COME TO VANCOUVER
IN THE MAGNIFICENT PACIFIC NORTHWEST
FOR THE SUGUNA ANNUAL CONFERENCE, AUGUST 4–7, 2011

Come, celebrate the 20th Anniversary of the founding of SUGUNA at the 21st SUGUNA Annual Conference, in Vancouver, BC. Vancouver is one of the finest cities in the world and August is a prime season to visit, to renew friendships and make new friends. Outdoor recreation is at its best during this month as the days are warm but not humid (it rains here sometimes!). Why don’t you come and see for yourself?

This year the SUGUNA Annual Conference is being held on the campus of the University of British Columbia (UBC), from Thursday to Sunday, August 4-7, 2011. Our local committee members, Robert Bear (Chair), Gillian Beattie, Ernie Baja, Rex Fortescue, Barbara Grier, Elizabeth Harris, Joan McConnell, Scott Stanners and Margaret Williams, have worked hard to put together an exciting program (outlined on pages 2 and 3).
The traditional Thursday evening ‘Welcome’ reception will be held at our Conference centre at UBC, followed by two mornings of brief talks given by some of our illustrious graduates as well as other very interesting speakers. More information will be posted on the SUGUNA website as it becomes available.

The Friday morning program will include a guided tour of the University of British Columbia campus, led by renowned landscape architect, Cornelia Oberlander, OC. The environment is not the same to a landscape architect as it is to a biologist and her projects are the result of studies of the social, cultural and physical features of a given site. The tour begins at the C.K. Choi Building, which houses the Institute of Asian Research. With its cutting-edge ‘green’ technology which Oberlander helped develop, it is the University’s ‘flagship environmental building’. The tour ends at the Museum of Anthropology whose design mirrors the traditional Haida Totem Poles and Long Houses which stand nearby.

Friday and Saturday afternoons include several excellent choices for social, cultural and sporting pursuits:

On Friday, a bus tour will take us through downtown Vancouver to famous Stanley Park and Totem Poles, Prospect Point (that provides a fabulous view of the North Shore Mountains), Lions Gate Bridge, and Cypress Mountain Lookout, with its marvellous view of the entire lower mainland.

On Saturday, there is a tour of Dr Sun Yat-Sen Classical Chinese Gardens, the first full-size Chinese or ‘scholars’ garden built outside mainland China (www.vancouverchinesegarden.com). On Saturday afternoon there will be a tour to Vancouver’s arts hub: Granville Island’s myriad artisan shops and Public Market; then a short ferry ride to the Maritime Museum which houses the RCMP St Roch, the first vessel to sail the Northwest Passage from west to east (1940–1942).

Other arrangements include visits to: Bill Reid Gallery of Northwest Coast Art which features current and iconic sculptures and other art work, particularly by famous Haida artist Bill Reid (www.billreidgallery.ca); the Museum of Anthropology at UBC designed by the eminent Canadian architect, Arthur Erickson (www.moa.ubc.ca); Vancouver Maritime Museum (www.vancouvermaritimemuseum.com) and the Beaty Biodiversity Museum (UBC) (www.beatymuseum.ubc.ca).
Sporting activities include: golf, tennis at VLTBC, lawn bowling and swimming, depending upon the number of people expressing interest. On the SUGUNA Registration Form, please identify your interests to assist the committee in making plans.

If you have never been to the Pacific Northwest, expect a lot – our BC Government Tourist Agency advertises Vancouver as “the best place on earth”. The Royal Vancouver Yacht Club and the Vancouver Lawn Tennis and Badminton Club (VLTBC) will be the venues for the Friday evening buffet dinner and the Saturday evening Awards Banquet, respectively.

Accommodation has been reserved (33 rooms) at UBC, where the conference is located. It is high quality, reasonably priced and includes full breakfasts. Accommodation registration details are given on the SUGUNA Registration Form. Don’t delay if you wish to stay on campus. These rooms will likely be snapped up quickly once registration commences, as the cut-off date for booking is 4 July 2011.

In the tradition of the past two years a special medically themed program will be included to supplement the SUGUNA Annual Conference. This year the Medical program will be held on Saturday afternoon. It is specially designed to attract some of the more than 300 younger North American doctors who graduated from Sydney Medical School in the past 10 to 15 years. The School is arranging the program under the Dean, Professor Bruce Robinson assisted by Dr Paul Lancaster; both will be at the conference. The program aims to be pragmatic in nature, helping doctors to make decisions about practice development and research opportunities relatively early in their careers. The program will have two keynote speakers, Derek Raghavan (MBBS ’74, oncologist) and Virginia Hood (MBBS ’70, physician). Subsequent presentations by other Sydney medical alumni and the discussion panel will highlight career choices and networking in North America. Regular Conference attendees are also welcome to attend this special Medical Program. The associated Conference luncheon will provide an excellent opportunity for regular Conference and Medical program participants to meet one another.

Dr Paul Lancaster, Medical Alumni Association and Alumni Council, University of Sydney, is actively making arrangements for the Medical Program and may be contacted at pallancaster@gmail.com.

There are many interesting places to visit close to Vancouver either before or after the SUGUNA conference. These include:

- Vancouver Island and the beautiful city of Victoria, which is just a short ferry ride away.
- The mountain resort of Whistler, where two of our previous SUGUNA conferences were held and which was the site of the 2010 Winter Olympics, is only 75 miles distant.
- The Canadian Gulf islands and the American San Juan islands are easily reached by ferry – a very scenic trip.

For more suggestions about places to visit, please contact Committee Member, Barbara Grier at bagsx2@sunwave.net – she will be happy to help.

Further information about the Conference may be had by contacting:
- Robert Bear, Conference Chair, at ro.bear45@gmail.com
- Gillian Beattie, Committee Member, at gbeattie@ucsd.edu
- H Michael Marsh, Medical Program, at hmarsh@med.wayne.edu

Or visit the SUGUNA website: sydney.edu.au/alumni/suguna/conference where updates and additional details will be posted.

A Registration Form for the 21st SUGUNA Annual Conference is enclosed. Payment may be made by credit card; options are described on the registration form. Please note there is a cost reduction for ‘early bird’ conference registration. Don’t delay to register! To make your accommodation reservations at UBC, select room type, review room details and photos, and other services at: sydney.edu.au/alumni/suguna/accommodation.

Attendees are encouraged to book accommodations online. UBC confirms reservations by email only. Alternatively, for reservations or questions, call 888 822 1030. A reminder to U.S. residents: Passports are now required for travel to Canada.

The Pacific Northwest Chapter of SUGUNA (PNW) usually meets in May or June in British Columbia or Washington, for a day of reunion, reminiscence and relaxation. All SUGUNA members are welcome to attend these events. However, in 2011, there will not be any PNW Chapter meeting due to the SUGUNA Annual Conference being held in August in Vancouver, BC.
In Barcelona, on July 14, 2010, Professor Ronald L. Ettinger, BDS ‘66 DDSc ‘82 MDS ‘70, of the University of Iowa, was presented with the 2010 “Research in Prosthodontics and Implants Award” at the General Session and Exhibition of The International Association for Dental Research (IADR). This award is one of the highest honours bestowed by IADR.

Professor Marie Bashir AC, CVO, Chancellor, on behalf of the Senate of the University of Sydney, has invited SUGUNA Secretary/Treasurer, Michael Challis, BE ‘84, to accept the award of Honorary Fellow of the University. The purpose of awarding the title of Honorary Fellow of the University of Sydney, is to recognize outstanding service to the University. It is expected Michael will attend an award ceremony at the University in October 2011.

Dr Robyn Gwen Alders (BVSc ‘84) was appointed as an Officer of the Order of Australia (AO) on 26 January 2011. The citation was “for distinguished service to veterinary science as a researcher and educator, to the maintenance of food security in developing countries through livestock management and disease control programs, and to the Australian poultry industry”. Dr Alders is the first woman veterinarian to be appointed as an Officer.

Dr Alders is currently an Associate Professor with the International Veterinary Medicine Program at the Tufts Cummings School of Veterinary Medicine. The summary of her talk, ‘Aiming For One Health In A World That Is Not Yet One’, given at the recent SUGUNA conference in Chicago, can be found on page 10 of this newsletter.

Warwick A. Arden, BVSc (Hons) ’81, was named Provost and Executive Vice-Chancellor at North Carolina State University in December 2010. “Dr Arden is a very accomplished scholar and educator and will provide tremendous leadership as we build on NC State’s rich tradition in academic excellence,” Chancellor Randy Woodson says.

As the university’s chief academic officer, the provost oversees the policies and priorities that create and sustain educational excellence across the university’s broad spectrum of academic and student affairs. Arden had served as NC State’s interim provost since May 2009 and as dean of NC State’s College of Veterinary Medicine.

John McLenaghan, BA ‘80 MA ’92, who serves as SUGUNA’s representative in Australia, has been reappointed to the Alumni Council of the University of Sydney. John was first appointed as a Vice-Chancellor’s nominee on the Council in 2006, for a period of four years, and in that capacity has represented SUGUNA on the Council. He has now been reappointed for a further four-year term, beginning January 1, 2011. Along with the elected members of the Council, he is one of nine councillors appointed by the Vice-Chancellor. John was elected Deputy President of the Council in 2009 and 2010.

Derek Raghavan (MBBS ’74) has been appointed as the President of the Levine Cancer Institute, a newly founded entity in Charlotte, North Carolina. This will allow Dr Raghavan to develop a new cancer program with cancer prevention and treatment activities spanning the 33 hospitals of the Carolinas Health System in North Carolina and South Carolina. He will be responsible for constructing a six-storey cancer treatment and research building, recruiting new faculty, and expending a budget of $500 million.

Dr Raghavan’s appointment follows his success at the Cleveland Clinic where he served as Director of the Taussig Cancer Institute over the past seven years. The institute’s ranking moved from number 46 to number 9 in the USA in the US News and World Report ranking system and number 1 in Hospital Review, with the recruitment of 70 faculty and the development of novel programs of anticancer therapy, increased cancer research funding, a doubling of patient volumes, with innovations including the development of effective new treatments for advanced kidney cancer, the identification of a new gene that is associated with leukemia, and new treatments for prostate and bladder cancer.

SUGUNA Board of Directors, recognizing the value of having the SUGUNA Newsletter Editor on the Board and in recognition of the significant contributions of time and effort, has appointed Portia McKenna (BA ’52) as Director, Newsletter Editor, Ex-officio.

The SUGUNA is published in Spring and Autumn. Contributions, Alumni news and letters to the editor are welcome and should arrive before January 15th (for Spring) and September 15th (for Autumn).

We are always on the look out for news stories, ideas and features to include in future editions. If you have any suggestions for content please do not hesitate to contact the editors.
Washington, before accepting the chair of Pure Mathematics at the University of NSW, the first of several academic appointments. He was appointed an Officer of the Order of Australia in 2006.

We extend our condolences to his wife Diane and his family.

Owen Phillips

We recently learned that Professor Owen Phillips, FRS, Decker Professor in Science and Engineering, Johns Hopkins University, and renowned oceanographer, passed away on October 13, 2010. Owen graduated with a BSc (Sydney) in 1952 and PhD (Cambridge) in 1955 and was a long-time SUGUNA member. Our condolences are offered to his wife, Merle, and family.

Margaret Sabine

Distinguished former staff member and Fellow of Senate, Professor Margaret Sabine, died on 4 January, 2011. Professor Sabine was a virologist and a member of the Faculty of Veterinary Science from 1973 until her retirement in 1993.

Professor Sabine made many contributions to the University of Sydney. She was a challenging teacher, who commanded great respect as both teacher and mentor. Former student, Robyn Alders, currently Associate Professor with the International Veterinary Medicine Program at the Tufts Cummings School of Veterinary Medicine, says ‘I was very grateful to have benefitted from both her knowledge and her compassion.’ As a researcher, her most significant discovery was the difference between various equine herpes viruses. She served on many university committees including the University Senate, the Academic Board, and the Animal Ethics committee. She represented the Senate on the Board of Directors of the University of Sydney Union, and for eleven years, was Vice Principal of the Women’s College.

Professor Sabine graduated with an MSc from the University of Melbourne, earned a PhD from the University of London and received an MVSc ad eundem gradum from the University of Sydney. She became the first female in the Faculty to achieve the level of Associate Professor and the title of Honorary Fellow of the University of Sydney was conferred upon her in 2001. We offer our condolences to the Faculty of Veterinary Science and her family.

Gavin Brown

We were saddened to learn of the death of former Vice-Chancellor and SUGUNA member, Gavin Brown. As reported in the Sydney Morning Herald, VC Brown died suddenly of a heart attack on Christmas Day, at his home in Adelaide.

‘The universities of Australia have lost a great champion,’ said the chief executive of Universities Australia, Professor Glenn Withers. ‘Gavin Brown had the distinction of being Vice-Chancellor of both Adelaide and Sydney Universities. He helped transform each, while also promoting the wider cause of science and the contribution of universities to the community.’

In his twelve years as Vice-Chancellor, the University of Sydney’s income almost trebled, including a fivefold increase in research income and a quadrupling of international student numbers. Andrew Potter, spokesman for the current Vice-Chancellor of the University and Professor Brown’s successor, Dr Michael Spence, said Professor Brown had ‘an uncanny ability to back unconventional people and projects which became successful’.

Professor Brown was born in Scotland on February 27, 1942. He graduated from St Andrew’s University in 1963 with first-class honours in Mathematics and Latin. He later lectured at the Universities of Paris, Illinois and Virginia before coming to Australia in 1975 and serving as Head of the Department of Economics and Finance and later of the former Faculty of Science and Engineering at the University of New South Wales. In 1996, he was appointed as the first Professor of Science and Engineering at Johns Hopkins and directs the Hopkins Center for Science and Technology.

DO WE HAVE YOUR EMAIL ADDRESS?

If not, you are missing out on special invitations to events and your monthly electronic newsletter eSydney.

Simply email your full name along with your degree to alumni.office@sydney.edu.au.
The koala (Phascolarctos cinereus) is perhaps the best known of Australia’s marsupials as many Australians and international tourists wish to be photographed with this popular animal. Moreover, they are a popular exhibit at those favoured zoos and wildlife parks around the world. Essentially, there is a North–South dichotomy in the problems, and therefore their solutions, facing the koala. This appears to stem from management variability over the past century or so, which led to Victorian and South Australian koalas virtually becoming extinct on the mainland through hunting for pelts and the establishment of isolated island populations, e.g. French and Phillip Islands in Victoria and Kangaroo Island in South Australia. As a consequence of a lack of disease and predators on some of these islands, populations started to overbrowse from the 1970–80s and a policy was developed by the two state governments to transmigrate koalas back to selected forest sites on the mainland. The situation was different in Central and Northern New South Wales and South East Queensland where koala populations survived the traumas of the early 20th Century, but are now diminishing in numbers due to urban encroachment on prime habitat along the coast. As a result, koalas are dying through a combination of motor vehicle accidents, predation (mainly dogs) and disease (particularly chlamydioidosis). Consequently, both NSW and QLD Governments regard some fragmented koala populations as seriously threatened. In contrast, VIC and SA Governments do not regard the island populations as threatened and have different policies for managing koalas. The National Strategy, as defined by the Commonwealth Government, reflects this North-South dichotomy, and has identified six major issues facing the koala through South-East Australia and intends to focus its energy on habitat management, education and research:

- Climate change – drought, bushfire and contraction of habitat
- Habitat alteration and fragmentation coastal NSW and QLD in particular
- Dogs and cars – coastal NSW and QLD in particular
- Disease – coastal NSW and QLD populations in particular
- Overpopulation – VIC and SA island populations
- Loss of genetic variability – VIC and SA populations derived from a few individuals moved to islands; some fragmented NSW and QLD koala groups may perish

The National Strategy, at least for the next five–years, to combat these major issues is perhaps a little subdued. However, it is constrained by State issues and legislation and a degree of uncertainty about funding. The result is a compromise plan that encompasses general protection of habitat in NSW and QLD management of over-browsed habitats in VIC and SA, investigation of the mortality of individual koalas to improve understanding of diseases; community education and involvement in management of habitat and the koala, improve caring for koalas in captivity; and increased research into population factors, nutrition, and disease. Ultimately, for the National Strategy to succeed, there is a mandatory requirement for cooperation amongst the Commonwealth Government, State Governments, koala preservation and conservation groups, farmers and the general public.

There are many species that are grouped and called Asian carp, which are in the minnow family Cyprinidae. The two species of Asian carp that are currently considered a threat to the Great Lakes are the bighead and silver. Asian carp were originally imported to the southern United States in the 1970s to help aquaculture and wastewater treatment facilities keep retention ponds clean. The carp have escaped the farms and migrated up the Mississippi River system. They now threaten to enter the Great Lakes through the man made canal connecting the Great Lakes to the Mississippi River watershed. The carp displace native species of fish by filter feeding and removing the bottom of the food chain for indigenous species. Silver carp have become an annoyance to recreational boaters since they jump out of the water and have the potential to land in a boat or strike a boater.

In 2002, the U.S. Army Corps of Engineers completed an electric fish barrier in the Chicago Sanitary and Ship Canal (CSSC), the only aquatic link between the Great Lakes and the Mississippi River drainage basins. The initial fish barrier was used as a demonstration project to study the design’s effectiveness. Following positive results, construction began on a second, permanent barrier in 2004. Barrier 2A became operational in 2006 and Barrier 2B is expected to be operational in early 2011. To date, this is the only operational electrical fish barrier placed on navigable waters.

The electric barrier consists of a series of electrical electrodes placed on the bottom, and across the entire width, of the canal. When Barrier 2B is complete there will be a total of 12 electrode arrays placed in an area of canal 1334 feet in length. Electric current passing between the electrodes, via the water medium, produces an electric field with electric field lines which run parallel to water flow. When fish are within the field, they become part of the electrical circuit with some of the current flowing through their body. The electric current passing through fish can evoke reactions ranging from a slight twitch to full paralysis, depending on the current level and shock duration they receive. When a fish is crosswise to the electric field it receives almost no electric shock. Fish learn very quickly that by turning side-ways to the flow they can minimize the effects of the electric field. In this orientation, upstream migrating fish are swept clear of the field by water flow.

U.S. Army Corps of Engineers, Engineer Research and Development Center, Construction Engineer Research Lab (ERDC-CERL) has conducted electrical field mapping on the fish barrier since 2005. During field mapping, a series of electrodes are placed in the water and towed over the fish barrier while continuously collecting data. These tests determine the strength and extent of the electrical field in the water. Touch potential tests determine the potential of electrical discharge in the event that an object in the electrified water comes into contact with a non electrified object. These tests are conducted by electrically monitoring the voltage differences between a vessel over the fish Barrier and an object (usually a stationary vessel or the canal wall) that is positioned outside of the electrical field.

The Electrical Field Measurement will enable the COE and the Coast Guard to define the regions of non-hazardous fields in the water which can then be used to develop the RNA (Regulated Navigation Area) for safe passage over the barriers.
Scribes have held an honoured place in society since those who wrote Egyptian hieroglyphs and Sumerian cuneiform four to five thousand years ago. For this talk I will focus primarily on the Roman alphabet, how it has undergone changes in style over the past 2,500 years. The Romans borrowed the alphabet from the Greeks. The geometrical nature of the Greek alphabet was transformed through Roman lapidary inscriptions into a monumental script that clearly reflected the grandeur and might of the Roman Empire. The Roman characters acquired their living, vigorous form in stone. The earliest books were written wholly in capital letters (majuscule script). Often referred to as ‘lapidary’ script because it had the elegance and precision associated with inscriptions in monuments. It was totally unsuitable for rapid writing; by the 3rd century CE uncials replaced Roman capitals.

Ucial is a majuscule script (written entirely in capital letters) commonly used from the 3rd to 8th centuries CE, by Latin and Greek scribes. Early Christian works used this hand which was written between two guidelines of one uncial — the name of the Roman inch measure. The letters had simple round forms taking advantage of the new parchment and vellum surfaces, as opposed to the rougher papyrus surface.

From 800 to 1200 CE, Carolingian minuscule predominated. It was a script developed as standard writing in Europe so that the Roman alphabet could be easily recognized. Codices, pagan and Christian texts used Carolingian minuscule throughout the Carolingian Renaissance.

During the period 1200 to 1500 CE new universities were founded, each producing books for business, law, grammar, history, and other pursuits, not solely religious works for which earlier scripts typically had been used. These books needed to be produced quickly to keep up with demand. Carolingian, though legible, was time-consuming and labor-intensive to produce. It was large and wide and took up a lot of space on a manuscript in a time when writing materials were very costly. Accordingly a narrower script termed Gothic minuscule was introduced, in which letters were formed by sharp, straight, angular lines, unlike the typically round Carolingian.

During the Renaissance in Italy a semi-cursive, slightly sloped style of handwriting and calligraphy was developed termed Italic because it originated in Italy, also called Chancery cursive because it was the preferred writing style of the Vatican scribes in the 15th Century. The scribes were required to write out the Papal Briefs, communications from the Pope, which would be sent throughout Europe. These therefore needed a clear but relatively quick writing style.

Examples of calligraphy, Greek word meaning beautiful writing, were shown from Arabic, Hebrew, Persian and Chinese sources as well as from Kalligraphia 12, an exhibit of the Friends of Calligraphy held every three years at the San Francisco Public Library. Several artists have used letters and or symbols in their paintings.

Cursive is any style of handwriting that is designed for writing notes and letters quickly by hand. Latin cursivus means ‘flowing’. Cursive is considered distinct from the so-called ‘printing’ or ‘block letter’ style of handwriting, in which the letters of a word are unconnected. After the 1960s, far less time has been devoted to teaching cursive script in schools. With the advent of computers, cursive as a way of formalizing correspondence has fallen out of favour. Any task that would have once required a ‘fair hand’ is now done using word processing and a printer. Cursive writing may go the way of Latin and future American children will be unable to read the original Constitution as it was written. 1990 was the last year for children in USA to learn ‘loops & squiggles’. Schoolchildren learn print writing in kindergarten, cursive in third grade but daily lessons have decreased from 30 minutes/day to 15 minutes. We may well have experienced the ‘death of cursive writing’.

WriTiNG AS ArT Or CALLiGrApHY AND THE DEATH OF CU rSiVE WriTiNg
ERNEST NEWBRUN BDS (Syd’54), MS, DMD, PhD, Professor Emeritus, University of California, San Francisco
In celebrating the centenary of the University’s Faculty of Veterinary Science, we should take account of research in Australia and New Zealand that has linked animal studies with improved reproductive outcomes, resulting in benefits to the health of mothers and babies.

In studying possible mechanisms of how thalidomide in early pregnancy caused major birth defects, first described almost 50 years ago by William McBride in Sydney and Widukind Lenz in Germany, it was soon recognized that the drug was teratogenic in rabbits and primates but not in rats and some other experimental species. This therapeutic disaster led to mandatory testing of drugs in pregnancy and caution about testing in a single animal species. It also gave impetus to the fledgling science of teratology.

Marsh Edwards (1928–), former Dean of Veterinary Science, is another Sydney alumnus who has made significant research into the causes of birth defects. Following a ‘natural experiment’ in 1963, when a temporary colony of guinea-pigs in an iron shed at Camden in Western Sydney were exposed to an unseasonably high temperature for several days, he noted spontaneous abortions and arthrogryposis (joint contractures) in fetuses. He then initiated further research in guinea-pigs and other species and showed that the duration and timing of elevated maternal temperature were key factors leading to birth defects. His work stimulated epidemiological studies in humans and warnings for pregnant women about the potential danger of elevated temperature.

In New Zealand, Graham Liggins (1924–2010) conducted research on sheep to study mechanisms of the onset of labour. With his neonatal paediatric colleague, Ross Howie, he later showed that giving corticosteroids to women in early labour could accelerate infant lung development enough to enable premature newborn babies to breathe independently, markedly improving their survival. These studies showed that biomedical research could be rapidly translated into significant clinical research which later became standard obstetric practice.

Geoff Thorburn (1930–1996), a Sydney medical graduate, studied sheep and goats at CSIRO, Prospect. Along with Liggins, he led the intellectual growth and development of fetal, placental, maternal and neonatal physiology.

Bevan Reid (1923–2010) was unusual in graduating both in veterinary science and medicine at the University of Sydney. His research on the nature and origin of cervical cancer, then subsequent collaboration with the gynaecologist, Malcolm Coppleson, eventually led to invention of a computerised device which reliably detects cervical cancerous and pre-cancerous cells by scanning a probe across the cervix.

Wesley Whitten (1918–2010), a Sydney veterinary science honours graduate, studied the effects of nutrition on the fertility of sheep and later early embryo metabolism and the endocrine control of implantation. His highly productive research on reproductive cycles, fertilisation and embryo development influenced fertility treatment in humans. The ‘Whitten effect’ was his discovery of synchronisation of the oestrus cycle of female mice exposed to the pheromones in male mouse urine. The ‘Whitten medium’ facilitated culture of mammalian eggs and developing embryos.

Alan Trounson gained his PhD in the Faculty of Agriculture at the University of Sydney in 1974 from his studies on the development of fertilised sheep ova. In his later career at Monash University and now in California, he became a pioneering IVF researcher and stem cell biologist. He developed novel techniques for non-surgical embryo collection and transfer, followed by work on embryo splitting and freezing. He also established the Australian Gene Storage Resource Centre for the conservation of genetic material derived from endangered species.

Often after rural influences in their early lives, they had diverse and frequently unpredictable career paths. The antipodean climate and space for research on sheep and goats were helpful factors. The researchers addressed major problems requiring solutions, sometimes serendipitously – the onset of labour, prevention of respiratory problems in preterm births, environmental causes of birth defects, and infertility and its treatment. These researchers serve as role models for encouraging students to develop research interests at the University of Sydney.
A little bit of history ...

For the majority of human history, the health of both humans and animals has been cared for by healers using traditional approaches to health. The separation of the health profession into different categories occurred around 1,000 years ago with a move to re-establish the concept of One Medicine occurring late in the 20th century.

Advances in molecular epidemiology have allowed us to see the world from microbes’ point of view where the differentiation of humans as a different category to animals has no traction.

One World, One Health

The Wildlife Conservation Society coined the phrase “One World, One Health” (OWOH) which has been picked up by the United Nations (UN) as a key approach to tackling health issues, and zoonotic disease in particular. Interestingly, veterinarians have played leading roles in the definition and institutionalisation of this concept. The American Veterinary Medical Association released its definition of OWOH in 2008 as: “the collaborative efforts of multiple disciplines working locally, nationally and globally to attain optimal health for people, animals and our environment.”

What does OWOH mean in practice? There is a range of challenges (including emerging and re-emerging diseases, food insecurity, environmental degradation, global financial insecurity and climate change), each of which has the potential to impact significantly on the health of our planet. Approximately 60 per cent of emerging infectious diseases are zoonotic and their origins are significantly correlated with socio-economic, environmental and ecological factors (Jones et al. 2008).

In many ways, the world indeed has never been smaller. There is constant movement of people and goods via land, sea and air. This movement facilitates the rapid spread of infectious agents as demonstrated during the recent SARS outbreak and Influenza H1N1 pandemic. Climate change is changing the pattern of disease and increasing encroachment of human activity into pristine wilderness is leading to increased exposure to new pathogens for both people and animals. International agencies are collaborating to establish international health regulations. Bilateral agencies are also supporting these efforts. The Australian Agency for International Development is supporting an emerging infectious disease program in collaboration with ASEAN (Association of South East Asian Nations). The United States Agency for International Development (USAID) has recently initiated a five-year Emerging Pandemic Threats Program.

However, moving One Health from theory to practice has identified that politically and economically the World is not yet One. The health and education indicators in the Human Resource Development Index compiled by the UN Development Program highlight the differences between Australia, the US and EPT partner countries. As a consequence, the RESPOND project must identify opportunities to improve the sustained capacity of countries in high risk areas to respond to outbreaks of emergent zoonotic diseases that pose a serious threat to human health using a One Health approach while at the same time responding to local priorities for the control of normative diseases.

Acknowledgements

Thanks go to the Faculty of Veterinary Science and Wesley College within the University of Sydney for the excellent education they provided. Thanks also go to USAID, my colleagues at Tufts University and the RESPOND team for their support of, and collegial engagement in, the Emerging Pandemic Threats Program.
The talk discussed the progress that has been made over the past 10 to 20 years in distributing drugs donated by major pharmaceutical companies to people living in endemic areas infected with filarial helminth infections. An introduction described the very large nature of these global programs that focus on River Blindness (onchocerciasis) and elephantiasis (lymphatic filariasis). Four specific locations, each at a different stage of their program duration and success, were presented as examples of the type of work that veterinarians can become involved in and that represent the fundamental concept of ‘one medicine’.

An update to this summary:
The laboratory at MSU (The One Health Research Laboratory led by Charles Mackenzie) with their collaborators at McGill University (Tim Geary) and various developing countries have been successful in the past 12 months, in advancing the science needed to achieve the goal of elimination of global parasitic diseases. After many years of research, they have now discovered the key to the action of one of the most important veterinary and human anti-parasitic agents ever discovered, Ivermectin. It appears that the drug acts by shutting down the worm’s secretion of protective agents thus allowing the host’s defence system to successfully attack the worms and kill them. Although this agent has been used extensively for over 30 years, until now it was not known exactly how it acted to kill the worms.

WORMS, DRUGS AND GLOBAL COLLABORATION
CHARLES MACKENZIE BSc, BVSc, PhD, FRC Path., Dip Ed.,
Professor Veterinary and Medical Center, Michigan State University

SUGUNA is looking for volunteers to assist with the preparation of the twice-yearly SUGUNA newsletter and eventually to take over as Editor. This includes working with the editors to identify, follow-up and occasionally write appropriate news items, in addition to assistance with proofing, editing news stories, and other activities as directed by the editors. If you have some writing experience and appropriate computer skills and can help, please contact the editors; Portia at McKPortia@aol.com, Angela at akirgo@verizon.net or SUGUNA Vice President, Wanda Haschek-Hock at whaschek@illinois.edu for further information.

CALL FOR VOLUNTEERS
SUGUNA is seeking member volunteers who would like to become involved in its activities including serving on the Board of Directors (BOD, 2 year term) and meeting organisation. No specific experience is required, however the ability to commit time and energy, and to attend the Annual Conference is very important. To volunteer, or if you need more information, please contact a SUGUNA Officer; contact details are shown on the last page.
Tracey provided an update on the pace and scale of alumni activity in 2009, which demonstrated an increase in momentum with the largest number of events and programs ever undertaken by the University to engage alumni worldwide.

Attendance at alumni events increased by 20 per cent in 2009, and alumni communications grew significantly. The Alumni e-newsletter is now distributed monthly, SAM is attracting increased alumni feedback, and a new Alumni Card was distributed to all alumni, as a signifier of loyalty and attachment.

The number of formal Alumni Associations increased from 45 in 2008 to 48 in 2009. Tracey noted that SUGUNA is one of the University’s most valued and key international alumni associations, reaching over 3,000 alumni in North America.

The number of Alumni Award nominations also grew with 46 in 2009, and Convocation Medal nominations increased by 43 per cent. Alumni were also recognised widely through the Australia Day Honours and Queens Birthday Honours, with more than 85 recipients in 2009. These award programs are very important alumni recognition opportunities for the University, and Tracey acknowledged SUGUNA’s recipient in 2008, Professor Charles MacKenzie (BSc(Vet) ’69 BVetSc ’71 PhD ’76).

A new ‘Fun, Fare & Future Alumni’ Hospitality Program connects new international students with alumni in Sydney, through lunch/dinner gatherings hosted by alumni in their homes. These enable all to share academic, professional and social experiences and foster new friendships, and the program is attracting significant support from alumni volunteers.

In closing, Tracey thanked the Directors of SUGUNA for their fabulous work as ambassadors for the University in North America.

Come to Vancouver, BC and celebrate the 20th Anniversary of the founding of SUGUNA, at the 21st SUGUNA Annual Conference.

The Conference features morning symposia covering a diverse array of topics presented by Alumni, and a Saturday afternoon Medical themed program. Also offered are visits to local points of interest, guided tours, sporting activities and evening social events.

Join us for the conference and discover Vancouver’s urban charm and stunning natural surroundings.

Thursday, August 4 - Sunday, August 7, 2011
Vancouver, BC

Questions?
Email Robert Bear at ro.bear45@gmail.com
Or, for Medical grads – H Michael Marsh at hmarsh@med.wayne.edu

Or visit the SUGUNA website:
sydney.edu.au/alumni/suguna/conference
The SUGUNA Scholarship Fund was created to award funds for travel expenses to University of Sydney students or researchers who wish to explore or pursue serious study opportunities in USA or Canada. The University of Sydney selects awardees, who are requested to make their best effort to attend a SUGUNA Annual Conference and, at a minimum, to provide a short written report to SUGUNA on their activities supported by this scholarship. The University of Sydney USA Foundation exists to encourage and promote research and education in USA and Australia, and for this purpose receives donations including allocations for the SUGUNA Scholarship Fund.

Nominations are invited for the 2011 SUGUNA Jim Wolfensohn Award. Any member of SUGUNA may submit a nomination for this award, based on the following criteria:

(a) The winner must be a graduate of the University of Sydney.
(b) He or she must be a member of SUGUNA.
(c) He or she must be a person who has made significant contributions for the betterment of society and his, or her, profession, business academia.
(d) The nominee shall have participate in SUGUNA conferences.

Nominations must include a complete curriculum vitae, with details of professional appointments, awards, honours, other accomplishments (research where appropriate), affiliations, compilations of publications, service to communities and organisations, and other achievements. The nomination must also include a supporting letter from the nominating member outlining the merits and qualifications of the person nominated. Nominees of the winning candidate are asked to ensure that both they and the award winner are present at the award presentation. The selection committee for each year is comprised of the five previous winners. The deadline for nominations from SUGUNA members is June 30, 2011.

Please email your nomination to the Chairman, John McLenaghan, at: mclenaghanjd@yahoo.com Or send to:

John McLenaghan
Chairman, Wolfensohn Award Committee
3/18 Parriwi Road
Mosman NSW 2088
Australia

The Chairman will circulate all nominations to the selection committee.

SUGUNA SCHOLARSHIP FUND

The SUGUNA Scholarship Fund was created to award funds for travel expenses to University of Sydney students or researchers who wish to explore or pursue serious study opportunities in USA or Canada. The University of Sydney selects awardees, who are requested to make their best effort to attend a SUGUNA Annual Conference and, at a minimum, to provide a short written report to SUGUNA on their activities supported by this scholarship. The University of Sydney USA Foundation exists to encourage and promote research and education in USA and Australia, and for this purpose receives donations including allocations for the SUGUNA Scholarship Fund.

NOMINATIONS SOUGHT FOR 2011 JIM WOLFENSOHN AWARD

SUGUNA members and friends living in USA who wish to offer a tax-deductible donation may do so through a gift to the University of Sydney USA Foundation requesting allocation to SUGUNA Scholarship Fund. For legal purposes, a Donation Form is to accompany each check or money order payable to: The University of Sydney USA Foundation, mailed to:

The USA Foundation
P O Box 3906
Ithaca, NY 14852-3906
USA

The form may be obtained by email request to: usaadmin@usyd.edu.au.
The form includes a credit card payment option.

Canadian residents may contribute tax-deductible donations directly to The University of Sydney, with a request to allocate donations towards SUGUNA Scholarship Fund.

SUGUNA commends and exhorts our members and friends to continue donating in support of University of Sydney students’ research in North America. A report on current scholarship awards will be included in the next SUGUNA Newsletter.
STEVE MANDEL’S CONUNDRUM

Steve Mandel, a University of Sydney graduate and former professor of mathematics, presents us with Spring’s conundrum. The answer will appear in the next issue or readers may send the solution directly to Steve at MaryJaneMandel@aol.com – he is happy to hear from readers.

THIS ISSUE’S CONUNDRUM:
In the 2010 Census a Census worker comes to a house to gather data and asks the respondent, inter alia, the number of children residing in the household and their ages. The respondent replies as follows: “There are three children living in this household, the product of their ages is 72 and the sum of their ages is the same as the number on the house which is directly across the street”. The Census worker thinks for a bit and then says that she needs a little bit more information. The respondent replies “OK, my oldest child is named Chris”. The Census worker says thank you and departs, having obtained the needed information. How old are the three children?

LAST ISSUE’S CONUNDRUM:
Fermat’s Last Theorem asserts that $x^n + y^n = z^n$ has no solutions when $x, y$ and $z$ are positive integers and $n$ is a positive integer greater than 2, where $x^n$ denotes “$x$ raised to the power $n$”. It was postulated by the French mathematician Pierre de Fermat in about 1635 but he did not publish a proof. The validity of the theorem remained an open question for more than 350 years, and it was then famously proved in 1995 by the English mathematician Andrew (now Sir Andrew) Wiles.

Time Magazine on 7 March, 1938, reported that Samuel Krieger claimed to have found a counterexample to Fermat’s then still unproved last theorem. Krieger announced that it was

$$1324^n + 731^n = 1961^n$$

where $n$ is a certain positive integer greater than two that Krieger declined to identify.

Can you show that Krieger was mistaken?

Solution: The integer 1324 when multiplied by itself over and over will always end in a 6 or a 4. When the same is done to the integer 731 the last digit will always be a 1. Likewise for 1961. Since no number ending in a 6 or a 4, when added to a number ending in a 1, can produce another number ending in a 1, the equation above offered by Krieger cannot possibly have a solution.

NEW MEMBERS  SUGUNA WELCOMES NEW MEMBERS AND RETURNED FRIENDS

Lucie Barron, MA 1971
Los Angeles, CA
Caroline De Lisle, M. Int. S. 2009
Montreal, QC
Jason Diab, BMedSc, MInternatPhlth, MBBS 2009, Sydney, NSW
Melanie Foxcroft, BA 1947
Madison, WI
Jane Fulton, PhD 1998,
New York, NY
Darrell Furgason, MInternatStud 1992
PhD 2002, Surrey, BC
Frances Haskins, M.Int.S. 2010
Vaucluse, NSW
Sean Jackson, MA 2007
Exeter, NH
Martyn Johnson, BEc 1975
Cary, NC
Robert Klinger, MPrajMgt 2010
Scottsdale, AZ
Felicity Lehane, BA 2002, LLB 2004
New York, NY
Rahul Mainra, MM (ClinEpid) 2009
Saskatoon, SK
Mariana Ng Meyerson,
BEd/Business 1982
New Rochelle, NY
Michael Miranda, MDesSc 2010
Pueblo, CO
Kathleen Reddington, MPACS 2010,
Jersey City, NJ
Ian Rothwell, MBBS 1974
Phoenix, AZ
Louise Simon, BSW 2003,
GradCertPolStud 2009, New York, NY
Peter Sinclair,
BSc 1961, MSc 1966
Ryegate, VT
Christine Verdon, MBBS 2002
Waverton, NSW
Remali Vilathgamuwa, LLM 2010,
New York, NY
Wing C Yeen, MBBS 1998,
Tampa, FL
Ashley Zeldin, MMediaPrac 2010
Calabasas, CA
Steven V Zizzo,
MPH 2004, MBBS 2008,
Ancaster, ON
SUGUNA OFFICERS AND DIRECTORS

OFFICERS – WITH CONTACT DETAILS

PRESIDENT:
Gerry Bassell MBBS ’73 (2011)
6505 East Central, Wichita
KS 67206, USA
T 316 648 7200;
F 707 667 0362
E usydgrad@mac.com

SECRETARY/TREASURER:
Michael Challis
BE Civil ’54 (2012)
4104 Thorneaks Drive, Ann
Arbor, MI 48104-4256, USA
T 734 971 6186
E mdchallis@aol.com

VICE PRESIDENT & PRESIDENT ELECT:
Wanda M Haschek-Hock
BVSc ’73
2638 County Road 600 E,
Mahomet, IL 61853-9788,
T 217 897 1618;
F 217 244 7421
E whaschek@illinois.edu

ASSISTANT OFFICER IN AUSTRALIA:
John McLenaghan, AM
BEng ’59 (2012)
3/18 Parriwi Road, Mosman
NSW 2088 Australia
T +61 2 9960 6138;
F +61 2 9960 6136
E mclenaghanjd@yahoo.com

IMMEDIATE PAST PRESIDENT:
Philip Minter AM BSc ’51
1576 Stapler Drive, Yardley
PA 19067, USA
T 215 321 1662;
F 360 323 1662
E pminter@comcast.net

DIRECTORS

Gillian Beattie
BSc ’61 DSc ’2007 (2012)
Langley, WA USA

Angela Kirgo
BA ’69 (2012)
Los Angeles, CA USA

Christopher Blaxland
BVSc ’64 (2012)
Radnor, PA USA

Charles MacKenzie
BSc ’69 BVSc ’70 PhD ’76,
(2012), Dimondale, MI USA

Julian R Brown
BSc ’57 MSc ’59 (2012),
Kingston, ON Canada

Bette Seamonds Nadler
BSc ’63 (2012)
Swarthmore, PA USA

Ramune M Cobb
BVSc (Hon) ’69 (2012)
Newtown, PA USA

Portia McKenna
BA ’52
Pacific Palisades, CA USA

Ronald Ettinger
BDS ’66 MDS ’70
DDS ’92 (2012),
Iowa City, IA USA

Penelope Pether
BA ’80 LLB ’82 PhD ’97
(2011) Wynnewood,
PA USA

Jennifer Green
BSc ’83 PhD ’87 (2012),
Mesa, AZ USA

Derek Raghavan
MBBS ’74 (2012)
Cleveland, OH, USA

Roderick Holme
BE (Civil) ’67 (2012)
Toronto, ON Canada

Perry Seamonds
BSc ’61 MBBS ’63 (2012)
Milford, CT USA

SUGUNA MEMBERSHIP FORM

Please return a SUGUNA Membership Form to the Secretary. If already registered, please update any changed address or contact information, such as an email address. This allows maintaining an accurate and complete database with current information. Membership includes participation in business decisions of SUGUNA, in person or by proxy. In accordance with the agreement between SUGUNA and the University of Sydney, Membership Dues are not required. Readers are encouraged to offer comments and suggestions and to ask any questions concerning SUGUNA. Please refer to any SUGUNA Officer – contact details are noted above.
THINK
SYDNEY
DO SOMETHING TODAY
THAT WILL BE REMEMBERED
TOMORROW

A decision to include a bequest to the University of Sydney USA Foundation in your will can create a legacy for generations to come and help make a better and brighter future for all. You can establish scholarships, fund research, or find your own preferred way to direct much needed resources to this internationally renowned institution.

To find out how easy it is to include a bequest in your will please contact Wendy Marceau

T +61 2 8627 8492
E wendy.marceau@sydney.edu.au
sydney.edu.au