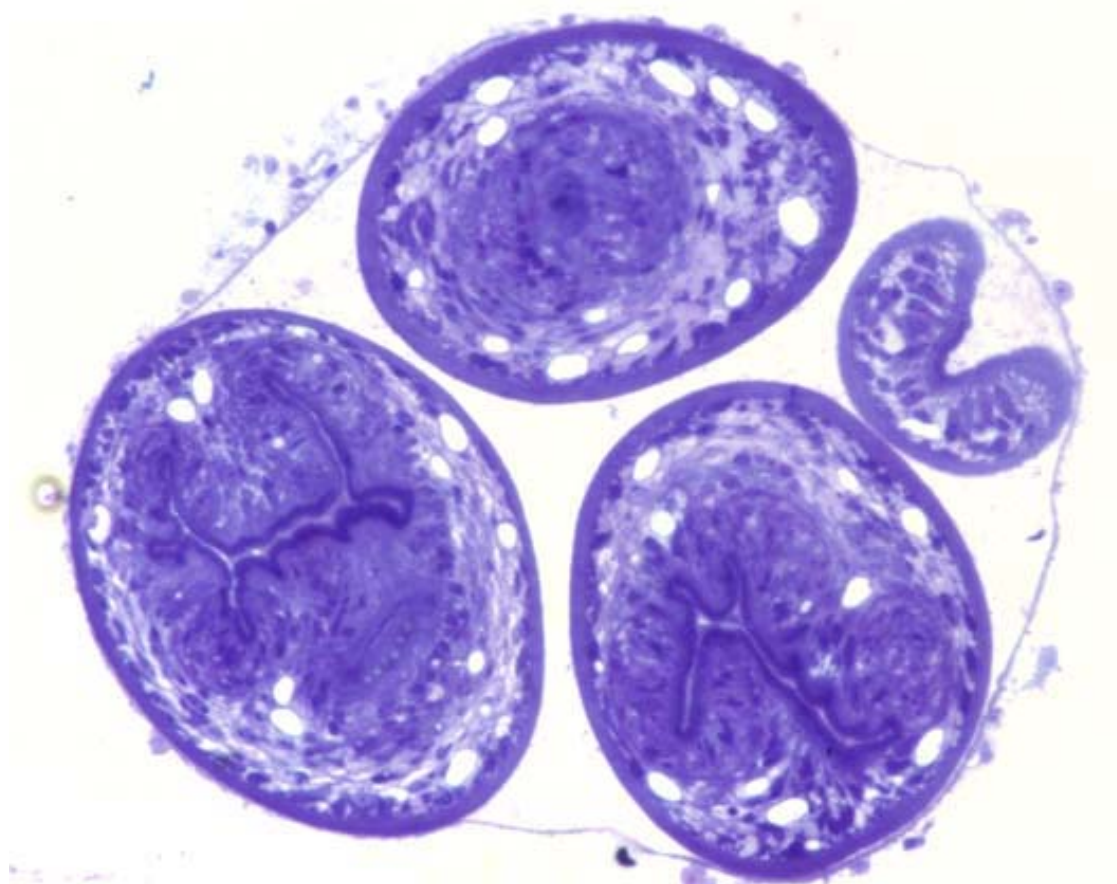


**the  
australian  
society for  
parasitology  
inc.**

ABN 65 979 686 445

**NEWSLETTER**

<http://www.parasite.org.au/>



**volume 15 issue 2**

**Print Post Approved PP 644113/00027**

**August 2004**



australian society for parasitology inc.

NEWSLETTER page 1

# From the President's Desk

This is my last “From the President’s Desk” report as I will be handing over presidential responsibility for the ASP to Simon Reid at Fremantle. I would like to take this opportunity to say thank you to the Executive Secretary Wendy Cooper and Treasurer Shane Middleton who have both given me excellent support during my time as President, particularly Wendy for keeping me ‘on track’ at our regular meetings and reminding me of jobs whenever I had one of my “senior moments” and lost the plot!

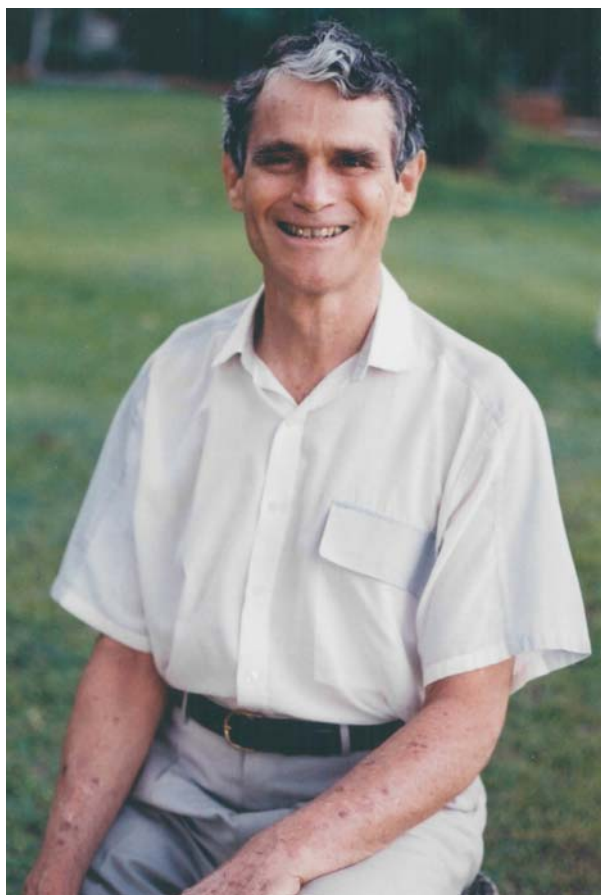
The brightest piece of news since the last newsletter was the announcement in the Queen’s Birthday Honours that Dr Bruce Copeman received an Order of Australia for his services to veterinary science, teaching

and parasitology. I wrote to Bruce on behalf of the ASP to convey our warmest congratulations. I was also delighted to learn that Bruce will be attending the Fremantle meeting, so anyone attending the meeting will have the opportunity to congratulate Bruce personally.

I was saddened to learn of the recent death of Ken Bremner, formerly of CSIRO and a Fellow of the Society. Eulogies given at the funeral by John Sprent and Dave Mahoney are included in this edition of the Newsletter. On behalf of the ASP Council and membership I send our condolences to Ken’s family.

I have little to report on the ARC Parasitology Network. I received an email from Nick Smith recently saying that the latest information he had from the ARC, via the UTS Research Office, was that we would hear nothing for a few more months.

I have been receiving regular communications from Bradley Smith of FASTS the ones relevant to the membership have been forwarded to State Reps for further distribution and some will be published in this newsletter. In view of the preoccupation of parliamentarians with the imminent election, “Science meets Parliament” (SmP) has been postponed until early next year. The exact



*Dr Douglas Bruce Copeman AO*  
Officer of the Order of Australia, for service to veterinary science, particularly in the area of parasitology as a leading researcher, educator and administrator.



dates will not be announced until the election dates are known, but it is anticipated SmP will occur until the first or second month of March 2005.

The WA team has been working hard arranging the Annual Scientific Meeting in Fremantle and seeking sponsors. There is an interesting range of local and international speakers and an impressive list of sponsors listed on the website. Thank

you from the ASP Council and membership to all the organisations that have agreed to sponsor our meeting this year. The last Fremantle meeting was a great success scientifically and socially. It is an excellent venue and I look forward to catching up with all of you who will be attending in September.

**David Jenkins**  
**President**

## **Notice of Proposed Amendment to the Constitution of the Australian Society for Parasitology Inc.**

In accordance with Article IX of the Constitution of the Australian Society of Parasitology Inc, notice is hereby given of a proposal to amend Article XIV of the Constitution at the Annual General meeting of the Society in Fremantle. This article reads currently:

### ARTICLE XIV. J.D. SMYTH TRAVEL AWARD

Financial assistance is to be provided to full-time postgraduate student members of at least 6 months standing who are enrolled at a recognised Australian University for the purpose of travelling overseas to gain knowledge on techniques that may not be available in Australia, to form liaisons that may benefit their careers in the longer term and to promote the cause of parasitology in Australia. The fellowship is not provided for the primary purpose of attending a conference. The maximum value of the fellowship is to be determined annually by the Council. Recipients are to be chosen by a selection committee appointed by Council.

The following amendment is proposed: Insert after "**The fellowship is not provided for the primary purpose of attending a conference**", the words: "**, but conference attendance may form part of the travel programme.**"

In recent years, the JD Smyth Travel Award has rarely been awarded. The proposed changes should increase opportunities for students to take advantage of this award and thus continue to preserve the name of J.D. Smyth, the inaugural President of the ASP and Foundation Editor of the IJP.

**Proposed: Andrew Thompson**  
**Seconded: Russell Hobbs.**



# Kenneth Charles Bremner



*ASP members will be saddened to learn that Ken Bremner, Past President and Fellow of the Australian Society for Parasitology, passed away in June 2004 after a period of illness. Dave Mahoney and John Sprent spoke of Ken's life and achievements at his funeral and have kindly given transcripts of their eulogies to the newsletter.*

I worked with Ken for over 30 years in CSIRO and I wish to say something about his life as a colleague. In the early 1950s, he obtained a job as a Technical Assistant at the CSIRO Veterinary Parasitology Laboratory at Yeerongpilly. He always had a very

strong ambition to be up there with the very best in his field. In scientific research it is all about doing something that nobody else has done and making useful advances in knowledge that stand the test of time. Ken did all of that. He went about it first by availing himself of the opportunity to undertake further studies at the University of Queensland and by 1953 had obtained his Bachelor of Science.

The Laboratory was recognised internationally for the study of parasites in cattle and Ken was associated with people whose names were synonymous with leadership in this field. Names like Roberts, Riek and Durie. He was inspired by their work and slipped easily into the role of a research



parasitologist. Further success followed - a Masters Degree in 1956 and a PhD in 1963. He was awarded a post-doctoral fellowship to study at Cambridge and spent the next year there under the guidance of another famous scientist, Lord Soulsby. He resumed his work at CSIRO on his return to Australia.

Persons like Ken contributed in no small way to the strong position the cattle industry enjoys today through their dedication to practical aims in the fight against parasitic diseases. Ken's work was always aimed directly at applications and practical solutions. This theme can be traced from his earliest work on the identification and reproduction of parasites to what was his major work - the chemistry of parasite damage in animals which affects the profitability and viability of animal-based enterprises. This work was and remains one of the most comprehensive investigations into the biochemistry of parasitic disease. It cemented Ken's international reputation as a scientist, and in 1970, he spent a year at Glasgow University working with a renowned group of parasitologists. Now, in the late 1960s, the old laboratory at Yeerongpilly was closed and moved to a new one at Indooroopilly, the Long Pocket Laboratories. After he returned from Glasgow he took charge of the Program on Internal Parasites of Cattle and during the 1970's, his focus was on studying the applications of the discoveries that had been made in previous years and how to integrate that knowledge into a system of recommendations for the control of internal parasites in cattle. This important job was completed late in the same decade. For Ken's career, the timing was impeccable, because as happens in all organizations, the old brigade was passing into history. The Organization itself was changing, searching for new personnel and new ideas. Ken's work had earned him a series of senior promotions over the years and he was the logical choice for Assistant Chief of the Division, a job which carried with it the position of Director of the Long Pocket

Laboratories which was at the time the Headquarters of the Division as well. It contained about 60 scientists and their support staff and Ken's prime responsibility was to look after those people, supervise their work and oversee the operation of the laboratory. It was not an easy job and as you might imagine, he did not have much time for active hands-on research work after that. He did a brilliant job in this role as administrator and mentor to young scientists until he retired eight years later.

Ken's scientific knowledge and influence extended well beyond the confines of his workplace. You have heard of his involvement with the Australian Society for Parasitology and its scientific Journal, his appointment as a Fellow of the Society and his role in the organization of the 6<sup>th</sup> International Congress of Parasitology in Brisbane in 1986. Not so well known was his interest and activity in the welfare of his fellow workers and the continual fight for better working conditions. To this end he was a longstanding active member of the CSIRO Professional Officers Association and at one time was President of the State Branch and represented Queensland on its federal body.

Ken will be remembered by those who knew and worked with him as a sympathetic and caring man who loved people and always listened to what they were saying. This ability to empathise with others together with an abiding sense of humour made him a popular and successful leader, and I might add, a truly delightful companion. He had a wide circle of friends, particularly in the golfing and fishing worlds with whom he spent many pleasant hours particularly after his retirement.

Above all, Ken was a very staunch family man and is survived by his wife Ruth, daughters Clare and Helen, and son Richard and four grandchildren to whom he was most devoted. To all the family we extend our deepest sympathy in their time of grief.

**Dave Mahoney**





---

I remember a hymn from my schooldays which went "Time, like an ever-rolling stream, bears all its sons away. They fly forgotten, as a dream dies at the opening day". But now, especially when thinking about Ken, I realize that this is wrong. He will not be forgotten, he will live again in each one of us. People like Ken live on through those that loved and admired them. They live on through the way they lived, through the way they laughed, the way they loved; through what they said, their work, their thoughts, and through their writing. So each one of us here will remember Ken, and keep his memory alive, each according to the circumstances in which they knew him.

As a newcomer on the Brisbane scene, my first recollection of Ken was in 1952. I remember a slender, athletic young man working at the CSIRO Veterinary Parasitology Laboratory. Later, as a recent graduate in Zoology, he was introduced to me by the Professor of Zoology, Bill Stephenson. I remember Ken as he studied for his Master's Qualifying examination, I remember marking his exam paper and congratulating him on his success. Then came his M.Sc. thesis and the three published papers which earned him the award of the degree. I remember how much I admired Ken for undertaking all this study in addition to his fulltime job and what's more for having a paper published in *Nature* at the age of 25.

Up to now it had been a formal academic relationship between examiner and candidate, but on the 28th of August, 1956 I received a letter from the Registrar to the effect that the Professorial Board had appointed me as supervisor for my first PhD student, who turned out to be Kenneth Charles Bremner. From this time on, I came to know Ken and all the features which made him such an interesting, amiable and lovable, but at the same time formidable, person. I must say that we had our problems. Ken had a strong streak of independence in him, but it all worked out satisfactorily. I had the distinct impression that I

learned more from him than he did from me. The title of his thesis was "Studies on copper in the host-helminth relationship".

It is I think important to mention that Ken was "brought up", in the parasitological sense, in a work environment that was perhaps unique at that time. Brisbane was a veritable Mecca of parasitology with very important work going on at the QIMR, the Animal Research Institute, CSIRO, and the University of Queensland. Working in this environment may have been a contributing factor in Ken's acquiring a profound knowledge of parasitologists throughout the world.

In 1960, Ken went off to take up a CSIRO Divisional Studentship at the School of Veterinary Medicine in Cambridge and I saw little of him for some time. It should be recalled that in the fifties the CSIRO, Animal-Health, and the vet school were all situated in the one compound at Yeerongpilly. We saw a lot of each other in those days. Then the vet school moved to St. Lucia in 1960 and CSIRO to Long Pocket in 1968.

It was possibly the establishment of the Australian Society for Parasitology in 1964 which brought us together again. Ken joined in 1967 and made a substantial contribution in various ways, becoming President in 1976. He was elected a Fellow of the Society in 1984. Ken's stature as a parasitologist of international acclaim gradually increased over the 40 years he spent in CSIRO. This part of his career will be, I understand, remembered for us here today by Dave Mahoney. My association with Ken was renewed from 1979 onward. In this year he was appointed as a member of the Editorial Advisory Council of the International Journal for Parasitology. He showed such aptitude for the editorial work of the journal that he was invited to accept the position of Deputy Editor in 1981. He also took on the editing of Research Notes and continued to edit them until 1993 when he resigned from the Deputy Editorship, an outstanding contribution indeed. It must be clearly stated and

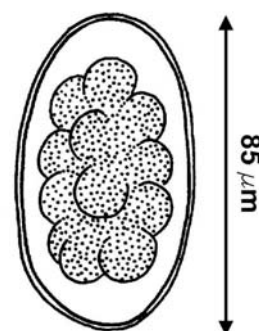
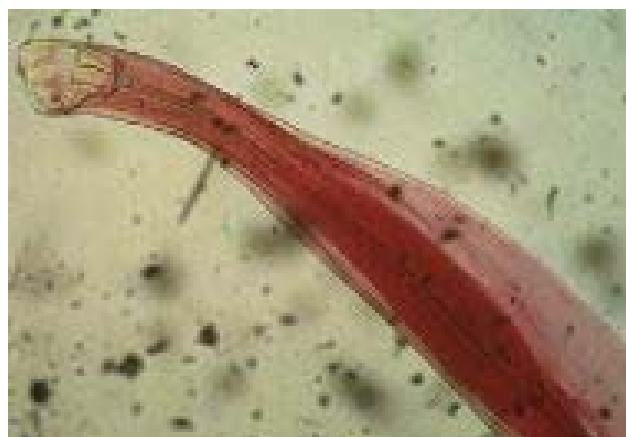
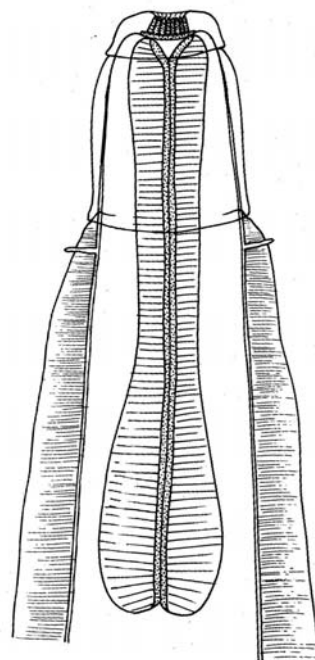
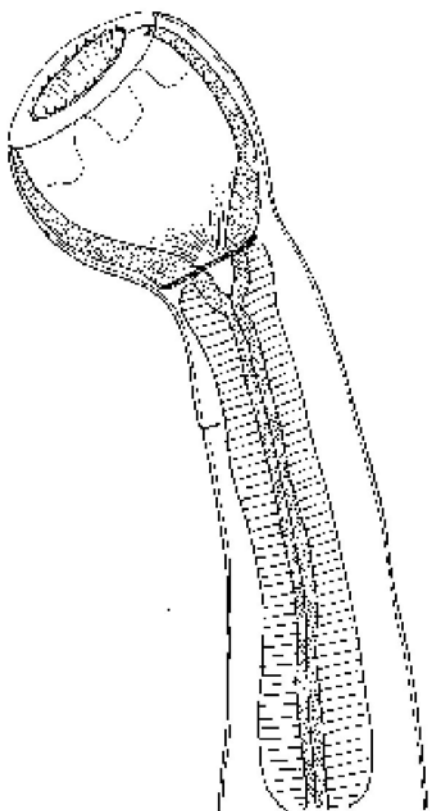


recognized that the Australian Society for Parasitology owes Ken Bremner very substantial acknowledgement for the enormous amount of work and thought which he put into the two roles he played as Deputy Editor of the UP and Executive Secretary of the Organising Committee for the Sixth International Congress of Parasitology.

These were the circumstances in which I worked with Ken, not close because we were never in the same building, but he was

a tower of strength over many years. I will always remember how, when things got difficult at St. Lucia, I would jump in the car and pop over to Long Pocket. His cheerful grin, a few jokes, and a bit of a talk seemed to put things right. This is how he will "live again" for me. I have lost a very dear friend and I want especially to express my deep sympathy to Ruth and all Ken's family. Thank you.

**John Sprent**





## Students!

Are you planning to attend an ASP Conference in the near future? You may qualify for travel support from the ASP. Please be aware that you need to have been a member of the ASP for at least **6 months** before the conference to qualify for support. Further information can be obtained from the ASP Executive Secretary.

Want to become a Student member of the ASP? Please fill out the form near the end of this newsletter or make a copy of the application form in the latest issue of the *International Journal for Parasitology*.

## Prizes for Best Student Posters and Seminars

The ASP offers generous awards for excellent oral and poster presentations at the ASP annual conference. In addition to cash prizes, the society may offer our best presenting students the opportunity to present their work at an overseas parasitology conference, such as the Malaysian Conference.



## Closing Dates for Nominations for ASP Awards

**Bancroft-Mackerras Award - December 31<sup>st</sup> 2004 (for award in 2004).**

**Invited Lectureships Travel Grants - December 31<sup>st</sup> 2004.**

**JFA Sprent Award – next award 2005; announcements in ASP Newsletter in mid-late 2004 .**

**Student International Travel Awards - December 31<sup>st</sup> 2004.**

**ASP Fellowships - before next mid term Council meeting (April/ May 2005).**





# Freo04 ASP Conference



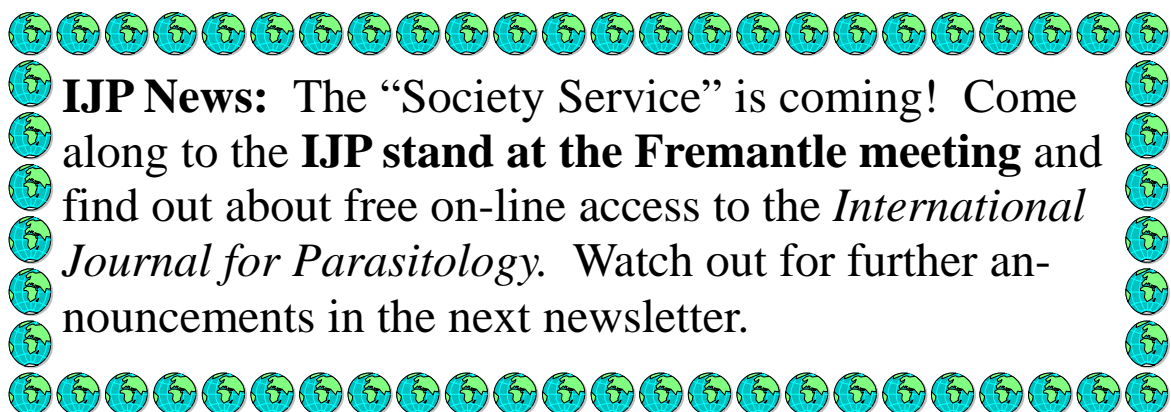
The Annual Scientific Meeting  
of the  
Australian Society for Parasitology Inc.

26th to 30th September

Have you registered for  
Freo04?  
For all late-breaking news  
and registration details,  
log on to:

[www.parasite.org.au/  
freo04/](http://www.parasite.org.au/freo04/)



**IJP News:** The “Society Service” is coming! Come along to the **IJP stand at the Fremantle meeting** and find out about free on-line access to the *International Journal for Parasitology*. Watch out for further announcements in the next newsletter.



# SA STATE NEWS

The local SA 'chapters' of the Australian Society for Microbiology (ASM) and the ASP met at the end of July for a joint parasitology meeting entitled 'An Evening of Parasites from Parasitologists!' co-organised by Drs Andrew Butcher (State Rep. for ASM and working at the Queen Elizabeth Hospital-Institute of Medical & Veterinary Science Laboratories) and Ian Whittington (State Rep. for ASP and working at the SA Museum and University of Adelaide). Speakers covered parasites of fish, predation of pathogens in water and parasites of medical importance. Ian gave a brief overview of the life-cycle of Monogenea; PhD student Allan Mooney (Marine Parasitology Lab., Uni of Adelaide) presented life-cycle data about eggs of a gill-parasitic monogenean infecting wild and farmed kingfish (*Seriola lalandi*) in SA; Honours student Kylie Harvey (Australian Water Quality Centre [AWQC]) contributed information from her on-going study about what micro-organisms eat *Cryptosporidium* oocysts in reservoirs; Dr Ross Andrews (School of Pharmacy & Medical Sciences, Uni of South Australia) spoke about human pathogens of the Greater Mekong Region, Thailand; Ann Weaver (IMVS – Infectious Diseases Lab.) presented an entertaining account of a local case of anisakiasis including an audio-visual extravaganza of Christmas carols and video of fish processing plus squirming worm found by endoscopy. Andrew Butcher chaired the evening and ASM kindly provided refreshments. The attendance of 45 to 50 people (folk from AWQC, IMVS, Museum, QE Hospital, SARDI and 2 of 3 SA universities) in an evening during a spell of cool, damp weather demonstrates that parasitology is doing well in Adelaide.

## **Queen Elizabeth Hospital-Institute of Medical & Veterinary Science Laboratories, Adelaide**

Migrant health continues to keep the diag-

nostic laboratory busy (Dr Andrew Butcher & Professor David Grove). There is a continual stream of African refugees for migrant health screens. A number of *Schistosoma* infections are being detected, a pleasant change from our normal workload of 'routine Australian parasitic infections'. There are always some unusual, interesting cases. Recently, ultrasound results from a testicular lesion were referred to us for our opinion. On several different occasions, a "worm-like" structure was observed moving in the lesion. Filarial disease was the most likely diagnosis, but unfortunately serology and examination of the excised lesion failed to provide a diagnosis. No worms or microfilariae were detected in any examination and the ultrasound findings remain a mystery. Thanks to Wayne Melrose (James Cook University) and Rogan Lee (Parasitology, Westmead Hospital) for their expert opinions and assistance with this case. We shall continue to monitor the patient and look for other serological tests that may provide an answer.

Andrew Butcher reminds all that the national scientific meeting of the ASM is being held in Sydney (26<sup>th</sup> Sept to 1<sup>st</sup> October, 2004, inconveniently clashing with the annual ASP meeting in Freemantle!) and will feature a medical parasitology workshop and a number of parasitology and tropical medicine sessions throughout the conference. Anyone requiring further information, please visit the ASM website at: [www.theasm.com.au](http://www.theasm.com.au)

## **SA Museum/University of Adelaide**

The Marine Parasitology Group at The University of Adelaide is braving another cold and wet Adelaide winter. In an attempt to stay warm Ian Whittington and Leslie Chisholm's (University of Adelaide [UA]) time has been spent indoors describing new monogenean species from elasmobranchs collected from Borneo. This study is part of a large collaborative survey (run by Profes-



---

sor Janine Caira; University of Connecticut, USA) funded by the United States National Science Foundation's (NSF) Biotic Surveys and Inventories Program to identify and chart the diversity of sharks and rays of Malaysian Borneo and their metazoan parasites. Ian has also been completing some papers on monogenean glues with Dr Bronwen Cribb (The University of Queensland).

The five Marine Parasitology PhD students (the famous five) have been bitten by an assortment of travel bugs. Rissa Williams and Allan Mooney are preparing to jet off to Japan (with supervisor Ingo Ernst) for field work on Japanese Yellowtail fish farms at Saeki, Kyushu, Japan. Kate Hutson is immersed in parasite samples unless lured away to do the odd spot of fishing. Kate and Kingfish & Yellowtail Project Research Associate Clinton Chambers attended the Disease Detection & Management Workshop run by Mark Sheppard at Arno Bay, SA. David Schmarr, aka Schmackerel, is complaining about the cold weather having just returned from the Third International Symposium on Fish Otolith Research in Townsville. Vanessa Glennon has been out catching fiddler rays along with a nasty chill! While she is waiting for parasite numbers to increase, she is busily writing up her literature review and papers from her Honours research. All five students, housed in the same small office, have done an outstanding job keeping both their cultures of fish parasites and 'winter wogs' alive and well! New Honours student Julia Lackenby joined the Kingfish Group in July to study aspects of the biology of *Benedenia seriola*, especially fecundity, supervised by Ingo and Ian.

Congratulations to Clinton and his partner Jane, on the arrival of Adelynn Elory Chambers who was born June 12<sup>th</sup> 2004. Not to be outdone, on the same day but half a world away, Ingo and his partner Raelene were married in Prague. Congratulations Ingo and Raelene!

## SARDI

Ian Carmichael entertained Brown Besier, Malcolm Knox and John Steele in SA's sunny southeast in July. Discussions took place either in the car or in the bar and examination of experimental properties occurred mostly through the car window on a very bleak day. The SARDI group has begun field collections for the prime lamb study and Ian has been searching for suitable candidates to fill a couple of temporary positions relating to the project. The group is extremely excited with the appointment of Dr Di Barton to the project. Di will be reviewing the literature and assessing the unpublished data collected both in SA and elsewhere to identify the management strategies used to control internal parasites in prime lamb production systems in southern Australia and the tools and processes that influence them.

Micko (O'Callaghan) has been examining the potential for geographically relevant ruminant nematode parasites to infect the European hare with Phil Stott from the University of Adelaide. Phil is trying to determine if any of these parasites has a detrimental effect contributing to the decline of the animal in Europe. A number of nematode species develop without persisting, but *Trichostrongylus colubriformis* appears to be quite at home in this host. Peter Phillips (Gribbles Veterinary Pathology) is conducting the pathology examinations that have been complicated by the presence of large numbers of *Eimeria* spp. in the young captive-reared hares. Phil is presenting preliminary results at a conference in Portugal.

**Compiled by Ian Whittington**



# VIC STATE NEWS

## University of Melbourne Veterinary Science, Werribee

In early July, The University of Melbourne recognized the brilliance of Ian Beveridge by promoting him to Professor. Congratulations Ian! His PhD student and current ASP treasurer, Shane Middleton, has now promised to treat him with the utmost respect, even when on field trips together. Everyone in Parasitology expects Shane to address him as nothing other than Prof., although Ian, in his usual no-fuss manner, would rather play down his elevation to a position of relative importance. Marshall Lightowlers traveled to Sardinia, Italy (Dipartimento di Biologia Animale, Università degli Studi di Sassari) in early June where he met with Antonio Varcasia & Giovanni Garippa who are working on control of Hydatid disease on the island. Following this he spoke at the Italian Congress of Parasitology held in Vietri (near Naples) 7-11 June. He also visited the Marine Biological Laboratory in Woods Hole in the US during July to lecture in the annual student course Biology of Parasitism.

Craig Kyngdon traveled to Lima, Peru where he undertook investigations into *in vitro* killing of *Taenia solium* oncospheres. The work was performed (Craig is glad to say successfully!) at the Universidad Peruana Cayetano Heredia with Manuela Verastegui, where Craig also gave a talk to members of the Cysticercosis Working Group in Peru. He also taught the oncosphere killing technique to members of Manuela's lab. This was a follow-on from work performed in Mexico City last year. Meanwhile, Sonja Gauci has taken a short break from her PhD to travel to Malta, Yugoslavia, Slovakia and the Czech Republic, where (along with her Slovak-Australian dance troupe) she will be performing in front of various audiences in Yugoslavia and the Czech Republic.

## La Trobe University Parasite Control Lab

Apparently I (Mark Sandeman) have missed a couple of issues and thus little is known of the Parasite Control Lab at La Trobe amongst the newer members of the ASP. As a result this bulletin will cover some past history as well as the current happenings. After many years the Nufarm project has more or less finished with the company now looking to sell the aminopeptidase inhibitor technology to a third party. Hopefully this will come off and all concerned will make a lot of money but in the meantime parasites wait for no man and also don't live by bread alone. Jackie Burgess actually carried out the last part of the Nufarm work for her honours and showed some very interesting effects of hydrophobic versions of our favourite aminopeptidase inhibitor. In the absence of Nufarm we have cast around and thrown our lot in with the sheep CRC for the present. The nematode diagnostics group within the CRC, which could be called Brown's Cows\* were it not for the fact that we work on sheep, are chasing the elusive rapid, cheap, on-farm diagnostic via a variety of research pathways. A couple of those pathways are following up on Khosse Mitri's work on faecal antigens at La Trobe. Peyman Mehrpouian is heading up the project and is currently making monoclonals to some interesting *Haemonchus* antigens while a CRC funded PhD student Steve Cotton has joined the group to study *Trichostrongylus* faecal antigens in more detail. Steve and Kate Richards, who has just started an honours year, are also investigating the ability of dogs to sniff out worm infections in sheep. This rather interesting idea arose from one of those 'what if' dis-

\* An obscure and poorly contrived reference to the project leader, Dr B. Besier.



cussions between Mark Sandeman and James Rowe at a CRC meeting last year. However, more on that on Steve's poster in Fremantle. Mark is also going to do some research but since this is an extremely radical and upsetting move to those actually working in the lab he has decided to go to Canada to work with Terry Spithill for a few months next year. Terry who hasn't seen Mark for some time, has actually invited him on the proviso that a suitable number of bottles of Australian wine are also forth coming. Mark is looking forward to the work and especially the writing since there is apparently little else to do in Montreal in January. At least it will be a chance to publish some of the reams that have accumulated over the last few years of writers block, a general term for teaching and administration, and play with Terry's expensive toys including a Mass Spec. which can apparently recognise and identify a protein in millions from only the barest smell. Or is that the dog!!!!

#### **University of Melbourne Centre for Animal Biotechnology**

In recent months, the post-graduate student ranks at CAB have swelled to eight with the arrival of Nick Robinson and Caroline Skene. Nick is working with Els Meeusen and Ken Snibson on the localized immune responses of the sheep abomasum to *Haemonchus contortus* and weekends find him scouring Bunnings for tubes and piping for the cannula system that he's developing. Nick hopes to follow *Haemonchus* infection over time in individual sheep and is perfecting surgical techniques and his cannula to allow for repeat sampling. Caroline is joining Phil Sutton to investigate protective immune responses in *Helicobacter* infections. I suppose this makes her a bacteriologist rather than a parasitologist, but it's nice to have her here all the same!

At the end of the tunnel where the light is switched on, Stuart Barber has had his

PhD thesis passed, so that's congratulations from us, and 'Dr Stu' to you! At the interim points and still poking around in the shadows, are Jill Pleasance, who has become the resident real-time PCR expert as she dissects immune responses of Indonesian Thin Tail sheep to temperate and tropical species of liver fluke; Nick Kennedy, who has finished his final sheep trial which looked at ruminant immunity to DNA vaccines and who is writing his final thesis chapters while preparing to attend the 2004 DNA Vaccines conference in Monaco in November; and Rebecca Smith, who dropped her candle and is looking for the matches ... (ie. still groping around in the dark). In our satellite lab at Monash University, Simone Beckham is making great progress with her characterization of a cathepsin B from *Fasciola hepatica* and is currently investigating its function in newly-excysted juvenile fluke. Her PhD is a hot area of research and she and her supervisor, Rob Pike, have recently been collaborating with Jim McKerrow, a protease expert from San Francisco and a speaker at our annual conference this year, to perform some analyses on her molecule that are beyond the scope of the lab in Melbourne. Her results are making a really nice story about the role of cathepsin B in fluke infections.

Both our director, Els Meeusen, and Jean-Pierre Scheerlinck are currently attending the 7th International Veterinary Immunology Symposium in beautiful Quebec City in Canada, where Els will be speaking on the cells and molecules involved with the rejection of gastrointestinal nematode parasites and Jean-Pierre about the discovery and applications of veterinary cytokines in the diagnosis and therapy of animal diseases. After the meeting, they hope to travel south to visit Terry Spithill at McGill University in Montreal and to meet other members of the virtual centre for Host-Parasite Interactions, which comprises labs from Université Laval, Université de Montréal-St Hyacinthe, In-





stitut Armand Frappier and the Laboratoire de Santé Publique du Quebec. We hope they enjoy the Canadian summer.

In conclusion, I'd like to share with you an observation one of us made recently in our local shopping centre. In the window of the veterinary surgery was a model of a hook-worm (helpfully labelled as such underneath, as well as 'not to scale') with its body made out of shiny air-conditioning duct, a paper picnic plate for a face and sav-

age-looking teeth made from pipe-cleaners, alongside some posters about worming schedules for cats and dogs. I guess it illustrated the point well, not just to this parasitologist, but the general public, that parasites are everywhere, and there are all sorts of ways to make people sit up and notice them.

**Compiled by Charles Gauci**

# Northern Territory News

## **Berrimah Veterinary Laboratories**

Earlier this year Lois Small travelled to Dili, East Timor to conduct a training program for animal health officers. The program was to initiate training of East Timorese health officers in the field of veterinary parasitology and laboratory techniques. The training was held in conjunction with vets from the North Australian Quarantine Strategy (NAQS), and was supported by the AQIS (Australian Quarantine & Inspection Service) East Timor Quarantine Support Program. Dick Copland from James Cook University was also in Dili and was able to offer much useful advice.

In June, Sara Brant, Scott Snyder and Sam Loker travelled from University of New Mexico, Albuquerque, New Mexico to Darwin to catch freshwater crocodiles. Why would parasitologists travel all the way from New Mexico, USA, to catch crocodiles in the isolated reaches of the Victoria River in the Northern Territory? To find *Griphobilharzia* of course. *Griphobilharzia* is a freshwater crocodile schistosome. The group was interested in obtaining some of these worms for molecular and morphological analyses. Although it took 6 months of planning, numerous emails, approval of a variety of permits, assistance from local crocodile trap-

pers, and prescribed viewing of Crocodile Dundee, the team were successful in finding *Griphobilharzia* and survived to do further research.

**Compiled by Shelley Walton**



# WA STATE NEWS

## Murdoch University

Andy Thompson completed his OSP in Canada, with Merle Olson and colleagues at the University of Calgary. It all proved very successful with respect to research on characterising *Echinococcus* in cervids, and studying the molecular epidemiology of *Cryptosporidium* and *Giardia* in wildlife. While Andy saw many species of Canadian wildlife one important animal eluded all his and Merle's efforts to locate it – the wily pika. This animal was the target of Russ Hobbs's 1970s parasitological research in Canada and there is now concern that he may have been responsible for its demise!

Andy has just returned from the EMOP and MEEGID meetings in Valencia which attracted over 1,700 delegates, and where he helped to organise symposia on 'Parasites, Bioterrorism and Biosecurity' and '*Giardia* and *Cryptosporidium*', and presented two invited papers. He also took the opportunity to visit GSK's drug screening facility at Tres Cantos near Madrid. Natalie Giles and Ryan Jefferies also participated at the EMOP and MEEGID meetings and will continue their overseas travels for the next 2-3 weeks. While Natalie will stay in Europe, Ryan will be visiting New York on his way home.

Una Ryan also attended the EMOP meeting and presented data from her project with Brown Besier and contributed to the symposium on *Giardia* and *Cryptosporidium*.

Rebecca Traub recently visited our collaborators at the Faculty of Tropical Medicine, Mahidol University in Bangkok for 4 weeks to initiate the fieldwork for the ARC-Bayer Animal Health Linkage project (Epidemiology of canine parasitic zoonoses in different community settings in Thailand). While in Bangkok, Rebecca also had the opportunity to catch up with our other collaborators Dr Mathirut Mungthin from the Phramongkutklao College of Medi-

cine and Dr. Gyorgy Polgar and Dr. Saengchai Kungsapiwatana from Bayer HealthCare, Thailand.

Aileen Elliot also spent a week at the Faculty to give demonstrations of the techniques she uses to detect *Cryptosporidium* and *Giardia* from faecal samples.

Dr Tawin Inpankaew, a Masters Student under the direct supervision of Dr Yaowalark Sukthana at Mahidol University will be working with Rebecca on determining the zoonotic potential of canine *Giardia* among the Temple communities in Bangkok and will be spending a two month period at Murdoch University from September to November being trained in molecular techniques. He will also be joined for a two-week period by a fellow faculty member and researcher Mr Amorn Lekkla who is keen to expand his knowledge on molecular techniques utilized to characterize *Cryptosporidium*.

Dr Yaowalark Sukthana together with Dr Tawin Inpankaew and Ms Chantira Sutikornchai (Nook) will be presenting their research findings at the September ASP meeting in Fremantle.

At a recent ASMR conference in Perth, Rebecca Traub won the "Murdoch University prize for animal based research" for her presentation of her recently completed PhD work on parasitic zoonoses in a tea-growing community in India.

Ryan O'Handley has returned to Murdoch University after long being banished to the wilds of Canada (and the United States). He has already joined up as star recruit in the Cockburn Icehawks ice hockey club, but rumour has it that he is engaged in research as well. His projects include *Giardia* and *Cryptosporidium* proteomics and pathogen detection using biosensor technology. Fisher Biotech is the big winner in this move, in regaining the employ-



---

ment of Ryan's wife Diane.

Nawal Hijjawi's success in growing *Cryptosporidium* in cell-free media *in vitro* not only resulted in a 'rapid' publication in IJP for which she has been inundated with reprint requests, but also in national press coverage.

The upcoming international *Giardia* and *Cryptosporidium* conference in Amsterdam in September which follows the previous successful meetings in Fremantle and Canmore on *Cryptosporidium* and *Giardia* respectively, is breaking new ground by combining the two parasites in the one meeting. A large contingent from Murdoch will be going: Nawal Hijjawi, Annika Boxell, Rebecca Traub, Carolyn Read and Andy Thompson.

Andy Thompson and Alan Lymbery have been contracted by CAB International to write a book on the Molecular Ecology of Parasitic Infections which will examine the impact that molecular tools and appropriate analytical methods are having on our understanding of the ecological interactions parasites have with the environment and their hosts.

Simon Reid has begun a two year project extension to extend the results of his ACIAR project on the epidemiology of surra (*Trypanosoma evansi* infection). The broad aim is to determine the socioeconomic impact of surra in Mindanao (Philippines) to enable more rational control programs to be developed. This work is being done with the assistance of Gavin Ramsay from the University of Western Sydney. Simon has also just received a collection of blood, serum and tissue samples from 5 Sumatran rhinos that died last year in Malaysia. We hope to assist in determining the cause of death which is suspected to be surra, based on clinical signs and the observation of trypanosomes in a blood smear and section of brain from one of the rhinos.

Brown Besier, Simon Reid, Marion Macnish, Russ Hobbs and Una Ryan are all busily conspiring to make the September ASP Conference in Fremantle one to remember. They hope to see you there.

## Department of Agriculture WA

Winter finds us spending as much time as we can in offices and labs, although the field samples still have to come in. Rob Woodgate's and Greg Hood's teams are frequently out in the cold and rain collecting a mountain of sheep poo as we validate our sheep worm control recommendations (Rob), and investigate new ones (Greg). Rob has also been shuttling between various locations in other states as the Sheep CRC project developing the WormBoss website program for worm management takes shape. (It was to be "WormMaster" until Arthur le Feuvre - Queensland DPIF-based project leader - met with the marketing gurus; now we will be worm bosses, not masters.)

Also (nominally) based at Albany, Brown Besier has recently spent more time in meetings and conferences than in productive work - Sheep CRC annual review in Coffs Harbour, Australian Sheep Veterinary Society conference in Canberra, Sydney University Post Grad Foundation sheep medicine course at Camden, Australian Society for Animal Production conference in Melbourne. As many know only too well, the chickens come home to roost when one gets home, especially if out of e-mail contact due to hardware problems. Di Evans has also continued her travels in connection with sheep external parasite projects, most recently with a new AWI project promoting best-practice mulesing of sheep.

At the South Perth laboratory, Dieter Palmer's team continues the quest to improve nematode egg detection, in concert with Ian Colditz's and Leo le Jambre's group at CSIRO, Armidale. Dieter and Jill Lyon (senior parasitology laboratory officer at Albany) have spent time at various country locations conducting worm egg counting workshops to support the move towards monitoring-based sheep worm control.

We are also preparing for a well-known visitor to spend some time in WA - Jan van Wyk, University of Pretoria/ Onderstepoort Institute, will be with the Department for 3 months during spring this year and autumn



next. Jan has legendary expertise in labs throughout the country. anthelmintic resistance and worm refugia-based management strategies, and will assist in developing a CRC project on "targeted treatment" for reducing the selection pressure for resistance in sheep nematodes. We hope to introduce him to many others at various

Compiled by Russ Hobbs

# AUSTRALIAN CAPITAL TERRITORY NEWS

Dave Spratt continues with data analyses, writing, examination of the brains of paralysed and dying tawny frogmouths from the northern suburbs of Sydney courtesy the rat lungworm, *Angiostrongylus cantonensis*, and assistance to several students. Former University of Sydney prize-winning student, Fiona Cavanagh, is writing up papers from her Honours thesis entitled "The common marsupial tick, *Ixodes tasmani*, and factors that influence the degree of infestation of the common brushtail possum, *Trichosurus vulpecula*." Dagmar Lorch has just submitted her MSc thesis to the Freidrich Schiller Universitat, Jena, entitled "Sex-specific variations in infestation and diversity of ectoparasites on the brown antechinus, *Antechinus stuartii*." Current University of New South Wales PhD student, Vicki Stokes, is involved in a large experimental manipulation study of competition between the introduced *Rattus rattus* and the native *Rattus fuscipes* in coastal forests and heathlands at Jervis Bay. One aspect of the parasitological component of this investigation has turned up *Angiostrongylus cantonensis* in the former and *A. mackerrasae* in the latter host species. These represent the most southern record for the zoonotic *A. cantonensis* and the first record of *A. mackerrasae* from New South Wales. I did not encounter it in native rats in 13 years study in the forests 30 km south of Eden but have seen it in *R. lutreolus* in Tasmania. The zoonotic potential of *A. mackerrasae* is unknown.

David Adams has moved from the strict field of parasitology and have been immersed in BSE and Australia's response to this disease. Parasitological thinking has helped me a great deal. It could have helped

towards an understanding of this disease which has had a worldwide impact without having a worldwide distribution. Perhaps it still can.

Wendy Cooper has just changed jobs at the APVMA, moving out of the Parasitology team

for 6 months to manage the main admin area and the Vet Chemical review team. Certainly a change from parasites but an exciting development anyway. "Like old Arnie (Governor Arnie) used to say," Wendy states, "I'll be back."

David Jenkins has been continuing his dingo tracking study. In collaboration with NSW Forests and DSE Victoria, 9 GPS collars were deployed on dingoes and 8 collars retrieved 4 weeks later. The 8 collars are currently in Sweden having the positional data extracted and are being re-jigged for the next deployment. The positional data will give us our first glimpse of dingo activity at night. We also recaptured a dingo radio-collared and daylight-tracked for 3 years, so we will now be able to compare day and night time activity of this animal. Exciting stuff!

On the parasitology front, David has done an interview with ABC Canberra local radio on their regular pet health show talking about hydatids and fielding phone-in questions from the public. At the request of Novartis Animal Health David gave hydatid talks to groups of 50 veterinarians at meetings in Melbourne and Sydney. The feedback was excellent with a number of fol-



low-up phone calls from attendees and a request from the NSW Branch of the AVA to address their next state meeting to bring the vets up to date on developments in the hydatid world. David was invited to the Dept of Veterinary Medicine, National Chung Hsing University, Taiwan in June to assist in the examination of a PhD student who had completed a project on the epidemiology of *Neospora caninum* in Taiwan. Whilst there, David gave two seminars to the Department, one on dingoes the other on hydatids and also signed-up his host, Professor Ooi Hong Kean, as a member of the ASP! Brush-tailed rock wallabies in Queensland are dying

from hydatid disease. A PhD student Tamsin Barnes, an English veterinary science graduate, is investigating the transmission and pathology of infection in macropodids in collaboration with David and Dr Lyn Hinds (CSIRO), trying to develop a serological test for macropods in collaboration with Don McManus and in collaboration with Marshall Lightowlers, determine the efficacy of the EG 95 vaccine in macropodids. Tamsin will be talking about this project at Fremantle.

Compiled by Chris Bryant

# QLD STATE NEWS

## CSIRO

Mr Absalom Mai from the Papua New Guinea Institute of Medical Research is working in several Parasitology labs in Brisbane over the next two months as part of a WHO-funded project. Absalom will be in the labs of James McCarthy at QIMR, Andrew Kotze at CSIRO, and Glen Coleman at UQ. He will be learning techniques for testing drug sensitivity in hookworm larvae. These techniques will be applied to an ongoing project looking at drug sensitivity of hookworms in Papua New Guinea.

Kim Messenger is in the midst of an Honour's project at UQ. She is working with Glen Coleman and Andrew Kotze to determine whether the anecdotal evidence of anthelmintic failures in alpacas in South East Qld may be due to the emergence of drug resistance.

While not specifically a Queensland affair, CSIRO Livestock Industries are holding the second Horizons in Livestock Sciences Conference at the Gold Coast International Hotel, Surfer's Paradise, from the 12<sup>th</sup> to the

15<sup>th</sup> September. This year's meeting focus is 'Gene Silencing and Therapeutic Innovation' and contains a session on parasite gene function. The plenary speaker is Carolyn Behm, with other contributions by Jody Zawadzki and Ian Sutherland.

More information is available at [www.livestockhorizons.com](http://www.livestockhorizons.com).

## Department of Primary Industries and Fisheries

Over at DPI, the parasitologists are all now members of the 'Emerging Technologies' group in the new research arm in the DPI&F called 'Delivery'. We sadly saw Rhonda Hall go after her short stint with us, she has taken up a position in the protein expression facility at the Institute of Molecular Biosciences at UQ. We welcome Andrew James who is visiting us to undertake his professional placement as part of his Griffith University Biotechnology Masters Degree. He will be working with Louise and Ala Lew following on from Rhonda's work studying *B. bovis* gene expression and RNAi. Also new to the lab is a Botany Dept. Honours student Tadeja Bakaj who is co-supervised





through Elizabeth Aitken at UQ, and Ala and Diana Leemon at ARI. Tadeja is characterising entomopathogenic fungi of *Boophilus microplus*. Cathy (who is attempting to culture *B. microplus* with Wayne) is steering clear of Tadeja and her cultures.... Back from sick leave is Anthea Bruyeres, our very own bionic woman. John and Glenn Anderson have been really busy doing liver fluke 'road shows' - with assistance from Donna, Sita (expert barbquers) and Wayne at various locations around south east Queensland. If you need to find the best accommodation and meals in places like Warwick, Woodford or Kilcoy - contact Glenn or John for advice. Alternatively, you can visit farmer Glenn at the Brisbane Exhibition (the Ekka) on the liver fluke stand. John is busy finalising his ACIAR Tick fever diagnostics Philippines project. Lyle and Ala have begun full scale 'raspador' production for *Tritrichomonas foetus* diagnostics (you will find out about this at ASP).

#### James Cook University

Townsville News- in the School of Public Health and Tropical Medicine, a team from Townsville headed by John Croese and including Rick Speare and Wayne Melrose have embarked on an interesting experimental trial of using *Necator americanus* to down-regulate the inflammatory response in Crohn's disease and ulcerative colitis. Early results suggest patients are happy whilst the experimental controls, who shall remain nameless, experienced substantial abdominal discomfort.

Also, a case of *Haycocknema perplexum* (I have checked this is a real parasite - Ian S) was diagnosed in Townsville and treated using 10 weeks of albendazole. The patient had a long history of living in Tasmania some decades before presentation. This case was severe and life-threatening.

Meanwhile, in the School of Biomedical Sciences, Eleanor Owen is visiting JCU CSIRO from the University of Melbourne in order to undertake a Bachelor of Animal Science project on health assessment of the endangered Proserpine Rock Wallaby.

Early results suggest that the weather is much nicer in winter in North Queensland and that wild animals are a bit leaner and meaner than their captive relatives and have an inguinal dermatitis due to the mesostigmatid mite *Thadewa serrata*. Kirsty Van Hennekeler is about to start trapping tabanids on Cape York for two years to look at temporal and spatial patterns of these flies as part of her PhD. Lee Skerratt recently visited Cambodia to start a two year ACIAR project which aims to develop a model for the control of Fasciolosis. Bruce Copeman who initiated this project and is working as hard as anyone is writing manuscripts and providing invaluable parasitological advice.

In Biological Sciences, David Blair is still puttering along with work on lungflukes (genus *Paragonimus*). One paper is in press dealing with molecular systematics of the genus and another is on the drawing board. He is now pursuing microsatellite loci that can be used for population-genetic and gene-flow studies on these parasites, and might even bother the ARC with a proposal along those lines next year. Work on those wonderful temnocephalans continues. This is work that can have no conceivable practical application except to highlight the extraordinary diversity of bizarre animals that we share this continent with - and about which nothing is really known. Kim Sewell and Lester Cannon are heavily involved in this project also. In the past month or two, northern Australia has been visited by two teams from the US looking for blood flukes in reptiles. Scott Snyder spent time in Townsville and the NT chasing spirorchids in freshwater turtles. Meanwhile, Sara Brant and Sam Loker, with organisational help from David Blair, hunted through the innards of freshwater crocodiles near Darwin and managed to collect specimens of the truly weird schistosome *Griphobilharzia*. Sara already has DNA sequences from the worms, and it turns out they might not be schistosomes at all - which makes the whole thing even weirder, because this fluke has separate



---

sexes, unlike the spirorchiids to which they seem closely related.

### **University of Queensland**

A lot has happened in the Lexa Grutter's Coral Reef Ecology Lab since we submitted a report years ago. In the more recent past, John McKiernan finished his Honours at the end of 2004 examining the distribution and biology of ectoparasitic gnathiids and haemogregarine blood parasites on epaulette sharks from Heron Island. Viviana Gamboa-Pickering just completed her Honours on the neuroecology of labrid fishes. She related their behaviour to brain lobes and eye structure and learned some fancy staining techniques in Shaun Collin's lab.

This year 2 new honours students joined the lab. Jennifer Pickering (yes, another Pickering!) is quantifying the parasite composition and load of larval and juvenile reef fish, while Jennifer Rumney (yes, another Jennifer!) is testing whether mucus cocoons in parrotfish protect fish from gnathiid isopod infection. She is also chopping away at tough slimy parrotfish heads so she can do histology to determine where the mucus glands are. Rachel Fogelman is half-way through her MSc looking at the effect of the huge parasitic *Anilocra* isopod, which lives on the head of cardinal fish, on its host. She will determine whether it castrates its host and increases filial cannibalism of the eggs which are mouth-brooded by the male.

We currently have five PhD students in the lab. Justine Becker is nearing the end of her PhD examining the association between cleaner shrimp and their clients and is currently processing samples from a recent trip to Papua New Guinea. Gabriela Munoz is busily identifying parasites in order to quantify the community structure of parasites in labrid fishes from Lizard Island. Penny McCracken, who is studying the ecological significance of crab grazing on the coral reefs of Heron Island, has completed her fieldwork and is writing up on Heron Island where she lives. Samantha Waller, after doing a long series of behavioural lab experiments on Lizard Island, is now half-

way through her project examining the role of ontogenetic colour change in the social interactions of reef fish. Laura Nagel, who is based in Canada at Queen's University, is looking at the role of marine cleaning symbioses in the diversification of host fish and their parasites, with an emphasis on local adaptation in gnathiid isopods. Conor Jones gave up the joys of being a paid research assistant for Lexa Grutter, and recently began his PhD where he aims to determine the effects of temporary parasitic isopods on reef fish larvae.

Lynda Curtis, who completed her Honours in 2002 on the physiological and behavioural effects of an *Anilocra* isopod on cardinal fish, has returned to UQ after a year of working for the government. She is now working as a research assistant in the lab. She is helping with some cleaner fish feeding experiments testing whether hunger levels affect cleaner fish cheating using cleaners trained to feed off plates. She is doing this in our 40-aquarium system on campus which she has been maintaining after Conor fine-tuned it. Lexa is finishing up her ARC ARF Fellowship and will start her lectureship at UQ in 2005 (which was put on hold in 2000). The four major research programs she is currently involved in are: using fish cleaning behaviour as a model system to understand cooperation theory, examining the role of parasitic gnathiid isopods as vectors of blood parasites in fish, examining whether larval fish leave the reef to avoid parasites, and the role of sunscreen in fish mucus.

The Coral Reef Ecology Lab is currently a hive of activity with the processing of samples from the summer field trip to Lizard Island. We had up to 8 people at once on the island and some spent more than 2 months up there. The lab is now filled to the gills with vials of little fish and parasites. What fun!

**Compiled by Ian Sutherland**



# Report from Council- Budget

A copy of the budget of the Council of ASP Inc was not included with the report of the mid-term council meeting published last year. The budget, approved by council, is shown below.

	<b>ACTUAL 2002/2003 (ref. newsletter)</b>	<b>Estimated 2003/2004</b>
<b>ASP 2003/2004 BUDGET PROJECTIONS</b>	<b>\$</b>	<b>\$</b>
<b>INCOME</b>		
Journal Royalty - Elsevier	132,238	100,000
Members Subscription	17,831	17,500
Interest Received on investments (adjusted for investments)	(2,222)	4,500
Sponsorship received	3,270	-
AHMR seed fund/ ARC seed funding refund	3,704	4,000
refund from Queensland museum display		10,000
<b>TOTAL INCOME</b>	<b>\$154,821</b>	<b>\$136,000</b>
<b>EXPENSES</b>		
accountancy and bookkeeping fees	1,015	1,200
Audit Fees	2,046	2,200
ASP-Newsletter	3,000	4,000
Bank charges	708	800
subscriptions expense (GST)	1,689	1,750
Conference expense )	41,064	15,000
- Student Travel )		25,000
prizes and awards )	18,729	14,000
University undergraduate Student Prizes )		2,000
Travel - Student Travel Award		4,000
Teaching Relief		7,000
Secretariat Fees - RGSQ	2,744	3,000
Council expenses	9,062	9,000
Publicity	3,194	3,000
legal costs	33	-
telephone	20	50
postage	690	500
IJP Special issue	5,973	6,000
Executive expenses	158	200
Insurance	1,062	1,200
ARC seed funding liability provision		10,000
other expenses	84	100
<b>TOTAL EXPENSE</b>	<b>\$91,271</b>	<b>\$110,000</b>
<b>PROFIT/(LOSS)</b>	<b>\$63,550</b>	<b>\$26,000</b>



# STUDENTS ABROAD

*Two Student members of the ASP were awarded ASP Travel Awards to attend international meetings. Here, Craig Kyngdon from Melbourne University reports on his travels in the wilds of South America, while Sarah Frankland from Latrobe Uni writes on her no-less exciting trip to the wilds of Chester in the UK.*



## **Craig Kyngdon's Travel Report**

A techno-pumping peak-hour bus swaying in the jolt of another near-collision. Eating cows hearts, raw fish, rabbit, guinea pig, and fried grasshoppers dipped in chilli. Riding a pony along a river in the middle of a desert. Playing soccer against Latin Americans and limping for a week. And a whole lotta microscopia, laboratorio, oncosphera, and no entiendo. Welcome to Craig Kyngdon's Travel Report for the JD Smyth Travel Award, 2004.

This trip took me to Mexico City and Lima, where i principally worked with Manuela Verastegui and her laboratory personnel, namely Jeanette Velaspuez and Marilu Farfan, at the Universidad Peruana Cayetano



australian society for parasitology inc.

Heredia (UPCH). Manuela's laboratory works in close collaboration with Hector Garcia's laboratory in Mogrovejo Hospital, and Armando Gonzales' laboratory in the Veterinary School at the Universidad de San Marcos, both in Lima. They all work under the guidance of Bob Gilman, from John Hopkin's University in Baltimore (USA), and together they form The Cysticercosis Working Group in Peru. Before my trip, I was very interested in working with *T. solium* oncospheres, in order to test an in-vitro bioassay I have developed as part of my PhD. Initial work in Mexico City, with Ana Flisser's laboratory faced technical problems associated the method of growing *T. solium* tapeworms in immunosuppressed chinchillas. However, my work continued with The Cysticercosis Working Group in Peru who had just collected several tapeworms from infected people in the countryside. Manuela Verastegui enthusiastically agreed to help me, and her unfailing enthusiasm and support throughout all my work made it very enjoyable, and contributed enormously to its success.

Prior to my arrival, a trial of two recombinant *T. solium* oncospheral antigens had been undertaken in Peru. In the trial, pigs were vaccinated with either of the recombinant *T. solium* oncospheral proteins, or with recombinant control proteins. All the pigs were then challenge-infected with *T. solium* eggs, housed for 3 months, then slaughtered, and the number of cysticerci in each pig determined at necropsy. The trial found that those pigs vaccinated with recombinant *T. solium* proteins had been protected against challenge infection with *T. solium* eggs; those vaccinated with the control proteins were not. Briefly, what I did was to use the sera from this trial in an in-vitro growth assay with larval *T. solium* parasites. The aim was to see whether the sera from the pigs

protected in the trial would be lethal to the parasite *in-vitro*. If it was, then this assay could be used as a rapid means of screening potential vaccines. The assay takes 10-14 days, and a challenge-infection trial takes up to 6 months, and is very expensive. I found that the sera raised against recombinant *T. solium* oncospheral proteins killed 75-100% of *T. solium* larvae *in vitro*, and that in the sera raised against control recombinant proteins only 9-25% of parasites died. And killing was correlated to specific antibody titre. And these were very pleasing results! In fact, they were so pleasing that I grabbed Marilu's arm and danced with her in the corridor. I was able to demonstrate the development of the larvae *in vitro*, teach our colleagues how to perform the assay, and most importantly, explain and describe what it was they were seeing in culture. I have some wonderful and crucial results for my PhD, and our collaborators have a very powerful assay with which to do many things: namely, to rapidly test new vaccine candidates, and to estimate the duration of protection of a given vaccine.

In Mexico City I spoke at length with Ana Flisser about my PhD, and I would like to thank her for the valuable feedback I received, and also for her prodigious hospitality. In Peru, I presented my work to the Department of Parasitology at UPCH, and to members of The Cysticercosis Working Group, and I received valuable feedback each time. I wish Manuela and her laboratory the very best of luck, and thank them immensely for their many kindnesses and support while I was with them. My sincere thanks also go to Hector and Sylvia at Mogrovejo Hospital, for their timely and complete supply of sera from the vaccine trial, and Armando at the Vet School, for his hospitality and advice. My final and warmest thanks go to the Australian Society for Parasitology for supporting my travels.

**Craig Kyngdon**

---

## **Sarah Frankland's Travel Report**

The conference was held at Chester college in picturesque Chester city. The city itself was founded by the Romans some 2000 years ago and the defensive walls from this time still stand. Chester also possesses a large and beautiful cathedral, and as we were there just before Easter, the choir and organist were practicing – quite amazing.

Concurrent sessions of the Malaria meeting and the Spring parasitology meeting were held over the four days of the conference. The malaria meeting topics included: epidemiology and the burden of malaria, transfection and functional genomics, transport pathways, immunology, new antimalarial drugs, plasmodium in the mosquito, malaria paroxysms and disease pathophysiology and interventions for control.

Each session began with a keynote speaker giving an overview of their field of interest. This was an excellent format as the subsequent talks could be put into context with this larger body of work. A major focus of the conference was the interaction of malaria and HIV infections. Stephen Rogerson (Melbourne University) and Rick Steketee (CDC Atlanta) both gave very interesting talks on this topic. While the nature of the interactions between these two diseases has not been fully resolved, it appears that the each is able to exacerbate the other. Emerging drug resistance and effective measures to counteract this were also discussed. Many people spoke of the need to use the artemisinins with caution to ensure that resistance does not emerge to what is currently an effective treatment.

Of particular interest, and relevance to my project were the talks on PfEMP1. This was an area dominated by the Danish contingent. One of these talks related to the acquisition of passive immunity in infants. During the first few months of life infants





in areas of high *P. falciparum* transfer suffer few malaria attacks. Lars Hviid (University of Copenhagen) explained that this is due to the transfer of maternal IgG to variant surface antigens of severe malaria. This places immune pressure on any parasites that do infect the infants to shift towards expressing variant surface antigens of uncomplicated malaria, thus reducing the incidence of disease in very young infants. Alyssa Barry (Oxford University) investigated another aspect of variant surface antigen immunity. This study focused on the variation in PfEMP1 molecules in a population in Papua New Guinea. It was found that the repertoire of the DBL domain of PfEMP1 was restricted when compared to the global population. This local restriction of PfEMP1 types may allow the development of a multi-antigen population based vaccine. Anja Jensen (University of Copenhagen) also discussed possible vaccine strategies. Her work has focused on the variant/s of PfEMP1 which is expressed in cases of severe malaria (SM). This study found that Group A *var* genes were upregulated in 3D7 parasites expressing PfEMP1<sub>SM</sub>. This group of *var* genes encode a large PfEMP1 which does not bind to CD36 and has previously been associated with SM.

I found it very interesting to hear of so many strategies to produce an effective vaccine. I also found it extremely valuable to be able to present my work to such a large audience. The talk that I gave regarding GTP dependent protein trafficking in *P. falciparum* was well received and there was much interest in the technique of resealing. (I have attached a copy of my talk at the end of this report.) As well as hearing about the work of many different laboratories, I found that an aspect of major benefit was being able to talk to researchers whose work up until now I had only read about. Meeting Laurie Bannister who has produced so many beautiful images of malaria parasites was a particular highlight. I also met up with Anton Dulzewski whose resealing protocol I have modified

for my project. In a meeting attached to the conference Laurie, Anton and a group of about 20 others outlined their interest in setting up a database of structural features of malaria. This could be a very useful tool, particularly when trying to localise a new protein to a particular structure.

In addition to travelling to the Chester conference I spent 6 weeks in Chris Newbold's laboratory at Oxford University. With the guidance of Paul Horrocks, I managed to produce a lot of data in this short time. I was particularly interested in looking at the surface exposure of PfEMP1 in parasitized erythrocytes that had been treated with various inhibitors of protein trafficking. I had experienced some difficulty with this at La Trobe, however Paul had great experience with using the flow cytometer to look at surface exposed PfEMP1, so I was hoping to get some good data. I found that erythrocytes which had been resealed with the inhibitors of protein trafficking had a different profile to those which had not been resealed, but this did not affect parasite viability. In addition I found that the major affect of the inhibitors of protein trafficking was on growth of the parasites not on the trafficking of PfEMP1. It was good to have this definitive result after a year of doubt.

Spending time in another laboratory was a valuable experience not only for the new techniques I learnt and the data I generated, but again the opportunity to meet many people working on different aspects of malaria research. I would like to extend my thanks the ASP for their generous financial support which enabled me to attend the BSP conference and visit the Newbold laboratory. These were very valuable experiences both in terms of the science and the contacts I made.

**Sarah Frankland.**



---

## **A call to all ASP photographers**

The ASP Council is keen to maintain the historical record of the society. If you have any photos of ASP colleagues, past or present, please send copies to our Archivist Carol Behm. Her contact details are on page 47 of this newsletter.



## **ASP Webmaster**

The ASP is calling for expressions of interest for the position of ASP webmaster. The role of webmaster is to maintain and update the ASP web pages ([www.parasite.org.au](http://www.parasite.org.au)) to keep the society informed of happenings and developments in the society.

This is a voluntary but rewarding position. For further information on the role and the ASP website, please contact our current Webmaster:

**Russ HOBBS**

Division of Veterinary and Biomedical Sciences

Murdoch University, WA 6150

Tel: (08) 93602499 Fax: (08) 93104144

Email: [hobbs@murdoch.edu.au](mailto:hobbs@murdoch.edu.au)



# ASP Announcements

## Nominations for Bancroft-Mackerras Medal

The Bancroft-Mackerras Medal may be awarded to a member of the Society who, in the opinion of the selection committee, has made an outstanding contribution to the science of parasitology, particularly in work published during the last five years.

Nominations should be made by a proposer and seconder, and should consist of:

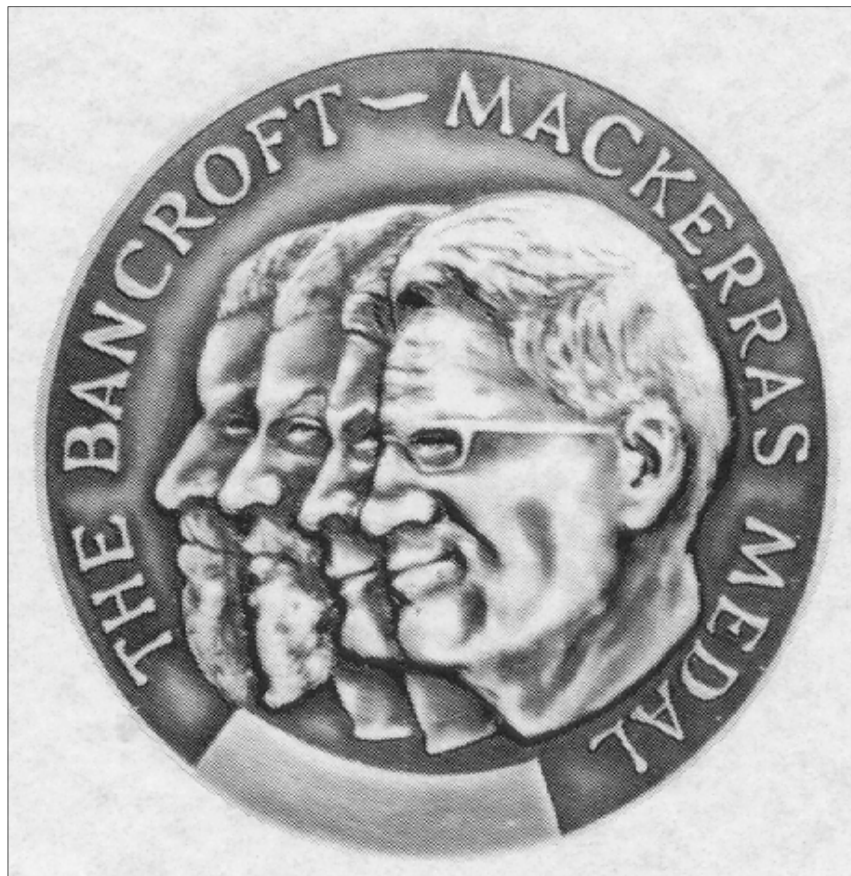
- A detailed statement of nomination describing the nature of the "outstanding contribution to the science of parasitology" for which he/she has been responsible. The statement should be

signed by the proposer and seconder, or each may submit a separate statement.

- A *curriculum vitae* including a list of all publications.

Note that the Medal is intended for members whose research program has been productive during the last five years. The permission of the nominee is not required and the nominee need not be aware of the nomination.

Nominations should be sent direct to the current ASP President. Detailed information on nomination and selection procedures is given in the By-Laws of the ASP Constitution. Nominations are due each year at the end of October.



## Nominations for ASP Invited Lectureship Travel Grants

To complement the scientific presentations at the Scientific Meetings of the ASP, overseas researchers of international reputation in a field of parasitology may be invited to attend and present their work. The invited speaker's expertise must be common to a discipline or symposium conducted at the Scientific Meeting. The visitor must be nominated by a member of the Society.

The Society will provide a travel grant to assist in the finance of the trip. The support will be based on an economy class direct return airfare from the recipient's home city to Australia, the necessary interstate travel and reasonable living expenses based on actual costs. Registration at the Scientific Meeting will also be included.

The total value of the lectureship will be determined by Council but it is expected that the recipient, or his/her Australian sponsor, will also seek to provide additional or alternative financial support.

Applicants must include the following information:

### Details of visiting specialist

An up-to-date *curriculum vitae* must be attached to the application. The following details should be supplied:

- Date and place of birth
- Present nationality (and former nationality, if applicable)
- Present position held
- Full address of employing institution, including phone, fax and Email numbers
- Detailed evidence of expertise in relevant discipline (list of publications, etc.).

### Details of Australian nominator

- Name of member organizing the visit, including full address, phone, fax and Email numbers
- Details of all other applications which have been made for financial assistance towards travel/accommodation costs. Total value of other contributions must be included.

### Details of program

The program should normally last a minimum of 2 working weeks and cover at least 2 States or Territories.

Details should include:

- Date of visit
- Program being arranged, including institutions to be visited (with dates) and the purpose of each visit (lecture, seminar, workshop, research discussion, etc)
- Aims, rationale and likely benefits of visit
- Contribution to be made at Society's Scientific Meeting

Applications plus supporting documentation should be sent to the ASP President by the end of December in the year preceding the Conference. Applicants should check with the Conference Organisers for details of conference theme, symposia, workshops, etc. before submitting an application.



# Postgraduate Travel

## ASP Postgraduate Travel Awards

These awards are specifically designed to assist postgraduate students attend and present their research at international conferences. Applicants must be members of the ASP Inc. of at least 6 months standing and enrolled in a postgraduate degree at an Australian university. Four scholarships will be awarded each year and applications will be considered in two rounds with closing dates in June and December of the preceding year. Each scholarship will be up to the value of, but not exceeding, \$A2000. Applicants must nominate the conference, supply an abstract and justify their attendance at a recognised international conference preferably though not exclusively held outside of the

Australasian region. The award will only be made once proof is received of acceptance of the abstract by the conference organisers. If the student does not attend the conference the ASP funds must be returned to the Society. On return from the Conference a short report must be written to the Council detailing the student's experiences. Applicants should apply to the current ASP Secretary giving details of the conference, their research and supervisor's support plus an abbreviated c.v. and conference abstract as outlined on the accompanying application form. The application must not number more than 6 pages including the c.v. and abstract. Applications must be received by the next due dates of June 30th or December 31<sup>st</sup> each year.

---

## APPLICATION FOR AN AUSTRALIAN SOCIETY FOR PARASITOLOGY INC STUDENT TRAVEL AWARD

Name: .....  
Address: .....  
.....  
Phone: ..... Fax: .....  
Email: .....

University: .....  
Enrolled Degree: .....  
Supervisor's Certification

I hereby affirm that the above-named person is a bona fide postgraduate student under my supervision.

Signed: ..... Date: .....

### Conference Details

Conference Title: .....  
.....  
Venue: .....  
.....  
Dates of the Conference: .....  
Conference Address: .....  
.....  
.....

Title of Abstract (*Please attach a copy of the abstract*):

.....  
.....  
Author(s) .....  
Oral or Poster session. ....

Awards will only be paid on receipt of proof that the abstract has been accepted.

Attach statement justifying attendance, budget (include all other support), brief curriculum vitae  
[application not to exceed 6 pages]





# ASP EXPERT DATABASE

The expert database is an initiative of the ASP Council and has been in existence for over 2 years. The aim of the database is to encapsulate all of the parasitological expertise available in Australia on one CD Rom.

This database can be utilised to quickly find appropriate people to comment on current issues or as a source of information for members looking for expertise in certain areas.

To ensure the privacy of these records is protected, they are not placed on the web site and information is only distributed to bona fide requests after permission is sought.

If you have not registered on this database, please complete the following and email to the current database custodian, Lois Small, at [lois.small@nt.gov.au](mailto:lois.small@nt.gov.au).

Title	Last name	First name	
Position			
Institution and Address			
City	State	Post code	Country
Phone number	Fax number	Mobile phone	
Email address			
Speciality area			
Parasite group			
Host group			



# NEWS FROM FASTS

## **Science meets Parliament**

Please be advised that the 2004/5 'Science meets Parliament' will be held in March 2005. The exact dates cannot be determined until the Parliamentary sitting schedule for 2005 is announced (which is typically done in November) but is likely to be in either the first or second week of March.

## **Biosecurity Australia**

Minister Truss has announced significant changes to Biosecurity Australia including making them independent of the Department of Foreign Affairs and Trade, ensuring scientists do final review of Import Risk Assessments and replacing the CEO, Mary Harwood.

This is in response to some major concerns raised by farmers and scientists over BA's decisions on banana, apples and pork risk assessment and, more generally, the robustness and science base of Australia's quarantine regime.

FASTS was a highly influential player in this debate through our interventions on quarantine issues in the AUS-US FTA inquiries which received widespread media coverage in rural and mainstream press.

I am not across the details of the proposed changes yet so am not sure how far reaching they will be in practice but we can certainly chalk this up as an important win for FASTS.

## **Review of Business-University Collaboration in the United Kingdom**

Some developments in the UK that may be of interest. In December 2003 the Lambert review of (UK) Business-University Collaboration was released.

There were two really interesting dimensions to this comprehensive report;

- a) it made a strong case that the fundamental challenge lay in the demand, not supply, side of public-private research R&D and knowledge transfer, and
- b) the report was commissioned by the UK Treasury, not the UK equivalent of DEST or DISR.

Gordon Brown, The Chancellor of the Exchequer, has recently responded to the review.

The key message is "We are setting a new and ambitious target of increasing UK R&D investment as a proportion of national income from its current level of 1.9 per cent to 2.5 per cent by 2014 over the next decade.

Whether this is achieved obviously remains to be seen, but Brown's approach is in stark contrast to

the Australian Government who have firmly resisted setting targets relating to investment as a share of GDP.

One budgetary measure announced by Brown is UK investment in science will increase by £1 billion (\$2.54b) by 2007-8. Another measure that resonates for FASTS is the UK Government's Chief Scientific Adviser will work with RCUK, the Prime Minister's Strategy Unit and Departmental Chief Scientific Advisers across Government to build up "a single centre of excellence in science and technology horizon scanning. This will feed directly into cross-government priority setting and strategy formation, improving Government's capacity to deal with cross-departmental and multi-disciplinary challenges".

FASTS have become increasingly concerned that there is no strategic oversight of where Australian research is heading. A problem exacerbated by changes in CRC selection criteria and the research and funding focus of CSIRO and universities. One way this could be addressed is enhancing the role and capacity of PMSEIC (as discussed in our submission to the Senate Inquiry into the office of the Chief Scientist).

## **'Science meets Parliament' wins Eureka Prize**

Dr Ken Baldwin has won the 2004 Australian Government Eureka Prize for Promoting Understanding of Science for initiating and championing the annual FASTS' 'Science meets Parliament'.

Congratulating Dr Baldwin on his win, the President of FASTS, Professor Snow Barlow said 'Science meets Parliament' has become a standout event in the calendar of politicians and scientists.

"For two days a year, 250 scientists and more than 150 politicians discuss a whole raft of ideas in cutting edge science and how these can improve the quality of our lives, environment and economy."

"Science meets Parliament' is a two-way street that has transformed both politicians' understanding of the diversity and potential of science and scientist's understanding of parliamentary processes".

**Bradley Smith, FASTS**



# WAAVP Peter Nansen Young Scientist Award

The aim of the **WAAVP Peter Nansen Young Scientist Award** is to reward innovative and outstanding work by promising young professionals in the field of Veterinary Parasitology. The award will be **presented at the WAAVP Conferences, next time in Christchurch, New Zealand, October 2005**. In addition to a cash prize, the award also covers the registration fee, economy travel costs and accommodation for the recipient to attend the Conference. If not a registered member, the recipient will receive a two-year membership of WAAVP.

Nominations should be made by a **proposer** and a **seconder**, and the portfolio consists of the following documents:

- (i) a detailed statement describing the **innovative nature**, and **excellence** of the work by the young professional (max. 2 pages).  
This statement should be signed jointly by the proposer and the seconder, or each may submit a separate statement
- (ii)a **Curriculum Vitae** including a list of publications.

The permission of the nominee is not required, and the nominee need not be aware of her/his nomination.

In order to qualify for the award the Nominees should be younger professionals, with a Master of Science (or equivalent) or higher level degree, aged 40 or younger at the time of nomination for the prize.

A Management Committee, appointed by the WAAVP Executive Committee, will evaluate nominated candidates, irrespective of gender, religion, and/or geographical origin. Nominations are only valid for the year in which they are made, but this does not preclude re-nomination of unsuccessful candidates in subsequent years. A candidate can only receive the award once. Serving members of the MC shall be automatically barred from being nominated themselves or from proposing or seconding someone else.

**Deadline for nominations:** 1 November 2004

**Successful nominee notified:** 1 February 2005

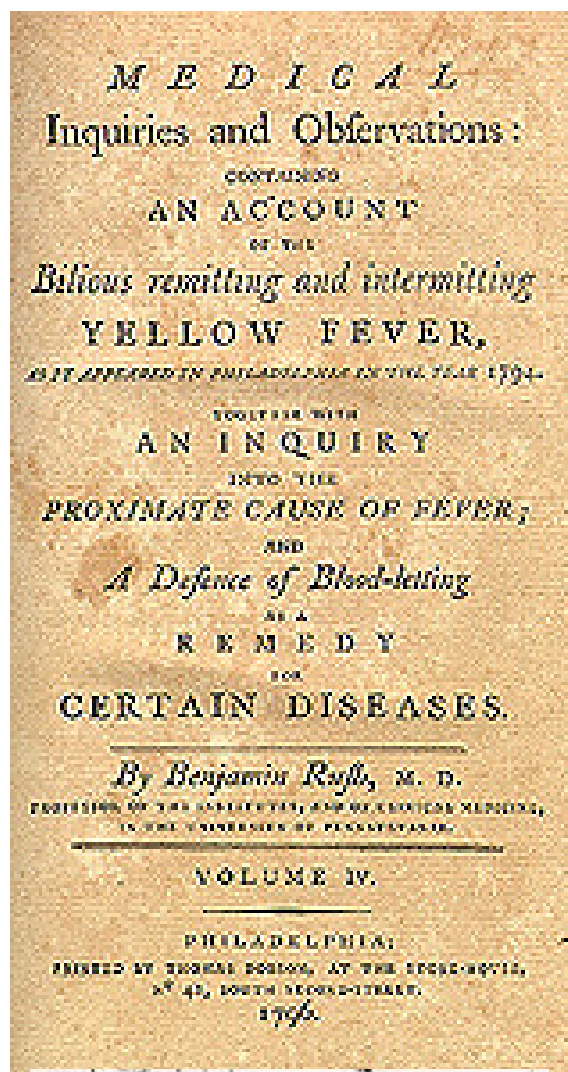
**Nominations should be mailed before the deadline to:**

Ann R. Donoghue  
Secretary/Treasurer WAAVP  
PR Pharmaceuticals Inc.  
1716 Health Parkway  
Fort Collins CO 80524  
USA

On behalf of the Management Committee

Michael Larsen (Chairman)





Courtesy: WHO/TDR



Benjamin Rush



# PARASITE CULTURE 3

Three editions, and our Parasite Culture column is still going strong! In this issue, our cultured worm travels back in history to look at scholarly literature concerned with disease transmission. From the time of Hippocrates to the 19th century, human disease was believed to be caused by miasmas, atmospheric alterations that arose from the earth and attacked the body. Here we have two accounts of miasmas. The first, from ancient Roman times, examines the dangers of building too near to swamps, from which diseases like malaria emerged. The second is from 18th Century America and deals with the spread of yellow fever, one of our viral cousins. Both books were authoritative accounts in their day, and in them are some salutary lessons for us: how well will our theories and ideas be received in 50, or 100, or 1000 years?

....Nor indeed must there be a **marsh** near the buildings nor a public highway adjoining, for the former always **throws obnoxious and poisonous steams** during the heats and **breeds animals with mischievous stings**, which fly upon us in exceedingly thick black swarms; and also sends forth from the mud and fermented dirt, envenomed pests of water, snakes and serpents, deprived of the moisture they enjoyed in winter; whereby hidden diseases are often contracted, the causes of which even the physicians themselves cannot thoroughly understand.....

Lucius Junius Moderatus Columella (AD 100) *De Re Rustica*

.....The origin of the fever was discovered to me at the same time, from the account which Dr. Foulke gave me of a **quantity of damaged coffee which had been thrown upon Mr. Ball's wharf.....**on the 24th of July, nearly in a line with Mr. Le Maigre's house, and which had putrefied there to the great annoyance of the whole neighbourhood. After this consultation I was soon able to **trace all the cases of fever which I have mentioned to this source**. Dr. Hodge lived a few doors about Mr. Le Maigr's, where his child had been exposed to the exhalation from the coffee for several days. Mrs. Bradford had spent an afternoon in a house directly opposite to the wharf and dock on which the putrid coffee had emitted its noxious effluvia, a few days before her sickness, and had been much incommoded by it. Her sister Mrs. Leaming had visited her during her illness, and probably caught the fever from her, for she perfectly recollected **perceiving a peculiar smell unlike any thing she had been accustomed to in a sick-room**, as soon as she entered the chamber where her sister lay....

Benjamin Rush (1746-1813), *Medical Inquiries and Observations*, 1796



# ASP Conference 2005

*ASP 2005 will be held as part of:*



**From Science to Solutions**

## **20th International Conference of the World Association for the Advancement of Veterinary Parasitology**

**Christchurch,  
New Zealand  
16-20th October, 2005.**

**For more information:**

**<http://www.waavp2005.org.nz>**



# New Books

## **Nematode Behaviour**

Edited by R Gaugler, Rutgers University, New Jersey, USA, and A L Bilgrami, Aligarh Muslim University, India

### **Key Features:**

Brings together the fragmented literature of nematology into a single comprehensive volume  
Explains and compares principles and mechanisms of various aspects of behaviour of plant, animal and insect-parasitic, predatory and bacterial feeding nematodes  
Discusses and compares physical, chemical, biological, physiological, genetic and molecular aspects of nematode behaviours.

### **Description:**

Nematode worms are among the most ubiquitous organisms on earth. They include free-living forms as well as parasites of plants, insects, humans and other animals. In recent years there has been an explosion of interest in nematode biology, including the area of nematode behaviour. The latter has, however, until now, not been synthesized into a single comprehensive volume.

Nematode Behaviour seeks to redress this imbalance by providing the first comprehensive review of current knowledge of the behaviour of nematodes. Key topics including locomotion and orientation, feeding and reproductive behaviour, and biotic and abiotic interactions are reviewed by leading authorities from the USA, UK, India and New Zealand.

## **Nematology: Advances and Perspectives**

**Vol I. Nematode Morphology, Physiology and Ecology**

**Vol II. Nematode Management and Utilization**

Edited by Z X Chen, Michigan State University, S Y Chen, University of Minnesota and D W Dickson, University of Florida, USA

### **Description:**

Written as two volumes, this title provides a broad overview of our current knowledge of nematology. The first volume addresses basic biology, while the second covers applied aspects of nematodes as parasites of plants, humans and other animals, or as disease vectors, and the control of pest nematodes. The contributors to this work include the world's leading authorities from Australia, Brazil, Canada, France, New Zealand, UK and USA. It will provide essential reading for researchers and students with an interest in nematology.

For more information: Visit <http://www.cabi-publishing.org/Bookshop/>

Disclaimer: The Newsletter does not accept paid advertising or endorse commercial products. These notifications are printed in this newsletter because it is recognised that the books are likely to be of interest to ASP members and because CABI is a not-for-profit organization.





# MEMBER SUBSCRIPTION ORDER FORM

## Special Low Subscription Rate for Members of the Australian Society for Parasitology

Elsevier Science publishes the *International Journal for Parasitology* and handles all subscriptions, including membership subscriptions, on behalf of the society. Elsevier Science is pleased to announce a special exclusive society rate for members of the ASP and urges all members to take full advantage of their membership and subscribe today! The 2003 member-rate is listed below.

It is important to note that any subscription is intended for personal use and is not to be used as, or replace, an institutional subscription.

To obtain such a member subscription, please complete and return the form and declaration below.

### MEMBER SUBSCRIPTION ORDER FORM

Please enter a Member Subscription for:

☐ 2003: *International Journal for Parasitology*, Vol. 33 (14 issues) at only US \$ 92\*

I confirm I am an active member of the Australian Society for Parasitology, and that any journals subscribed to under this membership scheme are for personal use and will not be used as, or replace, an institutional subscription.

Please note: the subscription will be sent to your home address.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Home Address (in full): \_\_\_\_\_

\_\_\_\_\_

I enclose: ☐ my personal cheque ☐ bank draft\*\*  
Please charge my credit card\*\*\*: ☐ Mastercard/Eurocard/Access ☐ Visa ☐ American Express

Card No.: \_\_\_\_\_ Valid until: \_\_\_\_\_

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

\* All rates include postage and handling. Customers in Europe are invoiced in Euro. Customers in Japan in Yen. Customers in all other parts of the world are invoiced in US Dollars.

\*\*Residents of the European Union should add the appropriate rate of Value Added Tax (VAT) to the subscription rate above.

\*\*\*Your credit card will be charged in US Dollars, Yen or Euro and your credit card company will charge you, in your local currency, at the current exchange rate.



To qualify for this rate, this form must be sent, with payment, directly to the Publisher:

Elsevier Science  
Customer Support Dept.  
P.O. Box 211  
1000 AE Amsterdam  
The Netherlands  
Fax: +31 (20) 485 3432

Elsevier Science  
Customer Support Dept.  
P.O. Box 945  
New York NY 10159-0945  
USA  
Fax: +1 212 633 3680

For more information on the journal, visit the web site:

**[www.elsevier.com/locate/ijpara](http://www.elsevier.com/locate/ijpara)**



**THE AUSTRALIAN SOCIETY FOR PARASITOLOGY INC**

**Secretariat:** ASP Inc c/- RGSQ.

237 Milton Road, Milton QLD 4064

Fax: (07) 3367 1011 Email: [rgsq@gil.com.au](mailto:rgsq@gil.com.au)

## APPLICATION FOR MEMBERSHIP

**Tax Invoice    ABN: 65 979 686 445**

**Surname:** ..... **Given name(s):** ..... **Title:** .....

**Email:** .....

**Postal address:** .....

.....

.....

.....

Telephone: ..... Fax:.....

Signature: ..... Date: .....

\*Proposed by (Name): ..... (Signature): .....

\*Seconded by (Name): ..... (Signature): .....

\*The Society's Constitution requires that the Applicant be known personally to at least one of the sponsors for membership. Both the proposer and seconder must be members of the Society.

This application must be accompanied by payment of one year's subscription in Australian dollars:

\$80 for full members (Inc GST), \$20 for student members (Inc GST)†, \$500 (Inc GST) for sustaining members.

† Applicants for **student membership** must have the following statement signed.

Registered Higher Degree: ..... Institution:.....

Signature of Head of Department: .....

I enclose a cheque or money order for A\$ payable to the "Australian Society for Parasitology Inc."  
OR please debit my (tick one)

Visa      Bankcard      Mastercard

Card number:      — — — —      — — — —      — — — —      — — — —

Expiry date:      — — / — —

Cardholder name:

Cardholder signature: \_\_\_\_\_

Applications for membership are considered by a Committee of the ASP and applicants duly notified.

Amount received

**Office use only**

Date elected: .....

Elected by: .....



## COUNCIL OF THE AUSTRALIAN SOCIETY FOR PARASITOLOGY INC.

**President:** David JENKINS

Australian Hydatid Control & Epidemiology Program

12 Mildura St

Fishwyck ACT 2609

Tel: (02) 6271 6331 Fax: (02) 6272 3124

Email: djenkins@effect.net.au

**Vice-President:** Tom CRIBB

Department of Microbiology and Parasitology

The University of Queensland

Brisbane QLD 4072

Tel (07) 3365 2581 Fax (07) 3365 4699

Email: t.cribb@mailbox.uq.edu.au

**President-Elect:** Simon REID

Division of Veterinary and Biomedical Sciences

Murdoch University

Murdoch WA 6150

Tel (08) 9360 7423 Fax: (08) 9310 4144

Email: S.Reid@murdoch.edu.au

**Executive Secretary:** Wendy COOPER

Veterinary Medicines Division

Australian Pesticides and Veterinary Medicines Authority, PO Box E240, Kingston ACT 2604

Tel: (02) 6272 3081 Fax (02) 6272 5249

Email: wendy.cooper@apvma.gov.au

**Treasurer:** Shane MIDDLETON

Department of Veterinary Sciences

University of Melbourne

250 Princes Highway

Werribee VIC 3030

Tel : (03) 9731 2291 Fax: (03) 9731 2366

Email: s.middleton@pgrad.unimelb.edu.au

**IJP Editor:** Nicholas SANGSTER

Faculty of Veterinary Science

Building B14

University of Sydney NSW 2006

Tel: (02) 9351 7130 Fax: (02) 9036 9485

E-mail: IJP@vetp.usyd.edu.au

**New South Wales:** Dr Michelle WOOSTER  
VHR Pty Ltd

Private Bag

West Armidale NSW 2350

Tel: (02) 67711602 Fax: (02) 67725184

Email: mwooster@vhr.com.au

**Australian Capital Territory:** Chris BRYANT AM

Centre for the Public Awareness of Science

Australian National University

Canberra ACT 0200

Tel: 02 6125 4815 Fax: 02 6125 8991

Email: chris.bryant@anu.edu.au,

chrisbry@ozemail.com.au

**Northern Territory:** Shelley WALTON

Infectious Diseases Division

Menzies School of Tropical Health

PO Box 41096 Casuarina

Darwin NT 0811

Tel: (08) 8922 8928 Fax: (08) 8927 5187

Email: Shelley.Walton@menzies.edu.au

**Queensland:** Ian SUTHERLAND

CSIRO Livestock Industries

Rockhampton QLD

Tel : (07) 4923 8187 Fax: 07 4923 8222

Email: Ian.Sutherland@csiro.au

**South Australia:** Ian WHITTINGTON

Parasitology Section, SA Museum

North Terrace

Adelaide SA 5000

Tel: (08) 8207 7463 Fax: (08) 8207 7222

Email: whittington.ian@saugov.sa.gov.au

**Tasmania:** Rob GURNEY

CSIRO Marine Research

GPO Box 1538

Hobart TAS 7001

Tel: (03) 6232 5138 Fax: (03) 6232 5485

Email: robert.gurney@csiro.au

**Victoria:** Charles GAUCI

Department of Veterinary Science

University of Melbourne

Werribee VIC 3030

Tel : (03) 9731 2291 Fax: (03) 9741 5461

Email: charlesg@unimelb.edu.au

**Western Australia:** Russ HOBBS

Division of Veterinary and Biomedical Sciences

Murdoch University

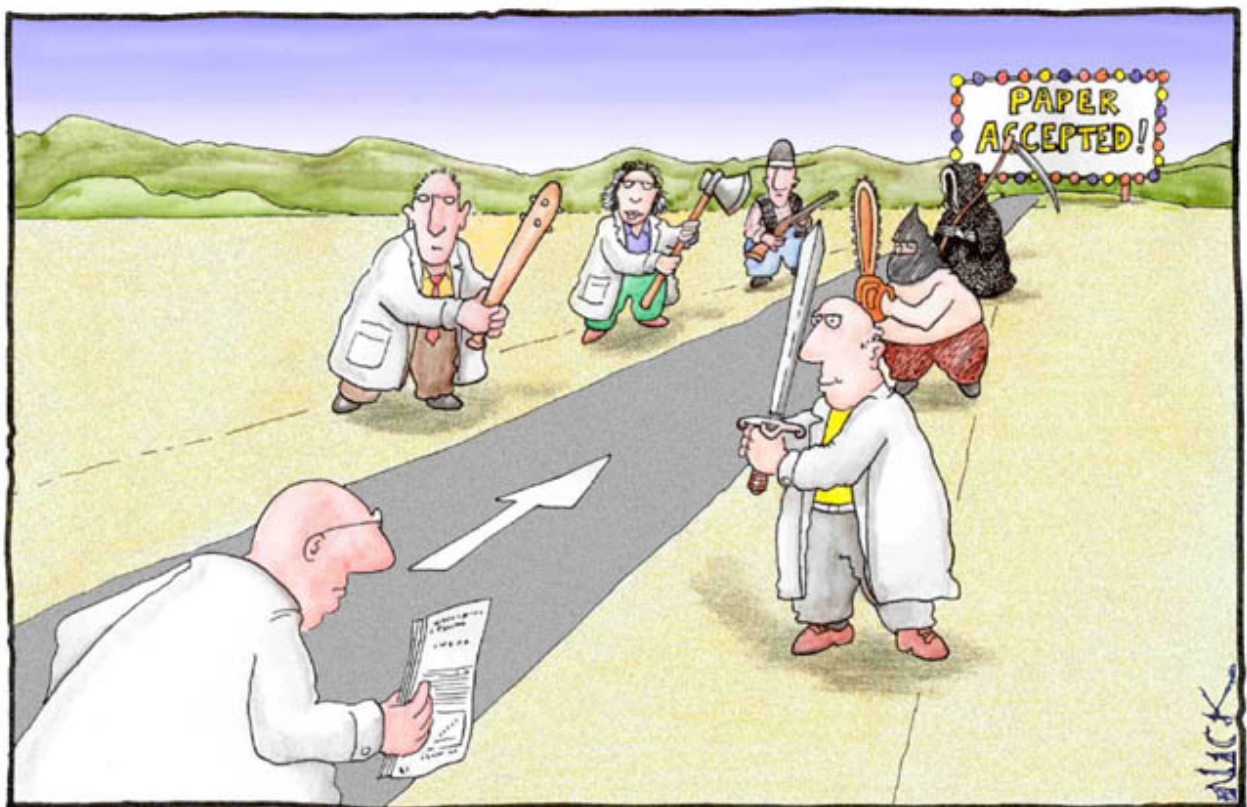
Murdoch WA 6150

Tel: (08) 93602499 Fax: (08) 93104144

Email: hobbs@murdoch.edu.au

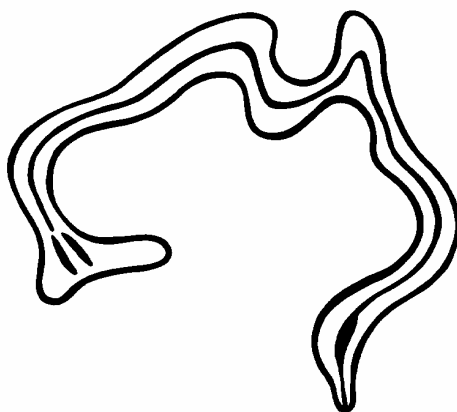
## COUNCIL OF THE AUSTRALIAN SOCIETY FOR PARASITOLOGY INC.

<b>Newsletter Editor:</b> Malcolm JONES Molecular Parasitology Laboratory Queensland Institute of Medical Research Herston QLD 4006 Tel: (07) 3362 0222 Fax: (07) 3362 0104 Email: malcolmJ@qimr.edu.au	<b>Archivist:</b> Carolyn BEHM School of Biochemistry and Molecular Biology Faculty of Science, Australian National University Canberra ACT 0200 Tel: (02) 6125 2203 Fax: (02) 6125 0313 Email: carolyn.behm@anu.edu.au
<b>Bancroft-Mackerras Medal Convenor:</b> Carolyn BEHM School of Biochemistry and Molecular Biology Faculty of Science, Australian National University Canberra ACT 0200 Tel: (02) 6125 2203 Fax: (02) 6125 0313 Email: carolyn.behm@anu.edu.au	<b>Incorporation Secretary:</b> Peter O'DONOGHUE School of Molecular and Microbial Sciences The University of Queensland Brisbane QLD 4072 Tel (07) 3365 2584 Fax (07) 3365 4699 Email: p.odonoghue@mailbox.uq.edu.au



Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'





## the australian society for parasitology inc.



### CHANGE OF ADDRESS

If you have changed your address, title or name; or if there is a mistake in your mailing label, please fill out the details below and send them to:

ASP Secretariat,  
c/- RGSQ  
237 Milton Road  
Milton QLD 4064



Name as it appears on present mailing label:  
(if possible, please enclose the old mailing label)



.....

Title, name and postal address for future mailing labels:



.....  
.....  
.....



Tel: .....  
Fax: .....  
Email: .....



Printed by: The University of Queensland Printery

