content clearly focused on modifying parental behaviours that were empirically shown to influence child behaviour. A variety of trained community and child health personnel delivered the program.

The fine grained details of our study and its results were published last year.[45] Briefly though, some 800 families, that is 66% of eligible families, in the targeted census districts enrolled. These families received an average of 7.9 hours of the total program. So, a good number of families from areas with very high risks were attracted into the program along with families from the other districts in the region and these families received a large portion of the program "dose". We compared them with another 800 families who did not receive the treatment and studied impact and cost outcomes.

In terms of impact the results showed significant changes in parenting behaviours and that these were associated with changes in child behaviour problems with effect sizes ranging from large immediately following the program (.83) to moderate (.47) two years later. In practical terms these effect sizes are associated with a reduction in the total proportion of children in the clinical range for serious behaviour problems of about 36.5% two years following the intervention.

In terms of cost, the large treatment costs associated with serious behaviour problems such as conduct disorder are well known. So too are the costs associated with outpatient treatment in a mental health clinic – in Australia the median per capita cost for treatment in a child and adolescent mental health clinic was estimated to be on the order of $2,000[50]. The costs to develop and deliver the group parenting program were $633 per capita (exclusive of evaluation) in the first year of operation given the establishment and set-up costs. This dropped to $250 per capita in the post-development period.

These results are the first of their kind to look at the dissemination of a large scale universal program of parenting. There are currently several major trials around the world in progress and producing results similar to ours. What they illustrate is a theoretically sound, empirically based strategy that builds parental human capital – in the form of parent training – and transfers it to the child in the form of increased social skills early in the lifecourse. This results in the building of human capital in populations while concurrently addressing the prevention of a proportion of the burden of mental health disorders in the population. Clearly it is not the only prevention opportunity that we should have in place, but it one of a growing number of prevention interventions now available for implementation and that reflects some of the basic principles derived from unpacking the social gradient.

EXAMPLE 2: THE ABSENCE OF A SOCIAL GRADIENT AND THE ACCUMULATED LOSS OF DEVELOPMENTAL RESOURCES IN THE AUSTRALIAN ABORIGINAL POPULATION

Changing the circumstances of Australian Indigenous people has remained persistently resistant over an extended period of time. The Aboriginal population comprises 3.5% of the total population of Western Australia (about 66,000 people). Using a trained field staff of 130 we gathered information on a random sample of over 5,000 children living in 2,000 families across the state.[51]

We were careful to use a detailed process of gathering information about income, time, human, psychological and social capital. At this point in time we are three fifths of the way through our analysis and publication of the results with three large monographs published in 2004, 2005 and 2006. A central finding in our work so far is the observation that there is no apparent link between improving financial and educational circumstances and improved health or mental health outcomes in the Aboriginal population. In other words, we can not find clear signs of strong social gradients. This is contrary to findings in the majority population where there are clear social gradients that associate better health with better financial and educational attainments. At first look this suggests that investments in education and employment are ineffective in producing changes in health and other developmental outcomes for Aboriginal people. A closer look at the developmental resource profile of the Indigenous population reveals why, under current policy arrangements, progress toward change will be slow unless we reposition our investments.

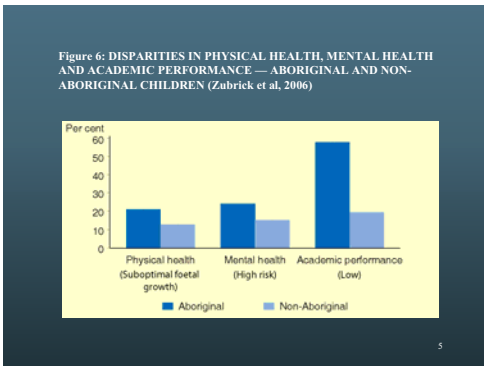
Half the Indigenous population is under the age of 20 years. The highest death rate occurs in the age range 35-54 years. One in four infants are born to mothers under the age of 20. About 6% of infants aged birth to three years and nearly one in four children aged 12-16 years are no longer living with either biological parent. About 30% of carers had left school before Year 10, unemployment ranged from 25-33%, 70% of the population are in rental accommodation, and 20% of children are living in families that report 7 or more major life stress events (eg. death, incarceration, serious illness, extreme financial hardship, violence) in the preceding 12 months.

The data are plain in what they tell us about the capability profile of the population: Across the range of measures of time, income, human, psychological and social capital there has been an accumulation of loss. As a result, social gradients in Aboriginal populations are currently moderated by other factors: the physical illness, mental ill health, family stress and family dysfunction profiles of the carer population. These stresses are, for many, overwhelming the benefits that may accrue through

improved education and income. This occurs regardless of remoteness – it's a feature of both metropolitan and remote settings. This combination of circumstances not only creates impoverishment of the financial wherewithal to raise children, but also compromises the very basis of human, psychological and social capital which forms the wider pool of resources essential for child growth and development, including their social and emotional wellbeing. The impoverishment across all of these resource domains is accompanied by a reduction in the choice, capacity and flexibility of carers, families and communities to meet the demands and challenges of daily living. This is a recipe for cumulative stress.

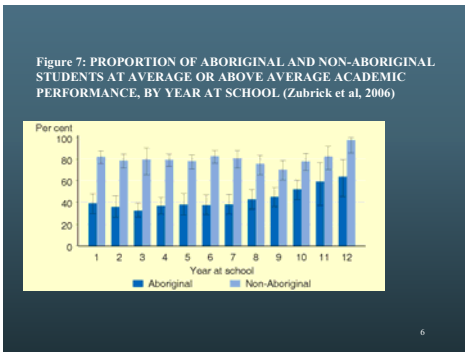
The processes that maintain this state of affairs are particularly entrenched and it's hard not to think that we are beyond the "tipping" point of return at a population level. For the past decade community development strategies have been used as a method of capacity building in the Aboriginal population – particularly in remote and rural regions. Broadly however, intervention strategies that assume population capability (ie time, income, human, psychological and social capital) – strategies like community development strategies – are based upon the expectation that there is a sufficient "mix" of developmental resources within the target population (ie "community") from which to build added capacity – if you like, a "bootstrapping" of added benefit.

Our findings however show that targeting the rapid improvement of individual capability is essential in order to reach a threshold for population capability expansion and that the principal mechanism for this should be through the early education system. In fact, more health benefit is likely to accrue through changes in the education system targeting the Indigenous population than merely increasing the already small quantum spent on Indigenous health (for every dollar spent on non-Aboriginal health, $1.18 is spent in Indigenous health). This is most clearly seen by examining health and education disparities between the Indigenous and non-Indigenous population (Figure 6).



Disparities in physical health between the majority population and the Indigenous population are well captured and illustrated by rates of intrauterine growth restriction that are on the order of 8% points greater. This is a sensitive index of overall progress in health. Last year our group documented that 24% of Indigenous children had a clinically significant mental health problem – a disparity of 9% points when compared with the lower rate in the majority population. This is the first time good data have been available to document this.

More recently we have documented the educational disparities between Indigenous and Non-Indigenous children and found them to be on the order of 30-40% across a range of empirical measures.[43] (Figure 7).



Quite notably the highest levels of achievement for Indigenous children occur in Grade 1 where barely 40% of Indigenous Year 1 students are at average or above average performance – compared with 80% of their non-Indigenous peers. From this point onward in school there is no increase in performance until approximately Year 7 when increasing numbers of poor performers commence leaving the school. We have no evidence that late investments in aspirational educational programs for Indigenous students in higher years will supply sufficient capability at the population level to reverse this trend. Our empirical evidence suggests that addressing the school readiness of young Indigenous children is required to impart human capital potentially sufficient to begin to lift the population profile.

Here is the quintessential illustration of where strategies are needed to be applied to impart essential developmental capacity into the Indigenous population. We have outlined 15 straightforward recommendations that can be implemented and that would produce measurable increases in Indigenous population capability. Ironically in a world where we are attempting to modify steep social gradients, the emergence of a social gradient in the Indigenous population would be an early indicator of their improving life prospects.

CONCLUSION

In its broadest form human development is about participation – social, civic and economic - and its underlying capabilities: to be able to survive; to be knowledgeable; to have access to

resources for a necessary standard of living; and to participate in the life of a community. These capabilities are closely tied to resources that support the development of social skills in children, adults, communities and nations.[52,53] Our current observations of social gradients suggest that significant burden could be prevented or substantially reduced through unpacking the social gradient into its constituent resources within specific social environments and studying the mechanisms that link these to persisting health and developmental outcomes. If children are certain cares and uncertain comforts, it is because our uncertainty is in how we reposition policy and practice to deliver more optimal developmental outcomes for more of the population in the face of increasing scientific certainty that it is necessary to do so.

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THE SOCIETY MEDAL
A/PROF CHARLES MITCHELL (QLD)

"Colleagues and friends, I was gob-smacked when I received a telephone call recently advising me of the Society's decision on this award. After recovering and on subsequent reflection, I soon came to appreciate this great honour and how privileged I am to receive this recognition. At the same time, I wondered "why me?"

Throughout my professional and academic career, I have always endeavoured to fulfil those tasks that I thought came with the job. For reasons which I hope to be able to explain in a little while, I have, over the years, become involved in many, some would say too many, activities outside conventional clinical medicine. I continued with these various activities because I found the experiences fulfilling and indeed pleasurable.

I do not think that I am in any way different to many of you in this room tonight. Indeed, I could name many in our Society who have taken on tasks outside of their usual clinical responsibilities. All have made significant contributions on the national scene, in areas such as teaching and service to the profession and the wider community.

I suspect that thoracic physicians are more likely than other physicians to become involved in broader issues. If we accept this proposition, we must next ask, "why?" Is there something basically unfulfilling about Thoracic Medicine that leads us to seek personal gratification elsewhere? Highly unlikely, as I think we would all agree that clinical practice of thoracic medicine is of itself a very satisfying and rewarding vocation. So, what might the reason be?

Perhaps thoracic physicians learn early on in their professional life that there is more to their discipline and its practice than occurs in contacts with individual patients. How can you stand by and not take a stance on cigarette smoking in the community? How can you not see the importance of air pollution or, more importantly, the environment in the workplace? For those considerably older than me, how could you practice thoracic medicine without becoming involved in, or at least supporting, programs that address the prevention and eradication of tuberculosis?

An inevitable consequence of becoming involved with wider healthcare issues, is that one starts to think about the need for system changes and about resource allocation to areas other than to individual patient care.

Very early in my thoracic medicine days, I had, and was greatly influenced by, many mentors. Amongst these were Geoff McManis and Doug Piper at Royal North Shore where I began my post-graduate training; they helped me to understand the prime importance of the patient and the enjoyment of teaching. John Colebatch and Bryan Gandevia, at the University of NSW, where I began my thoracic training, taught me in detail the science and art of respiratory medicine, and how they might be integrated. Subsequently, Arend Bouhuys at Yale and Richard Schilling at The London School of Hygiene and Tropical Medicine influenced me in many ways.

All of these mentors taught me to consider first the individual and then the wider aspects of disease, its determinants and impact in the community. They all influenced me to become more involved in teaching. By so doing, we increase our sphere of influence and greatly magnify our potential to change the standards of care.

In all of these wider activities, one gains considerable knowledge and great satisfaction from working with colleagues from other disciplines. For example, Ian Coombes and Danielle Stowasser are pharmacists with whom I have worked closely on system changes including the development of the state and national inpatient medication chart.

Matt Sanders, Ross Young, Jason Connor and Jenny Fitzgerald are clinical psychologists. Together, we have produced a program to assist medical undergraduates develop advanced communication skills.

Increasingly in medicine, we are becoming more and more specialised, working in our own silos, and communicating less with colleagues in medicine and other clinical and professional disciplines. I would like to take this opportunity to encourage you to become involved in wider issues. These activities are not superfluous to the job; they are part of it and your wider responsibilities to the community.

I would like to acknowledge and thank my wife, Bronwen, and children, Mandy, Glen and Haydn for their ongoing support and tolerance - from the early days studying for College exams, throughout subsequent overseas appointments, to the final move to Brisbane, away from family and established friends and networks.

I would also like to acknowledge the role of my colleagues at Princess Alexandra Hospital and, in particular, John Armstrong, in enabling and supporting me to develop and follow up on many interests. I am in their debt.

Finally, let me thank again the Society for honouring me with this award.

I shall value it always."

THE RESEARCH MEDAL ACCEPTANCE SPEECH
A/PROF GARY PETER ANDERSON (VIC)

2005 Recipent, Prof Peter Sly (Left) presenting the Research Medal to A/Prof Gary Anderson (Right).

"Thank you very much Peter and Rima.

I think it is very hard to get ahead in life if you do not have the good fortune to come in contact with great people. I have been extremely fortunate in this regard. I have a wonderful, lovely and supportive wife, Rita, and my little son Fergus. I have an exceptional mother Margaret who survives my late father Ted (Edward), who always provided their love and support. I have my two bothers Dale and Martin, who have overcome tremendous obstacles in their lives to be extremely successful in their own fields. And I have had, since I was a student, the good fortunate to be in contact with some of the great people in this Society. So the little story I want to tell you begins with Professor Paul Seale, who advised me that, rather than going to London to do a post-doctoral fellowship, I should take a risk and go to Switzerland to work with Dr John Morley who was in the pharmaceutical industry and a leader in the field of inflammation research. This started me off, 15 years ago, on a very interesting path.

In case I forget to do so later, I would like to acknowledge some people who have been instrumental to this line of research; A/Prof Margaret Hibbs (Ludwig Institute for Cancer Research, Melbourne), our former student, Dr Sarah-Jane Beavitt and Professor Tony Burgess (Director of the Ludwig Institute) for his enduring support of the research, Professor Peter Sly (Institute of Child Health Research, Perth) who has helped us out with the science all the way, and Professor Robyn O'Hehir (Alfred Hospital) who is working with us on the clinical translation of the research. I would also like to acknowledge Dr John Fozard, an eminent English pharmacologist recently retired from industry, who has always supported and helped to give voice to some of the new and unorthodox ideas I have had in the past. I would also like to thank Asthma Victoria for funding the first stages of this work and the NH&MRC. Many other colleagues in Australia have helped over the years and, although I cannot name them individually for want of time, I thank them all.

I think science works a little like this diagram (Slide 1). We present our ideas via a simple hypothesis and a neat linear mechanism diagram supported by fine preliminary data. We suggest to the reviewers that the answer is just around the corner and that, with a little funding, the problem will be solved. I will continue to submit my grants like this in the future. But here is the truth of the matter: science and biology, at least for complex lung diseases, is nothing like that at all. We already know that biology relies on great complexity in the interrelationships of its elements. And we know that this has to be the case because complex, highly interconnected systems are the only systems that have the inherent stability to survive the rigours of natural selection. Complexity is fundamental to life and there is no life without complexity. The diagrams that describe these networks look like this: vast mesh-works of interconnected elements. This means that mechanisms underlying the diseases we care about, like asthma and COPD, are almost certainly highly complex, and paradoxically stable (hence their chronic nature), but aberrant networks. Hence, all the problems we have to solve for chronic disease are therefore likely to involve understanding complex networks.

So I'm going to tell you about a complex network that has, over the last 15 years, from time to time, allowed us to feel we are drawing closer, as if to give us a little kiss as it yields it secrets and then as approach it, over and over, it has slapped us right in the face. It is a fascinating story. When I went into industry it was a very exciting time. In some ways it was the last days of a 'golden age' when profits were very high and research budgets seemed unlimited. In fact, I remember being told by my bosses at the time that I was not spending enough on basic research. Can you imagine that?

I worked with some very creative scientists, such as Dr Tony (Anthony) Coyle and Professor Manfred Kopf, and we quickly discovered that a cytokine called IL-4 was central to the induction of asthma-like pathology in animals. We found that IL-4 worked by controlling TH2 immunity. Tony and I proposed the 'TH2 model of asthma" which has been widely accepted and remains a useful framework even today (Slide 2).

Yesterday Professor Christine Jenkins asked Professor Jack Elias the following question: "In these clever mouse models,

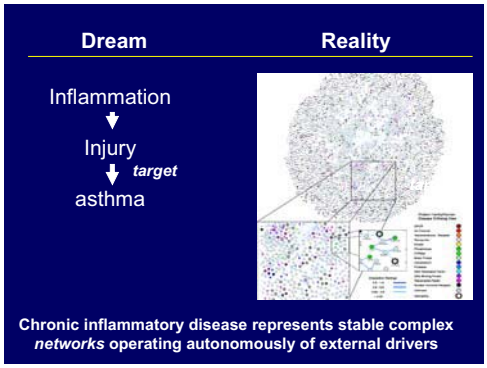
what *don't* you get that is present in human asthma?" It's a very important question. We knew very soon after formulating the TH2 theory that it could not explain all aspects of human disease, and that there were problems and deficiencies in the model (Slide 3). For example, although IL-4 is critical, it only works very early in the pathogenesis of disease, so that blocking it in established adult asthma has no effect. The strategy would only be useful in the earliest stages of life. As these ideas will not work in adults with asthma, people like Professor Peter Sly are now taking this work forward and looking for safe and effective immunomodulation methods to prevent primary disease induction in children.

Although these mouse models look clever, here is the truth. You cannot use the TH2 paradigm to easily explain disease severity, its chronicity or persistence and most disease exacerbations. You also cannot explain the very inconvenient fact that, in human asthma, interferon gamma, a "TH1" cytokine, is often found together with TH2 cytokines. In fact, you cannot even explain eosinophil activation: the degranulation revealed by clusters of free esoinophil granules (Cfegs) that is prominent in human disease was absent in the mouse models.

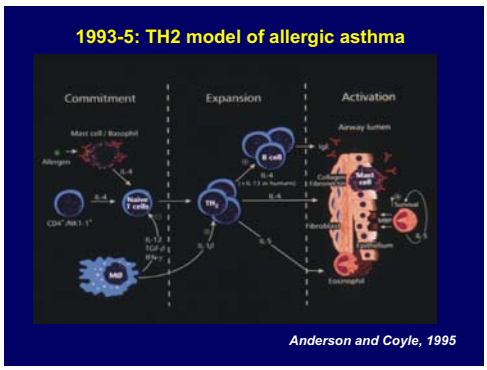
So along the way, around 1995-6, we did a couple of key experiments that changed the way I thought about disease (Slide 4). Together with Dr Micheal Auget and Professor Rolf Zingernagel we worked on mice in which the receptor for interferon gamma had been genetically deleted. Interferon gamma was thought to be the endogenous inhibitor of TH2 responses. We found that in these "knock-out" mice the asthma-like pathology was no worse. But, unlike the control mice, in which the airway inflammation resolved over about a week, the interferon receptor knock-out mice developed a very sustained response that persisted literally for months after a single allergen exposure. This opened up my mind to the idea that finding defects in *negative* regulation, that is the control mechanism that limits and resolves inflammation, or which controls the extent of signaling activation, would be critical to understanding chronic disease.

This view was reinforced when we found that activation of a "death receptor" called Fas, from the hard core of molecular immunology at that time, could rapidly resolve inflammation *in vivo* via the induction of apoptosis in inflammatory cells. So we started to probe into the biology of the Fas system and got this odd result, which drove me absolutely mad at the time. We found that when Fas was activated a 56Kd protein called Lyn, which at that time was really only of interest to cancer biologists and signaling specialists, was activated as revealed by this little tyrosine phosphorylation band on a western blot gel (Slide 5). I wondered what Lyn was doing being activated in an asthma model. About that time I was wrapping up my work in Switzerland and the Lyn problem was peck-peck-pecking inside my head - what was that protein doing in the asthma models? I was quite obsessed about.

Slide 1



Slide 2



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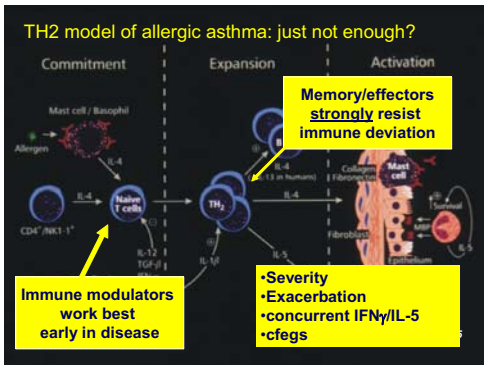

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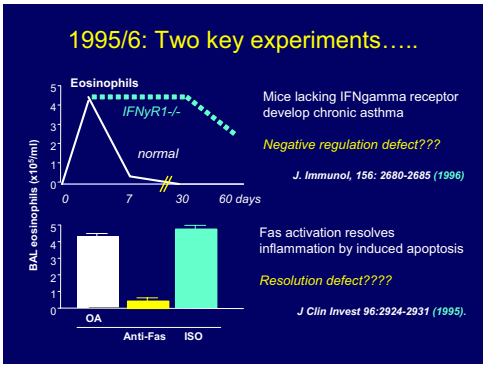


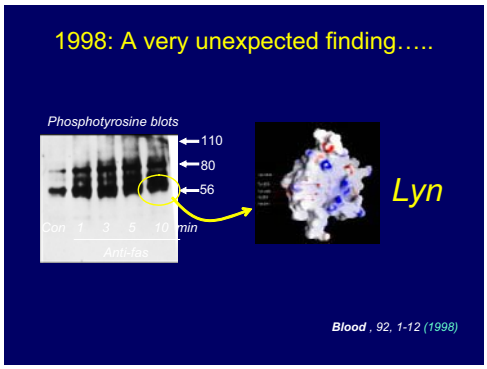
(Continued on page 36)

As soon as I had returned to Australia, I phoned Margaret Hibbs at the Ludwig Institute for Cancer Research in Melbourne since she had created a Lyn knock-out mouse. Margaret is a cancer biologist and a truly outstanding scientist! We decided to do some experiments to see what might happen in Lyn knock-out mice in an asthma model. We actually thought the experiment would not work and when we got the results we were absolutely astounded. We discovered that mice in which Lyn had been knocked out developed a very severe and persistent asthma syndrome (Slide 6). This was completely unpredicted - in fact we had expected the opposite: that Lyn-deficient mice would be protected from developing asthma.

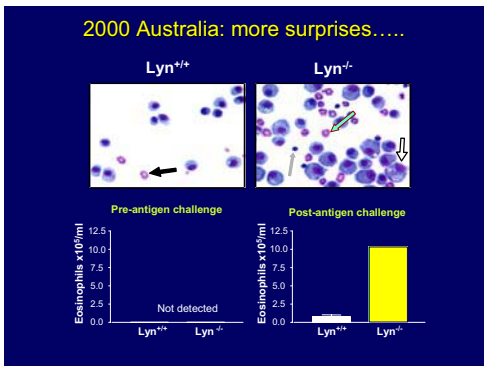
The Lyn knock-out mice showed intense eosinophilic inflammation with extensive degranulation, lymphocyte infiltration and, what we had overlooked at the time, very prominent macrophage activation (See Slide 6). They produce very large amounts of mucus, have mast cells that not only degranulate but also seem to almost explode loosing their distinct morphology (Slide 7). They are "atopic" with elevated IgE at rest but, as Steve Stick asked about yesterday, they require a second stimulus to express disease (Slide 8). They make buckets of TH2 cytokines and, like in human disease, also release interferon gamma. Remarkably, when we used microsatellite markers methods to back-cross the Lyn defect onto asthma-resistant or asthma-susceptible mouse strains, we found that all stains developed "asthma" and that its absolute intensity was controlled by genetic background (Slide 9). We also found that the immune system was strongly redirected towards a TH2 pattern which was difficult to understand because we had proven that Lyn was not expressed at all in T cell.

Here is the biochemistry to support that statement. It took us some years to understand how that could be the case - that Lyn which is not in T cell could so strongly affect T cell cytokine patterns. Eventually, we found the answer. It turns out that those macrophage-like cells - the ones we had ignored - were the vital clue that had been there all along. We now know that Lyn is expressed in dendritic cells (which are derived from macrophage-like precursors) and it is the dendritic cells that instruct the immune system towards the TH2 pattern (Slide 10). In fact we could transfer disease with these dendritice cells alone (Slide 11). We spent some time looking for the negative regulators and we now think we have solved at least some of the biochemistry. When Lyn starts off signaling, it uses intermediates, like Syk, to trigger inflammation. But at the same time, although with a slower kinetic, it recruits inhibitory phosphatase that normally turns off the responses. When Lyn is absent other kinases can start the process, but the inhibitors are not activated so the signals are too strong and too sustained (Slide 12). The same seem to happen in the dendritic cells, but here the consequence is to arrest the development of these cells in an "immature" state which predisposes towards allergy and asthma. We have found similar signaling patterns now in human disease.

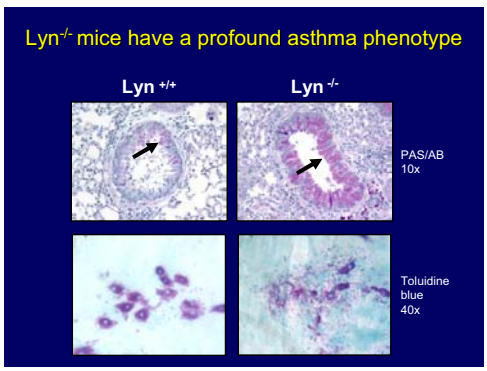
Slide 5



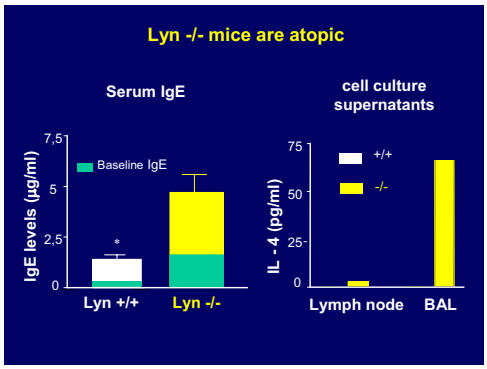
Slide 6



Slide 7

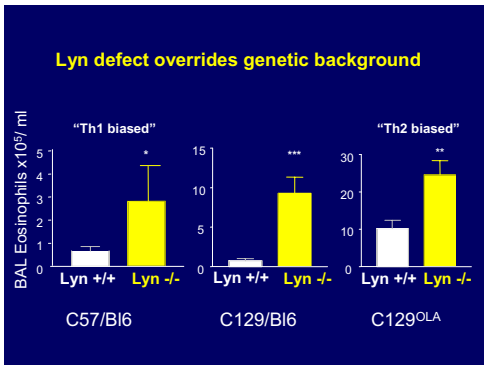


Slide 8

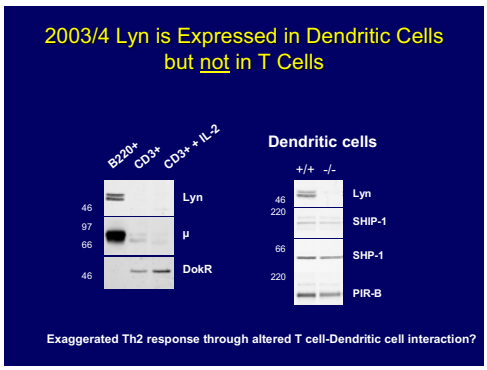


This work is continuing and looks like it will offer new insights into other lung diseases, especially COPD and lung cancer. Part of the story is the new finding that macrophage progenitors are rapidly recruited to the inflamed lung. Another part is that we suspect, but don't know, whether Lyn might affect regulatory T cells. Most recently we have found that under different stimulation conditions Lyn contributes to the development of profound lung phenotypes such as this pattern of bullous emphysema (Slide 13). We still have much work to do to understand how these delicate signaling balances are maintained and, in particular, how we can use this knowledge to make new treatments for inflammatory lung disease. Eventually we hope to understand the nature of complex signaling networks that underlie chronic lung diseases.

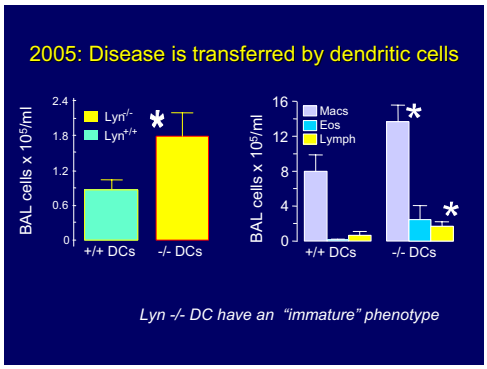
Slide 9



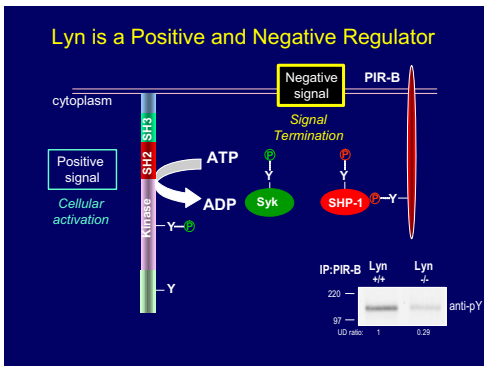
Slide 10



Slide 11



Slide 12



Lyn is a Positive and Negative Regulator

Negative signal — PIR-B — cytoplasm — Signal Termination — Positive signal — Cellular activation — SH3 — SH2 — Kinase — ATP — ADP — Syk — SHP-1 — IP:PIR-B — Lyn +/+ — Lyn -/- — anti-pY

In closing I would like to again express my most sincere gratitude to the members of our Society. When you are young and starting out you don't know anything. The members of this society have always been extremely generous with their encouragement and also with their constructive criticism, and this has helped us advance and refine our understanding of these complicated models.

I am just so proud to be a member of this Society.

Thank you all again for the recognition of the Research Medal.

The Australian Asthma and Respiratory Educators Association Inc. (AAREA)

"A NATIONAL VOICE" FOR ASTHMA AND RESPIRATORY EDUCATORS

The Australian Asthma and Respiratory Educators Association is a national network of health professionals (multidisciplinary) working in the field of asthma / respiratory education. It offers training, professional development and credentialing programs in addition to providing representation, information, support and a professional network for asthma and respiratory educators throughout metropolitan, rural and remote regions of Australia.

AAREA was launched on 28 February 2006 at the University of Sydney by the Her Excellency Professor Marie Bashir AC, Governor of New South Wales. Speakers at the launch included Professor Christine Jenkins from the Woolcock Institute of Medical Research and Ms Linda Powell, from the Commonwealth Department of Health and Aging for the Minister Tony Abbott MHR, with support from the National Asthma Council and the Thoracic Society of Australia and New Zealand. The formation of AAREA brings together the New South Wales and Victorian Asthma Educator associations, and the informal professional groups of asthma and respiratory educators from the remaining states and territories, to build on the initiatives of the parent organizations, strengthening the professional development of educators throughout Australia.

Her Excellency Professor Marie Bashir AC Governor of New South Wales, and TSANZ Assoc. Members, Ken Langbridge (AAREA President) and Emil Dan (AAREA Mentor)

The Governor was presented with the first of the Asthma Action Plan Interactive CD, by co-developer Vanessa McDonald, asthma educator of John Hunter Hospital. The CD assists clinicians to develop and convey effective written action plans for all people with asthma.

Beatie Pearlman with Sandy Wales (Asthma Educator NSW)

The launch of AAREA was celebrated by health professionals and peak bodies in respiratory management, recognising the role of asthma and respiratory educators working in partnerships to improve the quality of life in people with asthma and respiratory disease.

OBJECTIVES OF THE ASSOCIATION

- Promote patient and carer access to asthma and respiratory education services
- Implement National standards and frameworks for professional training and credentialing
- Deliver a national professional development program for health professionals working in the field of asthma and respiratory education
- Lobby for research and training opportunities in the practice of asthma and respiratory health education
- Promote awareness of asthma and respiratory health education as an integral part of the optimal management and prevention of respiratory disease across the age spectrum.

Professor Christine Jenkins AM presented: an Overview Reference Group, National Asthma Reference Group, current situation, and the challenges ahead.

See website at
www.aareducation.com
(under redevelopment)

Prize Winners at the 2006 ASM

ALF/Asbestos Research Group Award

Dr Delia J Nelson, WA

ALTERING INFILTRATING IMMUNE CELLS AND TUMOR-ASSOCIATED BLOOD VESSELS IN MALIGNANT MESOTHELIOMA USING 'ANGIO-IMMUNO' AGENTS

ALF/Astra Zeneca Young Investigator Grant-in-Aid

Dr Kristina Kairaitis, NSW

BIOMECHANICAL PROPERTIES OF THE PERI-PHARYNGEAL TISSUES: ROLE IN PATHOPHYSIOLOGY OF OBSTRUCTIVE SLEEP APNOEA SYNDROME (OSAS).

ALF/Bayer and CSL Respiratory Infectious Diseases Prize [Oral]

Dr Brian Oliver, NSW

RHINOVIRUS INDUCES GREATER IL-6 RELEASE FROM ASTHMATIC HUMAN AIRWAY SMOOTH MUSCLE CELLS THAN NON-ASTHMATIC CELLS.

ALF/Ludwig Engel Grant-in-Aid for Physiological Research

Dr Stuart B Mazzone, VIC

NEURAL REGULATION OF AIRWAY SMOOTH MUSCLE TONE AND COUGH

ALF/Lung Cancer Consultative Group Undergraduate Grant in Aid for Lung Cancer Research

Balaji Varatharaju [non member]

DIET FOR PREVENTING LUNG CANCER

ALF/Lung Cancer Consultative Group Undergraduate Cochrane Review

Isuru Amarasena [non member]

PLATINUM AGENTS VERSUS NON-PLATINUM AGENTS FOR SMALL CELL LUNG CANCER

Matthew Beech [non member]

CHEMOTHERAPY FOR SMALL CELL LUNG CANCER

ALF/Lung Cancer Consultative Group Travel Awards

Sonia Bisson
Oirish Mallesara
Kylie Museth
Amanda Stevanovic

ALF Slater & Gordon Research Trust Fellowship

Dr Robert G van der Most, WA

CAN WE IMPROVE ANTI-MESOTHELIOMA CHEMOTHERAPY BY IMMUNOTHERAPY: THE PROMISE OF INTERLEUKIN-12

Ann Woolcock Young Investigator Award

Dr Glen Westall, VIC

DISSECTING THE IMPACT OF HUMAN CYTOMEGALOVIRUS FOLLOWING LUNG TRANSPLANTATION

Astra Zeneca/TSANZ Cell Biology/ Immunology Prize

Dr Ann M Reynolds, SA

PULMONARY ENDOTHELIAL BMPR2 GENE DELIVERY ATTENUATES HYPOXIC PULMONARY HYPERTENSION

Best Poster Prize

Joerg Mattes [non member]

TRIAL IS A KEY REGULATOR OF TH2 CELL RESPONSES AND ALLERGIC DISEASE OF THE LUNG

ALF/Boehringer-Ingelheim COPD Research Fellowship 2006/2007

Dr Simon Phipps,NSW

THE ROLE OF TOLL-LIKE RECEPTOR 4 IN EMPHYSEMA PATHOGENESIS

TSANZ & Allen & Hanburys Respiratory Research Fellowship

Dr Danny J Eckert, SA

THE ROLE OF AROUSAL IN THE PATHOGENESIS OF OBSTRUCTIVE SLEEP APNEA (OSA) AND IMPLICATIONS FOR NOVEL THERAPEUTIC TREATMENT STRATEGIES.

TSANZ/APSR Early Career Development

Dr Carol J Lang, SA

ZINC SUPPLEMENTATION DECREASES EOSINOPHILIA IN MICE WITH ALLERGIC INFLAMMATION

TSANZ/Pfizer Clinical Respiratory Medicine

Dr Lutz Beckert, NZ

LATEX IL D-DIMER OUTPERFORMS PRE-TEST PROBABILITY SCORING SYSTEMS IN ASSESSMENT OF POSSIBLE COMMUNITY PULMONARY EMBOLISM.

(Continued on page 40)

TSANZ / NAC Asthma Prize

Dr Joerg Mattes, NSW

TRIAL IS A KEY REGULATOR OF TH2 CELL RESPONSES AND ALLERGIC DISEASE OF THE LUNG

TSANZ Nurses Prize

Best Oral

Mrs Maureen E Goodman, NZ

'MAGIC – DOES IT WORK?' A QUALITATIVE STUDY OF PEOPLE WITH COPD WHO CONTINUE TO ATTEND A SUPPORT GROUP.

TSANZ Nurses Prize

Best Poster

Kevin Clark [non member]

ATTITUDES AND BELIEFS OF NURSES TOWARDS PROVIDING SMOKING CESSATION INTERVENTIONS.

TSANZ Travel Grants to the 2006 ASM

Mrs Iman Basheti, NSW

Ms Elizabeth M Bozanich, WA

Ms Jennifer Theresa Burchell, WA

Ms Marie L Deverell, WA

Mr Danny J Eckert, SA

Ms Catherine Gangell, WA

Ms Danielle L Philippe, WA

Miss Kelly L Shepherd, WA

Ms Lisha van Reyk, WA

Dr Julia Walters, TAS

Dr Yudong Wen, TAS

Dr Lisa Wood, NSW

Dr Graeme R Zosky, WA

TSANZ/ALF John Read Prize of Physiological Research

Dr Kristina Kairaitis, NSW

TSANZ/Australian Lung Foundation Respiratory Primary Care Prize

Mr Christopher Barton, SA

PRACTICE CAPACITY IS NOT ASSOCIATED WITH THE PROVISION OF GUIDELINES BASED CLINICAL CARE FOR ASTHMA.

TSANZ/Allen & Hanburys Paediatric Grant in Aid (formerly TSANZ/Allen & Hanburys Paediatric Medicine Career Development Fellowship).

Dr Tonia A Douglas, WA

EARLY DETECTION OF PSEUDOMONAS AERUGINOSA INFECTION IN YOUNG CHILDREN WITH CYSTIC FIBROSIS

TSANZ/Boehringer Ingelheim Chronic Obstructive Pulmonary Disease Prize

Dr Shyamali Dharmage, VIC

EARLY LIFE SYMPTOMS PREDICT CHRONIC BRONCHITIS IN MIDDLE-AGE: LONGITUDINAL STUDY FROM AGE 7 TO 44 YEARS.

TSANZ/Boehringer-Ingelheim Respiratory Advanced Trainee Travel Grants

Dr Greg A Frazer, QLD

Dr Jonathan P Williamson, NSW

TSANZ/DDB Occupational & Environmental Diseases Prize

Kirsty Hannaford-Turner [non member]

ASBESTOS FIRBRES IN LUNG TISSUE OF A CONTROL POPULATION OF NSW RESIDENTS

TSANZ/Dust Diseases Board Travelling Fellowship

Mr Darrin Penola, NSW

TSANZ/Eli Lilly Lung Cancer Prize

Dr David Fielding, QLD

CHANGE OF MANAGEMENT WITH DAFE AUTOFLUORESCENCE ASSESSMENT OF ORAL CAVITY, LARYNX AND BRONCHUS IN HEAD AND NECK CANCER PATIENTS.

TSANZ/Mayo Healthcare Physiotherapy Prize

Mrs Sian Turner WA

REGIONAL DISTRIBUTION OF ASTHMA AND COPD ADMISSIONS (2000-2004) AND RESPIRATORY HEALTH SERVICES FOR ADULTS 40+ YEARS IN WESTERN AUSTRALIA.

TSANZ Paediatric Respiratory Care Prize

DrJulie Maree Marchant, QLD

PROTRACTED BACTERIAL BRONCHITIS IN CHILDREN – A CELLULAR AND INFLAMMATORY PROFILE.

TSANZ/Roche Cystic Fibrosis Prize

Dr Bradley Martin, NSW

PROPHYLACTIC ORAL ANTIBIOTICS IN CYSTIC FIBROSIS MAY PREDISPOSE TO PSEUDOMONAS ACQUISITION.

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Dr Alister Neill - representing ASA
Dr Fiona Lake - Elected Representative

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(Continued on page 42)

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A/Prof Gary Pelev Anderson - Convenor
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Dr A William Musk - Convenor
Dr Peter James Franklin - Co-Convenor

The contact details of all our Office Bearers can be found in the Member's Only section of the TSANZ Website:

www.thoracic.org.au/members.php.

Please contact the Office if you need your TSANZ Membership Number and password.

Name Your New SIG!

In August 2005 the Australian Lung Foundation (ALF) formed a consultative group to examine how it might be able to assist patients with interstitial lung diseases and pulmonary vascular disease. From this initial meeting, PIVOT (Pulmonary Interstitial and Vascular Lung Disease Organisational Taskforce) was formed under the imprimatur of the ALF. The PIVOT group includes members of the ALF executive as well as adult and paediatric respiratory physicians, a rheumatologist and cardiologist. Its goals include the promotion of greater awareness, education and research in Interstitial, Pulmonary Vascular and Orphan diseases, and to work with members of professional societies to help implement clinical trials and guidelines for management.

In this setting members of PIVOT decided to explore the possibility of forming a new Special Interest Group (SIG) within TSANZ to incorporate ILD, PVD and orphan lung diseases. This idea received strong support from the TSANZ executive and membership, and there was also support, albeit not unanimous, to include lung transplantation.

Following an email to all TSANZ members a special meeting was convened during the recent Canberra ASM. It was agreed to form the new SIG, and we are delighted to have been elected as its convenors. During the meeting there was some discussion about what should be included and interested members were canvassed for their opinion.

ILD and Pulmonary Arterial Hypertension (including thromboembolic Pulmonary Hypertension) have significant crossovers in terms of risk factors, pathogenesis and possibly treatment. There was a unanimous view that these areas would form the cornerstone. The relationship of these entities with lung transplantation is clear in that many of these patients will be considered for transplantation and most of the larger PAH centres in Australia and New Zealand are 'housed' within lung transplant programs. Although there was a minority view that lung transplantation could have its own SIG, most members felt that including lung transplantation would allow for greater interaction and help build bridges between physicians with overlapping interests. This position may evolve over time.

Therefore the new SIG will include ILD, PAH including thromboembolic pulmonary hypertension, orphan lung diseases (eg alveolar proteinosis, LAM, histiocytosis) and lung transplantation. These areas were previously represented at our ASM under the 'Clinical' umbrella, and members should be assured that the formation of our new SIG will complement the clinical sessions rather than detract from them. The organisers of the clinical sessions at the ASM have been consulted throughout the process and are supportive.

From the next ASM in Auckland, members will be invited to submit abstracts for presentation under the auspices of this SIG. The SIG will work with the ALF and other community groups to promote awareness and research into these diseases and may have a central role to play in reviewing management guidelines. We are hoping to be a focal point in promoting much needed multicentre trials.

ALL WE NOW NEED IS A NAME!!

This name should encompass those areas that have been included. The convenors (and Beatie of course) have their own ideas but we want you to help with a suitable acronym. Please e-mail your ideas to the TSANZ office (admin@thoracic.org.au) . The person who submits the chosen name will receive a bottle of excellent Margaret River wine.

We look forward to working with members to promote an exciting development in our already vibrant society.

Convenor: A/Prof Eli Gabbay (WA)

Co-Convenor: Dr Margaret Wilsher (Auckland)

Obituary

Dr HR (Bob) Elphick OBE, AM

Bob Elphick died on December 12, 2005 in Adelaide aged 88 years.

He was born at King Edward Memorial Hospital in Subiaco on April 9, 1917, during WWI, the third of three sons of Clarence Theodore (an accountant) and Margaret Ellen (nee Johnson).

His father died of "galloping consumption" in Cairo on the day before the Armistice when Bob was only 18 months old and he was sent from Toodyay to board at Guildford Grammar at the tender age of 12, on a Legacy Scholarship. Despite the emotional privations of being packed off to a boarding school at such an early age he later earned himself a reputation as a genuinely empathetic physician..

After finishing school and at the age of 18 he studied at UWA and then Medicine in Melbourne, well before there was a medical school in Western Australia and graduated in 1940.

He then returned to Perth, worked as a resident in Royal Perth Hospital. On his first day at RPH he met "staff nurse" Dorothy Charleston whom he married in 1943. He then spent two years as Deputy Superintendent at Fremantle Hospital until he enlisted in the army. He examined new recruits until he was seconded to the Northam Army Hospital to care for returned soldiers with tuberculosis. After Northam was closed Bob moved to Hollywood Repatriation Hospital with his troops, and later spent some months in Heidelberg Military Hospital in Victoria working with Sir Harry Wunderly.

Bob came from a generation of physicians who initially practiced medicine with no 'Magic Bullet". In an interview in 1997, Bob recalled his sister-in-law Nancy telling him about penicillin. She said "Bobby, they've discovered something in mouldy cheese that cures disease" and he had replied "Nancy that's bullshit". He was less skeptical when Streptomycin arrived in 1947.

In 1946 after he was demobilized Bob was persuaded by Dr Linley Henzell to work at the Wooroloo TB Sanatorium as deputy medical superintendent and, after six months, as superintendent. It was at Wooroloo in December 1947 that he successfully administered Western Australia's first dose of Streptomycin and "cured" a young nurse of laryngeal tuberculosis.

Bob was involved in rehabilitation and sheltered work for patients disabled by tuberculosis from his early days at Wooroloo. He set up the Linley Valley Colony with Linley Henzell, Don Letham, Dick Porter and Alan King. This was the first sheltered workshop in the state and when it moved to new premises in Perth and provided sheltered work for all disabled people Bob continued to actively support its activities as a member of the Board of Westcare and Chairman of its Tuberculosis Advisory Committee almost until the time that he relocated to Adelaide in 2004.

In 1958 when the Perth Chest Hospital, now known as the Sir Charles Gairdner Hospital was built and opened, he became its first Superintendent/Physician. His style of administration was completely at odds with modern day administrators: he led by example and engendered loyalty in his staff who followed for fear of letting him and their fellow workers down. This was true, not only for clinical staff but also for nursing staff led by the indomitable Olive Anstey, administrative staff and domestic staff all of whom he knew by name (especially Domenic who shared his love of roses). SCGH was a cohesive and happy institution to work in during this period.

Prior to "Charlies" opening, Bob predicted the decline of tuberculosis and sat and passed his Membership of the Royal Australasian College of Physicians thereby formalizing his right to call himself a specialist Respiratory Physician.

Bob observed the "cross of death" when mortality rates for tuberculosis were surpassed by mortality rates for lung cancer. He was the Foundation President of the WA branch of The Australian Council on Smoking and Health, the organization which was responsible for the first parliamentary bill to prohibit the advertising of tobacco products (prepared by the recently retired Chief Justice, David Malcolm (also an alumni of Guildford Grammar School)) and introduced into a hostile Liberal-dominated parliament by the local Liberal member for Subiaco, Dr Tom Dadour. As history records, the bill failed but it engendered a massive community debate that has ultimately been followed by the very

measures (and more) that it sought to achieve albeit much earlier.

Under Bob's leadership SCGH became a referral centre for all chest diseases in Western Australia (especially mining-related diseases). Despite the protest of some general physicians Bob asserted the qualification of TB physicians to call themselves respiratory physicians and subspecialisation has become so much more common in medicine.

In 1968, with a decline in the incidence of TB in Western Australia SCGH diversified into caring for general patients and Bob determined that he could best serve the hospital as a superintendent and withdrew from clinical duties. Within a short period he revised this decision and after consultation with the hospital's Board Chairman (Sir Hector Stewart), he relinquished his administrative position and returned to the work that he was best at doing.

At Charlie's he recruited a superb team of physicians to ensure that the best standards of care were provided: John Smythe, Janet Elder, Dick Adams and Bill Smith joined Bob along with surgeons Freddy Clarke, Archie Simpson and Peter Gibson. These appointments resulted in the hospital rapidly earning a reputation for excellence of care which it has found difficult to sustain subsequently as it has evolved into a major General Teaching Hospital. Bob continued to work as a chest physician and head of the Department of Respiratory Medicine until 1977 when he retired into private practice but then also continued as a locum physician to allow his successor (Bill Musk) to remain overseas for an additional year of postgraduate training at the Pneumoconiosis Research Unit in Wales.

Although many of his hospital patients followed him into private practice he left a huge clinic and hospital inpatient practice behind for his successor and a reputation for clinical excellence and commitment to patient care that could not be equalled by anyone. While much of his referral base followed him into private practice, when inpatient care and investigation was required his patients were referred into his old unit at SCGH thereby ensuring that they continued to receive the best care that he perceived he could organize for them.

Bob continued in busy private practice in Ord Street, West Perth for another ten years or so and even when he had ultimately retired from this he continued to see his old patients at their homes until quite recently. Patients looked forward to these visits and always felt better after Bob had just sat with them.

Bob was the consummate physician. He spent as much time with each of his patients as he felt he/she needed. This resulted in very long ward rounds and even longer clinics. He was protected somewhat from accepting everyone who wanted to see him by his staff, especially Loreen Smythe, his secretary, but still worked late into the evenings and would never not come back later to see a patient who needed to see him personally. This was never a worry to his junior staff as he never undermined them but sat on the end of his troubled patients' beds and listened to their woes and worries, a process which I rapidly learned was therapeutic for the patients.

Alan James who wrote the Departmental Handbook for Respiratory Medicine at SCGH some years ago said:

The resident/intern is sometimes right

The registrar is often right

The consultant is more often right, but

The patient is always right.

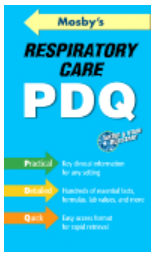
Bob knew this instinctively. And he also knew that the patients needed to be in full command of the facts required to make the right decisions about their health. And so he spent as much time as was needed to provide them with this, no matter how long it took.

Bob Elphick was an excellent and committed teacher. He was always accessible to students and junior staff. He lived on campus as it were. He could be contacted by his junior staff at any time. He would always come in when asked and an X-ray could always be taken over to him to look at and discuss, day or night, a great way for junior staff to learn clinical skills. And he also provided clinical tutorials, out of hours, that were of great value for physician trainees at a time when there were no formal training programs in Perth and aspiring Membership candidates had to organize their own tutorials.

Bob Elphick had a long and productive life. He was a great physician. His spirit lives on in the generations of doctors who follow and certainly in the halls and passages of the SCGH. He leaves behind his wife, four of his five children and many grandchildren and great-grand children ●

AW (Bill) Musk (WA) and
Criena Fitzgerald

Book Reviews



Mosby's Respiratory Care PDQ

By Helen Schaar Corning & Stanley L Bryant Jr.

ISBN 032303747X RRP: $21.95

Review by Greg Frazer (QLD)

This small reference manual is subtitled *Practical, Detailed, Quick* and promises to give the user ready access to vital data needed in the clinical setting.

The book is organised into chapters devoted to topics such as Pulmonary Diseases, ABGs, Haemodynamics and Lab Values, Pulmonary Function Tests and X-rays and Mechanical Ventilation. Each chapter has a brief index and contains brief facts as well as easy to use tables, formulae, equations, and lab values (given in SI units). From a practical point of view it is pocket sized - and water and stain resistant - so durable enough to stand up to daily use.

Like a number of publications reviewed here recently this book has been written by, and is primarily aimed at, respiratory therapists. As such its content is not necessarily entirely relevant to any one health professional group in the Australasian setting.

Medical students and junior doctors as well as nurses and allied health professionals working in respiratory medicine could find it useful, mainly for the easy access to commonly used formulae and equations. However, there is little here that could not be found in a number of similar publications competing for space in the white coat pocket (if anyone still wears these in this day & age), so it would be difficult to argue that ***Mosby's Respiratory Care PDQ*** would be an essential addition to the armamentarium of junior medical staff and other health professionals.

The Chest X-Ray

By Burgener, Kormano & Pudas.

ISBN 3131076127 RRP: $160 (Inc GST)

Review by Amy McLean (NSW)

At last a CXR textbook with well displayed images and concise tables!

As I approach the end of my training I realise that I have spent a great deal of time in radiology meetings mentally absorbing different titbits of thoracic radiology. This book takes all those randomly acquired titbits and draws them out in a sequence of chapters based around imaging characteristics rather than pathophysiology. This enables the keen reader to delve more deeply into the book and gain knowledge in a logical order.

For the busier reader, each section contains a great deal of detail in an easily accessed table format making quicker revision possible as well. I believe this book would also a useful teaching aid for junior staff and medical students. Most clinicians would probably find it more useful as a reference text rather than a day-to-day source of information.

A radiology book is only as good as its pictures and the x-ray images in this book are very clear and of a useful size. There are also some very helpful diagrams.

I would recommend this book to respiratory trainees and junior consultants who are trying to perfect their interpretation of chest radiology. It would also be an excellent addition to any medical library.

All books reviewed available through Elsevier Australia.

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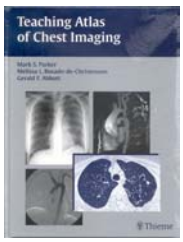


Teaching Atlas of Chest Imaging

By Parker, Rosado-de-Christenson & Abbott

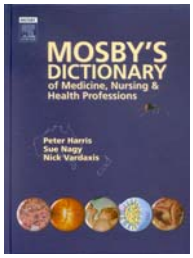
ISBN 3131390212 RRP: $302.50 (Inc GST)

Review by Natasha Whitaker (VIC)

This is a good textbook, written by American authors for predominantly radiology trainees. However, it remains a very useful reference book for any Respiratory Physician, Intensivist or even Cardiothoracic Surgeon to have on their book shelf. The first 30 pages (out of almost 800!) cover some essential basics, reminding readers about long forgotten anatomy before it progresses to imaging of developmental abnormalities with respiratory disease then reviewed case by case. The selection of respiratory diseases featured is fairly exhaustive including some 200 cases. However, the focus is plain radiography and CT, so don't expect to find any VQ scans or other imaging modalities.

The case based approach works well, particularly if you are not a radiologist, and includes brief but relatively accurate non-radiology information, such as differential diagnoses, pathology, treatment and prognosis. This makes the book much more easily readable for clinicians. Each case ends with a useful short section called "Pearls", which contains the main points about the imaging for that disease. The images themselves are of a high quality and well labelled. There are a few good diagrams of just the normal anatomy; however these are in black and white (clearly for the radiologists), so sometimes difficult to interpret.

In summary: this is a very useful, well written, rather glossy book, which most would find helpful either when wanting to review the relevant imaging after seeing a particular case or just to refresh some anatomy.



Mosby's Dictionary of Medicine, Nursing and Health Professionals

Authors: Peter Harris, Sue Nagy, Nick Vardaxis

ISBN 0729537544 RRP: $82.50 (Inc GST)

Review by Jane Civitico

Mosby's first Australian and New Zealand edition of this Dictionary is an excellent desktop reference text for all health professionals. This edition contains a comprehensive dictionary with over 2000 local entries and features large numbers of colour photographs and diagrams. It contains fully updated information on pathology, rheumatology, gastroenterology, epidemiology, renal medicine, medico-legal and ethical matters, and complimentary therapies. There is a simple atlas of anatomy at the front this edition.

The 19 appendices cover a wide range of topics. The section on health of the Aboriginal and Torres Strait Islander and Maori is very brief. Australian and New Zealand health organisations and resources are listed, i.e. self help groups, professional organisations and poisons information centres, but the lists are not extensive.

Abbreviations, medical terminology, conversion charts, normal reference values, immunisation schedules, diagnosis related groups (AR-DRGs), health assessment guides and nutrition reference values are all comprehensively covered. There is a small section on infection control which includes lists of notifiable diseases in Australia and New Zealand, as well as common complementary medicines and their interactions with other drugs.

Nursing diagnoses including NANDA-approved nursing diagnoses, Intervention, Outcome and Omaha Classification are listed with the full content of each diagnosis in the accompanying CD.

The CD contains a local spell checker, printable versions of the atlas images and all illustrations, unfortunately it does not contain an electronic version of the dictionary.

I would recommend this dictionary to all health students and professionals looking to update their old medical dictionary.

CALENDAR

2006

16th World Congress of the World Society of Cardio-Thoracic Surgeons
Ottawa Congress Centre, Ottawa, Ontario, Canada
17-20 August
Contact: info@wscts2006.com
Home Page: http://www.wscts2006.com

European Respiratory Society Congress
Munich, Germany
2 – 6 September 2006

ASCIA 17th Annual Scientific Meeting
Manly Pacific Hotel, Sydney, NSW
7 – 10 September 2006
Contact: www.allergy.org.au
Email: education@allergy.org.au

19th ASM Australasian Sleep Association/ASTA
Intercontinental Burswood Resort, Perth
5—7 October 2006
Email: conference@sleep.org.au

Chest
Salt Lake City, Utah
22 – 26 October 2006

11th APSR Congress
Kyoto, Japan
20 – 23 November 2006
Contact: www.APSResp.org

2007

TSANZ ASM
Auckland, New Zealand
23-28 March 2007

International Conference of the American Thoracic Society
San Francisco, USA
18-23 May 2007

World Asthma Meeting 2007
Istanbul, Turkey
22-25 June 2007
Website: www.wam2007.org

Worldsleep07
Quadriennial congress of the WFSRSMS
Cairns, Australia
2 – 6 September 2007
Contact: http://worldsleep07.com

European Respiratory Society Congress
Stockholm, Sweden
15 – 19 September 2007
Contact: ers2007registration@mci-group.com

Chest
Chicago, Illinois
21 – 25 October 2007

12th APSR Congress
Broadbeach, Gold Coast, QLD
30 November – 3 December 2007
Contact: www.APSResp.org

2008

TSANZ ASM
Melbourne, Vic
28 March—2 April 2008

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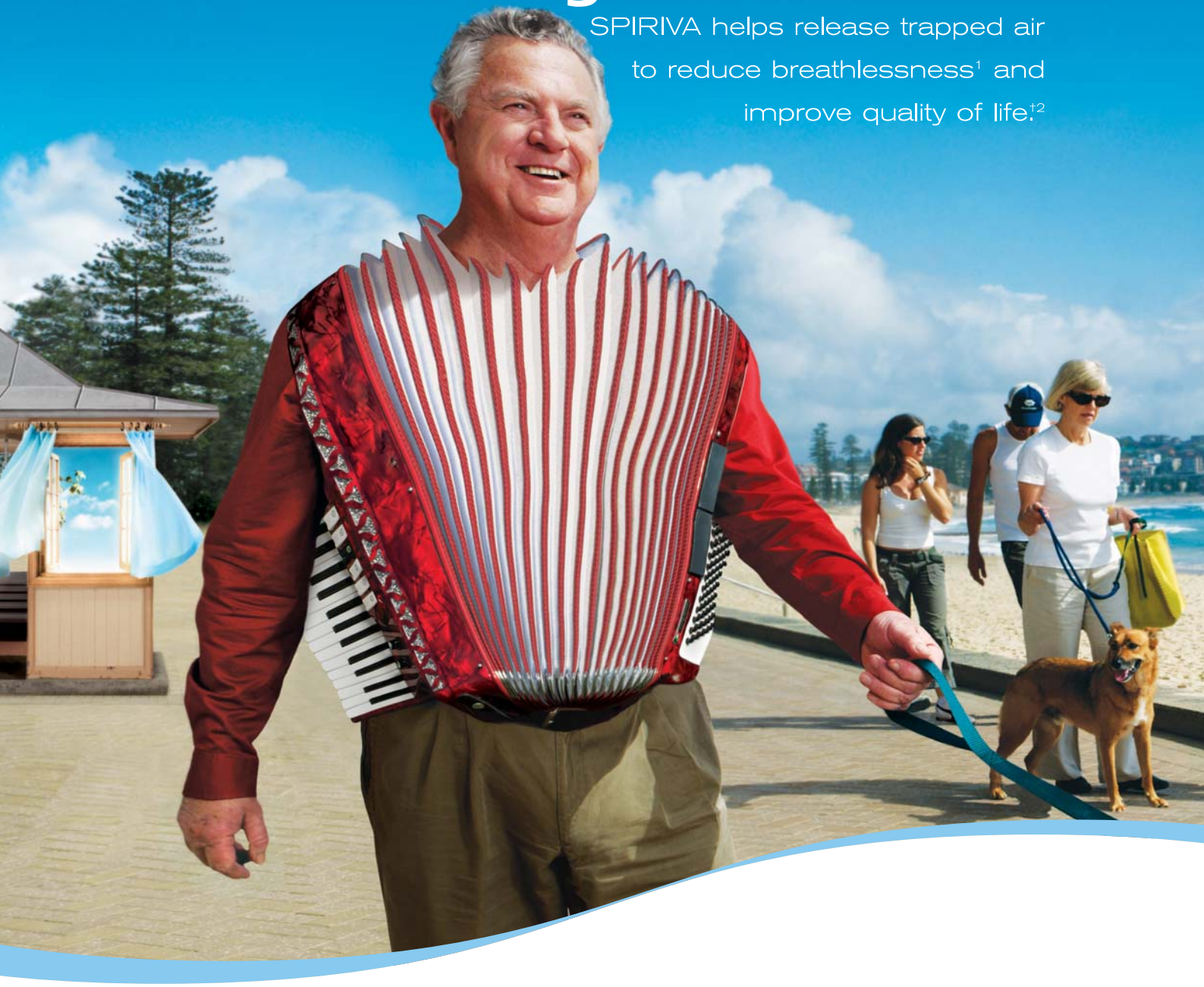

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