APE 2015



Take calculated risks. That is quite different from being rash.

- GENERAL GEORGE S. PATTON

APE 2015 comprised three weeks of presentations and discussion. This summary gives just a hint of the content and hopefully a flavour of the quality and range of presentations.



The theme of "Risk" was embraced by delegates to the meetings. In some cases the theme was front and centre of the presentation; in others, it was subtly alluded to or introduced as a transformative element.

The convenors take no responsibility for risks taken as a result of conference participation - however, we will happily take credit and a percentage for all profitable enterprises, successes or other gains!

The convenors - Dr Vida Viliunas and Dr Rod Katz

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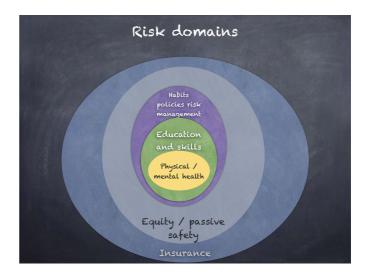
Week 1: Introductory remarks

Rod Katz gained his PhD from Sydney University in 1996 following undergraduate degrees in Economics and Law from ANU and a career in banking and finance. Rod's interests include moral philosophy, road safety and active transport.

Rod introductory presentation covers some of the philosophical questions that arise when thinking about risk.

He suggests a definition of risk with three elements (i) an identified action or inaction, (ii) the possibility of an adverse outcome and (iii) the assessment of severity of potential outcomes. He looks at risk from an individual "client" perspective and a "professional" perspective. The Trolley Problem thought experiments are popular among moral philosophers for exploring how moral choices conform to rational or utilitarian models. The role of the professional could be to help people achieve the best outcomes through actions that they might not be able or willing to perform themselves.





Keynote Presentation - Olaf Plummer

Olaf is an accountant who has worked around the world. He now is based in British Columbia and advises a range of clients including residents of Canada, Europe and Australia. He has a particular interest in behavioural economics.

Olaf presented eight common errors made in the assessment of financial and investment choices.

- Mental Accounting inclination to categorise and treat money differently depending on where it comes from, where it is kept, or how it is spent ("Not all dollars are created equal").
- 2. Loss Aversion Oversensitivity to loss.



- 3. Sunk Cost Fallacy Inability to forget money that has already being spent.
- 4. Decision Paralysis Inability to make proactive decisions.
- 5. Anchoring Clinging to a fact or figure that should have no bearing on judgement or decision.
- 6. Confirmation Bias Tendency to search for, treat kindly, and be overly impressed by information that confirms your initial impressions or preferences.
- 7. Overconfidence Tendency to overestimate own abilities, knowledge and skills.
- 8. Following the herd Allowing the judgement of others to steer you into unwise investments, or out of sound ones.

A salutary reminder of the need to be aware of our cognitive failures when investing or making other financial decisions.

Our whole way of life today is dedicated to the removal of risk. Cradle to grave we are supported, insulated, and isolated from the risks of life- and if we fall, our government stands ready with Band-Aids of every size.

- SHIRLEY TEMPLE BLACK

Organic Risk of BPH - Dr Peter Chin

Peter is Clinical Associate Professor of Urology at the University of Wollongong and is a principal of South Coast Urology. He gained his urology fellowship in 2000. Peter has a diverse range of experience in urology including prostate enlargement (BPH) - diagnosis and treatment and has involvement with clinical trials for possible new treatments. Peter has published and presented many urological papers and has a commitment to clinical research programs.



Peter demonstrates his teaching and entertainment prowess with this presentation. He first clarifies the distinction between prostate and prostrate. He then makes an analogy between BPH treatments and the skills of the ninja. The treatments for BPH comprise variations on poisoning, burning, slicing, strangling, freezing and other ninja skills. Peter concludes by describing a novel treatment that he has been involved in developing. This new method offers a great step forward for those suffering with BPH. A brilliant exposition on the past, present and future of risks and treatments for prostate enlargement.

Risk of black outs!

This session turned into a practical demonstration of the need to adjust to risk. Due to a tree falling on an electricity transformer serving the resort, the mountain lost power for several hours coinciding with the start of the session. Advice from the management was that we should expect to be without power until midnight. We thus had an abridged discussion and used the opportunity to identify emergency light and heat sources, cooking options and other responses to unexpected utility failures.



Dr Susannah Sherlock is an anaesthetist and hyperbaric physician. She works at the Royal Brisbane and Women's Hospital and The Prince Charles Hospital in Brisbane. Susannah is an instructor for the Herston Skills Centre (anaesthetic crises simulation) and an examiner with the Australian and New Zealand College of Anaesthetists.



Dr Bailey is a Fellow of the Australian Faculty of Rehabilitation Medicine. She practices as a Consultant in Rehabilitation Medicine at several Public and Private facilities in Newcastle. Dr Bailey has a Special Interest in Musculo-Skeletal Medicine.



Dr Tracy Peters is a Sports Medicine Physician. After completing her medical degree at Monash University, Tracy completed two years as a surgical registrar before joining the sports physician fellowship training program. Tracy's sports medicine coverage has included Team Doctor for the Melbourne Rebels Rugby team and for the Hawthorn Football Club during the 2006 AFL season. Her special interest areas are football (all codes), other contact sports and dance medicine. As well as injury treatment, injury prevention is an important part of her practice.

What will happen when you are gone? - Samantha Marks QC

Samantha has worked as a barrister since 1989 in Victoria and took silk in 2010. She practices principally in commercial law, employment, probate and TFM matters as a legal advisor, advocate and mediator.

We all know about the unavoidability of death and taxes, yet in many cases people are unprepared for the end of their days. In particular, they fail to make or update wills. They also fail to give trustees of superannuation funds appropriate directions for dealing with assets held in trust. Samantha



Sam Marks QC (right) with a potential testamentary beneficiary...

provides a fascinating rundown of what happens in these circumstances, noting the different treatments in different jurisdictions and the policy motivations behind these treatments. Judicial discretion exists to greater or lesser degrees and there is a significant risk that sizeable estates will be contested under the relevant provisions for entitlement. A fascinating area of law that reveals much about human nature and the risks of testamentary intent being thwarted.

Bell Medical - A Case study in entrepreneurship Alan Bell

Alan Bell has many years of experience in the Human Capital sector. He was founder and CEO of Chandler MacLeod Health and grew that business into one of the major HR service providers for Australian health services. He now runs Bell Medical and is a director of the Recruitment and Consulting Services Association.

Alan's presentation provides an update on a business venture that has the potential to be a



disruptive force in the delivery of medical assessments for business clients. The focus of this presentation is on a framework for presenting information gathered by nurse practitioners equipped with a diagnostic tool-kit for assessing general health, heart fitness and stress. The approach is still in a beta testing phase but offers real scope for achieving significant benefits for clients (businesses) and their employees, as well as investors in the concept.

NLP - What is it good for? - Dr Dinah Blunt

Dinah is an anaesthetist in private practice in Brisbane, and a member of the Australian Lifestyle Medicine Association. Her major interest is in motivating patients to be proactive to improve surgical outcomes. To this end she has undertaken certification training in hypnotherapy and neurolinguistic programming (NLP), offering preoperative counselling for weight loss, smoking cessation, and medical phobias.

Neurolinguistic Programming has been a favourite tool for marketers and advertisers since the phrase was coined in California in the '70s by Bandler and Grinder. Based on the therapeutic techniques of Milton Erickson, NLP uses communication techniques and hypnotherapy to influence behaviour. NLP got a bad name because of its enthusiastic take-up by sales and marketers professionals. It has also been embraced by personal development gurus such as

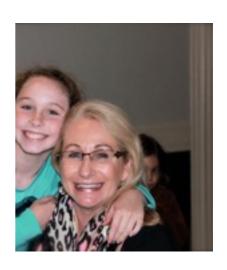


Tony Robbins which has not helped its academic reputation. Dinah makes the case convincingly that, despite the occasional misuse of NLP, it can be used effectively to achieve personal goals and reduce pain. Dinah describes her experience with NLP and hypnosis techniques in taking on some seriously daunting challenges including fire eating and participating in competitive body building.

Anorexia Nervosa : Managing risk in a vulnerable population - Dr Angela Lee

Dr Angela Lee is a psychiatrist based on Victoria's Mornington Peninsula. She has worked in clinical practice around Australia and internationally, including ten years in California.

This presentation provides a fast-track understanding of the features of anorexia based on Angela's extensive experience and research. It includes a discussion of diagnostic criteria, risk factors - including environmental and social factors, changes in social behaviour, mental distortions and, finally, treatment. The understanding and treatment of anorexia has developed significantly in recent years; in particular, its relationship with other conditions such as anxiety and depression. The clinician's



first treatment role may be stabilisation - frequently through medication - to allow the patient the opportunity to participate in cognitive therapies. We look forward to an extended opportunity to benefit from Angela's expertise in future meetings.

Taking a risk in Afghanistan - Dr David Scott

Dr Scott is currently Director Health Reserve – Air Force (Qld), Vice-Chair of Joint Health Command Anaesthesia Consultative Group, and Past and founding Chair of the ANZCA/ASA/NZSA Regional Anaesthesia Special Interest Group and was formerly Clinical Director of Anaesthesia and Intensive Care Services Royal Australian Air Force. He is currently working in private practice in northern NSW and SE Qld.

He received his FANZCA in 1992 and worked as an instructor in anaesthesia at Harvard University, Beth Israel Hospital before being appointed as a VMO at Lismore Base Hospital.

David was commissioned as an officer in the Royal Australian Air Force in 1990. He has deployed eight times with the ADF, to Bougainville, Solomon Islands, East Timor, Banda Aceh, and Afghanistan, has served with the US Navy Air force and Army, and is on the instructor panel at Uniformed Services University of Health Sciences Bethesda USA.



David's presentation provided a rare photo and video graphic insight into the reality of life at the Australian medical unit in Tarin Kowt, Afghanistan. The risks associated with manning the station were manifold including IEDs and mortar attacks. David describes the role of the base in providing medical services to friend, foe and struggling civilians alike.

Everest Base Camp - Dr Vida Viliunas

In addition to being one of the convenors of APE conferences, Dr Vida Viliunas is a VMO anaesthetist. She has practiced in Canberra since 1995 providing anaesthetics for cardiac, vascular, orthopaedic, urology, ophthalmology, pain management and general surgery.



Vida recently returned from an Everest Base camp trek. This presentation identifies the myriad risks associated with this type of activity. These risks are put into perspective by the lives of the locals - whether villagers, sherpas, donkeys or yaks. The presentation used extensive footage framed into constructs drawn from behavioural economics e.g.following the herd, buy low/ sell high, sunk costs and other biases, demonstrating the wide application of these concepts.

Risks in Formula 1 racing and the lessons applied to passenger motor vehicles - Dr Michael Pitt

Dr Michael Pitt is a GP in Birkdale, a bayside suburb of Brisbane. He has always had an interest in motor racing having virtually grown up on the side of a racetrack as his father raced Jaguars, notably through the Australian Touring car series in the 50s and 60s. Michael is a CAMS (Confederation of Australian Motor Sport) medical examiner, and has participated as a member of the medical team at numerous Formula One grand prix events in Melbourne. He has been a medical officer at motor racing events in south-east Queensland for over 20 years.

He is also a keen sailor, racing both an Elliott 780 at Manly in Brisbane, and competing at Masters level in single handed Laser sailing. He has recently returned from the World Masters Laser championship in France.



Michael's presentation commences with some personal history including footage of his father, Bill, crashing at Albert Park in 1956. His treatment for shock was by way of a quiet cigarette sitting at the side of the track. Since that time, the safety awareness track design and vehicle technology have changed considerably. Michael identifies some major innovations and provides footage of the spectacular crashes that inspired their adoption. The deaths of Giles Villeneuve in 1982, Roland Ratzenberger and Ayrton Senna in 1994 were instrumental in the introduction of the HANS (Head and Neck Support) device as standard in motor sport. Changes to cockpit design also followed and some of these are reflected in the crumple zones built into passenger vehicles we drive today.

Jan Derpak - Mental Edge for Risk

Jan Derpak is a professional sports psychologist who has combined her passion for athletics and her background in psychology and education to create a unique brand of mental training strategies for high level performers. Jan has worked with Canadian National Team athletes in alpine and cross country skiing, biathlon, snowboarding and figure skating. Jan helps athletes control their emotions and their minds. Jan has a Bachelor in Education – Human Kinetics (P.E) and a Master's in Education (Counselling Psychology)

Jan's presentation identifies three key ingredients for success in sport (applicable to all other aspects of life): 1. Deep practice 2. ignition and 3. master coaching. Deep practice involves time and targeted suffering and failure. It requires risk-taking and learning to concentrate

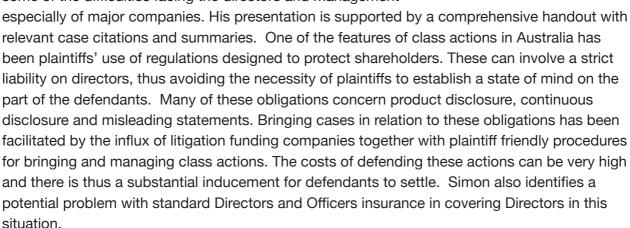


on the things that you can control. Ignition happens at a particular moment and changes the trajectory of the athlete from "also ran" to star. Master coaching is the part of the equation that can make the difference in the end - helping people to reach an ideal performance state using techniques to give emotional control through mental Imagery - visualisation, distraction control, relaxation and motivation.

Obligations on Directors: The Rise of Class Actions - Simon E Marks QC

Simon is a Commercial Litigator and Queens Counsel in Victoria. He came to the Bar in 1986, having practiced as a solicitor at King & Wood Mallesons (then Mallesons). He practices extensively in commercial litigation and trade practices in the Supreme and Federal courts.

This is the third time that Simon has presented at APE conferences. He has addressed the responsibilities of company directors in the past and this presentation again highlights some of the difficulties facing the directors and management -



The current situation is something of a "honey-trap" for class action specialists and arguably unfair on non-executive directors exposed to strict liability obligations. This raises the prospect of legislative review including new defences for directors and requirements for plaintiffs to nominate damage and loss claims at initiation of proceedings.

The Challenge of Uncertainty - E. Anne Purvis

Anne has more than 26 years experience in the stockbroking and investment advisory industry having worked with Dicksons Stockbroking, Ord Minnett and for the past 5 years with Macquarie Private Wealth. Her experience spans a diverse range of portfolios including income and growth focused strategies, superannuation and pension funds. She has a diverse range of clients from tradesmen to medical specialists, accountants, lawyers and company directors. Her caring and conservative approach to achieving her client's investment goals, has created a loyal client base spanning her entire career with some of her clients now in their 90's and trusting her implicitly to manage their investments.

Backed by Macquarie's global team of outstanding researchers, analysts and technical experts, Anne identifies and implements appropriate investment strategies. With the cost of living rising exponentially and many people living healthy and active lives well into their late 80's and 90's it is essential to have a long term investment strategy for retirement.



During her presentation Anne discusses the advantages and disadvantages of managed funds and direct shares in reducing market risk, Macquarie's outlook for 2015 and the implications of the new Future of Financial Advice (FoFA) legislation. Anne presents a number of charts to highlight investment ideas; the All Ords since 1950; the US ISM (Institute of Supply Management) manufacturing index based on surveys of 300 manufacturers tracking employment, inventories, orders and supplier deliveries correlated with US GDP; US employment indicators; US consumer confidence indices; Chinese GDP; world rates of urbanisation highlighting the growth in Chinese urbanisation since the mid 1980's; Resource price indices since 1936; Asset class returns from 1985 to 2013 highlighting the average outperformance of Australian and international shares, and; Movements in the Volatility index (VIX) from 2008 to 2014. She discusses market risks for 2015 including the possibility of further oil price shocks, interest rate rises (especially in the US), and slowdown in the Chinese economy. Some of these are as much an opportunity as a risk.

Risk Management in a Surgical Practice - Trish Jancewicz

Trish is a nurse and practice manager at Riverina Surgical Consulting. Trish is well-versed in risk both as a result of her professional position and her hobbies (she's pictured here by the Wagga Daily Advertiser at a Melbourne Cup event).

Trish's presentation follows neatly on from Anne's. The first area of risk she identifies arises from the sharemarket and the advent of High



Frequency Trading (HFT). This phenomenon, which accounts for an estimated 50-70% of market trades, contributes to a sense of powerlessness for the small operator and investor up against the technological scale of market insiders. There are many other risks that we face. Trish looks at some of the most feared events based on a Forbes Magazine business-owner survey. These include risks of political change, cash flow strains, commodity price changes, interruption due to natural disasters, technological disruption, loss of talented staff, reputation damage, increased competition, regulatory and tax change and finally and most importantly, a weak economy. Each activity of a surgical practice, from appointment management through consultation, records management, intra- and post -operative care, follow up and dealing with complaints or adverse events, faces its own risks. Most recently Trish has been made aware of medico-legal risks, financial risks and IT risks including the prospect of having computer systems hacked and ransom requests made for system access. Ironically, one of the greatest risks, given the litany of possibilities, may be the risk of complacency accompanying success.

Fatigue and Sleepiness - Dr Darren Mansfield

Darren is deputy director of Respiratory Medicine at Monash Health. He completed a PhD in sleep disorders looking at the interaction of sleep disordered breathing and heart function in patients with congestive heart failure. Darren is such a powerful presenter that it is almost impossible for sessions involving him to run to time!

Darren starts this presentation by distinguishing between fatigue (a subjective feeling of tiredness caused by mental or physical factors) and sleepiness (a state of impaired awareness associated with a desire or inclination to sleep usually caused by inadequate sleep). The two terms are often used interchangeably but the causes and symptoms are different. Darren's professional focus is on addressing inadequate sleep. The costs of sleep disorders in



Australia have been estimated at \$5.1 billion p.a. - surely enough to rouse us from slumber! A large portion of these costs occur on our roads with many younger drivers crashing in the early hours of the morning and older drivers crashing in the early afternoon. One study suggests sleep apnea sufferers have an eight fold increase in their crash risk. Other consequences of inadequate sleep include reduced productivity, mood disorders (anxiety and depression), obesity and diabetes. The most effective strategy to address sleepiness is to take a nap but the sleep specialist has many other lifestyle and medical measures in their treatment arsenal. Of increasing interest is Modafinil - a wakefulness promoting agent that does not have the side-effects of amphetamines. This has been used increasingly among narcoleptics, shift workers and people suffering from excessive day-time sleepiness. There are promising results...

Colorectal cancer - Dr Andrew Stevenson

Dr Andrew Stevenson is a Specialist Colorectal Surgeon and head of Colorectal Surgery at Royal Brisbane and Women's Hospital. Andrew's main interests are in laparoscopic colorectal surgery, colorectal cancer, inflammatory bowel disease as well as functional disorders. He has been Principle Investigator in a number of large multi-centre trials in colorectal and laparoscopic surgery and continues to be involved in research, education and training. He runs regular workshops for surgeons in laparoscopic colorectal surgery around the world.



This presentation has all the delegates booking colonoscopies!

It outlines the very high incidence of colorectal cancer (CRC) and associated mortality and morbidity. History of CRC surgery and latest developments, including multi-centre trials comparing open surgery with laparoscopic surgery are described. The developments in CRC surgery, many pioneered by Andrew's team, are truly astonishing.

Corneal Graft Surgery - Dr Alex Poon

Dr Alexander Poon is an Eye Surgeon (ophthalmologist) who specialises in anterior segment (front of eye) surgery which includes cataract surgery, corneal transplantation, laser refractive surgery and pterygium surgery. He also treats patients with ocular surface problems such as keratoconus, corneal infections, ocular surface malignancies and contact lens related problems.

He is a consultant at the Royal Victoria Eye and Ear Hospital and has private practices in East Melbourne (Lansdowne Eye Clinic) and Doncaster (Doncaster Eye Centre).

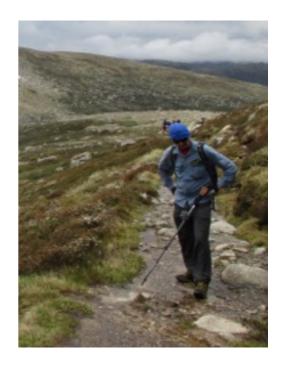


Alex gives us a real insight (sorry...ed.) into the techniques, stories and numbers underlying corneal graft surgery (CGS). The Australian donation rates for corneas are very low (only 0.7% of potential donors are on the register). There are currently 1700 grafts in Australia each year relying on donated corneas. Demand is expected to increase in line with an ageing population. In order to facilitate donation it is recommended that all people make an election via www.donatelife.gov.au. People of all ages can make corneal donations subject to screening for disease. Eye banks retrieve donated corneas within 24 hours and they can be used within 30 days of a donation occurring. Alex gives a quick rundown on eye anatomy and conditions that can be treated with CGS. These include conus, bullous and scarring conditions of the cornea. There are various surgical approaches to CGS and Alex describes DALK and the newer DSAEK that has faster recovery rates and leaves the eye much stronger than full thickness grafts. Major complications for CGS include rejection and infection.

Risk and Recovery in the Australian Alps - Dr James Eldridge

James is a GP in Canberra with a diverse practice. He works with youth at risk, is a medical officer for Companion House which offers services to immigrants, and also works for the ACT correctional facility - the Alex McConochie Centre. He has extensive experience in remote rescue.

James gives a fascinating account of a number of cases where Canadians have come to Australia and been lost in the Australian alps. This seems paradoxical given the relative size of the Australian alps relative to the Canadian Rockies. However, they pose real and under-appreciated risks. The case of Prabhdeep Srawn, lost in the Kosciuszko National Park in May 2013 has created an awareness of the traps for solitary explorers in the Australian bush and the difficulties in effecting a successful search.



James in the Snowy - still no sign...

The Riskiest Time of Life - Prof Helena Teede and Dr Mala Thondan

Helena is professor of Women's Health, Director Monash Centre for Health Research and Implementation, School Public Health Preventative Medicine, Monash University. She is also head of the Diabetes Unit at Monash Health and NHMRC Practitioner fellow.

Mala is a GP practicing in Kew. She has an interest in preventative health, women's health, obstetrics, polycystic ovary syndrome and paediatrics.

This presentation makes a fundamental point about risk: the riskiest point for life is at conception. The presenters deal with the time around conception, the effects of the environment, noting in particular the contribution of factors such as obesity. The benefits and hazards of assisted reproduction (AR) are also considered. The question is posed as to whether success of couples using AR is affecting human genetic stock in unanticipated ways. It may be offsetting other lifestyle factors such as obesity, smoking and drug alcohol consumption. In contrast to the AR



situation, 50% of pregnancies are actually unplanned in Australia. This suggests a greater role for pre-conception care to improve contraception or awareness of factors likely to lead to healthy pregnancies.

Sutureless Valves in Cardiac Surgery - Dr Simon Moten

Simon is a cardiac surgeon who consults at the Austin and Royal Melbourne Hospital. His background includes a diverse range of experiences in medicine and adventure!

This presentation describes Simon's recent experience with the

Perceval S suture-less valve. A number of advantages over alternative treatments were noted, in particular: low leakage, low rates of thromboembolic complications, relative simplicity and reduced time of insertion. The talk also focuses on a new minimally invasive aortic valve replacement, using an anterior intercostal incision, to avoid the need for a sternotomy. The ease of implantation of the Perceval S valve facilitates this approach. This keyhole approach, which avoids bone cutting, is favoured by many patients. It is associated with less morbidity, shorter ICU stays and a quicker return to normal activity. Use of this Perceval S valve, with its low complication rates, and a minimally invasive approach is proving to be a direct competitor to percutaneous transcatheter aortic valve.

Stephanie Vidler - Risk of injury for skiers and snowboarders

Stephanie graduated from Podiatry in 1989. She has established a number of successful podiatry businesses since that time, has studied in the USA, lectured, and was awarded the NSW young business woman of the year award in 2000. She has a number of sporting interests and is an active biological and foster mother.

Steph took the APE opportunity to investigate and demonstrate different risk profiles of different activities carried out in a similar environment by reference to skiers and snowboarders. She had a couple of willing assistants in the form of son Alex (playing the part of the stereotypical





skier) and friend Jack (the snowboarder). The theatrical performances of the assistants showed real promise and the different injury profiles were revealing. The question remains as to whether the much higher rates of injuries among snowboarders are a result of the inherent mechanics of activity or the risk seeking behaviour of the cohort participating.

RUSUTSU S.I.G.

The APE meeting in Rusutsu was exceptional in many senses. Rusutsu is located on Hokkaido and sits just an eruption away from the dormant volcano, Mt Yotei. The Rusutsu conference facility is extremely high standard, in line with the quality of the presentations. The resort is eccentric with amusement park features emerging out of the deep snow like remnants of a past civilisation.



Due to excess snow at Sapporo's Chitose Airport, a few of our delegates had trouble

making it to the conference. Many suffered extensive delays and one group ended up not being able to make it to Hokkaido at all. While this was unusual and aggravating, it was another reminder of the multitude of risks we face.

The first Rusutsu conference session provided an opportunity for the necessary logistical announcements. The convenors took the opportunity to recap on the earlier programming for APE 2015 and in particular the exploration of risk philosophy via thought experiments such as "the Trolley problem". This was complemented by a practical examination of risk by way of the very different acceptance of risk by trekkers in Nepal versus locals. A summary of some of the Rusutsu presentations is provided below.

Risk-and what can stop you from achieving your lifestyle goals - Brett Dillon CFP

Brett Dillon is Principal of BD Financial Planning, an independently owned boutique practice.

BD Financial Planning has a very diverse client base ranging from medical specialists to tradies and some expat clients. Brett enjoys helping clients to solve their financial complexities and to grow and protect their wealth.

Brett examines financial risk from a professional and a "Mum and Dad" investor perspective. He highlights the role of strategic planning in identifying what can go wrong as well as meeting retirement goals. The key strategy in investment risk



management is diversification. This is illustrated by the relative returns on cash, domestic shares, international shares and managed funds. He touches on some of the behavioural factors that are influential in poor decision making - confirmation bias is a particular feature of investment behaviour. Confusing lifestyle and investment assets is another trap. Brett also deals with the benefits and hazards of gearing. Gearing can generate great returns but, when the market turns against you, it can also be devastating to your financial position. The best approach to dealing with financial risk is to regularly measure and assess investment returns and model potential outcomes. As a final sobering note on the importance of saving, Brett makes the observation that a forty-year-old thinking of retiring at sixty only has 240 monthly pay packets to set aside a sufficient investment corpus to avoid relying on the pension.

Austria and the risk of being misunderstood - Susi Tegen

Susi is CEO of Medical Technology Association of Australia. She has over 20 years' experience in the medical and health, as well as in the agribusiness sectors. She has previously been CEO at The Royal Australian and New Zealand College of Ophthalmology (RANZCO) and is a Board Director at Sight for All, Australian Rural Leadership Foundation and Health First Network. She is Austrian honorary consul for South Australia and the Northern Territory.

Susi's presentation on "risk" makes us aware of the many cliches that are embedded in our understanding of Austria. The risks of social *faux pas* are extensive,



particularly when combined with a lack of basic knowledge of the culture, geography and sociodemographics. Susi attempts to remedy this by giving a run-down on some of Austria's key features such as the importance of the Danube, the significant alpine and forest regions, the eight countries that abut its borders and so on. The history of Austria is often contentious and

bound up with the associations to expatriate politicians from Adolf Hitler to Arnold Swarzenegger. Today it is a progressive country and the home of many well known brands such as Red Bull and Swarovski.

Sporting Injuries of the Shoulder Girdle - Dr Rob Creer and Dr Gus Oon

Dr Rob Creer is an orthopaedic surgeon practicing in Canberra. He specialises in sports and reconstructive surgery of the knee and shoulder and joint replacement of the hip, knee and shoulder.

Dr Gus Oon is a GP and surgical assistant working regularly with Rob. He has a particular interest in electronic technology and its use in medical data presentation, collection and dispersal.

This presentation discusses a number of common shoulder injuries occurring in sporting pursuits - AC joint dislocations, shoulder dislocation and Labral injuries, Clavicle fractures, and Scapular fractures. Images and explanations of the various grades of



dislocation are presented along with potential causes and treatments. This presentation is particularly interesting for medical practitioners who might need to be reminded of the diagnosis of, for instance, posterior dislocation - missed in 60% of cases.

Botox: history and applications - Dr lain Dunlop

lain is a widely respected ophthalmologist and serves on numerous advisory committees. He was integral in establishing the Canberra Eye Hospital and the Canberra Microsurgery. He is active in the Royal Australian and New Zealand College of Ophthalmologists (RANZCO), and the AMA.

His interests include cataract and refractive surgery, botulinum toxin and strabismus, and retinal disorders.

This presentation traces the history of botox from botulism - a lethal toxin causing paralysis and death - through to a major contributor to the health industry. The botulinum toxin is produced under anaerobic conditions in soil, food and wounds by the bacterium Clostridium Botulinum. It affects the end plates of nerves, eventually resulting in respiratory difficulties and



respiratory failure causing death in 60% of untreated cases. Artificial respirators have dramatically reduced the fatality rate from botulinum poisoning.

The botox industry that has grown from this lethal toxin is remarkable for its size and diverse application. Iain outlines the links between ophthalmology and development of botox including some of the personalities involved in extending its use. This started in the '60s when ophthalmologist Dr. Alan B. Scott began injecting monkeys with the toxin to treat crossed eyes. He received regulatory approval for use on human subjects. In 1988 he sold the rights to botox treatment in ophthalmology to Allergen for \$US3.5m (c.f. Allergen's botox sales of nearly \$2B in the last financial year!). Soon after this, ophthalmologist Jean Carruthers noticed the wrinkle free faces of her patients being treated with botox and, together with her dermatologist husband Alastair, pioneered the use of botox for cosmetic applications. Iain's family has been involved since 1992 and were at the vanguard of botox treatments in Australia. An amazing story of turning risk into opportunity, lateral thinking and commercial initiative.

Anaesthesia "a modern miracle" - Dr Sharon Tivey

Sharon Tivey is an anaesthetist, working mainly in the public hospital system. Her undergraduate training was at The University of Sydney followed by postgraduate training in Sydney and Virginia, USA. She enjoys teaching, is a Conjoint Senior Lecturer at the University of NSW, a Supervisor of Training (Anaesthesia) and an examiner with the Australian and New Zealand College of Anaesthetists.

Sharon gives a thorough and engaging review of the current state of anaesthesia. Acknowledging the enormous progress made by the speciality she then looks at some of the risks including; dental, nerve, post dural, allergic, hyperthermia, succinylcholine apnoea, halothane hepatitis, nausea and vomiting, itch and questions about brain development for kids. Some of the challenges in assessing anaesthetic risk include limited data. Techniques such as twin studies may be equivocal due to confounding variables including surgical stress.



Cancer and risk - Prof Paul De Sousa

Prof Paul de Souza is the University of Western Sydney's (UWS) Foundation Professor in Medical Oncology. He graduated from Sydney University in 1986, completed his Medical Oncology training,

received his Fellowship of the Royal Australasian College of Physicians in 1992. He was Assistant Professor of Medicine at the University of Virginia. In 1997 he founded the Clinical Trials Unit and a research laboratory at St George Hospital dedicated to developing new drugs and approaches for the treatment of urological and other cancers. Paul is appointed as a Senior Staff Specialist at St George Public and Sutherland Hospitals and a VMO at St George Private Hospital.

Paul sets out to explain the real risks of cancer based on recently published research (Tomasetti and Vogelstein 2015) highlighting that variation in cancer risk among tissues can be explained by the number of stem cell divisions. Paul illustrates the argument with a graph of tissue types by cell divisions and cancer incidence that is persuasive. The determination of cancer risk based on this correlation is sufficient to



emphasise the genetic factors of tissue types over lifestyle factors.

From Veterinarian to Anaesthetist - Dr Ross Peake

Dr Ross Peake is an anaesthetist practicing in Canberra. After initially training as a veterinarian and developing a practice working largely with large animals in rural Queensland, he retrained as a doctor earning his MBBS in 2003 and gaining specialist anaesthetic qualifications in 2010.

Ross's presentation tells the story of the diverse demands on a rural veterinarian. These require a special blend of empathy for animal and owner, an ability to anticipate and improvise, and a preparedness to work through fatigue and sleepiness. Illustrations of some of these qualities were provided in accounts of the techniques for



avoiding injury to the horses as they recover from anaesthesia. This is a fraught time as horses will often leap to their feet as they regain consciousness. This can cause new or re-injuries to occur. This may require the vet to sit on the horses neck until they have achieved a sufficient level of consciousness to displace the vet. Perhaps the pinnacle of Ross's vet career was performing a cesarean section on a lion. This required anaesthetising the lion and transporting it across town to the surgical facility, hoping that it had not recovered when transferring from the truck to the operating room, performing the surgery safely for mother and cubs and managing the mother's recovery.

The final word: "Quite Interesting"

A final special mention in these proceedings needs to go to Dr Andrew Stevenson for his amazing take on Stephen Fry. Due to popular demand, Andrew was called on twice - once in Silver Star and once in Rusutsu - to render his homage to the well known Wildean. This was not only educational, but also extremely amusing with references to popular culture, geography and science.

