



Network

Journal of Biomedical Illustration

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The Journal of Biomedical Illustration serves to provide the Australian Institute of Medical and Biological Illustration and the wider community of specialist photography, artistry and image making with a platform for the exchange of knowledge, ideas and information.

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3rd
world congress
of medical and
scientific imaging

25 - 29 August 2005

Cairns Australia



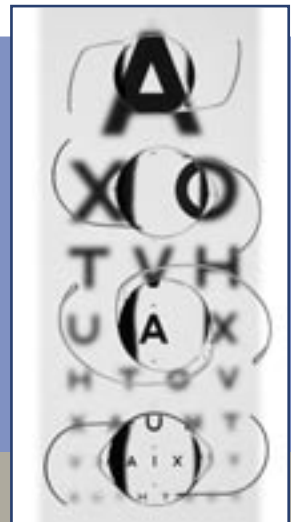
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Explore is the 3rd World Congress of Medical and Scientific Imaging

In keeping with our theme, *'Explore: Discover the Possibilities'*, the 2005 World Congress aims to inform delegates of the latest trends in medical and scientific imaging so that the potential of modern technologies can be fully realised.

Program at a Glance – 3 days of academic papers, a professional exhibition and a unique opportunity to take part in a Great Barrier Reef expedition.

www.discoverthepossibilities.com.au (available July 2004)



THE 2004 AIPP AUSTRALIAN
BIOMEDICAL / SCIENTIFIC
PHOTOGRAPHER OF THE YEAR

Chris Barry

Runner up:
Palmerino De
Sensi



EPP 500

congratulations ...



Welcome to the Post "Imagine" 2004 AIMBI Biennial Conference edition of Network and the first for myself as National President. Please allow me to introduce myself for those who do not know me. I completed my ADA (Applied Photography) at Qld College of Art (Brisbane) in 1990 as a mature age student (previous life was as an automotive spare parts manager). Following my studies I performed Locums at Royal Brisbane Hospital, QIMR and The Wesley Hospital then in mid 1991 I was appointed as the Clinical Photographer at Greenslopes Repatriation Hospital (in 1995 it was privatised to Ramsay Healthcare and now called Greenslopes Private Hospital) and so my position has evolved to what it is now, Multimedia Coordinator. My membership of AIMBI has been since I started at Greenslopes in 1991 and I have served on the Qld branch Executive as National Council (NC) Rep for a number of terms as well as State President and Vice President.

I would like to pass on my gratitude and appreciation to Angela Chappell for her leadership during her pass term as President as well as the NC Reps who held positions in the outgoing executive and those taking on positions in the new council executive.

On behalf of NC I want to thank Qld Conference Organising Committee for their tremendous effort in hosting the "Imagine" Biennial conference at Bribie Island. I hope that delegates who attended were inspired and have been reporting back to their State Branches and work places some of the great presentations offered at the conference and the opportunities for networking. The calibre of the keynote and guest speakers were excellent, especially Prof. John Pearn who also presented an engaging after dinner talk at the President's Dinner about Medical Arts and Medals.

Special congratulations to Susanne Williams from Glenys Grant's Department at the Royal Victoria Eye and Ear Hospital in Melbourne who took out the prize for best conference academic paper titled "The World Through the Eyes of a Bee", this paper was inspirational in showing groundbreaking photographic research using first principles of photographic knowledge to describe and demonstrate the way that the compound eye of the bee works. It would be excellent if we could see more cutting edge research like this being pursued by our members, as this is the aspect that can enthuse and enliven the work we do.

It was pleasing to see the range and high standard of work in the Professional Exhibition and that the newly introduced Digital Showcase exhibition was well supported. Congratulations to the two members Jennifer Potts and Pamela Dawes who were awarded RBIs, as well as Pamela's being awarded the best RBI Folio, congratulations also to Paul De Sensi awarded his Associateship.

Now to the future, firstly I want to enthuse members in regard to the next World Congress "Explore" to be held in Cairns in 25- 29th August 2005 (please refer to the promotional information on opposite page). I encourage you all to do what you can to try and get to this meeting. This will be your once in a lifetime opportunity to attend a world meeting of this nature on home soil with up to 300 International delegates.

Secondly, NC is working to look at what we can do to motivate people to become or rejoin AIMBI as members, and to seek future direction as to what we need to be pursuing to return value to members. I would value feedback from the membership and ex-members as to aspects that they see would help us with this goal. One example I have suggested to NC is to investigate the feasibility of holding a national video conference linkup with each of the state branches. We would stage a short virtual mini seminar/conference where members who have not been to a national conference are given the opportunity to "virtually" meet members in other states. Demonstrating to members and potential members the value we place on our national association and how we can benefit from the networking that can be had from being AIMBI members through utilisation of new communication technologies that many medical professionals already use.

Peter Merry
AIMBI National President



PRESIDENT'S REPORT



The Bungle Bungle Range

Purnululu National Park

Chris Barry

As this is the “E” edition of Network and perhaps a little less formalised, I suggested to our esteemed Editor, Julie Murray, that perhaps a few personal photos may be appropriate for this Issue.

Over the last year I have been travelling around Western Australia teaching Aboriginal Health Workers to use non-mydratic retinal cameras in a programme designed to detect and treat the eye condition associated with diabetes; diabetic retinopathy. This has taken me to some interesting and remote places in Western Australia. Recently I have re-found my love for personal photography and in particular landscape photography. At Easter, I was relatively close to “the Bungles” and arranged for a tour in the park. The following images are the result of that trip along with some information for those wanting to go to this absolutely amazing place.

The Bungle Bungle Range, in Purnululu National Park, is one of the most fascinating geological landmarks in Western Australia. From an aircraft, the Bungle Bungle Range is an imposing sight (figure 1). The orange and black stripes across the beehive-like mounds, encased in a skin of silica and algae, are clearly visible as you approach from the south. As you sweep further over the range, a hidden world of gorges and pools are revealed, with Livingstone palms clinging precariously to walls and crevices in the rocks (figure 2).

Although the Bungle Bungle Range was extensively used by Aboriginal people during the wet season, when plant and animal life was abundant, few Europeans knew of its existence until the mid-1980s. The area has been a national park since 1987. In the Kija Aboriginal language purnululu means sandstone. The name Bungle Bungle comes either from the corruption of an Aboriginal name for the area, or from a misspelling of one of the common Kimberley grasses found there, bundle bundle grass.

The Bungle Bungle Range rises up to 578 metres above sea level. The range stands 200-300 metres above a woodland and grass-cov-

ered plain, with steep cliffs on the western face. Elsewhere, particularly where Piccaninny Creek has formed Piccaninny Gorge, the range is cut by deep gullies and breaks up into complex areas of ridges and domes, with prominent orange and black or grey bands (figures 3-5).

How did this remarkable landscape come about? The distinctive beehive-shaped towers of the Bungle Bungle are made up of sandstones (rocks formed by the consolidation of sand grains) and conglomerates (rocks composed mainly of pebbles and boulders and cemented together by finer material). These sedimentary formations were deposited into the Ord Basin 375 to 350 million years ago, when active faults were altering the landscape.

To the north of what is now the Bungle Bungle Range, uplift occurred along the Osmond Fault to create the Osmond Range, and to the west, along the Halls Creek Fault. Streams and rivers eroded these ancient highlands and at their edges slopes were steep and the energy in the streams and rivers was high, allowing them to carry large boulders and dump them at the foot of the scarp. Such boulder conglomerates can today be seen in the walls of Echidna Chasm (figure 6).

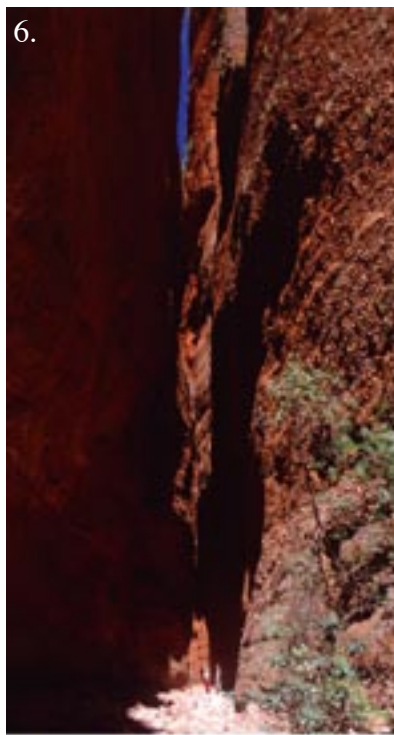
Most of the rocks in the Bungle Bungle Range, however, were formed from sand deposited further from the highlands by rivers flowing across broad plains in open valleys. As more sand accumulated, the older channels consolidated to form sandstone. The distinctive beehive-shaped landforms seen today have been produced by uplift and erosion during the last 20 million years. Contrary to its solid appearance, the sandstone is extremely fragile. The weight of overlying rock holds the sand grains in place, but when this is removed, the sandstones are easily eroded and the rounded tops reflect this lack of internal strength. Water flowing over the surface will exploit any weaknesses or irregularities in the rock, such as cracks or joints, and rapidly erodes the narrow channels that separate the towers.

One of the most obvious features of the sandstones is the alternating orange and black or grey banding. The darker bands are on the more permeable layers of rock (which means water is able to move through them with relative ease). They allow moisture to seep through to the rock surface, promoting a dark algal growth. The less permeable layers in between are covered with a patina of iron and manganese staining, creating the orange bands. These outer coatings (the rock beneath is a whitish colour) help to protect the lower parts of the towers from erosion.

Where is it? The turn-off to the park is 250 km south of Kununurra or 109 km north of Halls Creek in the Kimberley region of Western Australia (figure 7). The park access road is accessible only by four-wheel-drive vehicles.

Facilities: Camping at Walardi or Kurrajong Camp (both sites have toilets and water). Petrol and supplies available from Turkey Creek, which is on the Great Northern Highway.

http://www.calm.wa.gov.au/national_parks/previous_parks_month/purnululu.html



Imagine 2004 AIMBI Biennial Conference

Ever been to a conference where the talks were excellent but the social side was none existent or visa versa? The recent Australian Institute of Biological Illustrations (AIMBI) 16th Biennial conference seamlessly joined both outstanding and relevant scientific presentations with a social programme enjoyed by everyone cementing new friendships and reviving old ones. Held at Bribie Island just north of Brisbane in Queensland Australia, over 40 AIMBI delegates gathered to discuss the latest in imaging technology relevant to scientific, medical and police imagers.

Day 1

Professor Robin Cooke gave the opening Keynote address, a clinical pathologist from the University of Queensland with an interest in medical illustration. After tracing the early methods of recording medical information, Professor Cooke showed many European examples of the lost art of wax modelling of various pathologies. The artist's careful attention to detail and anatomical precision would be difficult to match even using today's technology. The models were carefully created and painted three-dimensional replicas and can still be viewed in museums in both Venice and Florence today.

The opening discussion was presented by John Baird and examined some of the areas where informed consent may not be sufficient for patient photography and documentation. This recurring theme during the Conference looked at the explosion of personal digital cameras in the medical environment and programmes to control "unofficial" patient imagery. Secondly, the equally contentious issues of informed consent and how medical images can be used for purposes other than patient documentation (scientific journal publication and even departmental promotions) and created interesting and spirited discussions. Our next speakers from the Queensland Police Service, Ken Leitch and Deon Williams, outlined the preparation and use of interactive crime scene recording now used to present forensic evidence in court. This combination of traditional photographic techniques and computer technology has been shown to improve the manner in which complex evidence can be presented to a jury and help their understanding of diverse and complicated evidence.

The first evening's entertainment included the opening of the print exhibition including the announcements of the ten category winners ranging from computer graphics to ophthalmology. Two perpetual trophies are presented at each biennial competition: the Ilford trophy for best black and white image (see figure 1) and the Foto Riesel trophy for best digital image (see figure 2). Delegates had a chance to examine carefully the very high standard of print quality and composition applied to many scientific and medical categories. The copious amounts of food and alcohol on offer ensured that everyone enjoyed the occasion and set the social standard for the days to come.

Day two began with an unusual talk: Images of Bio-terrorism by an equally unusual invited speaker, Professor John Pearn. With a chair in paediatrics, previously a Surgeon General and currently a Major General in the Reserve Army, Professor Pearn has the background to knowledgeably describe the current terrorist situation along with supportive images and how these images are used as yet another weapon to gain propaganda from fanatical acts. A diverse and entertaining series of talks followed including: multimedia applications in Twin Laser Surgery and creating posters in PowerPoint (Neil Fainges and Albert Sim). Alex Baker gave an invited talk on intellectual property and its ramifications in our industry. Drew Berry, a scientist and animator, sponsored by AIMBI Victoria, closed the day. Drew stunned us with his three-dimensional animated videos of tumour cells replicating, DNA renditions at cellular level and DNA/RNA reproduction in stunning detail using the latest Hollywood animation techniques.

The evening included the traditional President's Dinner. Angela Chappell (current AIMBI President) handed over the reins of office to the incoming President Peter Merry. During dinner Professor Pearn gave a short talk on the history of medicine as displayed on medals.

Predictably, as the evening progressed, the delegate's energy levels and enjoyment increased helped by free flowing beverages and continued into the early hours.

Heads were almost clear for the beginning of day three. Chris Barry started with a talk on liaising with Australian Aboriginal groups for diabetic retinopathy screening pointing out some of the pitfalls and programme successes. Dr Richard Wingate gave an illuminating talk on the development of the ophthalmoscope, arguably the single most important discovery in ophthalmology. Although the development of the direct ophthalmoscope is usually attributed to von Helmholtz, Richard showed earlier developments by the Englishman Charles Babbage also noted as the father of the computer. Susanne Williams then gave an amazing talk on developing a visual model of bee vision. After many trials, Susanne eventually used large numbers of straws against a diffusing screen with dramatic results and we were transformed into the world of the compound eye through Susanne's photographs. Susanne was awarded "Best Scientific Paper" for her work and I am sure we will hear a lot more from Susanne in the future. The final morning's talk was Richard Wingate on the side effects of fluorescein angiography. Who present can forget Richard's slide interpreting nausea and vomiting, a visual memory best forgotten! The afternoon was spent at Steve Irwin's Australia Zoo, a fascinating insight into crocodiles and other Australian venomous spiders, snakes, dingoes and cuddly koalas.

Day four was our final day. Talks included the insertion of commentaries into PowerPoint and the illustration of madness (Neil Fainges and John Baird). Heather Mathews gave an interesting look at Photoshop including several "how to" demonstrations of the steps involved in making novel artistic effects. Finally, Julie Murray proudly announced that the next World Congress of Medical and Scientific Illustration will be held in Cairns, northern Queensland in August 2005. This will be a wonderful site for any Conference, close to both the Great Barrier Reef and the Daintree tropical rain forest and many other attractions yet equally accessible from both America and Europe. We look forward to hearing more about this exciting meeting and I am sure that many JAMM readers will be interested in finding out more about attending a Conference in such a superb location.

Unfortunately, this was the end of our Biennial meeting. Thanks must go to a small group of dedicated organisers, Vicki Adams, Peter Merry, Des Lund, Heather Matthews and Noeleen Warnes. All present were aware of their hard work, willingness to please, efficiency and commitment to making the conference both academic and fun. This ensured we all had a great time and left looking forward to our next meeting in two years time.

So why are some meetings so enjoyable, what is the recipe? Firstly, the venue was next to a golf course with free access to delegates. Secondly, the location was far from other distractions so that all present needed to socialise as a group. The organisers chose guest speakers with care and the academic programme was both stimulating and entertaining. The hard work and dedication of the organising committee. The sponsors who gave generously to the Conference, particularly Canon Australia. Finally, the largesse of a free bar throughout the meeting may have had something to do with the general bonhomie, enjoyment and overall success of the meeting!

Chris Barry
Lions Eye Institute
Centre for Ophthalmology and Visual Science
The University of Western Australia
Perth
Western Australia



Professional Exhibition - Winners List



General Illustrative - Art / Computer Graphic

Winner:	Bill Reid	Untitled
Runner Up:	Bill Reid	Brachial Plexus

General Illustrative Image - Photograph:

Winner:	Edward Jozefiak	Cardiac Research
Runner Up:	Angela Chappell	Archnid Capsular Fibrosis

Computer Graphic Image - Photograph / Manipulation

Winner:	Heather Matthews	You Are My Sweetie Pie
Runner Up:	Peter Merry	Operating Theatre Promotional Display Poster

Ophthalmic Photograph

Winner:	Chris Barry	Diabetic Retinopathy (Montage)
Runner Up:	Angela Chappell	Wild Horse (Corneal Oedema)

Scientific Image

Winner:	Michael Bolles	Frog Embryo
Runner Up:	Pamela Dawes	Candida Tropicalis

Poster Design

Winner:	Bill Reid	Role of the Oncology Nurse Co-ordinator
Runner Up:	Greer Sansom	Recipe for Promoting Women's Health

Video / Cine / Multimedia

Winner:	Rob Grant	Dreams
Runner Up:	Joanna Griggs	Best Start

Fine Art

Winner:	Robin Williams	Big Drift
Runner Up:	David Summerhayes	Wind Farm - Myponga Beach

Digital Showcase

Winner:	Albert Sim	Monastery
Runner-Up:	Albert Sim	

Web Design

Winner:	Adam Leadoux
Runner Up:	Heather Matthews

Ilford - Best Black & White Print

Winner:	Paul De Sensi	Household Pest
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Foto Riesel - Best Digital Photograph

Winner:	Chris Barry	Intraocular Lenses
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