



# **Celebrating 50 years of the ASP**

Since its formation in 1964, the Australian Society for Parasitology (ASP) has become a premier advocate for the discipline of parasitology in Australia, with initiatives catering for members involved in research, teaching, private industry and public service.

To celebrate the occasion of the 50th anniversary of the Society, ASP Council sponsored the production of a commemorative book reviewing the past and present accomplishments of the Society. It is timely that a review of the ASP took place as the collective and corporate memory of the Society is waning as the old guard retires and most office-bearers only have brief tenure.

This commemorative book provides an overview of the Society, its membership and executive, endeavours and achievements, awards and prizes, and future aspirations. Numerous individuals provided material for the book and we are extremely grateful for their contributions.

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Letters of congratulation can be found on the following pages: Elsevier 6, ASMR 15, WAAVP 37, WFP 50, NZSP 81

# **President's welcome**

The Australian Society for Parasitology has made major advances since its inception in 1964. Built on a strong commitment from the Founding Members, the first President, John FA Sprent, his executive team and other colleagues guided the Society in its formative years toward a highly successful future. The Society now celebrates its Golden Anniversary!

This Commemorative Booklet reviews past and present accomplishments and milestones of the Society as well as its executive, membership, national and international endeavours, awards and prizes and future aspirations.

We represent a very special organization, comprising committed professionals, who are dedicated to the advancement of many different areas of Parasitology in Australasia and many other parts of the world. Created on strong foundations established by prominent parasitologists, combined with the passion and commitment of early career scientists, biologists, biomedical scientists, industry members, veterinarians, medical doctors and others, our Society has become a major advocate for the discipline of Parasitology both nationally and internationally. I thank and congratulate everyone who has, over many years, dedicated their expertise, time, effort and passion to continually building this wonderful Society and making it what it is today.

In the last 50 years, our Society has played major roles in academia and industry in the creation and dissemination of knowledge, capacity building and supporting early career scientists in Parasitology. The International Journal for Parasitology (IJP), in particular, is a reflection of this commitment to advance knowledge in our discipline, now one of the highest-ranking journals in the field. Thanks to the massive professional leadership and dedication of a series of editors, editorial assistants, deputy editors and editorial panel members as well as the commitment of its publisher, Elsevier, IJP is now one of the most respected journals in Parasitology in the world. The Society has also provided substantial and crucial support to the



area of Teaching & Learning at undergraduate, graduate and postdoctoral levels, through numerous programs at Australian universities and government institutions and industry as well as numerous academic prizes and awards, travel awards, postdoctoral fellowships and invited lectureships, which have allowed us to build professional capacity and also to enrich the Society through scientific and cultural exchanges as well as enhance academic and industry linkages. These outcomes have substantially increased the Society's influence and profile around the world.

#### ASP 50th Anniversary Commemoration | Presidents welcome

Obviously, it is an extremely exciting time for the Society, and there are many important fundamental and applied areas to tackle. Many parasitic diseases, including neglected tropical diseases, have a devastating, longterm impact on animal, human and environmental health worldwide. Through the extensive expertise, skills and guidance of key members, the Society will train our next generation of parasitologists through advanced courses, address salient scientific problems and tackle key diseases, develop new technologies, provide the community with new and innovative resources, and transform the fundamental understanding of the biology of host-parasiteenvironment interactions. Understanding the fundamental relationships among parasite populations, their hosts and the environment will also underpin major improvements in the prevention, diagnosis, treatment and control of major impacts on animal health and production. New and major challenges are rapidly emerging as a result of climate change and animal/human movement, which sometimes drive the spread of tropical diseases into temperate climatic zones, the spread of existing parasitic diseases, including water- and food-borne, and zoonotic diseases, the emergence of new pathogens/vectors and also exacerbate the dissemination of drug resistance in parasites. Taking full advantage of combined scientific skills, expertise and

technological developments, the Society will continually tackle all of these important areas, reconsider and redefine the parasitic disease paradigm, and deliver critical solutions to common, persistent and emerging problems through the development of new diagnostic tools and intervention strategies.

To conclude, I wish to congratulate the editorial team, archivist and many colleagues who have generously contributed their time, knowledge and effort in putting together this wonderful Golden Anniversary Commemorative Booklet. Fifty years is certainly a milestone and, clearly, a solid cornerstone for the Society's great future over the next 50 years and beyond!

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Robin B. Gasser President, Australian Society for Parasitology





# ELSEVIER CONGRATULATES THE AUSTRALIAN SOCIETY FOR PARASITOLOGY ON ITS 50TH ANNIVERSARY!



Learn more about these journals sponsored by the Australian Society for Parasitology at:

- International Journal for Parasitology: www.elsevier.com/locate/ijpara
- International Journal for Parasitology: Drugs and Drug Resistance: www.elsevier.com/locate/ijpddr
- International Journal for Parasitology: Parasites and Wildlife: www.elsevier.com/locate/ijppaw

# Society

According to the dictionary, a "society" is an "association of persons united by a common aim or interest or principle". Our Society's common interest is the field of parasitology the study of parasites.

Parasitism is a common way of life, involving two organisms whereby one (the parasite) derives benefit to the detriment of the other (the host). Three main parasite assemblages (protozoa, helminths and arthropods) are recognized in a wide range of eukaryotic hosts in terrestrial and aquatic environments. The study of host-parasite interactions utilizes many conventional and contemporary technologies and is relevant to human, animal and plant health.

Australian parasitologists banded together 50 years ago to form a community of like-minded scholars. Today, the Australian Society for Parasitology is a vibrant and active professional society that makes a significant contribution to the scientific and educational community of Australia.

### **Brief History**

The Australian Society for Parasitology (ASP) was founded on the 19th of January 1964 to provide opportunities for persons interested in parasitology to communicate, interact, collaborate and advance scholarly knowledge in the discipline of parasitology. Among the founding members of the Society were some of the most influential scientists of the time; including Ian Mackerras, Josephine Mackerras, Hugh Gordon, Desmond Smyth, Buddy Rogers and John Sprent. A Department of Parasitology had recently been established at The University of Queensland and Desmond Smyth had set up a strong parasitology group at the Department of Zoology at Australia National University. These groups, together with established groups of parasitologists at CSIRO McMaster Laboratory, Sydney University Veterinary School, Melbourne University Veterinary School and various State Agriculture Departments, ensured a strong and vibrant Society from the first meeting. Membership has grown significantly

over the years and there are now over 600 members in the Society.

Initially, the interests of the Society were in the fields of agriculture and veterinary science, but interest in medical parasitology at James Cook University, Flinders University and the Walter and Eliza Hall Institute for Medical Research balanced the ledger in the late 1960s. The ASP membership is now drawn from a wide variety of public and private organizations with multidisciplinary interests relevant to human, animal and plant health. Topics of study include morphology, taxonomy, biology, behaviour, lifecycles, pathogenesis, epidemiology, ecology, physiology, biochemistry, genetics and molecular biology, as well as the diagnosis, immunology and treatment of infections.

In 1971 the Society took the significant decision to sponsor a scientific journal and negotiated with Pergamon (now Elsevier) to publish an international journal under ASP editorship. In 1972, the first volume of the International Journal for Parasitology appeared edited by Desmond Smyth. This Journal rapidly grew in readership and is today recognised as one of the top parasitology journals in the world. The IJP has recently sponsored two open access journals; one dealing with Drug Development and Resistance, and one with Parasites and Wildlife.

The Society has become a great philanthropist for the recognition and promotion of parasitology in Australia. It offers a variety of travel awards and bursaries for undergraduate and postgraduate students, conference attendance, researcher exchange and visiting lecturers. It recognizes excellence in parasitology through the award of the Bancroft-Mackerras Medal to individuals who have made an outstanding contribution to the field over the preceding five years, and the award of the John Sprent Prize to the author of the best PhD dissertation in the field over the preceding three years. The ASP has become a conduit for information exchange by embracing technological change and developing internet sites, social media networks and various multimedia resources (www.

parasite.org.au). The quarterly ASP Newsletter is eagerly anticipated by members for news, views and events – all professionally presented but many contributions still retaining that laconic irreverent Australian style.

In 2005, the ASP played a pivotal role in the formation of the Australian Research Council and National Health and Medical Research Council (ARC/NHMRC) Research Network for Parasitology to enhance and focus Australia's research effort in parasitology. The Society now sponsors the ASP Network for Parasitology and it boasts a growing list of achievements to promote research and education in parasitology – the same objectives envisioned 50 years ago by our founding members.

### Purpose

Business management practices have changed dramatically over the last 50 years, but the ASP has constantly striven to maintain professional practice to remain contemporary and relevant. After considerable deliberation and consultation, the ASP formally adopted a Strategic Plan in 2011 to outline its mission, goals and vision for the future.

### Mission

The ASP fosters the association of persons interested in parasitology, fosters the curation of collections of Australian parasites and, by facilitating intercourse and discussion, promotes investigation to advance our knowledge of parasitology and facilitates collaborative research, education and public outreach

### Vision

That the ASP be known as an inclusive, vibrant and influential national Society, recognised both as a trusted source of expertise and information on parasite biology and control, and for its leadership in promoting and sustaining parasitology research and education for global benefit.

### Strategic goals

The ASP will:

- Continue to identify and address the needs of all our members in order to remain a vibrant and fully inclusive society;
- Sustain the International Journal for Parasitology (IJP) as a premier scientific journal and support the development of new open-access journals;
- Maintain the high quality of ASP Conferences in terms of participation of renowned speakers and engagement with the Asia-Pacific region;
- Encourage collaborative research and networking through personal interactions;
- Facilitate the development of advanced training opportunities and student education initiatives and engage in public outreach; and
- Provide professional management of the ASP including financial planning.

### **Four pillars**

The ASP's mission is based on Four Pillars of activity:

### 1. Recognising Excellence

The ASP will continue to offer Awards and Prizes to recognise outstanding achievements and contributions, and to support early career researchers.

### 2. Advancing Knowledge

The ASP will sustain the IJP as the pre-eminent international journal in the field of parasitology; create open access parasitology journals to complement the IJP; develop mechanisms to encourage collaborative research; operate annual scientific meetings (conferences) including the participation of inter-



The Four Pillars of ASP Activity

nationally renowned speakers; and support initiatives for enhancing parasite collections.

### 3. Serving Members

The ASP will professionalise management; ensure all members are engaged with the Society by encouraging access through excellent Website design and Newsletter presentation, use surveys to inform Council of actions required to address the needs of members, value the contributions of long term members, encourage student members; and advocate for parasitology at a political level by maintaining membership of Science and Technology Australia (STA).

#### 4. Delivering Training and Education

The ASP will provide training courses, networking opportunities, researcher exchanges, workshops, career development seminars, undergraduate education opportunities, public outreach, and engage in School education programs.

### Governance

Like every Society or Association, the ASP is bound by a set of rules formally articulated in a Constitution. The ASP Constitution comprises 19 Articles and four By-laws which provide a procedural code of practice covering membership, administration, finances, meetings, awards and prizes. The ASP Constitution was first drafted in 1963 and has been subsequently amended throughout the years by due process involving consensus of the membership. The full Constitution is available through the ASP website at: www.parasite.org.au

The Society is formally recognized by the Australian Government (ABN 65 979 686 445); qualifies for tax exemption with the Australian Taxation Office as a non-profit society established for the encouragement of science; and is incorporated with the Office of Fair Trading with the Queensland Government to provide legal protection to management from personal liability for actions of the Society, provided they are carried out in good faith and with due diligence. The ASP must provide annual

reports and audited financial returns to relevant public authorities as well as to its members at General Meetings.

The ASP is managed by a small Executive Committee supported by a more expansive Council. Most officebearers are elected from the membership, while some longer term positions are appointed by Council. The Executive Committee comprises the President, Executive Secretary and Treasurer, and the Council comprises the President-Elect or Vice-President, General Secretary, Editor of the International Journal for Parasitology, Convenor of the Bancroft-Mackerras Medal Committee, at least six State Representatives, and four non-voting appointed positions, the Archivist, Newsletter Editor, Webmaster, and Convenor of the ASP Network for Parasitology.

The Council directs and regulates the general affairs of the Society, and may co-opt members and appoint subcommittees to consider and report upon any matters referred to them. Council meeting are held twice a year, once early in each calendar year, and once immediately prior to the Annual General Meeting (AGM) later in the year. The AGM is held during the Annual Scientific Meeting (Conference) which is hosted in different locations around Australia. Local Organizing Committees are now appointed for each Conference and they operate on a separate budget. Some Conferences are held in conjunction with other Societies and Associations to promote international recognition and collaboration.

### Membership

The Society is composed of persons and companies whose experience or interest allows them to participate in and contribute to the activities of the Society. Membership is by subscription and all new applications are considered by the Executive Committee. Numbers have grown substantially from 82 members in 1964 to now include over 610 members in 2014. Growth has exhibited a steady upwards trend over the last 50 years, with small fluctuations attributable to prevailing economic conditions, private and government organizational restructures and variable funding priorities.

Four classes of membership are recognized: Student, Ordinary, Sustaining and Fellows. Student members obtain a discounted subscription but have all the rights and privileges of Ordinary members. Sustaining membership is open to companies which may display advertising, samples or equipment at Scientific Meetings. Fellows are elected by Council and are distinguished parasitologists who have promoted the advancement of parasitology or rendered conspicuous service to the Society.

Over the years, membership records have become increasingly complex to maintain, so in 1994 Council engaged professional Secretariat services to manage records, process subscriptions and correspond with members. The Secretariat has changed several times as computerized management systems have become more streamlined and more members have opted for electronic communication. Information about membership is available at: <u>http://asp.wildapricot.org/</u> membership

### Finances

From inauspicious beginnings, with the only income being a very small membership fee, the ASP has become increasingly solvent, due predominantly to the large income generated by sales of the International Journal for Parasitology. The ASP has consistently re-invested its income into its membership, especially student members, and has funded a variety of projects involving the promotion of parasitology. A financial planning strategy was recently adopted by Council to preserve capital in longer-term interest-bearing accounts and to better manage recurrent operating expenditure. The Society currently has around \$1 million in assets with an annual turnover of around \$200,000. This strong financial position allows the ASP to be very philanthropic within its discipline.

### Membership in numbers



## **Executive Committee 1964-2014**

Year	President	Secretary	Treasurer
1964	JFA Sprent	RF Riek	HMD Hoyte
1965	JFA Sprent	RF Riek	HMD Hoyte
1966	WP Rogers	<b>RI</b> Sommerville	AF Bird
1967	WP Rogers	<b>RI Sommerville</b>	AF Bird
1968	JD Smyth	A Clegg	M Howell
1969	HMcL Gordon	AD Donald	M Howell
1970	RF Rick	RW Butler	AD Donald
1971	RF Rick	RW Butler	AD Donald
1972	HR Wallace	IM Fisher	AF Bird
1973	<b>RI</b> Sommerville	L Bennett	GE Ford
1974	IH Arundel	MD Rickard	RP Herd
1975	IH Arundel	MD Rickard	RP Herd
1976	WH Southcott	IA Barger	I F Lelambre
1977	KC Bremner	IG Wright	R Winks
1978	WI Nicholas	CBryant	MIHowell
1979	IC Boray	PD Crowfoot	N Campbell
1980	ID Dunsmore	PD Crowfoot	RCA Thompson
1981	AD Donald	PI Waller	RCA Thompson
1982	MD Rickard	RE lames	RCA Thompson
1983	C.Bryant	CABehm	RCA Thompson
1984	C Dobson	LAY Johnston	RCA Thompson
1985	MI Howell	DM Spratt	R Windon
1986	DE Mahoney	Gleatch	R Dalgleish
1987	LE Lelambre	IA Barger	DB Adams
1988	IK Dineen	BM Wagland	DR Hennessy
1989	DB Copeman	GW Hutchinson	D Blair
1990	RCA Thompson	RP Hobbs	
1991	L Beveridge	Mlightowlers	RB Gasser
1992	CABehm	EM Bennett	G Singleton
1992	CA Bohm	EMBonnott	G Singleton
1995	PEL Boroham	Pl Brindlov	SC Barkor
1994		SA Tromain	DI Emory
1995	MWLightowlors	NB Chilton	P Gassor
1990	I Warpor		Plord
1008		P Monis	MG O'Callaghan
1990	N Sanastor	F MOHIS	
2000	MSandoman	J Ellis M Folov	X Rouze
2000		MAgenich	V DOWIES S Poid
2001	RCA Thompson	Machish	S Reid
2002		PD Adlard	C Hayward
2003	Dulanking	KD Adlard	C Haywalu S Middlatan
2004	D) Jerikins S Doid		S Miduleton
2005	D Diadrafita		K DODSON
2006	DPleafailta	J ZdWdOSKI	V DOWIES
2007	IN Jones	Distriguie	D Stenzei
2008	S Wallon	L Stildli	DHOIL
2009			N Seventer
2010 2011		DJ Jenkins	in Sangster
∠UTT 2012			in Sangster
2012			K Andrews
2014			K Andrews
2014	KB Gasser	D Pledrafita	A Jex

### **Fellows**

Distinguished parasitologists who by their influence or endeavour have promoted the advance of parasitology are eligible for nomination and election by the Council as Fellows. From time to time Council may elect as a Fellow a person who has rendered conspicuous service to the cause of Parasitology and the Society. Fellows are presented with a certificate upon election and pay no further subscriptions but enjoy all the rights and privileges of ordinary members including the right to vote. The Constitution mandates that the number of Fellows shall not exceed 10% of the current membership. There are currently 33 Fellows, and another 25 Fellows are deceased.

### **Current Fellows**

#### **Deceased Fellows**

JH Arundel	1988	DF Mahoney	1989	
CA Behm	1999	MA Meuleman	2009	
l Beveridge	2000	GF Mitchell	1993	
D Blair	2008	PJ O'Donoghue	2006	
JC Boray	1988	<b>RK Pritchard</b>	2007	
C Bryant	1986	MD Rickard	1987	
LL Callow	1994	K Rohde	1989	
LRG Cannon	1999	NC Sangster	2006	
A Cowman	2011	N Smith	2008	
AD Donald	1984	<b>RI</b> Sommerville	1984	
RB Gasser	2010	DM Spratt	2000	
E Handman	2006	<b>RCA</b> Thompson	2004	
R Hobbs	2007	J Upcroft	2012	
MJ Howell	1992	P Upcroft	2012	
AM Johnson	1999	L Warner	2001	
MK Jones	2011			
LF LeJambre	1992			
M Lightowlers	2003			

AF Bird†	1993
PFL Boreham†	1995
KC Bremner†	1984
Sir John Cleland†	1967
DB Copeman†	2004
M Cremin†	1994
C Dobson†	1986
PH Durie†	1978
H Gordon†	1972
DJ Kemp†	2013
TM Leach†	
IM Mackerras†	1976
MJ Mackerras†	1967
WL Nicholas†	1979
JC Pearson†	1989
FHS Roberts†	1967
WP Rogers†	1973
JD Smyth†	1972

WH Southcott†	1983
JFA Sprent†	1973
DF Stewart†	1975
LEA Symons†	1981
P Tate†	1968
PM Thomas†	1976
RH Wharton†	1981

### Archivist

Maintaining continuity of ASP records has always been a difficult task as office bearers only hold term for short periods and their physical location in Australia changes frequently. ASP recognised the need for a centralized repository for documentation in 1982. Negotiations for archival space within the Australian Academy of Science (Basser Library) in Canberra were successful in 1983 and hard copies of all documents, minutes and communications associated with ASP offices (including journals) are now archived in Canberra. The Society created the position of ASP Archivist and that role has been fulfilled by Carolyn Behm (1983-2007), Julie-Anne Fritz (2007-2010) and Haylee Weaver (2010-2014). Documents pertaining to current activities are officially handedover from outgoing to incoming executive officers, and electronic files are maintained by staff (notably Lisa Jones) of the ASP Network for Parasitology in Cairns.

### **Society Logo**

was held in 1993. Seven submissions were received from members. The winning design was submitted by Roger Lethbridge of Murdoch University. The official logo of the ASP is a stylised bursate nematode embracing Australia. It now adorns all ASP documents, communications and products, including all IJP publications. It has truly become an enduring symbol.

### **Society Gavel**

In 1995, the President of the New Zealand Society for Parasitology (NZSP), Paul Mason, presented the President of the ASP, Des Hennessy, with a carved gavel and base at their joint conference in Adelaide. The base features the ASP logo carved from Tasmanian hardwood while the gavel is carved from kauri, a coniferous tree from the North Island of New Zealand. It was hand carved by John Trimmer who was commissioned by the NZSP. A press report from the Hauraki Herald News notes the ASP logo is a "parasite in the form of a snake, stylised as an outline of Australia." The gift symbolizes the tradition of cooperation and collaboration between New Zealand and Australia, and it has been used ceremonially ever since to open and close Council meetings.



The idea for a Society logo originated with a suggestion by Rowena Grice at the AGM in 1992. A subcommittee was duly established and a competition for logo designs



The Australian Society for Medical Research asmr To the Members of the Australian Society for Parasitology As President of The Australian Society for Medical Research (ASMR), I write on behalt of the Society to extend warmest constatulations to the March 10, 2013 As President of The Australian Society for Medical Research (ASMR), I write on behalf of the Society to extend warmest congratulations to the Australian Society for Parasitolomy (ASP) on the occasion of its write on behalf of the Society to extend warmest congratulations to the Australian Society for Parasitology (ASP) on the occasion of its 50° Anniversary. ASMR has had close ties with ASP for a number of years with ASP becoming affiliated with ASMR in 2001. Our two organisations have enjoyed close co-operation in participating in the Australian Health and Medical Research Congress and we took Our two organisations have enjoyed close co-operation in Participating in the Australian Health and Medical Research Congress and we water forward to building on existing syneroies to further intermediate. the Australian Health and Medical Research Congress and we look forward to building on existing synergies to further information dissemination and cross fertilisation of ideas. becoming affiliated with ASMR in 2001. Anniversary Once again, our congratulations on reaching this milestone and very best wishes for the continuing drowth and success of the organisation. rorward to outiding on existing synergies dissemination and cross fertilisation of ideas. Once again, our congratulations on reaching this milestone and ven wishes for the continuing growth and success of the organisation. Yours sincerely. Roger Yazbek PhD President ASMR The Australian Society for Medi Email actification society for Medi

## Achievements

The success of the ASP is best exemplified by considering the high quality of its achievements over the last five decades, particularly with regard to social congress, professional productivity, resource provision, and networking. Originally formed to bring local parasitologists together, the Society now hosts convivial annual national conferences with thematic symposia/workshops bolstered by invited international speakers. Select papers are published in special issues of our house journal, The International Journal for Parasitology, which has become a premier parasitological journal with a high impact factor and growing citation indices. The journal has become so successful that its income supports a thriving philanthropy of activities. Newsletters are regularly produced and digested, students are recruited and supported, research networks are fostered and endorsed, parasite collections are curated, electronic databases are maintained, digital images are archived, parasitology texts are produced, and outreach programs now involve considerable social networking (like us!). Members have become very inventive in using contemporary technologies to promote parasitology and leave an enduring legacy for future generations.

### Milestones

1964	Formation of ASP (Affiliation with World
	Federation of Parasitologists)
1971	Creation of International Journal for Parasitology
	(Foundation Editor JD Smyth)
1973	Appointment of JFA Sprent as Editor, IJP
1977	ASP hosts WAAVP-8, Sydney
1981	ASP sponsors Australian Helminthological
	Collection
1981	Inaugural BMM award
1984	Inaugural Sprent Prize
1986	ASP hosts ICOPA VI, Brisbane
1989	Distribution of first ASP Newsletter
1991	ASP sponsors ASPIC

- 1994 Adoption of ASP logo
- 1996 ASP hosts PASEAN, Bali
- 2001 ASP hosts ICC-VIII, Cairns
- 2002 Production of FASTS Occasional Paper no. 4: Parasitology in Australia
- 2005 ASP/NZSP hosts WAAVP-20, Christchurch
- 2005 Establishment of ARC/NHMRC Research Network for Parasitology
- 2010 ASP hosts ICOPA-XII, Melbourne
- 2010 ASP sponsors ASP Network for Parasitology
- 2011 Adoption of ASP Strategic Plan
- 2011 Creation of open access journal IJP-DDR (Drug Development and Resistance)
- 2012 Creation of open access journal IJP-PAW (Parasites and Wildlife)
- 2013 ASP hosts WAAVP-24, Perth
- 2014 50th Anniversary of ASP, Canberra

### Conferences

An essential element of the ASP is to hold regular Scientific Meetings where members can come together to communicate and share information. These Conferences have become an annual event, and are usually scheduled in the latter half of the year. They have been held in all capital cities and at some wonderful exotic locations. Conferences generally last for 3-4 days and involve collective symposia, concurrent streams and specialized workshops. Meetings are occasionally held in conjunction with other affiliated organizations. Venues have progressed from university campuses to modest hotels to resorts and prestigious conference centres. Office bearers of the Society initially organized annual meetings, but the workload and fiscal responsibility became too onerous. Local Organizing Committees are now appointed by Council with responsibility for arranging finances, booking facilities and organizing conference themes and scientific sessions. Council provides additional financial assistance, mainly in the form of travel bursaries for invited speakers and student members.

The last five decades have witnessed extraordinary changes in science and technology, including the field of parasitology. Conference themes address contemporary topical issues as well as traditional subdisciplines: ranging from population biology to molecular biology; pharmacology to immunology; agriculture to conservation; and human to animal health. A Conference Handbook is produced listing abstracts for all presented papers and posters; and thematic reviews are published where possible in special issues of the International Journal for Parasitology. Conferences also provide social occasions where members can interact at a different level. Members have been regaled at Conference Dinners with recitations of the piddling pup (Hugh Gordon, 1970), slide shows of fictitious trips abroad (Dick Bawden, 1975), wormy award skits (Canberra, 1997), and trivial pursuit quizzes (Gold Coast, 2006). Many legends have been born as members passionately embraced, and sometimes over-indulged, in life and its merriments.

### **List of Conferences**

Month	Year	City	Affiliation
Jan	1964	Canberra	
Feb	1965	Sydney	
Aug	1965	Sydney	
May	1966	Canberra	
Jan	1967	Melbourne	
Aug	1967	Brisbane	
Aug	1968	Canberra	
Feb	1969	Sydney	
Aug	1969	Adelaide	
Jan	1970	Armidale	
May	1971	Brisbane	
Feb	1972	Melbourne	
Aug	1972	Camden	
Aug	1973	Adelaide	
May	1974	Brisbane	
Jan	1975	Canberra	
May	1976	Melbourne	
Feb	1977	Brisbane	

Jul	1977	Sydney	WAAVP-8
May	1978	Canberra	
May	1979	Leura	
May	1980	Adelaide	
May	1981	Perth	
May	1982	Marysville	
May	1983	Canberra	
Aug	1984	Christchurch	NZSP
Aug	1985	Sydney	
Aug	1986	Brisbane	ICOPA-VI
Sep	1987	Armidale	
Sep	1988	Sydney	NZSP
Sep	1989	Townsville	
Sep	1990	Perth	
Oct	1991	Lorne	
Oct	1992	Auckland	NZSP
Sep	1993	Heron Island	
Sep	1994	Nelson Bay	
Sep	1995	Adelaide	NZSP
Sep	1996	Bali	PASEAN
Jul	1997	Canberra	
Sep	1998	Melbourne	
Sep	1999	Rockhampton	
Sep	2000	Wellington	NZSP
Jul	2001	Cairns	ICC-VIII
Sep	2002	Hobart	
Jul	2003	Darwin	
Sep	2004	Fremantle	
Oct	2005	Christchurch	NZSP, WAAVP-20
Jul	2006	Gold Coast	
Jul	2007	Canberra	
Jul	2008	Adelaide	
Jul	2009	Sydney	
Aug	2010	Melbourne	ICOPA-XII
Jul	2011	Cairns	
Jul	2012	Launceston	
Aug	2013	Perth	WAAVP-24
Jun	2014	Canberra	

### Affiliations

Since foundation, the ASP has become affiliated with several national and international agencies with interests in parasitology, biomedical research and/or the advancement of science.

### WFP/ICOPA

When the ASP was formed in 1964, it had already arranged affiliation with the relatively new World Federation of Parasitologists (WFP) which organizes International Congress of Parasitology Associations (ICOPA) meetings around the world every 4 years. An ASP member represents the Society at WFP meetings and the ASP hosted ICOPA-VI in Brisbane in 1986 and ICOPA-XII in Melbourne in 2010. Members are keen to participate on the global stage and Australia has a proud history of scientific innovation and performance.

#### WAAVP

The World Association for the Advancement of Veterinary Parasitology (WAAVP) was founded in 1963 and it organizes conferences around the world every two years. The ASP became affiliated with the WAAVP soon after its formation and has helped host three meetings: WAAVP-8 in Sydney in 1977; WAAVP-20 in Christchurch in 2005 in association with the New Zealand Society for Parasitology; and WAAVP-24 in Perth in 2013. ASP members have held office with the WAAVP and members have contributed to thematic WAAVP publications.

### NZSP

In 1984, the ASP and the New Zealand Society for Parasitology (NZSP) organized a joint conference in Christchurch on the South Island of New Zealand. The event was a resounding success and members of both societies agreed to hold joint meetings at regular intervals thereafter. Joint meetings have been held in Sydney in 1988, Auckland in 1992, Adelaide in 1995, Wellington in 2000, with WAAVP-20 in Christchurch in 2005, and with ICOPA-XII in Melbourne in 2010. The spirit of cooperation and friendly rivalry 'across the ditch' has led to many successful collaborations and even job placements. But they still have more sheep than us!

### STA (FASTS)

A national Federation of Australian Scientific and Technological Societies (FASTS) was established in 1987 to promote science in Australia to the community and to government. The ASP joined FASTS in 1997 and together they produced an Occasional Paper entitled: Parasitology in Australia: An Investment in Human and Animal Health edited by Mark Sandeman and Lesley Warner. This document was pivotal in the subsequent successful bid to establish the ARC/NHMRC Research Network for Parasitology in 2005. FASTS has recently been renamed Science and Technology, Australia (STA) and it remains an outspoken advocate for scientific advancement, recognition and reform in Australian political arenas.

### ASMR

Together with 57 other professional societies and Medical Colleges, the ASP is affiliated with the Australian Society for Medical Research (ASMR) which is the peak professional society representing Australian health and medical research. Members participate in regular meetings addressing topical themes, particularly in infectious diseases, vaccine development and drug discovery.

### International Journal for Parasitology

The house journal of the Australian Society for Parasitology (ASP), the *International Journal for Parasitology* (IJP; ISSN: 0020-7519), was founded in 1971 under a profit-sharing

arrangement with Pergamon Press (now Elsevier) wherein the Society provided an Editor to review all submitted papers and be responsible for the standard of published papers. More than 40 years and 7 editors later, the IJP is now widely recognized as the leading journal in the parasitology arena.

### Editors

The inaugural IJP Editor-in-Chief was J. Desmond Smyth (1971-1974), a foundation member of the ASP and a driving force behind the creation of the journal. Desmond was from the Australian National University (based at Imperial College, London, UK when the early IJP issues were published). ASP fellow, Chris Bryant, wrote of Desmond Smyth - "He had the exceptional ability to draw together the expertise of people of diverse backgrounds and interests to produce a truly international journal from the outset, with its Parasitological Calendar, list of Parasitology Societies throughout the world, an Editorial Board composed of parasitologists from 11 countries and, in the first issue, papers originating from five countries" (Bryant et al., 1999). In addition to the Editor-in-Chief, IJP initially had an Assistant Editor (M Howell in Canberra) and Associate Editors (J Clegg, K Davey, A Capron). This model changed to the Editor-in-Chief and an Advisory Council which first appeared in the published journal in 1974.

John Sprent at The University of Queensland took the IJP reins from 1974-1993, where he was supported by Mary Cremin as the Editorial Assistant. John Sprent's name is synonymous with IJP, and his enormous contributions to the journal, and to parasitology at large, were recognized in IJP after John's passing (Obituary, 2010). It was in 1981 that a Deputy Editor was first listed inside the front cover of the journal, KC Bremner. ASP fellow, Malcolm Jones, wrote of John Sprent - "John's tenure as editor was characterised by his continuing passion for parasites and parasitology, and his compassionate and collegial support of authors and reviewers" (Obituary, 2010). John's 20 years in the role was an incredible achievement, one unlikely to be matched with the current journal workload, even with the advantage of electronic systems. Mary's efforts were recognised and she was made a Fellow of the ASP in 1994.

Alan Donald was the next Editor-in-Chief of IJP (1994-1997). He was based at the new McMaster Laboratory at CSIRO Animal Health in NSW. Peter Boreham was Associate Editor in 1994 and made an invaluable contribution to changes in journal policies and procedures. Terry Rothwell became Deputy Editor in 1996, continuing in that role with successive Editors-in-Chief until 2003. Alan worked with three people in the Editorial Assistant role: Michelle Shalhoub, Maria Meuleman (for just a few months) and finally Camille Sainsbury who









implemented many important innovations for the journal. Communications were faster, using faxes and some e-mail (computer systems were still very basic at that stage and typewriters were still commonly used), in addition to the traditional "snail mail" system. Alan's editorship saw a lot of changes, with a focus on making the IJP more international while maintaining a broad coverage, including a new panel of Specialist Editors, expanded to 12 people drawn from Australia, Europe and North America, replacing the former Editorial Advisory Council. There was emphasis on raising the quality of published manuscripts and reducing the time to publication, with papers sent to two referees, who were asked to review those within 3 weeks. All of these issues have continued to be a focus of Editors-in-Chief who succeeded Alan.

The next IJP Editor-in-Chief was **Alan Johnson** (1997-2003), based at the University of Technology, Sydney. Alan worked with a few people in the role of Editorial Assistant, including Camille Sainsbury, Maria Meuleman and Jeanette Taverner (with Maria returning from 2000 until the present). Two important developments during Alan's tenure were the implementation by Elsevier of Open Access for disadvantaged scientists and the initiation of electronic submissions (via e-mail) in 2001. These, and other initiatives Alan introduced, led to an increase in submissions from ~250 to 400 per year. Alan raised the global profile of the journal by continuing to internationalise the editorial board with high profile parasitologists. In addition, he reduced the time taken for review of the submitted manuscripts substantially, often by rejecting papers himself – indeed many of the editors have been on the receiving end of Alan's rapid rejections! Alan's diligence and sheer commitment to improving the quality of IJP articles resulted in a doubling of the 2-year Impact Factor in the six years that Alan was Editor-in-Chief. These improvements were a major factor in Alan being made a Member of the Order of Australia in 2006.

Nick Sangster (2003-2006) brought the IJP Editorial Office to the University of Sydney, based in the old CSIRO McMaster Laboratory and handled around 500 submissions annually. John Ellis took on the role of Deputy Editor until 2006. The ASP Society Service was initiated (in 2004) under Nick's editorship, giving ASP members free on-line access to IJP. The journal moved from a stand-alone database to Elsevier's electronic submission and review system (EES) in 2005, which again resulted in increased submission numbers. Nick continued to work on general Open Access for authors, which was ultimately finalised shortly after Nick's term as Editor-in-Chief had ended. Nick was also involved in initiating the use of electronic-only supplementary files for IJP articles. The IJP then moved to Victoria under **Brendan Crabb** 





Previous page L-R Smyth Sprent Donald Johnson

This page L-R Sangster Crabb Loukas

(2006-2009), firstly to the Walter and Eliza Hall Institute of Medical Research (with Brendan based at Parkville and Maria at the Bundoora campus), then to the Burnet Institute of Medical Research (with Brendan based at Prahran and Maria moving into a home office). Brendan initiated the current system of two Deputy Editors, both of whom are involved in daily manuscript handling and decision making. Brendan brought Dominique Soldati and Ian Beveridge on board as Deputy Editors in 2006. Brendan made the significant and outstanding change to the journal's front cover style, a now well regarded feature of IJP and sought after honour for authors of IJP articles.

It was back to Queensland for the IJP from 2009 until the present with Alex Loukas, first at the Queensland Institute of Medical Research in Brisbane and now at James Cook University, Cairns; and Maria continuing in her home office. Brian Cooke replaced Dominique Soldati as IJP Deputy Editor in 2011, and more recently, Jan Šlapeta has stepped in to replace Ian Beveridge on his retirement (sniff, sniff...) from IJP. During Alex's editorship, submissions increased to ~600 per year, and there are currently 32 Specialist Editors, with 8 Australians and 24 from other countries. Maria's efforts for IJP were formally recognized by the Society and she was made a Fellow of the ASP in 2009. During Alex's term the IJP family grew, with the formation of two open access sister journals, IJP Drugs & Drug Resistance and IJP Parasites & Wildlife, each of which shares the IJP name but has a wholly independent editorial board and management system within Elsevier. Indeed, IJP is the only parasitology "brand" with sister journals, highlighting the pioneering work of the ASP management committee.

One of the advantages of the current IJP Editorial Office set-up is its portability. In the past, the regular movement of the Editorial Office to the organisation where the current Editor-in-Chief was employed resulted in having to find a new back-up person to take on the Editorial Assistant role for short periods such as for annual leave. Since IJP has moved to a home office and Maria (pictured) has worked remotely with Editors, Wendy Relf has become our regular back-up person, also contracting with IJP to do scientific editing.



Whilst there have been challenges in the past, overall Elsevier's publishing staff have built positive relationships with IJP editorial staff over the years. At the joint 8th International Coccidiosis Conference and annual scientific meeting of the Australian Society for Parasitology (July 9-13, 2001, Cairns), Adriaan Klinkenberg of Elsevier was given special acknowledgement for his long-term involvement with ASP and IJP. Adriaan was succeeded by Claire Minto, who looked after ASP and IJP for a few years during Nick Sangster's editorship. Since 2006, IJP (and the other Elsevier parasitology journals) have been under the management of Dale Seaton, a parasitologist by training with post-doctoral experience from La Trobe University and Melbourne University Veterinary School with Mark Sandeman (1988-1992) and Marshall Lightowlers (1992-1994). Dale is based in Elsevier's New York office but has regular contact with the IJP editors by phone and at conferences.

### Aims and scope of IJP

The International Journal for Parasitology publishes the results of original research in all aspects of basic and applied parasitology, including all the fields covered by its

Specialist Editors, and ranging from parasites and hostparasite relationships of intrinsic biological interest to those of social and economic importance in human and veterinary medicine and agriculture. Original research includes the development of novel and innovative concepts and ideas, as well as experimental and observational science that raises new hypotheses. Because of its breadth of discipline coverage, the aims and significance of all contributions should be made clear to readers who are not expert in the particular subject of papers. In applied parasitology, it will tend to favour contributions of broader significance to the subject rather than narrow, highly specialised applications. The principal form of publication is the full-length paper which contains substantial results from a major program of research. The Journal also provides a medium for the publication of shorter, but complete, papers reporting highly significant original findings, as Succinctus articles. It also publishes Thematic Issues incorporating papers on a topical theme and commissions papers with emphasis on shorter, focussed Reviews of topical issues and strategically important subjects. The Journal encourages critical comment and debate on matters of current controversy in parasitology via "Current Opinions".

A quick look through the journal shows how it has changed over the years (details are approximate and based on random samples).

Volume 1 (1971) contained 4 issues for the year with a page size of 18 × 24 cm and 40 articles using 303 pages (this excludes advertisements, parasitological calendar, etc). At the back of the issue there was a page which included two sections: 'Referees' reports' with brief guidelines for referees when reviewing manuscripts for IJP and 'Check list: for authors' secretaries'. Those were the days! Writing papers longhand for transcription by a secretary was a very time-consuming process. Volume 3 (1973) expanded to 6 issues and volumes increased to 100 papers and 600 pages. In 1987 (volume 17), IJP was publishing 8 issues per year with 140 papers using 1,000 pages. Volume 23



(1993) Issue 4 was a Special Issue devoted to the ASP/ NZSP meeting. Publication of papers from the annual ASP conference became a regular Special Issue in IJP. Change occurred again in 1995 (volume 25) with 12 issues per year and 190 papers using 1,500 pages. The physical size of the journal increased again in 2008 (volume 28) to 18.5 × 25.5 cm. Volumes increased to 200 papers and 2,000 pages per year.

To make the hard copy journal more internationally accessible and appealing, volume 30 (2000) increased in printed size again to the current size of 20.5 × 27 cm. The numbers of issues per year increased to 14 and remains the same in 2014. In 2000, IJP published 171 papers using

1,500 pages, whilst in 2013 117 papers were published using 1,100 pages. IJP is no longer constrained by a pre-agreed page budget (the number of printed pages published) for each volume, so although the physical size of the journal remains the same since 2000, the number of pages in each volume differs from year to year, particularly since 2011 when we raised the bar yet again and started publishing thinner, but we believe higher quality, issues. Indeed, the final acceptance rate of submitted manuscripts is ~20%, with more than half of the submissions rejected at the editorial level without external peer review.

Electronic systems, and in particular Open Access, have changed the way that people publish. Whilst publishing in IJP still incurs no page charges, authors are offered the option of paying a fee to publish their paper as 'Open Access' in addition to the standard IJP hard copy and electronic publication. There are also other options available to authors to highlight the on-line version of their papers. These include AudioSlides - brief, webcast-style presentations by authors that are shown (publicly available) next to their published articles; the ability to share their articles via Facebook and Twitter.

The main geographical sources of papers have remained stable over the years. The data we have on hand for 2001-2013 shows that, based on the country of the corresponding author, Western Europe has been the main source of submissions (31% in 2001, down to 20% in 2013), with Asia rising from 15% in 2001 to 23% in 2013. North and South America have been fairly stable, between 16% and 12% in 2001, respectively and 14% each in 2013 while submissions from Australasia have fluctuated between 6-10% during the same period.

The initial cover design was simple and easy to read (1971 – 1994) featuring dark green. This changed for a few years (1995-1997) with yellow introduced with the green (very Australian, although perhaps not for that reason) together with a transmission electron micrograph background image. In 1998 the green and gold theme continued but

reverted to the simpler white space in the middle, which was later used to feature an image from a paper in the relevant issue, commencing 2002. A dramatic change occurred when the current cover style was implemented. The cover figure is still generally submitted by an author whose paper appears in that issue. Authors often request electronic copies so they can print posters of 'their' covers.

Due to the time that has passed, the IJP Editorial Office does not currently have access to historical details of income earned by ASP from IJP. We do however have records from 1990 onwards, when the ASP royalty (as a percentage of profits) was £16,980.00 (AUD 43,534.00); the royalty payment has increased almost ten-fold in just over 20 years, and was £163,667.83 (AUD 241,172.85) for the 2012 financial year. ASP income is a percentage of Elsevier profits based on sales of the journals, so it is clear that the IJP is now a highly profitable journal.

Similarly, we don't have all the records of impact factors (I.F.) since the metric was first introduced, however an upward trend has been evident from an I.F. of 1.172 in 1995 to 3.637 in 2012. This rise in I.F. surprised many people, as in the past IJP was considered too general a journal to reach an impact factor of 3, but it did so with 3.092 in 2003. IJP has continued its general upward trend while many of its competitors suffered a fall in I.F. in recent years. Indeed, IJP has the highest I.F. of all the journals devoted to publishing research articles exclusively on parasites (not bacteria and viruses) in the "Parasitology" category of the ISI Journal Citations Report database.

As for the future, IJP is going from strength to strength, putting editors under more and more pressure to uphold the exceedingly high standard of the journal. Our reputation is very high amongst the broader international parasitology community. This is evident from the 2010 and 2014 (pending) ICOPA conferences, arguably the premier quadrennial international conference for parasitology, where IJP secured the rights to publish a thematic issue for each of these meetings and have first right to approach the

plenary speakers for potential articles. We will continue to keep abreast of all of the advances in electronic publishing while holding true to our mission of disseminating the highest quality research in parasitology with global impact and cutting-edge advances. ASP members have every right to be proud of their journal, and we hope to see the very best of Australian and international parasitology research continue to be submitted to IJP.

IJP contribution by Maria Meuleman, Alan Donald, Alan Johnson and Alex Loukas.

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### International Journal for Parasitology: Drugs and Drug Resistance (IJP:DDR)



At the ASP strategic planning sessions in 2009/2010 the idea of an IJP spin-off journal was raised. Council formed a strategic committee, consisting of Nick Sangster, Terry Spithill and Alex Loukas, to explore the concept in consultation with Dale Seaton at Elsevier. As a result, the Society and Elsevier launched a new scientific journal in August 2011: the International Journal for Parasitology: Drugs and Drug Resistance (IJP:DDR). The new journal was to publish original research and review articles, as well as current opinion pieces, in the areas of anti-parasitic drug identification, development & evaluation, and parasite drug resistance.



The journal was established with two Editors-in-Chief, Dr Kevin Saliba and Dr Andrew Kotze, with responsibilities for the publication of articles covering unicellular and multicellular parasites, respectively. Kevin and Andrew continue in this role. Kevin is an Associate Professor

in physiology and pharmacology at The Australian National University Medical School. His research is focused on identifying and validating physiological and biochemical pathways in the intraerythrocytic stage of *P. falciparum* that may serve as drug targets. Andrew is a



Senior Principal Research Scientist with CSIRO Animal, Food and Health Sciences in Brisbane, Australia, and also an Adjunct Professor in the School of Veterinary Science at The University of Queensland. His research is focused on the control of nematodes and blowflies through the study of drug resistance mechanisms, and identification of drug targets. The two Editors-in-Chief brought together a number of leading scientists in the human and veterinary parasite-control spheres to form a high quality editorial board for the new journal.

The journal was established on an open access model. Articles are not published in traditional hard-copy issues,

but rather are uploaded onto the journal web site soon after acceptance. Authors pay a fee to publish their article. The first three years of the journal (Volumes 1-3, years 2011-2013) consisted of just one Issue each, however this has been expanded to four Issues for 2014. The journal was indexed by Thomson Reuters in mid 2013, will be seen on PubMed before the end of March 2014, and should receive its first impact factor in June 2014. By the end of 2013 the journal had published 55 articles, and these have so far been cited over 130 times. An indication of the exposure the new journal is enjoying is the fact that its published papers have been downloaded over 100,000 times by early 2014.

### International Journal for Parasitology: Parasites and Wildlife (IJP:PAW)



The proposal for a second, open-access, IJP 'spin-off' journal in the area of wildlife diseases was raised at Council in 2010, endorsed in mid 2011 and subsequently discussed with Dale Seaton who was very supportive and 'championed' the proposal within Elsevier. The opportunity was seized because there was only one society-based journal in the broad field of wildlife diseases, a field that has expanded enormously in recent years in terms of ecology, conservation, biodiversity, and surveillance. *Veterinary Parasitology* only publishes papers on parasites of wildlife if they are zoo-based studies or of zoonotic significance. Consequently, other wildlife papers appear in conservation journals most of which have high impact factors. There was thus an opportunity for IJP to capture this emerging market. It was also agreed that the new journal should include parasites of fish given the growth in this area and the high impact factor of some general aquaculture journals. It was decided that the title of the new journal would be: *IJP Parasites and Wildlife (PAW)*.

Andrew Thompson and Lydden Polley were appointed as joint Editors in Chief, and 41 Associate editors appointed reflecting the broad scope of the journal. IJP-PAW was formally launched in September 2012 at the Wildlife Diseases Association Conference in Lyon, 22-27 July.



The International Journal for Parasitology: Parasites and Wildlife (IJP:PAW) publishes the results of original research on parasites of all wildlife, invertebrate and vertebrate. This includes free-ranging, wild populations, as well as captive wildlife, semi-domesticated species (e.g. reindeer) and farmed populations of recently domesticated or wild-captured species (e.g. cultured fishes). Articles on all aspects of wildlife parasitology are welcomed including taxonomy, biodiversity and distribution, ecology and epidemiology, population biology and host-parasite relationships. The impact of parasites on the health and conservation of wildlife is seen as an important area covered by the Journal especially the potential role of



environmental factors, for example climate. Also important to the journal is 'one health' and the nature of interactions between wildlife, people and domestic animals, including disease emergence and zoonoses.

Since the journal was launched 18 months ago, over 120 papers have been submitted and to date over 50 have been published and indexed in PubMed. Papers published reflect our broad scope in terms of hosts, parasites and areas of research.

Go to: <u>http://www.sciencedirect.com/science/</u> journal/22132244

### **ASP Newsletter**

A suggestion was made to ASP Council in 1988 to facilitate the production of an informal Newsletter to be mailed out to members with relevant news, views and information. Council prevailed upon Russell Hobbs at Murdoch University in Western Australia to develop an informative periodic Newsletter for distribution by post to all members. Russ rose to the challenge and developed a brilliant blend of official ASP reports with information on forthcoming events (especially annual conferences), awards, prizes, employment and funding opportunities, as well as chatty state news about member's activities and high shenanigans. He did so with a wonderfully dry Australian laconic style – a formula that resonated with

the membership to make the Newsletter an important advocate for collegiality, community and society. Successive ASP Newsletter Editors have been:

1989-1994:	Russ Hobbs
1994-2003:	Peter O'Donoghue
2003-2006:	Malcolm Jones
2006-2009:	<b>Michelle Power</b>
2010-2014:	Lisa Jones

News items are solicited not only from serving Council members but also from the general membership, predominantly through the relentless activities of State representatives requesting, cajoling, berating, pleading and bribing state members for submissions. The Newsletter Editor sits on Council as a non-voting member and is thus privy to relevant contemporary information for inclusion in the Newsletter. Looming deadlines for quarterly Newsletter issues have also provided additional motivation for the collation of written material (often more so than the deadlines associated with bi-annual meetings). Editors have to apply considerable tact and skill in editing submissions to avoid inadvertent pronouncements, potentially libellous or slanderous statements, and risqué or politically-incorrect jokes. It is never a dull job! ASP Council funds the publication and distribution of the Newsletter. Over the years, many people have been press-ganged into helping the Editors lick-n-stick or peel-n-seal envelopes for print-post-approved mailouts, but most members have now elected to receive their Newsletters electronically via email. Whatever the format, the Newsletter continues to be an important conduit for society engagement and networking.

### **Parasite Collections**

Over the years, many parasitologists have been industrious in the collection, maintenance and preservation of Australian parasites for further study. The ASP has provided political and financial support for various parasite collections, including compiling a register of stock cultures, assistance with the curation of museum collections, and developing a national database.

### Register

In 1969, Mr PL Thomas produced for the ASP a register of stock cultures of parasites maintained in Australia. The list has been updated regularly by a succession of ASP office-bearers and is available to all ASP members (published in the ASP Newsletter). Many researchers have freely provided or exchanged parasite strains for experimentation, particularly during the heady days of emerging anthelmintic resistance, protein profiling technologies and the molecular biology revolution. Management of the register was taken on by Lester Cannon at the Queensland Museum until 2002, and subsequently by Robert Adlard, the current Senior Curator of Parasitology.

### **Museum Collections**

In 1974, Mrs Pat Thomas urged the ASP to help establish a national helminth collection. Most state museums already had parasite collections that had been lodged by researchers, donated by organizations or individuals, or bequeathed as deceased estates. These disparate collections belonged to separate state governments, a major impediment to a centralized national collection. Over the next 15 years, the ASP lobbied successive governments for commitments in kind, and in cash, for curators to manage collections.

The ASP facilitated the compilation of a list of helminth type specimens held by museums (Spratt, 1983) and applied to the Australian Biological Resources Study (ABRS) for funds to curate collections, leading to the appointment of Lesley Warner in 1981 to work on the Australian Helminthological Collection at the South Australian Museum, albeit for a limited term. After years of ASP lobbying and considerable volunteer work, notably by Pat Thomas and Madeline

Angel, the position of Curator of Helminthology was created at the South Australian Museum and Sylvie Pichelin occupied that position from 1994-1997. In 2001, Ian Whittington took up a joint appointment as Research Scientist (Helminthology) at the South Australian Museum and the University of Adelaide. More recently, Leslie Chisholm was appointed Collection Manager (Parasitology) at the South Australian Museum.



The significant collections of parasitic helminths and protistans at the Queensland Museum were curated from 1976-2002 under the Lower Invertebrates portfolio by Lester Cannon who, together with collection manager, Kim Sewell, incorporated the substantial collections of John Sprent and John Pearson (among others) into the Queensland Museum holdings. In 1987, after discussions with John Walker from Westmead Hospital, the parasite collections gathered through the former School of Tropical Medicine and Hygiene in Townsville were given to the Queensland Museum. In 1996, prompted by donation of the WHO-funded International Reference Centre for Avian Haematozoa, Robert Adlard joined the curatorial staff of the Queensland Museum where he was initially responsible for parasitic Protista, and then on Cannon's retirement, together with the Collection Manager, Mal Bryant, all collections were amalgamated into a single portfolio with Adlard as Senior Curator of Parasitology.



### ASP Information on Collections (ASPIC)



Information on RSPIC and the complete RSPIC 2000 database

The ASP provided funds to the Queensland and South Australian Museums in 1989 to computerize their parasite records. In 1990, John Sprent tabled a proposal to ASP to compile an Australian database on all existing preserved parasite specimens. Deliberations by Ian Beveridge, David Spratt and John Walker on behalf of the ASP brought this idea to fruition, and Lester Cannon began development of the database he termed ASPIC – a play on the gastronomic delight of 'worms-in-aspic'.

A CD-ROM entitled 'ASPIC 2000' was sent to all participating institutions in Australia in 2002, documenting records for 65,300 helminth specimens, most of which (62,745) are held in the South Australian Museum and Queensland Museum collections. Since then, parasitic worm registrations have increased to 80,300 and parasitic protists to 58,600, most of the latter originating from the International Reference Centre for Avian Haematozoa now held at the Queensland Museum.

Today, museum data are available through web-based

platforms with the Atlas of Living Australia (ALA) providing searchable and downloadable datasets. The ALA contains information on all the known species in Australia aggregated from a wide range of data providers: museums, herbaria, community groups, government departments, individuals and universities.

Twenty-four years after the original vision of senior ASP members, parasite records are electronically updated directly from museum databases and made available to anyone through the world-wide web.

### **ASP Network for Parasitology**

On September 29, 1999, the Australian Society for Parasitology held a Strategic Planning Meeting, led by the then President of the Society, Nick Sangster, which culminated in four priority recommendations:

- 1. the Society should reforge links with international parasitological organisations;
- the Society should improve its efforts to remodel itself to be more representative of all Australian parasitologists, most especially to attract to new members from the medical research community;
- the Society develop a "public face" to explain and educate about the importance of parasites, parasitology and parasitologists; and
- 4. the Society prepare an "issues" paper to advise the Commonwealth Government on the current state of the discipline of parasitology in Australia, potential threats posed by parasites and present recommendations to secure Australian parasitology's future for the benefit of all Australians.

Little did the participants in the 1999 ASP Strategic Planning Meeting know, but those four recommendations laid the framework for the genesis of the ARC/NHMRC Research Network for Parasitology. On February 11, 2002, the Federal Minister for Science, Peter McGauran was presented with a recommendation from the Federation of Australian Scientific and Technological Societies (FASTS) that research and training in parasitology must be addressed as a national issue (FASTS *Occasional paper #4, An Investment in Human and Animal Health: Parasitology in Australia*). Roughly one year later, the Commonwealth Government began discussing a new Australian Research Council (ARC) scheme – *The Research Networks Scheme* – and the idea for a Research Network in Parasitology was first discussed formally at the Annual General Meeting of the Society in Darwin in July, 2003.

The then President of the ASP, Tom Cribb, invited Nick Smith to lead a bid for seed-funding to prepare a full application for a Research Network for Parasitology. Nick Smith, Andy Thompson and Dave Jenkins met in Adelaide on August 1, 2003 and drafted the seed-funding application. This application was successful, as was an application by Leann Tilley and Geoff McFadden to establish a Research Network for Malaria. The ARC awarded the parasitologists \$30,000 and the malariologists \$20,000 and "advised" the two groups to attempt unification for an application for full funding of a network. The seed funding of the two groups was used to conduct workshops in Sydney on October 29, 2003 and December 17-18, 2003 to discuss the current state of the field in Australia.

The conclusion from these two workshops was that, while Australian parasitological research is world class and in many areas is leading the world, it is relatively fragmented because of the distances separating the large number of institutions and laboratories carrying out parasitological research. A truly national approach to parasitology, the meeting concluded, would make Australia an international competitor in the research and development of methods to control animal and human diseases caused by parasites.

The decision to formulate a single bid for a Research Network for Parasitology to enhance and focus Australia's research effort in parasitology was clear-cut. Nick Smith

was nominated as Convenor, and a final workshop was held in Sydney on February 17, 2004, to complete the final draft of the application. The overarching theme of the application was the aim to facilitate research and collaboration across and between the states of Australia and internationally, providing an outstanding parasitology research training focus for the nation. It was successful and was awarded \$1.5 million dollars from the ARC and the National Health and Medical Research Council (NHMRC) and, thus, named the ARC/NHMRC Research Network for Parasitology. The Network also secured an additional \$800,000 in combined funding from: the ASP; the University of Technology, Sydney (UTS); Murdoch University; LaTrobe University; Monash University; The Australian National University; The University of Sydney; The University of Queensland; the Queensland Institute of Medical Research (QIMR); the Walter and Eliza Hall Institute of Medical Research (WEHI); and the South Australian Museum. This total funding of \$2.3 million was for 5 years (January 1, 2005 – December 31, 2009).

#### Mission

The mission of the Network was to focus and enhance Australia's fundamental, strategic and applied parasitology research capabilities, leading to: a better understanding of parasitism, parasite biology and parasitic disease; and the development of sustainable control strategies to improve and protect the health and well-being of humans and animals.

### Objectives

The main objectives of the Network were to:

- create an exciting, multidisciplinary research environment for Australian parasitology;
- establish a world-class environment and web of facilities to attract and retain the most talented young investigators from Australia and overseas;
- promote Australia as a centre for parasitic research;

- foster scientific interaction both within Australia and internationally; and
- place Australia at the forefront of dealing with current and future parasitological threats.

### Specific Research Aims

The Network developed four specific research aims cast in the context of Australia's National Research Priorities:

- Maintaining an Environmentally Sustainable Australia through the generation of both knowledge about and practices for the management of terrestrial and marine ecosystems. The combined expertise of the Network aimed to assess the susceptibility to, and monitor the prevalence of, parasitic disease in wildlife by: assessing parasite diversity in Australian fauna; and ensuring the sustainability of wildlife and ecosystem health.
- 2. Promoting, Improving and Maintaining the World's Health by developing new vaccines and treatments for local and global populations and creating new technologies to monitor and prevent contamination of waterways with infectious stages of zoonotic parasites (one of the world's principle causes of disease). This required: better understanding host-parasite relationships; and discovering and developing sustainable parasite control strategies.
- 3. Frontier Technologies the development of novel molecular tools and information resources. The Network focused on the field of bioinformatics and the development of new databases and data management systems. This was intended to allow Australia's researchers to harness the vast quantity of information that has been generated by the growing number of genome sequencing projects. By placing Australia at the forefront of this research, the Network sought to create unprecedented opportunities to identify new vulnerabilities and

targets for the control of parasites. The specific objectives of the Network were to: discover and develop molecular and bioinformatics tools for studying parasite biology; and discover and develop anti-parasite vaccines and therapies.

4. Safeguarding Australia and the World by developing new technologies for the early detection and continued surveillance of Australia's borders. The specific objectives of the Network were to enhance and focus Australia's parasitology research effort to: better understand the epidemiology and transmission dynamics of parasites; and discover and develop better surveillance systems.

### Outcomes

There were two immediate effects of the award of funding for the Network:

- First, it put in place formal ties with several overseas parasitological societies and networks, achieving the first aspiration of the ASP's 1999 Strategic Planning meeting. This aspiration was enhanced by the introduction of a Researcher Exchange, Training and Travel Award Scheme. This scheme provided \$545,000 for over 100 researchers – 76% of whom were early career researchers or research students – to travel between collaborating laboratories, to field sites and to training workshops around Australia and throughout the world.
- And, second, it united Australia's animal and human parasitology researchers, instantly achieving the second key aspiration of the ASP's 1999 Strategic Planning meeting. This unification was further cemented by a conference, organised by Emanuela Handman (Chair), Alan Cowman, Marshall Lightowlers, Geoff McFadden, Maureen Grant, Marian Cravino and Nick Smith, and fully funded by the Network. The conference was held at the

Walter and Eliza Hall Institute of Medical Research in May, 2005, and representatives from every parasitology research group around Australia were invited to speak. No further independent Network conferences were held; rather, the Network injected considerable funding and expertise (from its staff) into the ASP Annual Conference, resulting in a significant expansion in the number of international speakers brought to the conference, a development that allowed the Society to confidently bid for, and win, hosting rights for the 2010 International Congress of Parasitological Associations. Very strong annual conference attendance patterns effectively double the typical numbers attending previous ASP conferences - have been experienced since the establishment of the Network. The Network also provided financial support for several smaller, more focused workshops, symposia and conferences between 2005 and 2010. Gratifyingly, many of Australia's medical parasitology research community signed on as members of the ASP and have gone on to be very active participants and committed, generous servants of the Society ever since.

### Award schemes

The Network devoted particular attention to the development of research students and early career researchers. The Network's *Research Exchange, Training and Travel Award Scheme* created opportunities for collaborative research – particularly international collaboration – that would otherwise not exist. This proved particularly valuable for research students and early career researchers who were granted the opportunity to work in different laboratories in Australia and overseas, gaining access to specialised equipment and expertise and exposure to a wider variety of research cultures than would normally be possible.

Additionally, the Network ran professional development

workshops on an annual basis, in conjunction with the ASP Annual Conference. Career guidance opportunities for early career researchers were enhanced by the introduction of the Network Mentoring Scheme at the Network's Early Career Researcher Workshop in Canberra, in July, 2007. Early career researchers were encouraged to apply to the Network Convenor, in strict confidence, for funding to participate in this scheme. The scheme allowed young investigators to be paired with experienced, successful researchers to discuss, plan, prioritise and set targets for their career. Mentors discussed with the early career researcher their personal career aspirations and development and the early career researcher were able to seek advice on annual and longer-term goals and career planning. The scheme has proved very valuable for numerous young researchers and their mentors.

### **Bioinformatics**

The Network also established an IT team with staff at the

Victorian Bioinformatics Consortium (Monash University) and in the Computational Research Support Unit (Faculty of Science, the University of Technology, Sydney), a member of the Australian Partnership for Advanced Computing (APAC) Grid Program.

As a proof of capabilities exercise, the Network IT team undertook a project to develop a *Sarcoptes scabiei* EST Database. An NHMRC Medical Genomics Grant had provided initial funding to sequence an EST library generated from mRNA obtained from scabies mites, however, bioinformatics activities were not adequately funded by the grant and the Network took over the analysis, construction of database and public release of the information. This has required a great deal of work as the project had to start from scratch, processing the raw sequencer reads for quality and assembling raw reads into contigs.

Additional advanced genomics and functional genomics



platforms were made available to Network scientists by arrangement with the Victorian Bioinformatics Consortium, including the *Wasabi genome annotation system*, which was designed to facilitate the rapid annotation of prokaryotic or eukaryotic genomes, and to allow browsing and searching of the annotated genomes, and computing infrastructure to support microarray experiments and provide statistical expertise, particularly for the analysis of microarray data.

### PARA-SITE

The Network also co-funded, with the ASP, the development of an "Australian Parasite Research and Education Resource" – PARA-SITE – by Peter O'Donoghue and Lynn Pryor at The University of Queensland. The resource is a web-based interactive site with illustrated keys to helminth, protozoan and arthropod parasites of Australian hosts relevant to undergraduate students, postgraduate students, teachers and researchers in biology, medical and veterinary sciences. It provides basic information about parasites causing disease in animals and people including:

- parasite morphology (fundamental to taxonomy);
- host range (species specificity);
- site of infection (tissue/organ tropism);
- parasite pathogenicity (disease potential);
- modes of transmission (spread of infections);
- differential diagnosis (detection of infections); and
- treatment and control (cure and prevention).



Users interact with the system by selecting a parasite of interest and then systematically building an illustrated life-cycle for that parasite. The life-cycle diagrams are supported by general overviews for each parasite assemblage, detailed textual



descriptions for specific parasite taxa, color photographs of parasite developmental stages and host lesions, and host- parasite checklists.

### Communications

In fulfilment of the third aspiration of the ASP's 1999 Strategic Planning Meeting, the Network appointed a Communications Coordinator, Lisa Jones, in October, 2005. Lisa transformed the public face of Australian parasitology forever, designing and implementing a communication plan that included the staging of public lectures, innovative shows and exhibits, as well as the production of media releases to highlight parasitologists and parasitological breakthroughs and discoveries.

The crowning achievement in the outreach program of the Network was the production, with ASP funding, of *Parasites in Focus*, an interactive, travelling, exhibition depicting the fascinating world of parasites and the work of Australian parasitologists. Designed and developed in collaboration with Stuart Kohlhagen of Questacon, The National Science Centre, and with the help of dozens of ASP members, *Parasites in Focus* travelled around Australia for more than 4 years, reaching over a quarter of a million of Australians.

### **Current Status**

At its 2009 Annual General Meeting, the ASP took the momentous decision to take over support for the Network when the ARC's Research Networks Scheme ceased in 2010. This decision was made in view of the tremendous success of Network activities and the recognised value these had endowed for members. Nick Smith and Lisa Jones were invited by the ASP Council to continue as Convenor and Communications Coordinator, respectively, and the Network's Research Exchange, Training and Travel Award Scheme, Mentorship Program and Outreach activities continue uninterrupted – since 2010, another \$300,000 has been committed to Network's Research Exchange, Training and Travel Awards, supplemented by an \$800,000 grant from the NHMRC (for OzeMalaR, coordinated by Geoff McFadden) to support Australian malaria researchers to undertake research exchanges with partners in the European Union's Centre of Excellence, EviMalaR, dozens of innovative outreach events have taken place (including with funding won from Inspiring Australia, a Commonwealth Government initiative), and early career researcher workshops are an even more prominent feature of our annual conference. Nick Smith (Convenor) and Lisa Jones (Communications Coordinator) have been, effectively, "permanent" staff of the Network since its genesis. They now report directly to the ASP Council.

During its ARC/NHMRC funding period, the Network was overseen by a Management Committee that included core members (Alex Loukas, Una Ryan, Geoff McFadden and Andy Thompson, in addition to Nick and Lisa) as well as other members in different years (Kevin Saliba, Leann Tilley, Rob Adlard and Jody Zawadzki) plus ASP Presidents (Dave Jenkins, Simon Reid, Mal Jones and Shelley Walton).

The ARC/NHMRC Research Network also had a core Advisory Committee (Chris Bryant, John Horton, Graham Mitchell, Nancy Millis), which also called upon international experts (Artur Scherf, Bob Sinden, Sornchai Looareesuwan, Terry Spithill) from time to time.

Since 2010, the Network's Research Exchange, Training and Travel Award Scheme has been assessed by a committee chaired by Una Ryan and including Rowena Martin, Kate Hutson, Deb Holt, Jake Baum, Brendan McMorran, Marshall Lightowlers, Geoff McFadden, Andy Thompson, Mal Jones and Nick Smith. OzeMalaR Travel Awards have been assessed by Geoff McFadden, Kevin Saliba, Denise Doolan, Chris Engwerda, Ric Price, Nick Smith, Dominique Soldati-Favre, Klaus Lingelbach and Andy Waters.
#### ASP 50th Anniversary Commemoration | Achievements

### **ASP Website**

The ASP recognized the need to consolidate internet portals to parasitological resources and information. In 2002, the ASP website was created to provide a conduit to relevant material for members. The web address is: <u>www.parasite.org.au</u>

Maintaining such a dynamic and flexible resource is time-consuming so ASP sought professional guidance. Commercial designers were consulted to facilitate the project, and ASP Network member Jason Mulvenna was appointed as Webmaster in 2007. Together with Lisa Jones, the Network Communications Coordinator, they manage the enormous amount of content available through the website. The Home page menu lists Awards and Prizes, Jobs Listing, Membership, Outreach, The Society, Newsletters, Links, Events and Subscribe.

### The Pugh Parasitology Collection

In 2012, Robyn Pugh donated a stunning collection of photographs of parasites and other pictures collected by herself and her late first husband Professor Peter FL Boreham. This valuable collection has been annotated and has been made available for research and teaching on the ASP website.

### A History of Parasitology in Australia and Papua New Guinea

Beveridge I. & O'Donoghue P.J. (eds) 2009. A History of Parasitology in Australia and Papua New Guinea. Raw Publishing, Blackburn, Victoria, Australia. 547 pp. ISBN 9780980633801

The genesis of this book was long and complicated. In his ASP presidential address in 1990, Ian Beveridge deplored



the way in which the history of the Society had apparently not been documented. In 1993, John Sprent formally requested the ASP undertake the preparation of a book on the history of parasitology in Australia. Ian Beveridge and Peter O'Donoghue were asked to act as editors. Thence followed the usual difficulties of asking senior members who knew

details to put their insights onto paper. Eventually, seven years later, the last contribution was received. The wait was worthwhile, as many contributors were essentially committing what had been until then an oral history into a written format. Many contributions were highly personal but extremely valuable as they included first-hand accounts of historical figures of significance. It was never envisaged that the published history would be a definitive work – rather the aim was to capture the views of senior members before it was too late. A definitive and more contemporary history remains in the offing.

This book provides a valuable resource for the future, not only in the personal recollections of senior members of the Society, but also in the extensive bibliography which probably includes most of the significant publications in Australian parasitology from settlement until the 1980s (this terminus was selected to coincide with a pivotal event for parasitology in Australia, that of ICOPA 1986). In the initial plan, Papua New Guinea had not been included. On reflection, it was realised that numerous Australian parasitologists had been involved in this area and a decision was made to expand the topic to Australasian parasitology.

#### ASP 50th Anniversary Commemoration | Achievements

#### The Table of Contents is:

- Chapter 1. Introduction
- Chapter 2. The Australian School of Parasitology
- Chapter 3. The Bancroft Family
- Chapter 4. Parasitology in northern Queensland
- Chapter 5. The Australian Hookworm Campaign
- Chapter 6. The University of Queensland
- Chapter 7. Parasitology in animal research laboratories of the Queensland Government
- Chapter 8. Parasitology in CSIRO in Queensland
- Chapter 9. The Queensland Institute of Medical Research
- Chapter 10. The University of Sydney
- Chapter 11. The CSIRO McMaster Laboratory, Sydney
- Chapter 12. Parasitology at the CSIRO Pastoral Research Laboratory, Armidale
- Chapter 13. Parasitology in Canberra
- Chapter 14. Parasitology in the New South Wales Department of Agriculture
- Chapter 15. Parasitology in Victoria
- Chapter 16. Parasitology at The Walter and Eliza Hall Research Institute, Melbourne
- Chapter 17. Parasitology in South Australia
- Chapter 18. Parasitology in Tasmania
- Chapter 19. The Tasmanian Hydatid Control Program
- Chapter 20. Parasitology in Western Australia
- Chapter 21. Parasitology in the Northern Territory
- Chapter 22. Parasitology in Papua New Guinea
- Chapter 23. History of the Australian Society for Parasitology

## **FASTS Occasional Paper no.4**

Parasitology in Australia : an investment in human and animal health Editors Mark Sandeman and Lesley Warner Executive Summary

Two billion people in the world are clinically infected with

parasites but humans and the parasites that afflict us are not static. The discipline of Parasitology has contributed a great deal to the overall health of the Australian people, and thus to the economy, via excellence in research over many years. This paper discusses a range of emerging problems that are consequent on the declining emphasis on parasitology in Australia and which are exacerbated by the effects of increasing globalisation of trade and global warming. The key findings are:

### 1. Increased significant risk of disease

Changing climatic conditions in Australia with global warming will cause changes in the distribution of parasites, increased numbers of parasites in some regions and the potential of transfer to Australia of previously unknown parasitic diseases.

# 2. Increased need for quarantine and surveillance strategies

The potential for new parasites to invade Australia is enhanced by the flow of goods and services across international boundaries. Continuing vigilance and research is necessary to ensure the country's safety. Monitoring livestock movements, development of risk strategies, effective quarantine policies and early warning systems are vital to protect Australia from threats such as malaria, surra and the vector borne arbovirus diseases.

3. Increasing difficulty with disease control

Resistance to drug therapy is an increasing threat to the viability of the grazing industry and to human disease control. Resources and expertise are needed to promote research to develop new drugs, alternative therapies and novel control strategies. Technology transfer from parasitologists to industry is also vital to the continuing profitability of Australian companies.

4. Threats to provision of safe food and water

White Association by the Adveronment d Veternery Percetting) MOTO ALCOCATION Soc the Advancements of determined measurements

To the membership of the Australium Society for Paritytology. 01 January 2014 The World Association for the Advancement of Vetermary Parasitology (WAAVP) warmin communicates the Anatolium Society for Parasitology The World Association for the Advancement of Veterinary Parantology (ASP) (WAAVP) warmity congratulates the Autoration Society for Parantology (ASP) in eelebration 25 Societ anti-version WAAVP eelebrated the same milestone last year and recordines the significant of such a bac Over the last 50 years the ASP has natured and is recognised as a leading body in prosecuting the values of parasitology in nom domestic and international areas. in detectivating the subject and werstry. WAAVP detection fast year and recontributes the significant of such a date. The relationship of WAAVP with ASP is solid and long standard. ASP members regularly allend WAAVP conferences and the ASP has previously bosted The relationship of WAAVP with ASP is solid and long standard. ASP members regularly anend WAAVP conferences and the ASP has previously busied WAAVP conferences in Sydney (1977), Christehurch (2005) and Peril (2013) On behalf of your fellow parasitologists within the WAAVP Lwith all ASP members a celebratory year to reflect on your achievenuents and also in early On behalf of your fellow pressitologists within the WAAVP Lowith all ASP members a celebratory year to reflect on your adheerements and also in plan follore endeavours for the new 50 years. arenas.

Yours sincerely

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Dr Peter Holdsworth AM FAICD President WAAVP 2011-2015

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#### ASP 50th Anniversary Commemoration | Achievements

Costs to food production because of parasitic disease are escalating. The broad scale use of chemicals to control disease is limited because of toxicity and pollution problems. Water supplies and food stuffs, both plant and animal, need to be free of parasites that can cause human disease as well as residues of the drugs used to control the parasites.

#### In summary

The pressures from old, new and potential parasitic diseases are increasing in Australia. However, resources available to science and science infrastructure to deal with these threats have decreased. Facilities in the CSIRO and Universities have been downsized or closed, numbers of expert clinicians, diagnosticians and researchers have all declined. This will continue to affect the ability of Australian science to provide answers to Australian problems and to maintain our international competitiveness. Australia has been at the forefront of bio-control research, vaccine development, gene technology and biodiversity research. Unless governments take urgent action to reverse the decline in job opportunities, direct research funding and industry investment in research parasitology will continue to decline. Australia will consequently lose its predominant place as a country of excellence in parasitological research. Those parts of the economy reliant on Agriculture will become less profitable and public health will be at greater risk.

Photographs from Marshall Lightowlers, University of Melbourne . Facing page, clockwise from top left

- 1. Marshall Lightowlers and David Jenkins in the Kosciusko National Park on the hunt for hydatid cysts. In the vehicle, Mr Bill Morris, dingo hunter, fisherman and raconteur extraordinaire. c2000
- 2. Oscar Jensen and Marshall Lightowlers about to handle dogs experimentally infected with *Echinococcus granulosus* and used to contaminate pastures In Chubut province, Argentina for the purposes of undertaking a field trial of the EG95 vaccine. c2005
- 3. Marshall Lightowlers holds a specimen of the tapeworm *Taenia solium*. The pigs were involved in an experimental program funded by the Wellcome Trust and the National Health and Medical Research Council which optimized the immunogenicity of the TSOL18 vaccine against porcine cysticercosis. c2006
- 4. Marshall Lightowlers, Craig Kyngdon and Charles Gauci with part of a 210,000 dose shipment of TSOL18 vaccine which was provided by the University of Melbourne to the Cysticercosis Working Group in Peru as a contribution to their Bill and Melinda Gates Foundation-

funded Taenia solium Elimination Program being conducted in the Tumbes region of northern Peru. The vaccines were manufactured by Drs Kyngdon and Gauci (Lightowlers was just there for the photo). c2009 Werribee parasitology 1970. Some members of the Department of Para-Clinical Sciences at the Faculty of Veterinary Science, University of Melbourne c1980. Front row: Mike Rickard, GR Rajasekariah, Paul Presidente, Christine Andersen, Challis Boland, Philip Craig, Jill Singer, Paul Squires. Back row: Ian Jenkins, Jack Arundel, Ruth Reuter, Keith Hughes, David Obendorf Dr David Jenkins and late porcine friend. David was undertaking a project to determine the prevalence of cystic echinococcosis in macropod marsupials and feral pigs in the Kosciusko National Park. The pig was post mortem'd, found infected, then BBQ'd and eaten. c1988. Experimental infection of sheep with viable Echinococcus granulosus eggs. Eggs are injected directly into the rumen via a 16G 6" needle using a 3-way disposable stopcock. Following injection of the eggs the needle is flushed with water from a second syringe. Sheep held by Ms Sonja Gauci. c2006

5.

6.

7.

# FEATURE Photographs from Marshall Lightowlers















# Awards and prizes

In an endeavour to recognize and reward excellence in parasitology, the ASP established special awards and prizes available to individuals nominated from its membership. Funds were also made available to support invited lecturers, researcher exchange, postgraduate student travel, honours scholarships, and undergraduate student prizes. The Society chose to foster new generations of parasitologists to ensure a lasting legacy.

## **Bancroft-Mackerras Medal**

This prestigious award allows the ASP to recognise outstanding contributions of individual members to the science of Parasitology. It is based particularly on work published over the last five years. Nominations are considered by a committee of Fellows appointed by Council. The Medal commemorates the contribution of the Bancroft-Mackerras dynasty to the development of the discipline of Parasitology in Australia from the 1860s to 1960s. The award includes a medallion, and sponsored travel to the Annual Scientific Meeting. The recipient, who is a guest of the Society for the duration of the Meeting, gives a presentation which is then published in the Meeting issue of the International Journal for Parasitology. The Medal has been awarded 17 times in the 32 years since its inception in 1982.

#### **Bancroft-Mackerras Medal recipients**

1982	RW Sutherst
1983	MD Rickard
1984	GF Mitchell
1986	l Beveridge
1989	AM Johnson
1990	IG Wright
1991	RCA Thompson
1996	DR Hennessy
1998	MW Lightowlers
1999	<b>RH Andrews</b>
2000	RB Gasser
2006	Aloukas

2007	TH Cribb
2008	K Kirk
2009	B Crabb
2010	LTilley
2012	M McConville
2014	?



# John Frederick Adrian Sprent Prize

The John Frederick Adrian Sprent Prize is a substantial prize in cash presented to a member of the Society who has written an outstanding thesis in Parasitology for which the PhD degree was awarded during the previous three years. Nominations are considered by a committee appointed by Council. The prize is marked by the presentation of a cheque and certificate to the recipient together with a medal as a permanent token of achievement, and by a lecture from the recipient to the Society at their Annual

#### ASP 50th Anniversary Commemoration | Awards and prizes



### JFA Sprent Prize recipients

1987	DR Hennessy
1990	SC Barker
1993	NB Chilton
1997	J Bowles
1999	J Waterkeyn
2002	SL Cameron
2005	R Traub
2008	M Ellis
2011	C Spry
2014	?

## Other awards and prizes

### **ASP Invited Lectureship Travel Grant**

This grant allows members of the Society to nominate overseas researchers of international reputation to visit Australia to speak at the Annual Scientific Meeting of the Society and other venues around the country. The invited speaker's expertise must be common to a discipline or symposium represented at the Scientific Meeting. The grant assists with travel, registration and accommodation costs. Council considers nominations put forward by members, including details of the projected itinerary, complete curriculum vitae, and a justification for the invitation. The Invited Lecturer is expected to visit at least two Australian states in addition to the Meeting's location. A large number of renowned parasitologists have been the recipients of these grants, and they have contributed greatly not only to the quality of our conferences, but also to fruitful international collaborations between host institutions.

### Researcher Exchange, Travel and Training Awards

This scheme is available to members of the ASP for Researcher Exchanges, Training Courses, Visiting International Lectureships, Workshops and Grant Writing Retreats. The ASP aims to: promote and facilitate interaction between colleagues, peers and potential research partners; communicate the scientific achievements of its members; and create professional development opportunities for them, in particular for postgraduate students and early career postdoctoral fellows. ASP has therefore made funds available for its members to undertake important, relevant travel: including exchanges between laboratories, participation in training courses, finance lecture tours, and organize workshops and/or grant writing retreats that promote or foster significant collaboration between ASP members. This award scheme does not support travel to attend conferences, with the exception of the JD Smyth Travel Award.

### JD Smyth Travel Award

Financial assistance is provided to full-time postgraduate student members who are enrolled at a recognized Australian University for the purpose of travelling overseas

#### ASP 50th Anniversary Commemoration | Awards and prizes



Sarah Catalano (University of Adelaide) was a recipient of the JD Smyth Postgraduate Travel Award in 2012 for a Researcher Exchange to visit A/Prof Hidetaka Furuya, Osaka University, Japan

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 award is not provided for the primary purpose of attending a conference. Recipients are to be chosen by a selection committee appointed by Council. Applications include details of the travel to be undertaken, the applicant's research, evidence of the supervisor's support and an abbreviated curriculum vitae. Awardees are required to provide a report of their trip within three months of their return. The reports are published in the ASP Newsletter.

### **ASP Student Awards**

Student members presenting oral and poster presentations at ASP Annual Scientific Meetings are eligible to win cash

Student Awards for the best presentations as judged by a panel of members appointed by Council and Conference Organizers. These awards seek to promote professional development among student members and reward them for excellence. Students are at liberty to spend their awards as they see fit.

#### **Student Travel Grants**

The ASP offers all bona fide student members the opportunity for part reimbursement of the costs of attending the Annual Scientific Meeting of the Society. Funds usually cover 50-75% of the Registration, Accommodation and Travel costs incurred by student members. Students must be members of the Society and be enrolled for a higher degree at a recognized Australian University. These generous grants encourage student participation in our Meetings by substantially reducing their costs. It facilitates fraternization, networking, collaboration and even employment prospects as the next generation is inducted into our community of parasitologists.

#### **ASP Undergraduate Prizes**

Universities reward excellence in undergraduate courses through the provision of awards and cash prizes, usually linked to specific disciplines by endowments or society donations. The ASP provides cash undergraduate prizes to tertiary education institutions offering suitable courses in Parasitology, for presentation to the best undergraduate student each year (as identified by the highest passing mark/grade).

Students demonstrating strong proclivities for parasitology are encouraged to undertake Honours projects. The Society has previously provided small Honours scholarships to suitable institutions on a competitive basis, but the scheme is now in abeyance due to perceived inequities among the Society membership.

ences hnology www.respectthescience.org.au www.sta.org.au GPO Box 259, Canberra City ACT 2601 Tel: 02 6257 2891 Fax: 02 6257 2897 To the executive committee and general members of The Australian Society for Parasitology. Congratulations on achieving your 50% Anniversary. The ASP was established to engage with and communicate advances in parasitology to the general public and ABN 71 626 822 845 Congratulations on achieving your 50<sup>th</sup> Anniversary. The ASP was established to engage with and communicate advances in parasitology to the general public scientific community. This founding principle has been achieved through 43 engage with and communicate advances in parasitology to the general public is scientific community. This founding principle has been achieved through 43 ware of publication of the International Journal of Parasitology or more rect scientific community. This founding principle has been achieved through 43 years of publication of the International Journal of Parasitology or more recently through innovative public lectures and social media to inspire the scientists of Years of publication of the International Journal of Parasitology or more recently through innovative public lectures and social media to inspire the scientists of tomorrow. Parasitology. The ASP has been a long standing member of Science and Technology Australia, and in partnership we have engaged with all levels of government to and in partnership we have engaged with all levels of government to communicate the fundamental part that science and technology play in boosting pational prosperity and well being. The ASP has been a long standing member of Science and Technology and in partnership we have engaged with all levels of government to communicate the fundamental next that edges and technology Lagain congratulate the ASP on this fantastic achievement and wish the society and its members every success in the future. tomorrow. national prosperity and well being. and its members every success in the future. Yours sincerely. Dr Ross Smith STA President

## **FEATURE** Reaching out

ASP members have a long history of engaging with the general public through outreach activities, and their audience includes school students, visitors to our zoos and museums, teachers, national and international health professionals and rural and regional Australian communities. ASP scientists recognise the important role they can play in communicating to the wider community with the aim to stimulate more interest in science and health. Public lectures and outreach activities help the Australian Society for Parasitology meet one of its aims in promoting Australia as a centre for parasitic research. Utilising these opportunities to showcase the hard work of Australian parasitologists is a perfect way to engage a curious public. These photos reflect just a small sample of many varied ASP Outreach activities that take place across Australia.

The ASP Network's Outreach efforts received a major boost in June 2012 with the award of an Inspiring Australia grant from the Australian Government through the Department of Industry to run a series of free public events "Parasites in Power" to explore the world of parasites.

Over 100 members of the public enjoyed the first Inspiring Australia / ASP outreach event in Launceston 2nd July 2012 "Parasite Encounters in the Wild" featuring presentations and activities based around parasites and wildlife, with a special guest appearance of a Tasmanian Devil from Trowunna Wildlife Park, Mole Creek, Tasmania. Our presenters were Professor Greg Woods, Menzies Institute Tasmania, Professor Andrew Thompson, Murdoch University, Professor Ian Beveridge, The University of Melbourne and Androo Kelly from Trowunna Wildlife Park. Lisa Jones was compere.

At the Australian Science Teachers Association Conference on 9th July 2013 Lisa Jones and Nick Smith ran a handson workshop "Who poohed in my food?" for 17 science teachers, in partnership with Kay Lembo the Primary Industry Centre for Science Education, (PICSE). The workshop aimed to promote outreach and engagement with teachers through professional development and encouraging more students into scientific and technological gualifications and careers by developing links between schools, Universities and scientific industries. This workshop has been repeated across Australia run by PICSE Officers and ASP researchers (Dr Haylee Weaver, USC and Dr Melanie Leef, UTas) and engaging with teachers and is based on a hands-on workshop developed by (then) UTS researchers Dr Kate Miller, Dr Nicky Boulter and Dr Rowena Lock and Lisa Jones.



Our joint ASP-Inspiring Australia public outreach events in Perth with our partners Perth Zoo, Scitech and Murdoch

#### ASP 50th Anniversary Commemoration | Reaching out

University were lots of fun. Parasites in Focus at Perth Zoo on Saturday 24th August 2013 attracted more than 300 of the 3000 visitors to the Zoo that day and gave people from all ages the chance to engage with ASP parasitologists and explore the fascinating world of parasites with activities suitable for everyone to enjoy, and an opportunity for zoo patrons to get "under the skin" of Australia's parasitologists.

"Parasites and Pets, Parasites and You – What do you really think you know?" took place on Sunday, 25th August, 2013 and attracted attended by 150 members of the general public and their feedback has been a resounding thumbs up for a very entertaining and informative event. Professor Susan Little, Oklahoma State University, Professor Malcolm Jones, University of Queensland and Professor Andrew Thompson from Murdoch University gave a lively performance on stage and hosted a quiz with prizes (for non-parasitologists) whilst our "Young parasites science club" engaged in science activities. Murdoch University even offered a free parasite poo sample check.

"Profs, Pints and Parasites. Friends Without Benefits." held on Tuesday 27th August 2013 at a Perth bar. This inspiring and energetic event was hosted by Renae Sayers from Scitech and featured Professor Peter O'Donoghue and Dr Stephanie Godfrey doing parasite interpretive dance and wide discussion from evolution and environment to

why you need to "watch your orifices" with new threats on the block - parasites play a far more important (and horrifying) role in the world than you have ever imagined. In 2014 our ASP-Inspiring Australia "Parasites in Power" and National Science Week events will be a highlight with flags along Commonwealth Avenue bridge, public exhibitions, presentations, movies and children's workshops taking place across Canberra in June, July and August. Parasites in Focus will be on display in the Gallery, CSIRO Discovery Centre, 9 June – 3 August. At the Australian War Memorial (AWM) in Canberra we will run a two-part public lecture series "Parasites: the war years" in June and August. "War on Parasites" will take place Sunday 29th June, and feature Professor Alex Loukas (James Cook University) and Dr Graham Mitchell (Foresight Associates) and "Malaria in wartime" will take place Sunday 17th August and feature Dr Rowena Martin, Australian National University. Nick Smith and Lisa Jones will run War Worms interactive workshop for children at the AWM on Tuesday 8th July, and later that day at the National Film and Sound Archive (NFSA) they will present "Aliens amongst us" with the screening of the movie Alien and pre-movie parasites discussion "Revenge of the Bodysnatchers".



Our events all feature on the ASP YouTube channel <u>http://www.youtube.com/user/ASPParasiteNetwork</u>

This page: Chinese schoolchildren watching "The Magic Glasses" educational video for the prevention of intestinal worms by Franziska Bieri, QIMR Berghofer

Previous page: interactive exhibit, Parasites in Focus, at Wollongong Science Centre

### ASP 50th Anniversary Commemoration | Reaching out



ASP 50th Anniversary Commemoration | Reaching out



# **FEATURE** Parasites in Focus



The 'Parasites in Focus' interactive exhibition was developed by the ASP Network and the Australian Society for Parasitology and is an interactive, hands-on exhibition featuring 26 beautiful images of parasites and interactive exhibits. Since 2007 'Parasites in Focus' has toured across all states and territories engaging more than 300,000 Australians . For information about the photographers and the beautiful "Parasites in Focus" images visit our Hidden Zoo website www.thehiddenzoo.wordpress.com where you can see these parasite images and more.



SO FEDERATION RASITOLOG The World Federation of Parasitology (WEP) congranulates the Australian Society for Parasitology (ASP) for the important milestone celebrating its 50° analyersary. To the membership of the Australian Society for Parasitology The World Federation of Parasitology (WFP) congratulates the Australian Societ Parasitology (ASP) for the important milestone celebrating its 50<sup>th</sup> analyersary ASP was founded to foster association of people interested in parasitology, encourage establishment and curation of collections of Australian parasites and facilitate ASP was founded to foster association of people interested in parasitology, encourage establishment and curation of collections of Australian parasitology. Over the last discussion and investigation to advance the knowledge of parasitology. 21" March 2014 establishment and curation of collections of Australian parasites and facilitate discussion and investigation to advance the knowledge of parasitology Over the ASP 50 years it has successed in these aims in many different ways. For example, ASP discussion and investigation to advance the knowledge of parasitology. Over the last 50 years it has succeeded in these aims in many different ways. For example, ASP developed UP with Elsevier and this is now an internationally respected journal 50 years it has succeeded in these aims in many different ways. For example, ASP developed UP with Elsevier and this is now an internationally respected journal in many different ways. For example, ASP developed UP with Elsevier and this is now an internationally recently, namely UP. developed UP with Elsevier and this is now an internationally respected journal in molecular parasitology. The launching of two new journals recently, namely UP, Drugs and Drug Resistance and UP. Parasites and Wildlife, shows ASP's strong commitment to furthering parasitology both in Australia and internationally. Drugs and Drug Resistance and UP. Parasites and Wildlife, shows ASP commitment to furthering parasitology both in Australia and internationally. ASP has continued a strong relationship with the WFP for many years as a member society and made significant contributions to its operations. Additionally, it has ASP has continued a strong relationship with the WFP for many years as a member society and made significant contributions to its operations. Additionally, it has bosted the International Congress of Parasitology in Brisbane (1986) and Methodania society and made significant contributions to its operations. Additionally, it bas hosted the International Congress of Parasitology in Brisbane (1986) and Melbourne (2010) demonstrating a strong support of the WFP. On behalf of the WFP, 1 wish to congratulate ASP and its members for your achievements over the last 50 years. I am sure that the ASP will continue its work to On behalf of the WFP, 1 wish to congratulate ASP and its members for your achievements over the last 50 years. I am sure that the ASP will continue its work to make important contributions in the future. (2010) demonstrating a strong support of the WFP. make important contributions in the future. Yours sincerely Here Con President, World Federation of Parasitologists Professor Alan F. Cowman FAA FRS

# **Reflections of the Society**

## Alan D Donald, FASP, 1984

My thoughts on the ASP on its 50th birthday are inevitably concentrated on the first half of its life. I am a foundation member, although at the time I was a PhD student at Bristol and began my active involvement in 1966 after my return to Australia. I attended and presented papers at most meetings of the Society between 1967 and 1984 and the ASP was a very important part of my professional life, but after my appointment as Chief of CSIRO Animal Health in 1983, and other positions in the wider fields of animal health and production after that, I was decreasingly active in parasitology.

I was Secretary in the period 1968-70 when the IJP was being conceived under the leadership of Desmond Smyth and I was familiar with his astute negotiations with Pergamon Press to secure an agreement for the Journal's creation and management which was highly favourable to the Society. Even Desmond would be surprised to see how his conception has become the leading medium for the publication of the most original and significant research in parasitology in the world, which is a tribute to the increasing depth and quality of Australian parasitology researchers who have provided the editorial policy and practice behind this achievement. At the beginning, we did not take seriously a possible flow of royalties to the ASP from the IJP and indeed for many years we saw nothing at all, yet thanks to that original agreement, which carried over when Elsevier took over Pergamon, and its subsequent refinement, we enjoy a flow of income now that far exceeds any other source and is of immense benefit to the ASP. The Society owes a great debt to Desmond, and of course to John Sprent for its very existence as well as John's editorship of IJP for almost 20 years. I was privileged to succeed John as editor in 1993 for a few years and enjoyed the tremendous help of Peter Boreham as we made changes to the Journal and weathered some ups and downs while Elsevier changed its own operations. However, it is mainly the editors over the last 15 years who deserve credit



for the present high standing of the IJP.

It was during my Presidency in 1980-81 that the Bancroft-Mackerras Medal came physically into existence. We arranged the design and production of the dies and the striking of the first medals in Sydney to enable the first award to Rob Sutherst at Marysville in 1982, one of our many memorable scientific meetings. It is a joy to see that medal continuing to be produced and awarded.

It is also a joy to see, from those early beginnings, how the Society has grown in stature and the range of it activities as well as in membership, along with adoption of the most recent advances in basic science and changes in the relative importance of fields of parasitology, while retaining its informal character and fellowship.

# Chris Bryant, FASP, 1986

I wish I could say I was a foundation member of ASP but the truth is, I'm not. I was at the first meeting, but only as an observer. I was newly arrived at ANU and my professor, Desmond Smyth, 'suggested' that I go along and listen to the papers. I was still young enough to believe that a professorial suggestion was a command. So I went.

My background is Zoological Chemistry, and I was soon out of my depth in Veterinary Parasitology. EPG of what? What on earth was a Whitlock counting chamber? Who would want to count Whitlocks anyway? I knew nobody, except Buddy Rogers, who had interviewed me in London for a job at Adelaide, and I had obviously failed to convince him that I was England's zoological gift to Australia. I reintroduced myself; he glowered at me from behind his handlebar moustache. "Ha – I remember you, you were late!"

When I started work on the sheep tapeworm, Moniezia expansa I found out what EPG meant. Moniezia proved a good option for biochemical studies as, in those golden days before the widespread use of benzimidazoles, I could get it from the local abattoir by the bucketful. It always reminded me of tagliatelle.

Another ASP meeting, and Desmond, completely disregarding taxonomy, 'suggested' I contribute to the Symposium on Nematode Physiology. I knew nothing about nematode physiology. Fortunately, nobody else knew much more. I mugged it up and completely stunned my audience with labyrinthine metabolic pathways projected on an inadequate screen in an unreadable font. Later, in the bar, I received valuable feed-back; I also found I could talk EPG with the best of them.

Becoming a member was one of my best decisions. The ASP is a friendly, collegiate institution and offered a forum where my students could present their research without feeling threatened – not my experience in some



other scientific societies. We learned to communicate biochemistry so that those unfamiliar with it – most of the audience at that time – could understand. In later years, it was rare that one of my students did not walk away with a prize for presentation. Conference Dinners were always an occasion for mild misbehaviour. I only ever organized one and I waited at the Conference venue to make sure everyone had transport to the restaurant. This was a mistake; by the time I got there I found that the members had drunk the bar kitty twice over and started on a third cycle.

When I compare the ASP of 1964 with that of today, I am impressed by the modern spread of topics. Yes, it still does the things we talked about then, but it also covers a wide range of biological disciplines under names (Genomics, Informatics, Proteomics, Metabolomics and Phenomics) that had not been invented 50 years ago. Malariology, not mentioned at the first meeting, is now integral to the ASP's activities, in spite of having somehow avoided an -ics suffix.

I take into retirement many happy memories but one in particular somehow captures the essence of the ASP. It is of lan Somerville, eminent nematologist and FASP, performing a haka on the Conference dining table.

### Mike Rickard, FASP, 1987

I commenced my career in parasitology as a PhD Student in the Department of Parasitology, University of Queensland in January, 1964. It was an exciting time to be commencing because it was the year of the birth of The Australian Society for Parasitology (ASP), marked by its inaugural meeting at the Australian National University (ANU), Canberra, Saturday and Sunday January 18th and 19th, 1964. The ASP owes its existence to the drive and enthusiasm of the inaugural Committee chaired by Professor Sprent. By the time of the first meeting the Society had already become affiliated with the World Federation of Parasitologists (WFP). I joined the Society and was fortunately able to attend the second meeting of the Society in Sydney in 1965 and present my first paper. Attending the meeting was incredibly exciting for a previously insulated and unworldly undergraduate as well as an education in being able to meet and talk with great parasitologists who had previously been only names on paper. I remember feeling the same sense of awe and wonder when I attended my first International Congress of Parasitology (ICOPA III) in Munich. Staying in a humble pension seemed a luxury and with Jack Arundel, Rupert Herd and David Heath for company there was never a dull moment. I guickly appreciated what it meant to be part of a Society of likeminded researchers and the benefits this confers on young career scientists.

The next truly exciting period was to be party, as a Council Member, to the decision by the ASP (not made without some vigorous debate) to publish its own scientific journal to be called The International Journal for Parasitology (IJP) as recommended to the ASP by Professor J.D. Smyth after discussions between himself and Pergamon Press on behalf of the Society. This was a far-reaching decision, and with Pergamon Press and under its first Editor in Chief (EIC) (1971-1974) Professor Smyth (by this time head of the Department of Zoology, Imperial College, London) the Journal quickly established itself as a major vehicle for the



publication of parasitological research varying from applied to fundamental studies. Professor Sprent succeeded Smyth as EIC in 1975 and with the invaluable assistance of Mary Cremin continued until 1995. The IJP brought great kudos (and financial returns) to the Society.

Two other major events stand out in my memory. First was the decision of the ASP to Award a Medal (The Bancroft Mackerras Medal) to honour its finest researchers. Second was the decision by the ASP to prepare a bid to hold ICOPA VI in Brisbane in 1986. I was honoured as Immediate Past President to join with Professor C. Bryant the then President (and with the hard work of many others) to put the bid to the WFP Council at ICOPA V in Toronto. What excitement and celebration when we won the bid by one vote from the Netherlands! As Co-ordinator of the Scientific Programme there were many times in the subsequent four years that I doubted the sanity of the decision. However, with the hard work of the Congress Organising Committee and its Patron Professor Sprent and many other volunteers, ICOPA VI was a resounding success and greatly enhanced the International standing of the ASP.

Amongst my most treasured personal memories of the ASP were being awarded the Bancroft Mackerras Medal in 1983, and being elected a Fellow of the Society in 1987.

# Jack H Arundel, FASP, 1988

I was a foundation member of the ASP and gave a paper at the first meeting which was held in Canberra. I was eager to join as it gave me an introduction to others working in various areas of parasitology and this was most helpful when I joined the staff of the Melbourne Veterinary School where, for the first 5 years, I taught the full course as well as the applied aspects in veterinary medicine.

I have always believed that to get the most out of membership of an organisation, you should participate fully so I became active and was an early President of the ASP. Thus I was able to join in the early discussions of how the society should be named and how the Journal, that was commenced, would be printed and financed.

To this we owe a great debt to the late Professor Sprent who devoted a great deal of time to the minutiae of these decisions and laid the foundation for the strong financial position of the Society. This has allowed the ASP to have sufficient resources to fund undergraduate and postgraduate prizes as well as travel grants to allow members to attend conferences. I know of no other society that is so generous to its members.

I would encourage all young graduates to join an organisation relevant to their interests. I have been President of the Australian Veterinary Association, the Wildlife Disease Association and Australian Society for Animal Production, all of which had a bearing on my interest in the biology of parasites and their control. By this I have made many friends and markedly enlarged my knowledge.

One of my delights in parasitology is its breadth. Thus our members are expert in a range of disciplines, not only in helminths, protozoa and ectoparasites but in the subdisciplines within each of these. Thus we have biologists, taxonomists, immunologists, applied parasitologists and



others all of whom can interact and add to our corporate knowledge.

In my early graduate life when the only relevant journal was the Australian Veterinary Journal, it was widely accepted as an important, if not the main, reference for articles on ticks and tick fever, control of internal parasites of sheep and cattle, myiasis of sheep and many other parasitic diseases. It is pleasing that Australia has retained its place as a leader in parasitology but now has its own journal to showcase our research efforts.

It has been a privilege to been a member of the ASP and to see how our members have added to Australia's reputation in this important discipline.

## Joe C Boray, FASP, 1988

I joined the Australian Society of Parasitology 50 years ago and became President in 1979 with the Secretary, Dr. Peter Crowfoot. During this period we suggested that the chemical companies should join the Society as members. That was accepted by the Society members. I became a Fellow of the Society in 1988, received honorary membership of the WAAVP in 1997 and gained life membership of the Australian Veterinary Association in 1992. Several molecular biologists and parasitologists have been working to produce a vaccine against Fasciola hepatica from about 1960 without much success. In 1996 a grant was received for 3 years to join Dr. Michael Howell and a group of 3 other scientists to work on a vaccine against Fasciola hepatica. We had some success but it was not effective enough for a vaccine. I have read the August 2013 Newsletter and I was happy to see that a lot of work will be done to produce a vaccine which is supported by grants to La Trobe University. The Research team includes Dr Glenn Anderson and Dr Robert Dempster from Virbac Australia. Terry Spithill will support the work.

I have worked with this parasite, or as I call it, predator, for 64 years both on fasciolid parasites and on their intermediate hosts, first in Hungary for 7 years and in Australia for 57 years. During this period I worked in McMaster Laboratory, CSIRO for 12 years. I also spent 1 year in Hannover receiving the Alexander von Humbolt Stiftung. I worked for 4 years in Switzerland, when I was invited to join the Veterinary School of Zurich and I spent 4 years as Associate Professor of Parasitology with my old friend and colleague, Professor Hannes Eckert. After I returned to Australia for family reasons, I was invited to work in the CIBA-GEIGY Research Centre as Director of Research and Development for 10 years. During this period we developed more than 14 new products, including the very important flukicide, triclabendazole and Vetrazin for blowfly control. After this period I was invited to join the Department of Agriculture, Elizabeth McArthur



Agricultural Institute to lead the section of parasitology as a Principal Research Scientist for 18 years. In 1999, at the age of 7I, I retired from this position. I received the Meritorius Service Award for my work from 1983 to 1999 presented by the Director General, NSW Agriculture, and the Minister for Land and Water Conservation. I continued to work on my own property for 7 years producing snails and metacercariae and support research on chemotherapy against liver fluke in sheep and cattle. We have to support the chemical industry. If the Swiss did not build tunnels we would have lost more millions of sheep without carbon tetrachloride.

I produced 183 publications, mainly in English, some in German and Hungarian, some of them in book chapters or books. At present I am registered as a specialist veterinary surgeon in pathobiology and consultant for parasitology, particularly on diseases caused by trematodes. Until we have a reliable vaccine, we will be working with susceptible anthelmintics which currently exist or which have been recently developed by the chemical industry. In my experiments, synergistic combinations are normally efficient against flukes, even if one of the compounds is resistant. Also, increasingly, we should make the farmers aware of sensible farm management by fencing in wet areas and by other simple methods of keeping the sheep and cattle away from the paddocks where the lymnaeid snails are present.

### Klaus Rohde, FASP, 1989

I came to Australia in 1970 as a postdoctoral fellow at the Department of Parasitology, University of Queensland. Professor John Sprent and Dr. John Pearson brought me over, and if I remember this correctly, I was the first parasitologist who was awarded a postdoctoral fellowship at UQ. Previously, I held a "habilitation fellowship" at the Ruhr-Universität Bochum, Germany, working on the biology and ultrastructure of Aspidogastrea, and prior to that I was a lecturer at the University of Malaya, Kuala Lumpur for 6<sup>1</sup>/<sub>2</sub> years. During that period I met Professor Sprent at a WHO conference in Singapore, and the contact established there induced me later to apply for the postdoctoral fellowship in his department. After two years I moved for seven months to the University of Khartoum, Sudan, to return to Australia as the director of the Heron Island Research Station. After three years on the Great Barrier Reef I obtained a position as senior lecturer at the University of New England in Armidale, where I rose through the ranks to Associate Professor to Professor (personal chair). I am not sure when I joined the ASP, it was either soon after I had first arrived in Australia in 1970, or after my return to Australia from the Sudan around 1973. At one stage I was a member of the selection committee for the Bancroft-Mackerras Medal, and for one year I was a chairman of that committee.

Membership of the Society was important to me. I met many colleagues, got ideas for my work, and learned how to look at problems from different angles. Also, talks given at meetings of the Society were excellent practice for preparing and delivering presentations at large international conferences and congresses. I have fond memories of many of the ASP meetings I attended, and of the colleagues I met there.

Parasitology is not a field that stands in isolation, it overlaps with other fields in various ways, be it by similar techniques used, taxa studied, or applications in medicine



and veterinary medicine, to mention only a few. My own interests became more and more oriented towards phylogeny, ecology and evolution. I was one of the first who developed marine parasitology in Australia, and three of my books are largely ecological, i.e., Ecology of Marine Parasites (two editions and translations into Malay/ Indonesian), Nonequilibium Ecology, and The Balance of Nature and Human Impact. The last book makes the step to applying ecological (including parasitological) findings to the great challenges humanity faces today: dealing with human induced effects on the environment and particular those due to climate change. I hope that my role as a parasitologist in Australia and as a member/fellow of ASP has contributed to making people aware of these challenges. - Finally, students of mine (I don't recall how many) became members of ASP.

Photo: Holding The Balance of Nature and Human Impact, Cambridge University Press 2013, at the book launch by the Vice-Chancellor of UNE.

# Mike J Howell, FASP, 1992

At a very early age I am sure I was unknowingly introduced to the parasitic nematode pin worm *Enterobius vermicularis,* probably by my Mother. In those days very few children escaped infection and as I grew older under my Mother's tutelage I came to understand the details of the parasite's place in the world!

I completed my school years under a first rate teacher Maurice Ineson who graduated with MSc Honours from Victoria University, Wellington, New Zealand. His thesis was based on a study of pig parasites in New Zealand. This fired up my interest in Parasitology and I had no hesitation in undertaking an MSc program under the guidance of Professor LR Richardson. I investigated the life cycle of a trematode parasite of oysters – a bucephalid that had almost decimated the oyster's reproductive system.

Seeking wider horizons I made contact with Professor JD Smyth in 1966 at the Australian National University. He offered me a PhD scholarship which I duly completed in April 1969. I studied trematode life cycles and their development in vitro. Desmond Smyth had built a productive department and Parasitology was at the forefront at that time. The Zoology Staff were an enthusiastic group and the departmental seminars and social activities were always a highlight. Many characters enlivened our meetings – I shall never forget the wit and wisdom, notably of Hugh McL. Gordon and Warwick Nicholas.

There were murmurings from time to time about the possibility of publishing a journal with international exposure to Parasitologists that would progress the discipline. At the Annual Scientific Meeting of the Society in Brisbane 1971 there was strong support for the idea and



it was brought to reality by the efforts of many people. The status of Professors Smyth and Sprent were the lynch pins and many others made significant contributions as well. Towards the end of my time in Canberra as a Student/Staff Member/ Fellow of the Australian Society for Parasitology, from 1966-1993, I have seen the Society grow in stature under the guidance of a number of brilliant scientists and administrators. Their innovative approaches and dedication to the Society and its members have achieved great results for the present members and those who will follow. May you all continue to prosper.

## Leo F LeJambre, FASP, 1992

### Where to Veterinary Parasitology?

As a post-graduate student studying Haemonchus contortus at Cornell University in the 1960's, I knew more Australians working in veterinary parasitology than I did Americans. The Australians were a great bunch, full of ideas and enthusiasm. Cornell was undertaking some cutting edge research on sheep parasites besides having an attractive campus in a pleasant part of the USA. Consequently, the Australians were frequent visitors. Upon completing my PhD, it was obvious that one of the places to apply for a job would be CSIRO. I was thrilled, and my fellow postgrads envious, when the letter came back saying that I was accepted as a Research Fellow for 2 years to be stationed at Armidale, NSW. When I arrived in Australia, I knew that I had made the right decision. Three CSIRO Divisions were undertaking a coordinated study of the epidemiology of sheep and cattle in temperate eastern Australia with planning meetings at least once per year. Plus sub-tropical/tropical cattle parasites were the subject of the Division of Animal Health's Queensland laboratories research. CSIRO was also undertaking parasite immunology and pharmacology in both Melbourne and Sydney. It wasn't just a CSIRO show by any means. The state Departments of Agriculture in every state had an active veterinary parasitology program. Universities had whole departments of parasitology. Nevertheless, CSIRO was arguably foremost in an environment of many excellent research initiators.

Of course, such an active research effort required sufficient funding to support it. CSIRO was fortunate to have had an arrangement with the Wool Corporation for bulk funding parasitology. The Wool Corporation and the Meat Corporation were also active supporters of University and Department of Agriculture parasitology research. In 1982 ACIAR was launched and provide an additional source of funds. Not only was parasitology being funded well but



it was also producing results, including: elucidating the epidemiology of helminth infections which in turn lead to simulation models; farmer education and on-farm control programs such as Wormkill and Drenchplan; studies on resistance to parasiticides, pharmokinetics of parasiticides, heritability of host resistance to parasite, parasite vaccines, in vitro diagnostics of both parasite infections and resistance.

Veterinary Parasitology began to wane with during the 90's and funding of parasitology projects became increasingly difficult. There were several indicators from CSIRO that all was not well. Moving the McMaster Laboratory from Glebe to Prospect and then to Armidale saw many leave parasitology. With decreased support from outside funding bodies concurrent with dwindling state and commonwealth support, there was a move to more parasitology being done by commercial companies and more emphasis on contract work. It could be that veterinary parasitology fell victim to its own success. With so much of the biology of veterinary parasitology understood, it could be that parasitologists are seen as replaceable by a molecular biologist with a gene chip. It would be good that if the effort once expended on veterinary parasitology was now taken up by other areas of parasitology e.g. human parasitology such as malaria research. However, from my perspective it doesn't seem to be happening. Hopefully, if not parasitology, then biology prospers. It will certainly be needed as the Earth's environments are stressed by climate change. Good luck then to future scientists and their gene chips.

### Graham F Mitchell, FASP, 1993

What an absolute pleasure to provide some thoughts on, and indeed, express my gratitude to the 50 year old Australian Society for Parasitology. I can relate several instances of great generosity and deep professional pride amongst the membership. In short, Australian parasitologists are superb collaborators!

With an agricultural diploma and veterinary degree, I started my scientific research life as a PhD student in cellular immunology at The Walter and Eliza Hall Institute (WEHI) in 1966. After post-doctoral studies, I returned to WEHI in 1974 and initiated a program on the immunology of parasitism. To get this going, I naturally turned to veterinary parasitologists in Melbourne: - Hogarth-Scott, Anderson and Rickard; in Queensland - Callow and Copeman; also Nicholas in Canberra. These and others in the late 1970s were unstinting in their efforts to be helpful and to ensure "good parasitology" would underpin the new WEHI immunoparasitology program. The writings of John Sprent were important in the conceptual underpinning around the evolutionary biology of host-parasite relationships. ASP at the time was dominated by veterinary and wildlife parasitologists if I recall, with medical parasitology under-represented. The WEHI program eventually went some way in addressing this, particularly with respect to malaria, leishmaniasis and schistosomiasis.

On three occasions, I have been asked to provide an overview of parasitology in Australia: one for the Rockefeller Foundation, another for Parasitology Today coinciding with ICOPA in Brisbane and the third with John Walker on Australian medical parasitology (see below). For all of these reviews, but particularly the Parasitology Today supplement, I had to approach and collate input from a large number of Australian parasitologists. I do not recall a single refusal to provide articles (of high quality, as expected), thoughtful insights and historical perspectives. This was a truly memorable example of the good will,



professionalism and collaborative spirit that existed across ASP. The only "rivalry" that I recall was a bit of light nonsense around vaccines versus drugs for parasite control (within CSIRO largely)!

Another example of generosity was when we, together with Philippine collaborators, introduced schistosomes into the WEHI lab in the early 1980s. John Walker, then at the University of Sydney, provided us with all the technology and tricks for maintaining the snail intermediate hosts of Schistosoma japonicum and S. mansoni. John was willing to share all his knowledge with no effort spared – again typical of ASP members and fellows.

From the above, I hope it is obvious that my abiding memory of Australian parasitologists and ASP is one of collegiality, generosity and deep specialist knowledge. I have been a major beneficiary – so, thank you ASP and happy 50th birthday.

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Mitchell GF & Walker JC 1990. Australian contributions to medical protozoology. In: History of Microbiology in Australia. F Fenner (ed), Brolga Press, Canberra. pp 467-471

# LL (Bill) Callow, FASP, 1994

### **Bring on the Serendipity**

Up until 1964, a blood vaccine collected from young steers ('bleeders') that had recovered clinically from laboratory infections with Babesia bovis and Babesia bigemina was used to inoculate cattle at risk from babesiosis in Australia. In the 1950s there was an escalating incidence of sickness and death from B. bovis in cattle that had been vaccinated with 'bleeder' blood. Inoculations had sometimes been performed only a few weeks before problems appeared. Farmers levelled considerable criticism at the lab. Politicians also became involved. Investigations began.

An explanation for the failure of vaccination was obtained quickly. The blood of 'bleeders' held for vaccine supply was found to be deficient in Babesia parasites, so that cattle frequently did not experience immunizing infections when vaccinated. Animals were severely affected (almost always with B. bovis) when the next wave of infected ticks arrived. The immediate task was to give cattle their babesiosis in a controlled way before the ticks took over. Splenectomized calves which develop high Babesia parasitaemias when infected, were chosen to provide the B. bovis for an effective vaccine. The first batch of the 'new' B. bovis vaccine was released in November 1964. It was monovalent with each dose containing approximately 10,000,000 living B. bovis. It worked. There was, however, a major concern that the rapidly passaged B. bovis would increase in virulence and cause dangerous reactions in susceptible recipients. Our experience with B. bovis strains passaged in steers confirmed this; some of these animals required treatment to save their lives. How would farmers, used to mild or non-existent vaccine reactions in their cattle, handle potentially lethal responses in a sizable proportion of their herds? A network of skilled QDPI officers helped vaccine users stock up with babesicides.





vaccinated then and in subsequent years. The serendipity was in the unexpected absence of severe reactions to the B. bovis vaccine. Users were very pleased with the mild reactions. The effect was seen in five different strains of B. bovis. Possible reasons were considered. After about a year, we had a fair idea that splenectomy of calves in passaging series was a major factor in the observed phenomenon. It took a further 10 years of work1 to satisfy us completely that our counter-intuitive finding was correct. As for basic understanding, elegant studies by a Walter and Eliza group showed variability in the surface proteins of strains subjected to differing manipulations.

My simplistic explanation is that B. bovis leads a polyclonal existence in normal bovine hosts. Because of variations, no one can know how many clones comprise a natural population. It is possible that different clones have different predominating properties; some may be immunogenic, some immunosuppressive. There may be a natural balance which is upset by splenectomy, leaving the host with increased numbers of immunogenic or decreased numbers of immunosuppressive parasites (or both!). Infection of a susceptible intact bovine with inocula containing 'adjusted' parasites could explain the benign responses which ensured the success of the 'new' vaccine. In 2002, I vaccinated a small group of susceptible cattle on our postretirement hobby farm. The vaccine worked well.

'Reduction in virulence of Babesia bovis due to rapid passaging in splenctomized cattle' Int.J. Parasit. 9: 333-338.

### Carol A Behm, FASP, 1999

I joined ASP in 1973 while a PhD student in the Zoology Department at the Australian National University, supervised by Chris Bryant, and presented my first conference paper at the 1973 Adelaide meeting of the ASP. A frightening experience, but fortunately the paper was well-received by an enthusiastic and supportive audience. As a student from ANU I had had little exposure to veterinary parasitology, or to veterinary parasitologists, an interesting species. Some of my most enduring memories of the early ASP meetings are the numerous papers on sheep helminths - drug or vaccine trials, much discussion of 'scouring' and 'eggs per gram' - and the social behaviour of veterinary parasitologists. I didn't know then that I, too, would spend much of my career working on parasites of sheep.

I have attended and presented papers at most of the ASP meetings since 1973. Probably the most memorable, though not for parasitological reasons, was the meeting on Magnetic Island, Townsville, in 1989, held during the devastating nationwide strike of airline pilots. Many who attended this meeting had used considerable ingenuity to get to Townsville, though I was fortunate to get a flight from Sydney to Townsville on an international airline. The return flight to Brisbane was in an RAAF Hercules; a highlight was being invited into the cockpit, meeting the crew and discussing parasites with them, and the magnificent views of Queensland through the low windows in the nose of the plane.

As Secretary of the ASP in 1983 I received the first royalties cheque from Pergamon Press, the (then) publisher of the International Journal for Parasitology. A very pleasant surprise - at the time nobody had expected that the Journal would ever earn any money for the ASP. This important milestone for the Society initially led to many lively debates about how to use the funds and eventually provided a sound financial base to support many of the Society's



awards and activities.

At the end of my tenure as Secretary of the ASP I was asked if I would consider an appointment as inaugural Archivist for the Society. The ASP Archives were to be stored at the Basser Library of the Australian Academy of Science; the Archivist was to be a non-voting member of Council, would collect official Council and general ASP documents, plus appropriate material from retiring ASP members. I was also advised that the Archivist should expect to hold the position for many years. I accepted the appointment and managed the collection of documents and their transfer to the Basser Library for 25 years. I would like to note that I am still waiting for some promised 'notorious' photographs of early members of the Society....

In 1992 I became President of the ASP, the first woman to hold this position. My term, which was extended to two years, was dominated by complex and sensitive negotiations and arrangements for the evolution of the International Journal for Parasitology occasioned by the impending retirement of Professor John Sprent as Editor-in-Chief and the change of publisher to Elsevier Science. I spent most of this time either on the telephone or attending or travelling to meetings, and I wish to thank my family and my students for their considerable patience during those years.

I thank my ASP colleagues for their friendship, collaboration, inspiration, entertainment, and for providing a highly supportive community for parasitologists.

# Alan M Johnson, FASP, 1999

I was honoured to be recognised as a Fellow of the ASP in 1999, and delighted to be invited to provide my reflections for the 50th Anniversary Commemorative Conference Booklet.

I am particularly pleased to have the opportunity to put in writing some thanks and explanations that I have been meaning to make for many years.

The contribution to the ASP of which I am most proud is Editor of the IJP. Three previous Editors had established a highly regarded journal, and with Alan Donald's completion of his productive editorship, Des Hennessy convinced me to take on the role. I never got to thank Des for his confidence in me. Des was taken from us much too soon, but wherever he is gliding now, I express my sincere gratitude.

I set about changing the focus of the IJP for a more global audience, very well assisted by the excellent work of Maria Meuleman. Between 1997 and 2003, with the support of the editorial board and reviewers, we were able to raise the impact factor of the journal, putting it on the trajectory to where it is today. To raise the impact factor it was necessary to increase the profile of papers published, so I hope those of you who had their papers rejected, understand why that had to be done. The journal is apparently now so successful that it has spun off two new journals, and I hope the IJP family keeps its high standing.

The increase in the IJP's profile was a major factor in my being made a Member of the Order of Australia and I would like to thank everyone involved in that, especially Dave Jenkins, Nick Sangster and Nick Smith.

I had to give up my ARC grants and editorship of the IJP to take up a secondment as an Executive Director of the ARC in 2003, but this gave me the chance to facilitate the



formation of the parasitology research network which has laid an excellent foundation for parasitology collaboration in Australia.

I was instrumental in leading the push to secure ICOPA for Melbourne in Glasgow in 2006 and thank all those that assisted me in that endeavour.

Recently my research management company has been very successful assisting applicants obtain research funding and providing guidance on career planning and academic leadership both in Australia and overseas. This means I have not been able to make the contribution to ASP activities that I would like to have made.

I have also had the honour of being invited to give a presentation at the 50th anniversary ASP meeting on the future of Australian parasitology. Many things have changed in research over the last 50 years, but now as then, quality research is paramount and I have been pleased to have been a part of what we have achieved in Australian parasitology.

### Lester Cannon, FASP, 1999

I was fortunate to be at that inaugural meeting of the Society in Canberra. As a young graduate student I was excited to find myself in company with some of the great names of Australian parasitology and awed to actually join in conversation with them. Becoming a member of the society afforded me an entré into a professional life, no longer a student.

Shortly after, I lost immediate contact when I went overseas to study in Canada and the USA, but on my return I was again welcomed into the fold enjoying my trips to conferences to join with like-minded colleagues in scientific interchange and mingle convivially afterwards. Many friends were made.

Though my own research strayed to the periphery of main stream parasitology, my role as a museum curator allowed me to keep up close ties with the parasitology community and to strive to build significant collections of continuing importance to the field.

I was proud and honoured to be made a Fellow, to gain the recognition and respect of the society members, to mature in the Society that I had joined all those years earlier.

Now retired and living in France far away from Australia I enjoy the regular communications and news, though the names are gradually becoming less familiar. That is how it should be, a continual renewal of my professional family, one I am confident will nurture future generations of scholars even as the emphasis changes and directions of



enquiry evolve.

May the next 50 years be as productive for the Society as the last 50, may my professional family thrive.

Coublevie, France, November 2013

### lan Beveridge, FASP, 2000

As far as I can remember, I joined the Society in 1972 and the first meeting I attended was held in the Veterinary Research Institute at the University of Melbourne of that year. My memories of that meeting were that it was a relatively small meeting (by contemporary standards) but that those who attended were particularly friendly to a nonentity such as myself who had just started a PhD and who had no idea what he was doing. It was also guite an alcohol -facilitated conference. I remember vividly the chairman of one session, after a particularly heavy night (no names mentioned), chairing a session in which he was seated at the front of the lecture theatre, while Brigit Ogilvie (later Dame Brigit Ogilvie) waxed lyrical on slides to the right hand side of the podium on immunity to gastro-intestinal nematodes. Apparently, this had been a joint project with the chairman and at one point, she turned to him to ask a question, which merely directed the attention of the audience to the fact that the chairman was soundly asleep. In spite of minor irruptions, it was an extremely enjoyable conference and was my introduction to many more unforgettable experiences.

It must have been during the subsequent conferences that I got to see Hugh Gordon speak after dinner with his endless array of jokes and John Whitlock (of McMaster slide fame) sing (extremely well) at annual dinners. There was also a great deal of relatively healthy rivalry. At a meeting in Adelaide, two of my colleagues from Melbourne kept the first speaker for the next day of the conference (deliberately) drinking overnight until about seven in the morning when they conveniently retired to bed, leaving him with two hours to prepare his talk. Those of us who saw his presentation, remarked on his rather greenish complexion, although to his credit, he managed to complete his talk without any significant embarrassment. At the same meeting, one member of the Society presented a talk on a new computer model, which in the final minutes of the talk, turned out to a complete spoof, which everyone



enjoyed greatly.

At a later meeting, the annual general meeting of the Society commenced with the invariably boring topic of apologies. However, one of the apologies was from a member well known for prolonging meetings with points of order. At the announcement of his apology, there was a spontaneous round of applause, the only time I have ever seen such an activity at an annual general meeting. At yet another meeting, when new memberships had to be approved by a vote at the annual general meeting, Dr. Rajaserkaria's candidacy (now a valued member of the Society) was proposed. As guick as a flash, Hugh Gordon, sitting in the front row, called out "we will have him if he encysts". While the humour of this pun may be incomprehensible to many current members of the Society, it caused great mirth at the time. Sadly in some respects, as the Society has become more 'professional' over the years it has lost a lot of the fun and the sheer irreverence of the early meetings that I attended.

### Dave M Spratt, FASP, 2000

I joined the ASP 47 years ago and attended my first Conference and AGM in Armidale in 1970. There nervously, I presented my first conference paper on the results of my ongoing PhD studies on the life history and pathogenesis of Dirofilaria roemeri (Filarioidea) in the connective tissues of macropodids. I wasn't to know that the work would result in my becoming an accidental tabanid taxonomist almost four decades later.

It proved a welcoming entry into a scientific society with which I would establish a long association. The next ASP meeting in Armidale, in 1987, involved my first encounter, after corresponding for many years, with the helminthological trio from Adelaide, Madeline Angel, Pat Mawson and Stan Edmonds. The master of the fauna of the guts of macropodids, Ian Beveridge, was also present and between us we were able to introduce the Adelaidians to what was possibly their first live view of the writhing tangle of white spaghetti contrasting exquisitely with the fresh green bolus of pasture in the forestomach of a kangaroo.

There was an after-dinner collecting session at Marysville in 1982 resulting in a night-long vigil with scalpel and forceps in what is now, after the fires of 2009, an incinerated motel bathroom. And later that year a crew of Barker, Beveridge, Presidente, Speare and I took on the astonishing faunal diversity of the Atherton Tablelands and the parasitological wonders that resided therein.

One memorable field trip was collecting in Coollangubra State Forest with the ASP member from Guelph, Prof. Ian Barker. He had been coerced into the role as Camp Cook the first night in order to settle his nerves after an unprecedented experience. Reclining on his camp cot outside the tent after a hearty lunch, four collectors watched in disbelief as the good Professor levitated a substantial portion of a metre off his camp cot while a red-bellied black snake scurried out from under the tent



and slithered directly under the reclining Professor. That guasi-religious levitation event remains forever etched in our memories. Unfortunately, the shooting party departed the campsite for collecting in late afternoon with the uncooked turkey for that night's repast, unbeknownst to us, reclining unobtrusively in the back corner of the truck. The crew returned on dusk salivating expectantly over the anticipated roast turkey dinner but in its stead it was openers of Chestnut Teal flagon sherry and smoked oysters, followed by mains of corned beef hash (sliced onions fried in oleomargarine, sliced tinned potatoes, tinned corned beef, cubed, and a slug of White Crow tomato sauce) which Barker had whipped up in desperation when he realised that said turkey had disappeared down the track in the back of the Land Rover with the collecting party. Meanwhile, the battered turkey was recovered from amongst the wildlife entrails and dust in the back of the truck and returned to the esky to await another day.

I cherish the memories of wildlife collecting in the field with the camaraderie and carry-on of ASP members, and always with the bounty of long hours of post mortem examinations guaranteeing findings new to our science of wildlife Parasitology, to say nothing of feeding the rabid parasitologist syndrome, turning people's stomachs with tales at dinner parties.

## Lesley Warner, FASP, 2001

I have been a member of the ASP since 1973 and attended my first conference in Adelaide that same year. At that time I was a keen PhD student in the then "parasitologically rich" academic environment of Adelaide, but I was also encouraged by my supervisors to develop a broader experience of the disciplines of parasitology through attending ASP meetings. In those earlier days the meetings were relatively small friendly affairs which provided ideal opportunities for getting to know other members. I believe this is now called networking.

My first appointment as a parasitologist in 1981 was to the South Australian Museum to work on the helminthological collection which was begun by T H Johnston at the University of Adelaide and fostered by Pat Mawson and Madeleine Angel, ultimately as honorary curators at the South Australian Museum. As early as 1974 the need for a national collection was raised by members and agreed to as a priority by the ASP. This initiative As the Australian Helminthological Collection the collection has expanded over the years and is now staffed by a research scientist and collection manager. With the continuing support and sponsorship of the Society in its home in the South Australian Museum the AHC continues to grow and to provide a useful and well used resource for parasitologists at home and internationally. As I started my parasitology career, so shall I end it, at the South Australian Museum working on the AHC. In between these milestones I have continued to value the friendships I have made and the collaborations I have entered into as a result of my participation in the Society.

My career path led me to an isolated outpost of academia in Central Queensland (the region people fly over on their way to Townsville and Cairns). I have valued the opportunity to meet with colleagues, catch up on the latest trends, discuss projects and get an annual dose of parasitology gossip at each conference I have attended. I have welcomed the



introduction of a newsletter and valued it as a source of information, both formal and informal. Without the ASP my professional life would have been much the poorer.

I have never regretted my decision to join the society and the benefits I have received have far outweighed any costs I may have had. I have a wealth of happy memories and the satisfaction of knowing that my career would not have progressed the way it has if I had not become a member.

## Marshall Lightowlers, FASP, 2003

In 1977, at the age of 25, I had my first mid-life crisis. Coming to the end of my PhD research in immunology, I was sick and tired of answering questions such as Why would anybody want to work on that? Hence I decided to look for a post-doc research topic that combined my interest in immunity with a more obvious rationale. Into my life came Geoffrey Eric Ford. He offered a postdoc in Adelaide, asking me to make him a vaccine to prevent sarcosporidiosis in sheep. Naively I thought this was a perfect project - research on immunity with an understandable practical purpose. I (and he) had no idea that the number of anti-parasite vaccines in existence at the time could be counted on the fingers of one hand. On my first day of work in Adelaide as a 'parasitologist' I met Peter O'Donoghue; a year later I had the pleasure of being joined at IMVS by a quiet and charming polymath, Ian Beveridge.

As far as development of a vaccine for sarcosporidiosis was concerned, I was a dismal failure. The ASP came to my rescue. Having become a member in 1978, attendance at the society's meetings led me to meet Mike Rickard and Graham Mitchell. A subsequent post-doc with Mick Rickard ensued and a year working at WEHI in a lab with Kathy Davern, Karen Day, Graham Mitchell, Robin Anders, Terry Spithill, Emanuela Handman, Alan Cowman, Graham Brown, Rob Saint and others, cemented my interest in parasitology.

In the early days of my membership of the Society, ASP conferences were particularly convivial events. Meetings were held in venues that minimized costs for all and maximized social activity Great emphasis was placed then, as now, on facilitating post-graduate students' attendance and participation. No concurrent session ensured that we came to know what everybody was working on and learnt lots of interesting things about all sorts of things parasitological.



My recollection of the administration of the ASP in the 1980's was that it was something of a closed shop. There were various office bearers and state representatives, but at the AGM a single nominee was always listed for each position, and they were elected unopposed. Later I learnt that the nominations were put together at the Council meeting held just before the annual scientific meeting, at which nominations were passed around for each other to be re-elected. I discovered the machinations of Council goings on after Mike Rickard was elected President and he asked me to be the society's Honorary Secretary. While on Council I took the opportunity to introduced limitations on the tenure of Stare Representatives so that there would be a chance for new people to contribute to the Society.

Having been a member and active participant in the ASP's affairs over three decades, I would encourage young members to seek the opportunity to become involved in the Society beyond simply attending the meetings. The ASP has a great deal to offer all of its members and there are many rewards for those who take the opportunity to become more deeply involved in the management and activity of what is an inclusive, friendly and intellectual scientific society.

## Andrew Thompson, FASP, 2004

I knew a lot about the ASP before arriving in Australia in 1976 as one of two academics recruited to teach parasitology in the new Vet School at Murdoch University in Western Australia.

I was Desmond Smyth's first PhD student at Imperial College upon his return to the UK after leaving ANU. Desmond was a Foundation Member of the ASP, the Society's third President and Foundation Editor of the International Journal for Parasitology (IJP). It was IJP that I was quickly introduced to by Desmond. I heard much about how the journal was established and the 'who's who' of the Editorial Board, some of whom passed through Imperial while I was there, including the incoming Editor, who was taking over from Desmond - John Sprent, Mike Howell and others. I was therefore well informed about the Australian parasitological scene and was very fortunate to be asked to serve on Council not long after my arrival in Perth, and I have been on Council in one capacity or another for much of my career in Australia.

Council was and is the engine room for the Society and Australian parasitology. It was Council that embraced the idea of the IJP as a vehicle for demonstrating our influence on the international stage of parasitological research. The IJP's success has provided financial stability for our Society, served to enhance the reputation of Australian parasitology and importantly allowed the Society to support young parasitologists at the formative stage of their careers.

I am very grateful for the opportunity that being on Council gave me as a new member of the Australian parasitological community. It allowed me to regularly meet my parasitological colleagues 'over east', and to be the recipient of some excellent mentoring from my peers, particularly Chris Bryant, Mike Howell and John Sprent. I very quickly felt part of the ASP, and embraced its fellowship, enthusiasm and pursuit of innovative ways to



support our parasitological endeavours.

I have never considered the ASP to be parochial – quite the reverse. This has been consistently demonstrated by the international meetings the Society hosts and the welcome we give to our international guests. This must continue and the calendar of events over the next few years suggests that this will be the case.

As the Society grows and work pressures increase, Council must be careful not to relinquish any of the roles it has always played in fostering the Australian parasitological community and taking Australian parasitology to the world.

### Peter O'Donoghue, FASP 2006

I joined the Society 40 years ago as a naive PhD student working on cyst-forming sporozoan infections in sheep. My first talk at the 1975 Canberra conference was a technological disaster as the projector broke down (twice) and I had to give the bulk of my talk by re-creating my slides on a blackboard. Fortunately, this was well received by the bemused audience. Since then, I have attended 29 ASP conferences and given 63 presentations. Over the years, meetings have progressed from university campuses to modest hotels to prestigious convention centres. Fortunately, my finances accommodated such changes and suffice to say, considerable networking has been done at many a bar!

There are three main things that spring to mind when I reminisce on the ASP: collegiality, professionalism and philanthropy! I was well accepted into the parasitological community and experienced a high degree of social engagement. People were friendly, even when lampooning each other, arguing about minor points of order, or competing for limited research funds. There were always stories to tell, silly anecdotes, heroic deeds, fierce hosts, gory parasites, messy liaisons, exaggerated conquests, behavioural disorders, politicking and partying. Members knew each other and the Society never grew to the size that it became impersonal. Many early collaborations still persist today; new ones are emerging, though not all necessarily bear fruit. Having been inducted into the collegial Society, I was subsequently called upon to be a corporate citizen. I enjoyed many stints on Council, had a very informative decade as Newsletter Editor, and am keen to further promote our discipline through resource provision.

I have found the easy-going nature of the members to belie the profound professionalism of the Society. The ASP has an impressive international reputation, aided immensely by its travelling membership, successful house journals,



and affiliations with regional and global organizations. It has responded to change management (with mission statements, incorporation, and financial planning), weathered economic rationalization (due to dwindling pharmaceutical profit margins, deregulation/privatization of animal health services, flexible government priorities), embraced technological innovation (esp. in molecular biology and information technology) and addressed public accountability (through marketing, conferencing, and outreach programs). I was initially concerned that the discipline of parasitology would be subsumed by technological specializations, but our membership keeps thriving despite the changing workplace. I am heartened to know the Society caters for such a broad clientele: researchers and teachers; government and industry, producers and consumers, private and public concerns.

Finally, I am impressed by the beneficence of the Society in spending its modest journal-derived income on future generations of parasitologists. The ASP has become a philanthropist for student members through the provision of undergraduate and postgraduate student prizes, travel awards for conference attendance, bursaries for overseas visits, careers advice, job advertisements, the establishment of on-line data-bases and networking opportunities. Such activities should be viewed as succession-planning to ensure that we leave an enduring legacy. I have thoroughly enjoyed my association with the ASP and feel privileged to be a member. My thanks to mentors, colleagues, administrators and students for making work fun!

## Emmanuela Handman, FASP, 2006

I2014 marks the 50th anniversary of ASP and my almost 30 years association with it. And what a great journey it's been! I was born in Romania, and grew up in Israel. After completing my PhD at the Hebrew University in Jerusalem in 1976, I contemplated a postdoc in an exotic location. Would it be Belem, at the mouth of the Amazon, or Melbourne Australia? The balance was tipped by the director of the Walter and Eliza Hall Institute, Sir Gus Nossal, and a new program in immunoparasitology. He was a larger than life figure, as captured in a limerick from the 1980s:

> There once was a man named Nossal Whose own self-regard was colossal The way that he leads us You'd think he was Jesus Or if not, at least an apostle.

With Graham Mitchell, the leader of the program, we infected different strains of inbred mice in the hope of reproducing the spectrum of disease susceptibility in humans. The start of the Leishmania program was not propitious; we had no permits to work with human pathogens. I asked my colleagues in Jerusalem to hold off sending the parasites, but to my consternation a parcel labelled DANGER HUMAN PATHOGENS arrived in the mail. There is a scurrilous rumour that I was culturing the parasites on my desk and storing them in the drawer. In time, we developed an excellent mouse model for leishmaniasis and elucidated key elements in the genetic and immunological mechanisms of susceptibility and resistance. An approach gently mocked:

> Young Mitchell a mouse man is he Sticks needles in them with great glee He has a great knack With C57Black But does his best tricks with BALB/c.



I spent part of 1978 and 1979 at Stanford University working on Toxoplasma gondii, applying the new techniques of monoclonal antibodies and 2-dimensional gel electrophoresis to the first analysis of their membrane proteins. Back at WEHI in 1980, I initiated similar studies of Leishmania membrane proteins, leading to the surprising discovery of a family of carbohydrate polymers and glycolipids, not proteins, involved in host invasion and virulence, opening up a new field of Leishmania glycobiology, superbly continued by Malcolm McConville.

Advances in molecular genetics in the 1980s allowed us to clone, express and delete genes involved in virulence and parasite survival, opening the way to vaccines and drugs. Using X-ray crystallography we determined the structure of several new drug targets. These advances also allowed us to analyse the genetic basis of host susceptibility to disease with far greater precision. With Simon Foote, we showed that genes involved in wound healing and tissue remodelling play a major role in resistance to leishmaniasis. More recently, we disproved the notion that Australia was the only continent free of leishmaniasis. We discovered a unique strain of endemic Leishmania in kangaroos, raising the question of possible transmission to other animals and even humans. Over the years, the ASP meetings provided great stimulation, and I owe our members a debt of gratitude for their support and encouragement.
### Nick C Sangster, FASP, 2006

I am well into my 5th decade as an ASP member and continue to work in the field of anthelmintic resistance, also in my 5th decade. During that time, from being a student member, through several academic jobs and involvement with ASP Council, contact with the Society has been a constant. For me the workplace provides work, a place to work, an academic environment, as well as a set of constraints. As time elapses the constraints become tighter. Thus the challenges of an academic career are many and include funding, publication, teaching standards, actually teaching, maintaining scholarship, mentorship through the academic maze and surviving the institutional regime. It is in helping me meet those challenges that the ASP has made such a difference to me. The support for me has taken many forms such as a collegial environment, collaborators, a pride in high standards, providing a vision that I could emulate in my career. At times when the workplace was rocky, and it was for me in my early career, the ASP and its members were a powerful support to the point that it was a stronger home than the workplace. I have made a lot of friends in the ASP too.

In analyzing what made the ASP what it is, I go back to the founding fathers many of whom I was lucky enough to know. They were leaders of their time who saw a vision and then built the Society on it. This vision has led to vibrant conferences, strong student support, adaptation to new challenges, the IJP as both the pinnacle of the science and a source of funds. But the vision had to last and be renewed by the many people who followed. A succession of Councils and Presidents has guided the Society wisely. The Network continues to provide direction, ideas, and cohesion to the Society. Looking from more than 40 years back, the Society has taken parasitology in Australia forward in huge strides.

I have given a lot to the ASP and it has given a lot back to me. I spent 12 years as a voting member of Council and occupied every voting position except Secretary (no, I am not



after the full set!). During my time I edited the IJP, and with others: completed Incorporation, organized conferences, contributed to governance, commenced the development of the Veterinary eText, initiated the open access journals and flew the ASP flag internationally. I like to think I also influenced the careers of many other parasitologists. I value the association I have with parasitologists and count my Fellowship as the most significant award I have received.

In my ASP roles and with ASP colleagues I learnt skills in negotiation, strategic planning, managing people, administration and governance that my academic role would not have offered me. The rewards for me have been career defining and I use those skills to lead my current School. It has also been a touchstone of reality in difficult times. Long may it continue its great work.

# Roger Prichard, FASP, 2007

I got into parasitology somewhat by accident. My PhD supervisors, Dr Ian Johnstone and Dr Phil Schofield (UNSW) worked on the periphery of parasitology, one as an animal scientist and the other as a biochemist; between them they developed my interest in molecular parasitology related to livestock parasites. One thing led to another and I ended up in the CSIRO Division of Animal Health, after my PhD, working on parasitic diseases and have never regretted my career. I have been a member of the Australian Society for Parasitology for 47 years - nonstop - despite my career taking me to McGill University, Institute of Parasitology in Montreal, Canada, in the mid 1980's, as Director of that Institute and later as James McGill Professor of Parasitology. I have maintained my interests in molecular parasitology of animal and human helminth infections and of anthelmintic resistance for over half a century.

The occasion of the 50th Anniversary of ASP gives me cause to reflect on why I have always remained a member of ASP, despite living overseas, and why I try to attend as many ASP meetings as I can. I am a member of several other scientific societies closer to where I now live in Canada. However, the ASP was the first real scientific society that I ever joined and the one to which I have remained most attached. I am passionate about parasitology; our discipline combines the search for understanding how parasitic organisms live - their biology and physiology; an understanding of how they interact with their host(s) and, in some cases cause disease; an intimate understanding also of host physiology, of pharmacology and immunology. It is a fascinating rich world of biology and medicine. The ASP has been/is a great collection of people interested in understanding biology, reducing disease and morbidity in humans and animals; of people who genuinely help humanity and animal and human welfare, not only in Australia but in poor countries and globally. We do good work through our efforts and interests, and the Society fosters that, brings us together at our annual meetings, encourages excellence, stimulates



young people to get into science and make a difference.

Over the years, ASP has had great leadership. Its creation of IJP and its recent journal off-springs were inspired and very successful. I have been happy to have served on the Editorial Board of IJP, to have played a key role in the development and design of the Bancroft-Mackerras Medal (BMM) and, as an ASP Fellow, to have served on and convened the BMM Committee. I try to come as often as possible to ASP meetings and to participate in the scientific program, despite the long distance travel involved, because the ASP meetings are great. In conclusion, I wish the Society very long life and success and thank all its members over the years of its history, for their great contributions to science and for their collegiality.

# Russell Hobbs, FASP, 2007

Parasites first began to fascinate me in 1971 when I took a wildlife parasitology course in the Zoology Department at the University of Alberta in Canada, taught by Bill Samuel and John Holmes. They were inspirational teachers and I was hooked, so I was lucky to go on to a post-graduate degree with an ecological parasitology theme supervised by Bill Samuel.

At the end of that degree, jobs in parasitology were rather thin on the ground and I returned to Australia and found a position at the University of New England as the professional officer in Zoology. Although the job was not in parasitology, the brilliant ecological parasitologist Klaus Rohde was in the same department. Being involved with some aspects of his work, and in interactions with some of his students, my interest in parasitology remained high.

It was not until 1986 that I returned to parasitology when I became the technologist in parasitology at Murdoch University, and it was then that I joined the ASP. I soon discovered how supportive the members were to each other and how generous the society was to students. In 1989 Andy Thompson encouraged me to become Secretary of the ASP. David Obendorf, the Tasmanian Representative at that time, suggested that the Society should produce a regular newsletter, since the only real chance that members had of catching up with the activities of the Society was once a year at the annual conference. So as Secretary, I put a proposal to Council for a quarterly newsletter, which I volunteered to edit. Council agreed and I became the inaugural newsletter editor, a position I held for 5 years. One of the major intentions of the proposal was to include a State News section, which detailed activities of individual members. ASP was a very friendly society, and those personal notes helped to keep people in touch. It is gratifying to see that 25 years on, the Newsletter is still going, and that the State News section is still a major part of it. The Society remains small enough to maintain its



personal approach, and conferences are still the friendly affairs that they were years ago, always with an element of fun.

With several years on Council as WA Representative, and as Webmaster, I have seen from the inside what a supportive society the ASP is to young researchers and to the promotion of parasitology in Australia. We are very fortunate to have the income from IJP, but in my experience it is the selfless dedication to the advancement of parasitology, of a large number of our members, that really makes this the great society that it is. The ASP is well placed and in good hands to continue as a friendly and supportive society for many years to come.

# Nick Smith, FASP, 2008

I was made a Fellow of the Australian Society for Parasitology in 2008. It was the proudest moment of my professional life. Why? That's easy – the ASP embodies all that is best about science. It is open and honest, welcoming – to new people and new ideas – it is adaptable, always looking to the future without forgetting the past that made that future possible. The Society holds, close to its core, ideals that all scientists aspire to...though sometimes we might forget those ideals and aspirations, even half a day at our annual conference is enough to bring us back to them.

The ASP Conference is a remarkable and inspiring event. It attracts not just Australia's but the world's best parasitologists on an annual basis and the quality and novelty of the research presented is supreme. At the same time, the conference is very often a research student's first true exposure to the wider world of scientific endeavor – it was mine, nearly 30 years ago, and remains an enduring, fresh memory. It is simultaneously intimidating, reassuring and overwhelmingly exciting but a better introduction to that world is scarcely imaginable.

If the ASP embodies all that is best about science, our conference reflects all that is best about our Society. The generosity, unselfishness and vision of its members are what sets our Society apart. We don't just talk about supporting young scientists and the future of our discipline; we do it by providing opportunities and funds to attend conferences, to present research, to travel the world to collaborate with the best parasitologists, wherever they may be. We provide workshops and training courses to help each other succeed. We don't just tell ourselves how



fascinating and important parasites and parasitology are; we reach out to the community, to government, to industry and to the world, collaborating to host major international meetings, and producing top quality journals, exhibits and educational resources. The Society's achievements, in just 50 short years, are nothing short of astonishing.

# David Blair, FASP, 2008

My PhD supervisor, Adrian Hopkins ("Hoppy") always insisted everyone should be prepared to eat their study organisms. For me, that was easy: smoked rainbow trout are delicious and their parasites nicely flavoured by the process. Enjoying the effect, Hoppy used to sit down in the lunch room every day and ostentatiously dissect the tapeworms out of the sardines he was going to eat. The worms were always pushed to the side of the plate and displayed to visitors. Deliberately eating parasites was certainly a habit of parasitologists in the 20th Century. At a joint meeting of the NZ and Australian Societies in Christchurch in the 1980s, the conference dinner featured, as might be expected, NZ specialties such as green-lipped mussels. When I made an announcement that the mussels with juicy red gills were the ones containing larval stages of a fluke, Tergestia, there was a rush to sample these parasitised delights and they were pronounced superior to their "healthy" cousins. Do parasitologists still relish their parasites, be they tartare or smoked, or have OHS rules stymied that?

OHS rules have changed a bit since I first joined the Society in 1975. Nowadays, things are regulated and risk-assessed to the extent that no harm can come to the diligent parasitologist. Take fieldwork. Once upon a time, that was something you went off and, well, just did. I think I might have needed to fill in a tiny half-page form to say where I was going if any money was to be spent. Thereafter, my superiors didn't seem to worry if I leapt into a tiny dinghy with several Torres Strait Islander turtle hunters, setting off into that perpetually westward-flowing current along the reef front. And the propeller fell off the outboard. No problem. Somebody jumped over the side and retrieved it. Nevertheless, I made some comments along the lines of "next stop Timor". On a subsequent trip, when the same thing happened, the cheery crew all chorused "next stop Timor" and laughed mightily. I laughed too – I'd brought lots of water this time, and a towel to keep the sun off.



But the prop, once retrieved, wouldn't stay on. With the distance between TI and Timor narrowing at the rate of a few knots, a short conference was held, and the tool kit (a rusty file) mobilised. Some diligent work on a piece of wire found in the bilges fashioned a new split-pin, and we could navigate again, bringing home the turtles and their parasites.

I did gain greater appreciation for safety, and the increasing ease of laboratory work after I went molecular. I remember my first PCRs (liver flukes and schistosomes) and agarose gels. Phenol and ethidium bromide – yum yum. Does anybody still use those? Then there was the use of isotopes. More skill than I possess was required to wrestle huge, fragile and radioactive slab gels onto sheets of blotting paper for drying. All this for a string of As, Gs, Cs and Ts in seemingly random sequence. I really appreciate the modern conveniences of kits and outsourcing.

But sometimes I still hanker after the simple pleasures of standing on a topical sandbank using an oar to fend off sharks on a rising tide while my Islander hunter friends were doing the skilled work of butchering a dugong (I got the parasites).

# Maria Meuleman, FASP, 2009

My introduction to IJP, and consequently ASP, was in 2005, after being retrenched from CSIRO Animal Health at the old McMcMaster Laboratory at Sydney University, where I worked in administration and dealt with people including John Steel, Peter Waller, Des Hennessy, Rob Dobson, Liz Barnes, Ern Lacey, David Emery, David Ali, Michelle Power and many others.

Alan Donald was IJP Editor-in-Chief and had an office in the new CSIRO McMaster Laboratory at Prospect. Our lovely receptionist, Michelle Shalhoub, became the IJP Editorial Assistant. However, the distance to Prospect led to Michelle leaving and I was asked to fill in for a few months, which I thoroughly enjoyed. Camille Sainsbury, a wonderful lady who replaced Michelle, moved across to work with Alan Johnson as the next Editor-in-Chief at the University of Technology, Sydney. Camille decided to move on and I successfully applied for the job. I enjoyed working with Alan but after 18 months felt compelled to move on; however I was invited back, commencing in March 2000.

It was déjà vu moving to Sydney University to work with Nick Sangster in the old McMaster building (coincidentally, Michelle Power also returned to work with Nick). The move to Melbourne was timely and when Brendan Crabb later agreed to my working from home it began a new chapter. Alex Loukas has allowed it to continue and with the current electronic system (and good communication) it works well.

I have enjoyed working with different Editors-in-Chief, Deputy Editors, Editorial Board members and Elsevier's publishing staff. Each person has something different to offer. If I had to describe my appreciation of each Editor-in-Chief with a single word it would be: Alan Donald, flexibility; Alan Johnson, determination; Nick Sangster, commitment; Brendan Crabb, empowerment; Alex Loukas, support. I am fond of them all and feel sad when they move on but



'change is good' is the motto I try to embrace.

Nick Smith and Lisa Jones do a fantastic job organising the annual ASP conferences. Attending the conference and helping on the registration desk gives me great pleasure and the opportunity to meet and catch up with people. I love meeting new PhD students and watching their confidence increase each year until eventually they are bringing their own students to the conference. I also enjoy the down-to-earth nature of parasitologists. They are good to be around.

My IJP job keeps getting busier; electronic systems have in many ways increased, rather than decreased, the workload but I still love it. One of the best things is knowing that IJP helps to generate income for the ASP which supports students and parasitology in so many ways. It feels wonderful to be able to contribute to that in some small way and I enjoy building relationships with editors, authors and referees.

Being made an ASP Fellow was very special and is always a reminder that hard work is appreciated.

# Robin B Gasser, FASP, 2010

I have been a member of the ASP since 1987, and have been actively involved in different ways over the years. I remember arriving back in Australia to commence a postgraduate project in March 1987, and Mike Rickard saying to me "Robin, you need to become a member of ASP, and give a talk at the next conference!" At the time, I was not aware of the Society but I was really excited and delighted when I received a student travel scholarship to attend my first scientific conference. So, after having worked for some months, I gave a talk at ASP in Armidale. Immediately, I got the sense that it did not matter that I did not have many results; what mattered was that I actively participated and that I gave a progress report! I remember being pretty nervous, but the nervousness soon subsided, when I started meeting members and discussed science and parasitology. Everyone was very supportive and constructive, and I rapidly learned that ASP was one of a kind, and was there to support young people. As time passed, I witnessed how the Society continued to strongly support and guide the next generation of parasitologists, not only on a national level but also, importantly, in the international arena. These aspects had a major impression on me at the time, and still do! They impacted my career path.

To date, I have not yet seen another Society with such a strong focus on supporting its "next generation". In addition to this philanthropic focus, founding members of ASP had the foresight to ensure that the International Journal for Parasitology and new sister journals have remained the property of the Society and that the proceeds from these journals flow to ASP to support many of its activities, including the provision of undergraduate and postgraduate student prizes, travel awards for conference attendance and overseas visitors, careers advice and mentoring, advertisements, data-bases and networking, and much more. Although ASP has become more complex to run, key values and aspirations remain the same as 50



years ago, and we look very much forward to a resurgence of Parasitology into the future. It is crucial that all of us are ambassadors, and that we profile the discipline nationally and internationally.

We need to resist institutional and "other" pressures on our discipline, and must maintain our unique and clear identity. We need to keep reminding both nonscientific and scientific communities of the massive adverse impact of parasites on animal and human health worldwide, and of the massive importance of Parasitology. Some of the biggest challenges globally are neglected parasitic diseases. No wonder that FAO, WHO and other international organisations are calling for urgent action to find better ways of treating and controlling parasitic diseases. So, there are huge opportunities for us, as Parasitologists, to "make a difference", not only as researchers, but also as educators, advisors and experts in the biotechnology and pharmaceutical industries, government and a wide range of other areas. ASP will be there, in the background, always supporting its membership.

I feel privileged to be part of this great Society.

# Alan Cowman, FASP, 2011

I am proud to be a member of the Australian Society of Parasitology (ASP) and pleased to give some thoughts on its very successful 50 years history. The ASP has provided a forum to bring together the parasitologists of Australia and this has been an important and very positive force for the development of this broad field in Australia. There are a number of things I have been involved in for the ASP and I have greatly benefited from this association.

The first is the International Congress of Parasitology (ICOPA), which was held in Melbourne, 2010. I was not part of the bid, in Glasgow 2008, to the World Federation of Parasitologists by ASP for this Congress; however, I was present and was very proud that Melbourne won and I certainly took part in the celebrations. Both David Piedrafita and Alan Johnston played important parts in successfully bringing this congress to Melbourne. Having won the bid the hard work of holding a successful ICOPA began and I was asked to Chair the organising committee and over the next four years and I accepted this task as I was keen to support the ASP as host. An organising committee was formed across the disciplines of parasitology and geography of Australia. This provides me with another opportunity to again thank the members of this committee for their work in bringing together a very successful ICOPA XII that attracted approximately 1,700 delegates. I had a huge amount of support in particular from Terry Spithill and David Piedrafita. ICOPA XII provided an excellent opportunity for ASP to show the quality, breadth and depth of parasitology in Australia and I believe we were very successful in that endeavour. We also developed a number of Outreach events to inform the general public about parasitology and the ASP and these were successful drawing in very large crowds. Overall, I believe ICOPA XII was a great success and is an important event in the history of the ASP.

Secondly, the Australian Research Network for Parasitology



(ARNP), which the ASP played an important role in establishing and now sponsors, was a very positive influence on parasitology generally and provided much needed support for many younger scientists. This network was supported by the NHMRC and ARC and has been very successful in its aims and it is hoped that it can be supported in future to continue its important work.

Finally, the ASP has many reasons to be proud of its achievements in supporting parasitology and parasitologists in Australia. I am fortunate to have played a very small part in its history.

# Malcolm Jones, FASP, 2011

While examining a PhD thesis submitted by a candidate from another university, I came across a phrase that, although to me perfectly clear, could cause a moment of confusion for someone not well versed in parasitology. The student was outlining transmission strategies of a parasite of interest, and spoke of that well-known place, the "outside world".

Where could this outside world be? As I reflected on this, I wondered what this place could mean to different people. A prisoner might long for life on the outside. For Anthony Sprent, son of John Sprent, one of the visionaries who set the ASP on its path over 50 years ago, an outside world would be one of many exoplanets found around distant stars. Anthony trained as a geographer, but in later years turned his interests to designing and making optical telescopes. He uses these telescopes to image light from a distant star eclipsed by a nearer one. The deflection of distant light as it passes around the nearer solar system enables him to detect planets in that nearer solar system. Anthony's search for novel entities so reflects his own father's logical and exacting search for new and exciting entities, in John's case, ascaridoid nematodes.

For us in parasitology, the outside world has a special meaning. It is that terrible place a parasite, or more correctly its progeny, must negotiate in order to ensure the species survives. Early parasitologists likened hosts to islands in a vast ocean. Offspring of parasites, jettisoned unceremoniously from a host must find their way back to new host and the life cycles that have developed are remarkable and often complex. For there to be an outside world, in the context of parasitology, there must also be an inside world. There is of course and it involves a fascinating array of interactions: of subterfuge countered by high level surveillance, of attack and counter-attack, of an erstwhile harmonious relationship souring when conditions change. Each interaction has its own story. To me, as one who is by nature easy-going, and some would say lackadaisical, the



astounding nature of parasites is that once they establish themselves, they get on with the important aspects of their life - reproducing, and that in rich profligacy. The lot of a parasite, whether inside or outside, is not easy but they are astoundingly successful.

When I think of why the ASP has survived and flourished over the last 50 years, I think it is in large part due to the shared wonder we feel as we observe parasites negotiating their inner and outer worlds. We gather, sharing anecdotes and writing treatises on how they negotiate their paths outside the host on in the host, sometimes bickering about the identity of some, or about how we can control them. At times we seek to do ourselves out of work by breaking parasite cycles. Other times, we marvel at the inherent beauty of these organisms. We have our lexicon-faecal flotation, eggs-per gram, tracheal migration, parasitaemia, host-parasite interactions and many more terms that mean a lot to us but bewildering to people outside of our discipline. We are taxonomists, ecologists, biophysicists, climate scientists, molecular biologists, immunologists, protein chemists, structural biologists, and sometimes poets, debaters and dreamers.

Parasites and, by inference, parasitologists are strange creatures with strange habits. At the same time, I am proud to be a parasitologist and an Australian one at that. The ASP is united by a common passion and peopled by passionate people and it is this that has kept me linked with this society.

# Jacqui Upcroft, FASP, 2011

A taxi driver commented in envy when I told him I was on my way to a parasitology conference, "Wow, I love Paris."

How could I explain the reality? Driving round in a four wheel drive seeking women in the Highlands of Papua New Guinea willing to donate a vaginal swab so I could check for *Trichomonas vaginalis* – not quite the Moulin Rouge; peering down the microscope at the graceful, flowing consumption of bright red blood cells by *Entamoeba histolytica* – not quite the Café Procope; paddling around the interstices of a variety of animals searching for Giardia vaguely reminiscent of, but not quite as exciting as, the more seedy areas of Montmartre; and the wonder of the ever so clever *Plasmodium spp.*, more awesome than the Louvre?

#### But wait there's more!

Peering down microscopes at duodenal biopsies – what was that kid eating; crazy scientists each in love with some dubious creature which lives on or in another; conferences bursting with worms and more worms – some think they are pasta substitutes; graphic slide shows of passing of tapeworms; bloated stomachs and egg trails of yet another worm; black urine; ulcerated livers – the-one-way-street demise of E. *histolytica* trophozoites – they should have been warned; conversations in crowded lifts of the surprise appearance of tapeworm segments - the dangers of eating in Kenya; making parasitology sexy for granting purposes; wishing our Prime Minister and Health Minister a very severe dose of drug-resistant giardiasis (we had the cysts



ready to go) and imagining rushing to their rescue with an as yet untested drug; and colleagues lingering outside the lab too afraid to venture in.

In case you were curious, *paludisme* is not something you succumb to while rapidly ascending the Eiffel Tower.

# Bonne chance and thanks for the memories one and all.



On behalf of the New Zealand Society for Parasitology, I would like to extend our congratulations to our sister society the Australian Society for Parasitology. In To the Australian Society for Parasitology keeping with the best of ANZAC traditions, out two societies have shared many close contacts over the years including several joint contenences, Townsville 1989. Adelaide 1995, Wellington 2000 and Christehurch 2005, which also saw members of both societies share in the organisation of the 20th International Conference of the World Association for the Advancement of Veterinary Parasitology. The importance of Parasitology to the economic wellbeing of our two countries and the health and welfare of our animals (and people) have encouraged and instered the links between us and meant that Parasitology down under has been continually world-leading and its scientists fered amongst the very best. I hope that The NZSP recently passed its 40 year milestone, but to our elder sister, we wish a this will long continue.

1-5=

Ian Scott,

President NZSP

very happy 50th Anniversary.

# **Quo vadit?**

The first 50 years of the ASP has been spectacular in terms of professional outcomes achieved by a motley collegial band of enthusiasts for the discipline of parasitology. The Society evolved with the times and has been typified by convivial conferences, professional publications, meritorious awards, sponsoring students and embracing information technology. What does the future hold?

# **Strategic Plan**

The ASP has developed strategic three-, five- and tenyear goals within each of the four fundamental pillars of activities (Recognising Excellence; Advancing Knowledge; Serving Members; and Delivering Training and Education).

#### STRATEGIC PILLAR 1: RECOGNISING EXCELLENCE

#### **Actions Next Three Years**

- Sustain current ASP Awards and Prizes through investment income
- Explore viability of reintroducing Honours scholarships
- Explore viability of offering postgraduate and postdoctoral scholarships and fellowships

#### **Actions Next Five Years**

- Consider possibilities for new prizes and awards
- Develop sponsorship initiatives
- Undertake dialogue with Research Institutes and University Departments to determine possibilities for collegiate cooperation

#### **Actions Next Ten Years**

- Review portfolio of prizes and awards
- Review sponsorship and networking initiatives

#### STRATEGIC PILLAR 2: ADVANCING KNOWLEDGE

#### **Actions Next Three Years**

• Ensure well managed Editorial succession process for ASP Journals

- Launch new open access journals building on the reputation of the IJP
- Continue to offer annual ASP Conference with input from scientists of international standing, fostering diversity in plenary and contributed sessions in the program
- Engage with New Zealand and the Asia-Pacific Region
- Examine mechanisms for continued support of sponsored parasite collections
- Investigate efficacy of various travel awards

#### **Actions Next Five Years**

- Review ASP Journals to ensure excellence and relevance
- Review conference programs
- Establish mechanisms for support of parasite collections; if validated
- Edit portfolio of travel awards to meet members' needs within ASP resources

#### **Actions Next Ten Years**

- Continue to review ASP Journals to ensure excellence and relevance
- Monitor changing face of parasitology to support emergent disciplines
- Survey members to decide on preferred conference organization and content

#### STRATEGIC PILLAR 3: SERVING MEMBERS

#### **Actions Next Three Years**

- Identify needs of members through variety of communication media
- Establish new opportunities for members to engage with Society to improve collegiality
- Provide professional support for Treasurer and other members of Executive
- Prepare a paper redefining the roles of key management personnel
- Continue to improve and update the web page

#### ASP 50th Anniversary Commemoration | Quo vadit?

- Address needs of members through improved communication channels
- Maintain quality of Newsletter
- Review Constitution to ensure relevance to current
  ASP
- Apply for ARC Linkage or other grant to obtain data for a paper advocating for change to National Research Priorities to recognise the socio-economic impact of parasites
- Ensure active membership of STA to lobby for parasitology as a research priority

#### **Actions Next Five Years**

- Complete grant and write paper to inform, and advocate for, changes to National Research Priorities
- Continue lobbying for parasitology as a research priority through membership of STA
- Develop and implement new initiatives identified to meet members' needs

#### **Actions Next Ten Years**

- Continue to advocate for changes in National Research Priorities to recognise the socio-economic impact of parasites
- Continue lobbying for parasitology as a research priority through membership of STA
- Increase public awareness of socio-economic impact of parasites by continuing to educate government, universities, industry, and general public

# STRATEGIC PILLAR 4: DELIVERING TRAINING AND EDUCATION

#### **Actions Next Three Years**

- Ensure face-to-face activities are maintained
- Establish a new operating unit of the ASP to raise cash and in-kind support to ensure the long-term future of our training and education activities
- Establish and staff the new ASP Network

- Foster research exchanges and mentoring
- Conduct workshops on targeted topics
- Develop focused satellite training courses around each ASP Annual Conference

#### **Actions Next Five Years**

- Increase international linkages to other Societies, joint meetings with New Zealand and Asia-Pacific Societies, and shared membership with other Societies
- Explore ways to use technology to facilitate international linkages
- Encourage early career parasitology researchers by increasing travel awards and further developing mentoring scheme (brokering knowledge with ASP Fellows)
- Develop nationally and internationally recognised training program, and bring in trainees from the Asia-Pacific region
- Continue to expand revenue-raising opportunities

#### **Actions Next Ten Years**

- Create an Australia-based 'Woods Hole-like' training course in Parasitology
- Interact with teachers to provide curriculum enrichment for High School students

# **Concluding remarks**

This book has attempted to provide a succinct summary of the first 50 years in the life history of the Australian Society for Parasitology (ASP). Literally, hundreds of people have contributed to the genesis, growth and vitality of this professional scientific society dedicated to the study of parasitic organisms.

Parasites are remarkably resilient creatures which have evolved to be well adapted to their hosts and environments. It is hoped that parasitologists will be just as resilient and continue to apply new technologies to the study of these fascinating organisms. Research should not only be justified on the basis of improved outcomes in host health, but also on our need to understand the complex interactions between host and parasite that have made parasitism the most dominant life-style on our planet.

Humanity faces at least six major issues in the immediate future – we must address population growth, energy supply and demand, climate change, food production, urban crowding, and surviving pathogens. Parasites have been responding to similar issues throughout their evolution, utilizing mechanisms we are only beginning to understand. Hopefully, parasitologists will be just as adaptable to changing circumstances.

Over the last 50 years, we have witnessed profound changes in the workplace: not only in how we do science (technological advances), but where we do science (resource infrastructure), what we do it on (research priorities), and how we communicate it (information technology). The ASP has taken an active role in discipline organization and promotion which has required considerable change management; through strategic planning, mission statements, constitutional revisions, incorporation, position statements, network development, and financial planning. It is commendable that such significant long-term changes have been brought about by a succession of Executive Committees appointed for short terms (initially annually, now biennially). It shows a remarkable capacity to accommodate change and to maintain shared vision.

The field of parasitology encompasses many scientific, technological and clinical disciplines, all of which have changed dramatically over five decades. Further changes are foreshadowed over the coming decades; possibly precipitated by globalization, economic reforms, government imperatives, industry requirements, public accountability, and social demand. The ASP has constantly endeavoured to respond to contemporary circumstances and it is natural to assume that it will continue to do so in the future. It is hoped that the ASP and its members will do so with similar passion, professionalism, collegiality and conviviality that have been hall-marks for the last 50 years.

May the ASP live long and prosper! The objects of our study certainly will!

All the best from your editorial team.

# The Australian Society for Parasitology Inc.

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