



VETERINARY PATHOLOGY REPORT

Australian Society for Veterinary Pathology
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DEADLINE FOR NEXT VET. PATH REPORT IS JUNE 30, 1993

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CONVENOR - SLIDE OF THE MONTH

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1.

FROM THE EXECUTIVE

Welcome to VPR 36!

This will be our last regular VPR before we hand over the reins to the new Executive to be elected at the AGM in Brisbane. A nomination form for ASVP Executive for 1993-94 is enclosed. Please use this if you wish to nominate and return it to the Secretary at EMAIL.

Membership fees for 1993 are now due (\$25 for Australian members, \$30 for overseas airmail, \$35 for NZ airmail, \$40 for other overseas airmail). A membership form is included in this VPR, and it includes a section to indicate special interests & skills. Please fill in the form, even if you have already paid for this year, so that our records can be kept fully up-to-date in the interests of better communication between members. Note that the membership forms should be returned to the new Secretariat address (see directory inside front cover). All routine enquiries concerning membership and receipt of the VPR should be directed to the Secretariat.

GL Reddacliff, Honorary Secretary

SLIDE OF THE MONTH

It came to my attention that several chronically non-financial members (= non-members) were still receiving the ASVP Slide of the Month. Their names have been removed from the distribution list and they have been written to and told why, with an invitation to rejoin.

I also note from the ASVP membership list that there may be members who are eligible to participate in the Slide of the Month and are not currently doing so. We do limit mailings to one set per institution and call on recipients to contribute cases on a 2-3 yearly cycle. If you wish to be involved in the Slide of the Month please drop me a line.

**Peter Phillips
Convenor, ASVP Slide of the Month
Vetlab, GPO Box 1671
Adelaide SA 5001**

I

PRESIDENT'S REPORT

The Hon. Terry Groom MP, Minister for Primary Industries in South Australia, acknowledged receipt of our ASVP executive submission on the McKinsey & Co. Organisation Development Review (ODR) of November 4, 1992. The submission is included for member's information. At time of writing the many submissions received are being considered by Cabinet and it is felt that further re-consideration of the laboratory services elements of the ODR may be forthcoming. Please help and support our members in Adelaide wherever possible.

The details of May Conference, 15-16th May 1993, are included in this issue. A big thank you to agreed participants and local organiser Roger Kelly. We look forward to your contribution and/or attendance. Do please use the registration slip to signal your intentions now. The Executive for 1993-95 must be nominated in writing 7 days prior to the May 15th AGM. Please consider because your present crew are definitely retiring!!! A nomination blank is enclosed with this newsletter.

We express sympathy with the Bairnsdale RVL which has been forced to reduce staff by 10 in late January. Clearly their capabilities have been severely compromised by this acceptance by staff of voluntary redundancy packages. This and other evidence of pressure on members in public employ has prompted the segment at Conference on "The Future of Government Vet Services in Australia". Please come prepared to review the situation in your state and to share any vision you have in the area. Clearly this situation interacts actively with the more recent emergence of private pathology services to animal industries at large and the interaction will be worthy of examination.

Finally, I draw your attention to Robin Giesecke's article relating to the rationale for training and training modules for consideration and future discussion.

Best wishes for 1993 now with us and look forward to seeing you at Brisbane for ASVP Annual Conference.

Yours faithfully,

K. H. Walker

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AUSTRALIAN SOCIETY FOR VETERINARY PATHOLOGY

(incorporated in Victoria)



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Elizabeth Macarthur Agricultural Institute
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MR R DUNDON
CHIEF EXECUTIVE OFFICER
DEPARTMENT OF PRIMARY INDUSTRIES
GPO BOX 1671
ADELAIDE SA 5001

McKINSEY AND CO REPORT NOVEMBER 4 1992
ORGANISATION DEVELOPMENT REVIEW (ODR) OF
SOUTH AUSTRALIAN DEPARTMENT OF PRIMARY INDUSTRIES

Dear Sir,

I write on behalf of the Executive of the Australian Society for Veterinary Pathology representing some two hundred laboratory service and research professionals Australia wide, including current members at your Adelaide Central Veterinary Laboratories (CVL). The executive members work here in animal health laboratory services at EMAI, which is the equivalent central animal diagnostic and research facility in N.S.W. EMAI operations are supported by five regional veterinary laboratories throughout the State, each having a staff complement of some 10-20 persons depending on workloads. Thus I consider our following comments on the ODR to be constructively offered from a position of considerable experience and relevance to the McKinsey and Co. review in S.A., particularly as it pertains to research and diagnostic or analytical laboratory services in the animal health and production, disease surveillance, chemical usage and welfare fields.

The ODR properly identifies, we believe, the mission of the future economic development of South Australian agriculture and we clearly recognize the current cost restraint imperatives! However, severe curtailment of scientific service operations to Agriculture does not equate with DPI (S.A.) becoming the premier Government Agricultural Organization in Australia as predicted. Indisputably agriculture needs the hard facts (diagnosis) and rigorous arguments (research) of its present scientific professional leaders, if agriculture's contribution to gross state product is to increase to the expected potential of 3% per annum growth, it is noted that the report recommendations imply a possible 20% reduction in administrative full-time equivalents (FTE's) compared with a 60% plus sharp reduction in diagnostic and analytical services FTE's. This at least suggests an imbalance in cost saving priorities and at worst will decimate the scientific human resource without which Agriculture in any state will become progressively less competitive, particularly in product quality assurance and certification terms.

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The ODR's report focuses on restructuring to clarify accountability and to redirect scarcer resources to highest value opportunities. The establishment of multi-disciplinary "program areas" to facilitate change is believable and properly directed to measurable performance outcomes for South Australian agriculture. If CVL Adelaide's research portfolio or its diagnostic workload is not so aligned, as claimed by McKinsey and Co. then positive redirection and change may be warranted. However, the recommendation against the proposed laboratory building as part of the Waite re-location together with the sharp reduction in proposed CVL staff levels will effectively combine to neutralize and/or preclude a positive response to change for the support of the animal industries by CVL personnel. We believe these personnel fit the category of officers acknowledged by the report as delivering "a quality of research product(s)..... attributable to the dedication and professionalism of its personnel (rather than the Departments research organization skills)"! However, they cannot respond to new or changed demands without such infrastructure development planning and capital (re)allocation support. Clearly centralization of agricultural and veterinary research facilities at the Waite Institute, including those for diagnostic and analytical services, should not be abandoned prematurely. This is especially so as South Australia has no Commonwealth or University alternatives in the veterinary area which might contribute to research and/or diagnostic services.

This position is particularly relevant when "outside providers" are suggested as alternatives to S.A. DPI for scientific services, as such service demands are now fully or over-committed in all other States and the Commonwealth, because of similar cost containment environments. The diagnostic and analytical laboratories at CVL Adelaide must be allowed to maintain a critical mass of people (expertise) to allow services such as veterinary biochemistry, parasitology, virology, microbiology and serology/immunology and pathology to be core functions. Our experience in New South Wales is that this is impossible with a staff of twenty. There are seventy-two staff at EMAI central laboratories and seventy staff at five Regional Veterinary Laboratories (RVL) including twenty at the RVL Menangle located at EMAI. Currently in a number of discipline areas in NSW staffing is below operational effectiveness following two years of a "non-replacement of vacancies" policy. This is despite a strict limitation of work activity to commercial livestock species. Total implementation of the ODR recommendation on laboratories could leave CVL with no expertise in some areas and below critical effective levels in others. This would impinge directly on SA agriculture's capacity to certify health status for international or interstate trade in livestock and to promote marketing and product quality assurance for those markets. Ignorance does not satisfy documentation for OIE or EEC nor will it suffice for argument against non-tariff trade barriers based on source population disease status.

Experience in New Zealand over the past 5 years serves to reinforce this argument that a scientific capability can be allowed to degenerate to below critical levels. In that country reliance on user revenue combined with extreme cost restraint severely eroded the staff resource in the agricultural/veterinary scientific services area. Currently some overseas recruitment is in train in a belated recognition of the need to redress that situation and to foster and maintain functional and specialized scientific services.

In our opinion services of CVL are nowhere as discretionary as made out by the ODR. They may be re-organized within and through the Animal Health Program but should not be arbitrarily reduced until the service needs of expanded agriculture in SA are properly assessed. Unless the beneficial, integrated, optimum nature of veterinary (private and public) field and laboratory services is recognized, developed and utilized there is a real danger that South Australia will become a "black hole" from which livestock and products cannot be easily exported, where little is known of endemic disease patterns, and the facilities and expertise to diagnose and exclude exotic diseases are minimal and operationally unsatisfactory. This is contrary to Commonwealth requirements for each State to have a competent and operationally credible state diagnostic capability.

The ODR has failed to recognize that in a State without a University veterinary school or any other public sector animal health service provider, there is direct public expectation for a range of "peripheral" agricultural/veterinary services from the State government. These include veterinary education e.g. in the welfare and environmental fields, animal welfare diagnosis, e.g. for the RSPCA, export certification for

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other "non-agricultural" species, notably horses, veterinary post-graduate training specific to the South Australian agricultural scene, animal quarantine laboratory support, wildlife protection, zoo services etc etc. Whilst these may well distract from direct agricultural pursuits of economic benefit to the State no government could allow all such services to wither or be dismantled without significant disadvantage to and disgruntlement by the public. Private providers are inappropriate or unattracted to such areas.

The ODR notes that the State Government heavily subsidizes (44%) CVL diagnostic services and that services provided to private veterinarians do not significantly support the disease surveillance role. These arguments are used to justify the sharp reduction in staffing and service provision in the report. In contrast to these propositions it can be argued and is seen applied currently in NSW, WA, NT, and Queensland, that the public beneficiaries can and should contribute (in this case the cost of laboratory services) to the 50-60% of private veterinary submissions to laboratories from commercial animal species in those States. This provision of specialized laboratory services is "traded-off" for the compulsory endemic disease information required of private veterinary submitters for access to the free core diagnostic service in State government laboratories for commercial animal species. All or any other services are chargeable at full cost accounted rates and companion animal services are largely left to private providers. This symbiosis ensures that both parties receive what they otherwise may not get. Private veterinarians, on behalf of their clients, get laboratory services and disease information on animals of commercial value that may otherwise be precluded. The State veterinary service insists on and receives valuable endemic disease information which a state-wide privately trained professional work-force is able to provide. This allows it to fulfill its statutory disease reconnaissance obligations at minimal cost. World-wide the absence of such hard information is one major limitation to sound policy development and rational and economic veterinary preventive disease control programs. Despite successful control in Australia of pleuro-pneumonia, tuberculosis and brucellosis no Australian State can afford not to know their status for endemic diseases, such as mycobacterium paratuberculosis, enzootic bovine leucosis, salmonellosis, and arbovirus infections. We submit that disease surveillance tests received from limited numbers of Government animal health staff not in daily contact with client's livestock does not represent adequate animal health surveillance. We further suggest that the ODR report recommendations for budget/staff reductions should **NOT** be implemented until the issue of adequate quantitative and surveillance coverage of endemic diseases, with the full co-operation and consultation of country veterinarians has been worked out and implemented. This should allow the true needs for alternate Research and Development projects at CVL and the type of support needed for animal health programs to be assessed in their productive agricultural context and not by a short-term fiscal review.

The ODR rightly recognizes the "the Department should be careful that the pursuit of revenue (in this case short-term cost-cutting) does not divert it from its overall mission". We believe that the severe recommendations of the ODR report with regard to veterinary laboratory services may represent such a diversion!

I trust this critique and comments will be carefully noted and openly received by you on behalf of the South Australian Government. If our Society could provide further independent advice please understand we are willing to assist. I may be contacted as per the above letterhead or privately as below.

Yours faithfully,

KEITH H. WALKER
President
Australian Society for Veterinary Pathology
12 January 1993

DR KEITH WALKER
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**ASVP ANNUAL CONFERENCE MAY 15-16 1993
Gazebo Hotel, Brisbane**

Arrangements are well under way for this year's annual conference, again to be held on the weekend before the AVA conference. The local arrangements committee in Brisbane headed by Roger Kelly has booked conference facilities at the Gazebo Hotel. The University residential colleges will not be vacant and in these times of "user pays" we would have to pay for the use of a conference venue at the University. There was thus no advantage in holding the conference at the University, rather than at a city hotel, where the bulk of delegates could also stay for the duration of the conference.

Conference costs at the hotel are \$33 per delegate per day, which includes parking, lunch, morning and afternoon tea, and hire of the conference facilities. A separate charge of \$40 will be necessary to cover the cost of speakers' expenses, production of proceedings etc. This will be charged regardless of how many days a delegate attends.

While we regret the increase in conference registration fees over last year ($\$66 + \$40 = \$106$ for the 2 days as compared to \$50 last year), we still feel that the ASVP conference represents good value, and holding the event at the same venue as most accommodation, has allowed us to secure very reasonable rates for accommodation, and have the convenience of a central location.

Accommodation for conference delegates at the Gazebo (including breakfast) will cost \$37 per day per person twin share (organise a room-mate yourself) or \$66 per day for a single room. These special rates are for the Friday and Saturday nights and are available only to conference delegates. Should you require accommodation on other nights you will have to arrange this separately.

The major theme for this year's conference is reproductive pathology and we invite members' contributions in this area. In addition we invite clinical or anatomical case reports concerning disorders of haemostasis or haemolysis, plus, of course, case reports as usual on any aspect of veterinary pathology. A draft program follows.

If you intend to come to the conference, please complete the conference registration form enclosed with this VPR, and send it off with your registration fee before May 1 1993. This will save an enormous amount of confusion and time on the first morning of the conference! Receipts for registration and accommodation will be available then.

Note: Deadline for receipt of abstracts (1-2 A4 pages typewritten, suitable for photocopying) for production of conference proceedings is also 1st May 1993. Abstracts received after that date **WILL NOT** be included in the proceedings.

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DRAFT PROGRAMME

**AUSTRALIAN SOCIETY FOR VETERINARY PATHOLOGY ANNUAL CONFERENCE
May 15-16th, Gazebo Hotel, Brisbane**

Saturday May 15th

REPRODUCTIVE PATHOLOGY

Chairperson - Dr J Gibson

Reproductive pathology and immunopathology in the ram - Dr P Ladds, James Cook University, Townsville.

Reproductive pathology in the fowl - Dr R Reece, National Registry of Domestic Animal Pathology, Menangle.

An overview of pestivirus infection in the bovine - Dr P Kirkland, Elizabeth Macarthur Agricultural Institute, Menangle.

Mammary tumours in the canine - Dr W Robinson, Murdoch University, Perth.

Endometrial biopsy in the mare - Dr G Mitchell, Veterinary Pathology Services, Brisbane.

Members presentations/case reports, reproductive pathology.

THE FUTURE OF GOVERNMENT VETERINARY SERVICES IN AUSTRALIA

Chairperson - Dr T Ross

The federal perspective - Dr T Nicholls, Bureau of Resource Sciences, Canberra.

General discussion, including brief reports on the position in each state.

ANNUAL GENERAL MEETING

CONFERENCE DINNER

Sunday May 16th

Disorders of haemostasis in companion and laboratory animals - Dr JP McGrath, Eli Lilly & Co. USA

An overview of muscular dystrophy in animals - BJ Cooper, Cornell University (to be confirmed)

MEMBERS PRESENTATIONS/CASE REPORTS

Details to be advised

**NATIONAL REGISTRY DOMESTIC ANIMAL PATHOLOGY REPORT FOR OCTOBER,
NOVEMBER & DECEMBER 1992**

The registrar (Rod Reece) attended the Exotic Diseases Training course for laboratory based veterinarians held at CSIRO, AAHL Geelong, 12-19th October. Animals (cattle, sheep, pigs, chickens, ducks, geese) infected with a variety of pathogens were examined at different stages during the development of clinical disease and characteristic lesions were observed. In addition, histological slides prepared from field cases and experimental infections were studied and presented. Techniques used in the diagnosis of exotic diseases were demonstrated, and lectures were given in diseases of concern to Australian veterinary pathologists. Opportunities were taken during this course to promote the NRDAP and strengthen its relationship with AAHL.

November, Rod attended the Aust. Vet. Poultry Assoc. Scientific Meeting at VIAS (Melbourne) and gave a presentation on infectious stunting syndrome of chickens. Other sessions included results of various field and experimental studies, a review of the use of chemotherapeutic substances in poultry, a forum on the recent outbreak of avian influenza in Victoria, and a summary of several overseas symposiums (Marek's disease, Avian Mycoplasmas and Salmonellosis). It was a very informative and useful meeting and opportunity was taken to promote the NRDAP.

Several veterinary pathologists visited the NRDAP at EMAI and were given instruction in histopathology of various species, especially poultry.

The Registrar (Rod) was involved in setting questions and assessing performance of a candidate applying for Fellowship of the Australian College of Veterinary Scientists (Avian Health Chapter). Also articles for refereeing were received from several journals.

Many sections were examined and selected for entry into the registry.

The veterinary histopathology courses for 1993 are being prepared.

Rod Reece
Pathology Registrar

PUBLICATIONS OF THE REGISTRAR

Reece, R.L., Howes, K. and Frazier, J.A. (1992). Experimental factors affecting mortality following inoculation of chickens with avian nephritis virus (G-4260). Avian Dis. 36:619-624

Reece, R.L., Beddome, V.D., Barr, D.A. and Scott, P.C. (1992). Common necropsy findings in captive birds in Victoria. Australia (1978-1987). J. Zoo Wildlife Med. 23 (3):301-312.

McOrist, S. and Reece, R.L. (1992). Clostridial enteritis in free-living lorikeets (*Trichoglossus* spp). Avian Pathol. 21(3):503-307

MODULAR TRAINING FOR VETERINARY PATHOLOGISTS IN AUSTRALIA

Background to Development of Training Modules:

Currently there is no consistent or relevant structured postgraduate training for diagnostic pathologists in Australia. Some training is possible through involvement in university postings, research activity toward Masters and PhDs.

National recognition is needed for veterinary pathology as a specialist discipline. This is most likely to be attained through some form of accreditation supported by formal structured training.

Membership of the Pathobiology chapter of the Australian College of Veterinary Scientists and specialist registration by state Veterinary Surgeons Boards are available but employment as a veterinary pathologist alone is not seen as specialist registration. There are inconsistencies apparent in these systems and there is no defined standard for pathology, which is becoming an increasingly specialised discipline which must be applied across an ever increasing number of species.

The knowledge provided by the science of pathology underpins clinical medicine (diagnosis and treatment) and therefore should not be accepted as a static discipline.

At ASVP annual conference in Adelaide, May 1992, papers on training options were considered and decisions made that:

1. ASVP would support the module concept for veterinary pathology training
2. that the ASVP training committee would define the modules, suggest curriculum for modules and present proposals to 1993 AGM for discussion and amendment.
3. That the training committee would finalise the curriculum and nominate coordinators in collaboration with the Pathobiology Chapter by the 1994 AGM. The Pathobiology Chapter has agreed that flexibility must be built into the Fellowship prerequisites and further negotiation with the College is required. We must define what we need first!

The Pathobiology Chapter has also been asked to comment on draft guidelines prepared by the Assistant Chief Examiner (Fellowship) in February 1992 for supervised training for preparation for Fellowship, which is now the recognised specialist accreditation.

The College is aware that ASVP and the Chapter are considering the development of training modules.

ASVP comments are also requested on the proposed guidelines, as to their relevance and feasibility for practicing veterinary pathologists.

Draft Guidelines for Supervised Training Programmes as Prerequisites for Fellowship:

- * Require two years of 100% involvement in practicing the specialty at an advanced level (one year under 1:1 supervision, with supervisor on site, and having 100% interaction on every case and one year with lessening supervision but increasing case responsibility, with recorded supervision periods), or
- * Four years preparation with no less than 50% of the candidates time spent on the specialty in the normal working week (training could be in six and then three month blocks, with regular weekly supervised training, and keeping of a case log book.

10.

- * For Pathobiology candidates there must be adequate facilities available for training in anatomic and clinical pathology and to gain experience in immunology and microbiology. Ten published and unpublished case reports across the spectrum of organ systems common species encountered and disease aetiologies must be presented, together with one project of significant retrospective study and a case load of > 1500 cases per year.

The Chapter has responded in the vein that the guidelines are too restrictive, 1:1 supervision and 100% interaction with every case for one year is impractical and, for a diagnostic laboratory, almost an impossibility and that log books are unnecessary when all cases are kept on file. Pathology is already considered as a specialty area of veterinary activity.

What are member's views?

Following the ASVP 1992 AGM a working group was nominated by Tony Ross as National Training Coordinator to undertake the definition of the modules. The members of this group are J.Glastonbury, I.Links, J.Mackie, L.Sims, R. Rahaley & R.Giesecke (Coordinator)

The tasks are to:

1. assemble the proposals
2. elect a coordinator and
3. consider the purpose, benefit to members, funding ,storage and distribution of modules and
4. provide a report of proposals for publication in the Report prior to the AGM.

Therefore, in addition to commenting on the proposed guidelines for supervised training for Fellowship preparation, members are provided with an opportunity to express their views on points raised by the ASVP modular training working group, to enable fine tuning of the proposals, allow objective debate at the AGM and to provide a basis for ongoing discussion with the College.

Questions which need to be asked before assembling the curriculum in which modules are to be developed:

What are the priorities for formal training?

personal satisfaction? employment opportunities? recognition as specialist? national or international status?
formal qualification? the joy of continuing education?

What is the relevance of College membership?

is it relevant?
at membership level?
at fellowship level ?

Who benefits?

pathologists? employers? ASVP members?

11.

What are the benefits?

career development? employment opportunities? value adding? acknowledgement of established criteria for specialist status? portability of status?

What is a reasonable time line for achieving the goal?

unspecified?
two years?
four years?
> four years?

Is State Registration as a specialist a suitable alternative to College Membership/Fellowship?

Fellowship is the only accreditation recognised for specialist registration by the Veterinary Boards Conference, but is available through formal University training (Coursework Masters or PhD including two years full time in-depth supervised training) or through supervised training as specified. Fellowship is then awarded on examination (written, practical and oral)

What is the Relevance to Employment?

Consideration should be given to the following:

- * increasing automation of laboratory services
- * increasing pressure to reduce laboratory personnel
- * requirement for laboratories to meet accreditation of varying sorts
 - i.e. state responsibility to certify export testing
 - NATA accreditation
 - quality assurance
 - differentiation of exotic from endemic diseases.
- * The value to laboratories of having recognised specialists on staff, arrangements to provide staff with time and opportunity to study and attitude to competence standards and performance appraisal and consistency of support for postgraduate and on job training.
- * The resources available to provide ongoing exposure to range of species and diseases (alternatively, working arrangements with University or other laboratories to provide).
- * The opportunity development of modular programs provides for interaction between, and support of disease programs.

Modular Training Programs must:

- * Be available regardless of university presence
- * Assist and support self directed learning
- * Provide opportunities for supportive networking with others undertaking training
- * Develop consistency in minimal standard required
- * Provide opportunity for a mentor system (mentors possibly chosen from ranks of pathobiology chapter or university, or visiting pathologists
- * Provide options to allow for the different working environments of pathologists and the feasibility of supporting training programs.
- * Provide additional support through networking, teleconferencing, dedicated radio or television channels (cp Open University concept) preferred reading lists, slide and film kits (? availability of good Australian material through registries, universities, laboratories)

Some Possibilities for Funding:

1. Employer Funding:
 - value of having specialists on staff would have to be emphasised
 - curriculum must be so designed and structured that training expenses (part salary, travel, accommodation and resources materials) can be claimed as eligible as training expenditure under Training Guarantee Scheme and other national training and performance standard initiatives. Benefit to staff development programs.
2. Self Funding:
 - must be accepted by ATO as self education to claim as taxation rebate
 - if not toward an award, HECS would not apply
 - needs achievable and defined commitment over specific period.
3. External Funding:
 - Rural Industry, Equine, Poultry and Companion Animal Funding bodies
 - EXANDIS for FAD related segment funding
 - Australian Council for training curriculum

Design, Delivery and Assessment:

To qualify as eligible training programs under the Training Guarantee Scheme programs need to have objectives, strategies, methodologies and outcomes previously defined, be structured and delivered by persons knowledgeable in the particular field and be developed for the acquisition of employer related skills.

Tenders could be called nationally to develop specific modules, related training material, opportunity for meetings with mentors and assessment. University lecturers and senior pathologists could be invited to contribute.

Mentors to be appointed by and from the Chapter in Pathobiology or University.

ASVP should determine the skills and knowledge baseline for each module.

ASVP and Chapter should determine minimum standards in pathology for membership and fellowship levels.

In view of increasing technology curriculum should include:

knowledge of disease entities and normal organ functions
relevant technology (e.g. necropsy, light and basic ultramicroscopy, histochemistry clinical pathology immunopathology, differential diagnoses, awareness of microbiology and parasitology)

Modules could be housed and distributed by the Registry of Domestic Animal Pathology.

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Module options discussed so far:

- 24 modules (3 general pathology, 21 organ and system pathology, no species differentiation)
- emphasis for preparation for practical examination
 - 4 weeks per module, based on 24+ gross lesion Kodachromes, 18+ glass slides of classic lesions, with morphological and aetiological diagnosis
- ongoing review process, test in 4th week by module provider
- own case review of conditions not covered , with provider.
- trainee to review wider range of material from registries etc.
- material suggested for preparation to written examination i.e. reading lists.
- specialty modules i.e. fauna, zoo species, laboratory animals, aquaculture.

Modules could be relevant for supporting veterinary medicine candidates (i.e. dermatology, neoplasia of organ systems) and could be purchased from ASVP.

Courses/workshops of the standards set by the Sydney University Post Graduate Committee could be included in the curriculum and topical workshops arranged by lecturers/supervisors to bring candidates together.

Your comments would be appreciated and may be sent to the working group before 26th February through the coordinator,

**Robin Giesecke,
Department of Primary Industries,
GPO Box 1671,
Adelaide SA 5001 phone (08)226 0571, fax (08) 226 0200**

14.

VET LAB

Dr Tony Ross,
A.S.V.P.,
Elizabeth Macarthur Agricultural Institute,
Private Bag 8,
CAMBDEN, N.S.W. 2570

December 21, 1992

Dear Tony,

In response to your article in the "Veterinary Pathology Report" regarding the timing of the ASVP Conference, we strongly believe that the ASVP should maintain its independence from the AVA.

The ASVP has an established record of conducting successful annual meetings, which are always well attended. Apart from the financial disadvantages outlined in your report of being tied to the AVA such an arrangement would commit the pathologists to a city and venue of the AVA's choosing; since most pathologists are government employees, the selection of venue is important, especially in a climate of government fiscal restraint. Furthermore, many ASVP members are not AVA members.

In view of the disturbing recommendations in the McKinsey report with respect to VETLAB, many of which are based upon false statistics and a misunderstanding of the functions and responsibilities of a state veterinary laboratory, we would greatly appreciate an independent comment by the ASVP and communication of this to Mr. R. Dundon, Chief Executive Officer, Department of Primary industries, GPO Box 1671, Adelaide, SA 5001.

Yours sincerely,

(Signed) Ian Finnie
Vui Ling Tham
Peter Phillips

DEPARTMENT OF AGRICULTURE, SOUTH AUSTRALIA
Frome Road, Adelaide 5000. GPO Box 1671, Adelaide 5001.
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15.

VET LAB

Dr Keith Walker
EMAI
PMB8
Camden NSW 2570

Dear Keith,

ASVP and AVA

I suspect it is too late but I would like to make some comments regarding the above.

I think it is a pity that this relationship is so difficult. At this time the animal industry, Departments of Agriculture, laboratories and pathologists are all threatened to some extent. It really is not a time for division but rather for integration. Unfortunately, many pathologists feel strongly about the subject and some might even see it as a re-incarnation of the Eureka Stockade.

I have been a member of the AVA (and the BVA for that matter) for 30 years and I consider membership of the AVA to be almost a *sine qua non* of being a veterinarian. I don't look at membership as a purchase but more as a privilege and as a member of a profession I believe I have a responsibility to make the AVA into an organisation from which I can take pride.

I agree that the AVA has some way to go before it earns my respect but at least I can voice my protest although my credibility is becoming more strained of late with many of my fellow pathologists pulling out of the AVA in the past twelve months. Increasingly, I can see them perceived as becoming out of touch with the main stream and the danger is that their opinion may be considered irrelevant.

I note with interest that Ian McCausland the architect of the ASVP pulling out of the AVA is now a member, probably because it is politic to do so similarly, simply because pathology is not viable on its own, it is politic to maintain linkages with the AVA.

It seems to me that there are at least two issues that AVA needs to address in the context of the ASVP.

Firstly, they need to recognise that they are alienating a lot of salaried veterinarians who perceive the AVA as being too expensive for the services they provide, or that the services they provide being irrelevant to their needs. Unfortunately, in this context resignation from the AVA is not helpful and denies a solution.

Secondly, the financial details you describe concerning a joint conference with the AVA are not to be tolerated. Last year in Adelaide the AVA made a profit of some \$100,000 and they seem to be obsessed with making money (and spending it) rather than catering for the welfare of membership.

Yours sincerely,

Martin Copland

DEPARTMENT OF AGRICULTURE. SOUTH AUSTRALIA
Frome Road, Adelaide 5000. GPO Box 1671, Adelaide 5001.
Phone: 228 7390. Fax: 228 7495

16.

European Association of Fish Pathologist (Australia)

July 1993 Workshop on Health and Physiology of Aquatic organisms.

The inaugural EAFP (Australian Branch) scientific meeting, will be held in southern Tasmania on Tues 20th and Wed 21st July, 1993, Non-members welcome.

There will be the opportunity for both formal research presentations and less formal Situation Updates and Case Reports etc. Subjects can cover any aspect of fish/shellfish health and survival, ranging for example over disease case reports, formal pathogenicity studies, disease surveys, microbiological characterization, treatments, factors of larval survival and other physiological studies.

The proposed format is for the meeting to commence on Tuesday 20th with proffered submissions, including short submissions and case studies.

For a more formal physiology workshop session on Wed 21st, we expect to have available as guest speaker and leader, Dr Gilles Boeuf of INFEMER, Centre de Brest, PLOUZANE, FRANCE. Dr Boeuf is in charge of physiological programs at INFREMER, and has an international reputation as a researcher and speaker with over eighty recent publications in the field of fish physiology, especially the physiology and endocrinology of salmonid adaption to sea water.

This is your opportunity to find out and make known the very diverse range of work which is carried out in Australia relating to fish health and survival in culture; to meet and hear one of the leading international speakers on fish osmoregulatory physiology; and to meet fellow colleagues. Participants do not need to be members of EAFP, though we would suggest you consider membership anyway.

The meeting is timed to follow the Tasmanian Aquaculture Conference of the 16-18th July and the University of Tasmania Key Centre of Aquaculture workshop on Fish Kills on the 14-15th July, so hopefully there will be a high aggregation of Australian fish health scientists already in the state.

Enquiries and initial replies of expressions of interest would assist planning, and should be directed to:

EAFP Fish Health and Physiology Workshop,
C/- Dr Judith Handlinger, Fish Health Unit, Mt Pleasant Laboratories, P.O. Box 46, Kings Meadows, 7249.

Full program and locality details will be published at a later date, though costs will be minimal.

**TEMPORARY FACULTY POSITION
IN
VETERINARY ANATOMICAL PATHOLOGY**

The Department of Veterinary Pathology, Western College of Veterinary Medicine, University of Saskatchewan, seeks applicants for a temporary faculty position in veterinary anatomical pathology. The successful applicant must be an enthusiastic teacher and be a competent diagnostician. Duties will include teaching at both the graduate and undergraduate level, and diagnostic service in the context of clinical teaching. The candidate must be adaptable to the many demands on faculty in a busy academic department. Applicants should have had post-graduate education in veterinary pathology or equivalent experience. The period of employment will be for a period of one year, starting July 1st 1993, but both starting date and period of employment are negotiable. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents. The University of Saskatchewan is committed to the principles of Employment Equity.

Applicants should send a letter of application, **curriculum vitae**, and contact information for three professional references to:

Frederick A. Leighton, Head
Department of Veterinary Pathology
Western College of Veterinary Medicine
University of Saskatchewan
Saskatoon, Saskatchewan S7N 0W0
Canada

Tel: (306) 966-7281

Fax: (306) 966-8747

QUEENSLAND - Jim Taylor

Canine pulmonary lymphomatoid granulomatosis (Anita Gordon, The University of Queensland)

In the last six months, three cases of pulmonary lymphomatoid granulomatosis have been tentatively diagnosed in dogs with pulmonary or mediastinal masses visualised radiographically. Presenting complaints included weight loss, exercise intolerance and dyspnoea. The dogs were medium to large purebreds (a Golden Retriever, a Whippet and a Boxer), ranging in age from 1 to 6 years. Necropsy findings included the presence of firm, nodular, cream-coloured pulmonary masses, some of which were large enough to replace an entire lung lobe. Similar masses were present on the pleura and mediastinum in two dogs. One dog had a copious pleural effusion.

Distinctive histological features of this neoplasm have been described by Berry et al. (1990) and include pleomorphic mononuclear cells with an angiocentric and angioinvasive disposition. Vascular obliteration should be apparent. An accompanying infiltrate of eosinophils was present in two of three dogs. This tumour is reportedly rare, and is probably classified as a malignant histiocytic or lymphoreticular neoplasm when it appears.

Reference: Berry, C.R. et al. 1990. *Journal of Veterinary Internal Medicine* 4:157-166.

Inclusion body hepatitis in chickens (Greg Storie, Yeerongpilly Veterinary Laboratory)

An increase in daily mortality rates (20 birds per day compared with the usual rate of 5 or 6) occurred in a shed of six thousand 27 day old mixed sex broiler chickens at the Poultry Research Centre, Redlands. The birds were being used in a trial to assess the effect on growth rate of feeding a new type of coccidiostat.

Well grown birds were found dead each morning with no premonitory signs observed. Six dead birds were submitted for necropsy and were found to have swollen, pale yellow and mottled livers within multifocal haemorrhages. Histopathological examination revealed numerous randomly distributed and variably sized foci of acute hepatocellular necrosis. Many of the remaining hepatocytes were swollen, vacuolated and dissociated from hepatic cords. Numerous large basophilic intranuclear inclusions were present within hepatocytes, most noticeably at the periphery of the necrotic areas. Adenovirus was readily demonstrated by EM.

Vicia benghalensis (popany vetch) (John Gibson, Toowoomba Veterinary Laboratory)

The first confirmed case of vetch poisoning in Queensland was diagnosed in a herd at Greenmount on the Darling Downs in July 1992 when three 7-8 year old Friesian cows in a herd of 53 became ill and died after grazing a 25 ha pasture of *V. benghalensis* and oats (*Avena sativa*) since May 1992. Selective grazing of oats allowed the vetch to dominate the pasture after 75 mm of rain. Clinical signs reported were fever, diarrhoea, dermatitis affecting both pigmented and unpigmented skin over the head, neck, body and udder, jaundice, loss of condition, dyspnoea, and recumbency. Clinical pathology of one moribund cow revealed mild anaemia (Hb 8.3 g/dl; PCV 24%), leucocytosis ($25.6 \times 10^9/l$, severe neutrophilia (76%; $19.5 \times 10^9/l$) and significant increases in serum concentrations of bilirubin (22 $\mu\text{mol/l}$), urea (37.5 mmo1/l), creatinine (284 $\mu\text{mol/l}$, CPK (4635 U/l), AST (960 U/l) and GGT (47 U/l). Necropsy of this cow revealed jaundice and enlarged adrenal glands, kidneys, heart and subcutaneous lymph nodes. The kidneys were pale and mottled. The heart contained pale streaks and patches. Prominent pale foci were seen in the adrenal glands. There was marked perirenal oedema. Histologically, focal granulomatous inflammatory lesions were seen in the heart, kidneys, adrenal glands and skin. These foci contained macrophages, eosinophils, plasma cells, lymphocytes and giant cells. (92-18574).

Septicaemic Salmonellosis (Jim Taylor, Toowoomba Veterinary Laboratory)

Two calves out of a group of twenty died suddenly. At necropsy about 2/3 of the total lung mass was a dark reddish purple in colour and mildly consolidated. Fresh lung was submitted to the laboratory. The lungs had a severe diffuse, acute, interstitial pneumonia with necrotising alveolitis and bacterial emboli in small blood vessels. *Salmonella* Dublin was isolated as a pure heavy growth on primary culture.

VICTORIA - Deb Seward

RVL BAIRNSDALE

Eight staff at the laboratory has taken voluntary packages, some after receiving advice from the executive, and two had their "funding terminated". Among the departures was one pathologist, Ian Jerrett. We now have 2 pathologists, 2 scientists and 2.5 technicians. We are maintaining as many services as possible.

Bush tick

Over the years specimens of the "Bush Tick", alias the "New Zealand Cattle Tick", *Haemaphysalis longicornis* have been submitted to the laboratory for identification all over Gippsland. Usually, numbers have been low, and the main motive has been curiosity. After two wet summers in a row, then a bumper spring, it is not surprising that we have had a sudden rash of queries about large numbers of these ticks on cattle, horses, dogs and sheep. The reports so far have all been from East Gippsland. There are plenty of chemicals registered for use against this tick in other states, but none are registered in Victoria.

Presumptive clostridial enteritis in a calf

A 2-month-old, non-vaccinated, suckling Hereford cross bull calf was found dead. The calf had sunken eyes and a faeces-soiled perineum. The distal jejunum, ileum, caecum and proximal colon had thickened fibrinohaemorrhagic mucosa. The intestinal lumen was blood filled. Histologically, infarction of the mucosa and most of the lamina propria was seen. The submucosa and muscle layers were severely oedematous and infiltrated by neutrophils and mononuclear cells. Myriads of Gram-positive bacilli were seen in the luminal exudate and affected mucosa. A heavy growth of *Clostridium perfringens* (untyped) was isolated from affected intestine. Cultures for *Salmonella sp.* and flotation for *Coccidia sp.* were negative.

Teratoma in an aged female alpaca

An aged female alpaca developed ataxia, loss of body condition and blindness with retention of normal pupillary light reflexes. There was no response to B vitamins including thiamine and parenteral antimicrobials. A faecal lead test was negative. The alpaca was killed and was found to have a firm, egg-shaped mass in the posterior left cerebral hemisphere with adhesions to the adjacent dura mater. Histologically, the tumour comprised cartilage, stratified squamous epithelium and undifferentiated epithelium arranged in an acinar pattern. A diagnosis of teratoma was made. Teratoma is defined as "a true neoplasm composed of bizarre and chaotically arranged tissues foreign embryologically and histologically to the area in which the tumour is found".

Alpaca parasitology

Our horizons were broadened when we received a faecal sample from an alpaca and cultured the sample to identify the larvae. We found very low numbers of strongyle type eggs (15 epg) 80 x 39 µm. As our treatises on the parasitology of alpaca are rather limited, we approached the subsequently cultured larvae with some uncertainty. Fortunately, the larvae looked quite familiar: 80% *Cooperia oncophora* and 20% *Trichostrongylus sp.* We found that both are recorded as common parasites of alpaca as well as cattle and sheep.

Actinobacillus equuli septicaemia in a Shetland pony

An 11 year-old gelded pony was treated with Equipalazone (phenyibutazone) for founder. After treatment for 2 weeks, the pony was losing weight and not eating, had diarrhoea, was lethargic and was still lame in the front legs. The horse was then found dead. At post-mortem examination the liver was enlarged with multiple 2-3 mm yellow foci throughout the parenchyma. Kidneys were soft and showed white flecks on cut surfaces. The gastric mucosa was reddened with areas of haemorrhage. No lesions were seen in the autolysed intestinal tract. Histology on heart, liver and kidney revealed foci of inflammatory cells and associated Gram-negative bacteria. The intestine appeared normal although it was moderately autolysed.

Culture of liver gave a heavy, pure growth of *Actinobacillus equuli*. This bacterium is common in the intestine of horses. PBZ can cause ulceration, although this was not seen in the autolysed tissues. Possibly this was the route of infection.

Yersiniosis in cats

In mid-September blood samples were submitted from a 2 year-old "flat", depressed and severely jaundiced cat. The brother of this cat had died suddenly with severe jaundice a week earlier. Laboratory tests on blood demonstrated non-regenerative anaemia, left shift, low total protein and albumin and increased ALT, CPK, total and conjugated bilirubin. The cat died the following morning and was sent to the RVL. Severe jaundice and multiple, 2-3mm nodules were seen throughout the liver. A heavy, pure growth of *Yersinia pseudotuberculosis serotype 1* was isolated from the liver and characteristic histological lesions of yersiniosis were seen.

In late September blood was received from another jaundiced cat (Michael Hibbert, Traralgon). Biochemical and haematological features were similar to the previous cat and culture of EDTA blood resulted in the isolation of *Y pseudotuberculosis serotype 1*.

At the time that these cat cases were diagnosed there were numerous outbreaks of yersiniosis in aviary and wild birds in the Latrobe Valley and elsewhere in southern Australia, it is possible that the cats in question were infected by eating sick or dead wild birds or carrier rodents.

Parvovirus enteritis in vaccinated dogs

A number of fatal cases of parvovirus infection were diagnosed in vaccinated pups during October. All affected animals were between 4 and 9 months of age and various breeds were involved. In one instance a boarding kennel was affected, with 3 deaths. In two other instances, littermates were affected with typical signs of vomiting and watery-bloody diarrhoea. Severe panleucopaenia (TWCC 0.1 and 0.5×10^9) and thrombocytopenia (20 and 80×10^9) were found in bloods from 2 affected pups. Characteristic histological findings of enteric crypt epithelial damage were seen in a further 2 autopsied animals. Vaccine manufacturers report that high levels of maternally derived antibody may persist in pups and interfere with vaccinations prior to 16 weeks of age.

RVL BENALLA

Lesser Loosetrife poisoning in sheep - Judith S Nimmo Wilkie, Malcome Lancaster

10/400 ewes died and another 2 were sick 1 week after being introduced into a small paddock with dry feed and green Lesser Loosetrife (*Lythrum hyssopifolia*).

One recently dead animal was necropsied. Mild jaundice was apparent. Haemorrhages were present in the subcutis, mediastinum, thoracic wall, epicardium and endocardium. The kidneys and liver were pale and swollen and the liver had an accentuated lobular pattern. Fat necrosis was evident in the omentum.

Histologically, there was periacinar necrosis and replacement haemorrhage in the liver and numerous bi or multinucleated cells were present in the necrotic area. There was marked biliary hyperplasia and the surviving hepatocytes were vacuolated. There was marked acute tubular necrosis in the kidneys.

Postmortem serum contained elevated levels of urea (100 mM), creatinine and bilirubin (81 uM).

Lesser Loosetrife toxicity is poorly defined. Liver and kidney damage has been induced in sheep pen-fed the plant. Problems seem to occur when the plant is the dominant green vegetation in the paddock.

Bovine abortion due to listeria ivanovii - Judith S. Nimmo Wilkie

An aborted foetus was submitted from the last of some third-trimester abortions in three heifers. There was a bronchopneumonia present in the foetus with mixed inflammatory cells, both mononuclear and polymorphonuclear, in bronchioles and occasionally in alveoli. No other histological lesions were present

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in the foetus, including no foci of necrosis in the liver, which is the classic lesion of *Listeria monocytogenes*.

A profuse growth of *Listeria ivanovii* was cultured from the foetal stomach contents.

The foetus was negative for *Campylobacter sp.*, *Leptospira sp.*, *Salmonella sp.* and *Brucella abortus*.

Listeria ivanovii has rarely been associated with abortion in cattle, being most frequently associated with sheep abortions. In this instance, the cows were not in close contact with sheep, were not being fed any hay, silage or grain, and the cows did not show any illness either before or after the abortion.

Reference: Bovine abortions attributable to *Listeria ivanovii*: Four cases (1988-1990). Alexander, A.V. et al *JAVMA* 1992. **200**:711-714.

RVL HAMILTON

Listeriosis in lambs - Janeen Samuel

In July-August 1992, a sheep farmer with 600 ewes lost approximately three lambs per day over three weeks. The lambs were from three to six weeks old and did not show signs more than 24 hours before death. The deaths occurred in two separate mobs.

Post mortem on one lamb (performed by the field vet) showed haemorrhages on thoracic and abdominal organs. *Listeria* was isolated in pure culture from the liver and lung and as the predominant organism from the intestine. (We initially called the isolate *Listeria monocytogenes* but in an inter-laboratory quality control program five out of seven labs called it *Listeria ivanovii*.) No bacteria were seen histologically; there were diffuse mononuclear infiltrates in the abomasal and ileal mucosa, the portal areas of the liver and the endocardium, and foci of mononuclear inflammation in the myocardium. The brain was not submitted.

This case struck us as unusual in the age-group affected. Most text-books refer to listeriosis as a cause of either meningo-encephalitis in adult ruminants or of abortion and perinatal deaths. There was no record of abortion, neonatal deaths, or weak lambs in this flock; nor were any deaths noted in the ewes. It is interesting to speculate as to whether the lambs had been infected in utero or after birth. There had been no feeding of silage on this farm but conditions were very wet. This year we have also seen one outbreak of listerial encephalitis in adult sheep and one of abortion in beef cattle.

Botulism in waterfowl - Deb Seward

Approximately 80 dead waterfowl were found along the edge of a one kilometer stretch of Lake Hindmarsh in western Victoria. The affected area was a newly flooded backwater of wattles and red gums. The dead birds included wood ducks, teals and a white heron. Other waterfowl were present sitting near the edge of the lake and were either reluctant or unable to move.

Three birds, two wood ducks and a teal were submitted live to the Hamilton laboratory. The three birds were in good nutritional condition and had paralysed legs but no evidence of neck paralysis. There were no noteworthy post mortem findings and blood lead levels were found to be low. The differential diagnosis of the leg paralysis included botulism and blue-green algal toxicity. Serum and fresh liver samples were sent to the regional veterinary laboratory at Toowoomba for mouse inoculation tests. A diagnosis of botulism was made following the testing of pooled samples. Unfortunately, insufficient sample was available for toxin typing.

Rotting vegetation observed at the edge of the lake was considered to be the source of the botulinum toxin. We wish to thank the staff of the Toowoomba laboratory for testing the serum and liver samples. Specimens were sent from Hamilton by express courier and results were received within 24 hours of dispatch of the samples. A truly excellent specimen turnaround time!

AUSTRALIAN ANIMAL HEALTH LABORATORY

The pathology of avian influenza - Peter Hooper

The birds sent to AAHL by Les Sims and John Calvin from the recent Bendigo outbreak were grossly typical of severe avian influenza. The most distinctive features were the oedematous swellings of the heads and congestion of the legs. Many birds had mottled pancreases, which when tested by fluorescent antibodies on smears and frozen sections reacted strongly to avian influenza. This meant that a positive result was available on the night of receipt of the birds. We were able to enjoy the prospect of CVO's being advised of the diagnosis of an exotic disease late at night.

A more detailed histological study of the birds, accompanied by AIV-specific immunoperoxidase reactions, showed a much broader range of affected tissues than the highly virulent H7N7 viruses of 1976 and 1985. Experiments with the H7N7 showed pathology largely restricted to the pancreas and brain (with secondary stress necrosis in the bursae, caecal tonsils and thymuses). In the 1992 Bendigo birds, the new H7N3 virus caused necrosis and/or inflammation in a variety of combinations of organs in the birds. In addition to the pancreases and brains, there were lesions and peroxidase reactions in the kidneys, hearts and wattles, and lesions without peroxidase reactions in skeletal muscles, livers and spleens.

We have also studied the occasional birds affected by avirulent AI viruses originally isolated from wild birds. In these birds, there was a common problem of severe nephrosis and nephritis supported by strong staining reactions.

In summary, there seems to be a distinct pattern of disease caused by avian influenza viruses -

- : highly virulent and highly susceptible (e.g. young, SPF) - pancreas and brain are target organs.
- : virulent and susceptible - a variety of organs may be affected e.g. pancreas, brain, kidney, heart, muscle.
- : occasional birds affected with largely avirulent viruses - kidney is the specific target.

Newcastle disease and the "late respiratory syndrome" - Peter Hooper

Many of the Newcastle disease virus isolates which have been sent to AAHL from Australian veterinary laboratories have caused a form of chronic tracheitis when inoculated into young SPF chickens intranasally.

First visible lesions are at 2 to 3 days post-inoculation, then there is progress to a maximum in these birds kept in ideal conditions, at 4 to 5 days. The lesions in the tracheas consist of infiltration of mononuclear cells to the lamina propria, loss of cilia then metaplasia of the columnar cells to thin, squamous coverings, and loss of mucous glands. These changes are not very specific and could be caused by a number of respiratory agents, immunoperoxidase tests for NDV show virus active in the surface and gland epithelium throughout.

Some of these virus isolations were from birds suffering from an upper respiratory syndrome which has been causing serious losses to the broiler industry late in the growths of the young broiler birds.

SOUTH AUSTRALIA - Vui Ling Tham

VETERINARY PATHOLOGY SERVICES PTY. LTD. (ADELAIDE)

Cannabis toxicity in dogs - Ruth Reuter

A four-year-old Border Collie-cross from a beachside suburb of Adelaide was found out in the rain early one morning, evidently in distress, and was rushed to the local veterinary clinic. On examination the dog was shaking, the pupils were fully dilated and mucous membranes were pale. The animal was ataxic, and aggressive when handled.

A blood sample submitted for routine screening purposes showed no abnormalities apart from a PCV of 0.56 (ref. range 0.37-0.55) and an eosinophil count of $0.9 \times 10^9/L$ (ref. range 0.1-0.5). Questioning of the submitter (a "middle-aged" lady) failed to identify any possible source of toxins. The dog was hospitalized on fluids and other supportive treatment. By the next afternoon he was recovering well and was sent home.

The teen-age daughter who picked up the dog informed the veterinarian confidentially that the animal had found a "marihuana cookie" in her room and had eaten it before she could prevent him doing so. The dog made an uneventful recovery and there has been no recurrence of symptoms to date!

From information received from various practices in the area, this is not an isolated incident. Several practitioners questioned indicated, that in their practices, Cannabis toxicity is a prime suspect when they are faced with animals showing an acute change in temperament and other nervous signs similar to those described.

Hypothyroidism in a Terrier - Ruth Reuter

7-year-old neutered male Terrier was submitted to a veterinary clinic with a history of abdominal distension, anorexia and failure to pass feces. The animal showed no evidence of straining but, when put in a cage, licked the bars compulsively and salivated excessively. The dog was lethargic and the heart sounds irregular.

A routine blood screen showed the following abnormalities:

ALK PHOS U/L	155	(20 - 70)
ALT U/L	190	(15 - 70)
GGT U/L	17	(0-10)
CPK U/L	892	(70 - 250)
CHOLEST mmol/L	13.2	(3 - 7 .)

Other parameters, including bile acids, were relatively normal.

When the subject of hypothyroidism was raised during discussion of the possible conditions involved, the veterinarian mentioned that the owner suffered from this disease. A T4 subsequently done on the serum from the dog showed a level of $<10 \text{ nmol/L}$ (ref. range 12-50).

Further investigation by the veterinary practitioner revealed that the owner and her husband were strict vegetarians, living in an area of South Australia which is known to be iodine deficient. The dog was also being given a vegetarian diet. Upon recommendation from the veterinarian, the dog was switched to a normal dog food diet and supplemented with thyroxine. He made a very rapid recovery. The present status of health of the owner is not known.

VETLAB, ADELAIDE

MALIGNANT MELANOMA IN PURPLE SPOTTED GUDGEON - (Vui Ling Tham)

A population of purple spotted gudgeon inhabits the Balcanoona system of the Northern Flinders. It is different from its northern counterpart (*Mogurda mogurnda*) and its Murray counterpart (*Morgurnda adspersa*) and is regarded as a new species yet to be named.

Body discolouration has been found in some of this new species of gudgeon and towards the end of last year 3 affected fish were submitted to VETLAB for examinations.

Fish (1) had a discoloured head region and histologically this was found to be due to heavy infiltration of predominantly spindle cells with varying amounts of intracytoplasmic melanin granules, nuclear pleomorphism, prominent nucleoli and some mitotic figures in the dermis (particularly stratum compactum), hypodermis and between the muscle fibres. Fish (2) had a discoloured area around the cloacal region and histologically this was found to be similar cellular infiltrate to that in fish (1) - the infiltrate had extended from the cloaca to the distal part of the intestine. Fish (3) had a discoloured area over the right operculum and was due to similar cellular infiltrate to that in fish (1).

The nuclear pleomorphism, mitotic figures and the degree of invasiveness of melanin containing cells are highly suggestive of malignant melanoma. It is not known what percentage of this population is affected with this condition and how long this condition has been present in the population, although some fish in this population with similar discoloured body areas were noted in 1981.

Acknowledgments - Dr TW Rickman of 1914 Main North Road, Salisbury Park, SA. and Mr. KM McKay of 4 Nykiel St, Whyalla Stuart, SA submitted the affected fish to VETLAB for examinations.

NEW SOUTH WALES - Paul Gill

RVL WOLLONGBAR

An Unusual Suspect Mycotoxicoses in Hereford Calves - Roger Cook, Graeme Eraser, Paul Gill

Between April and July 1992, three dead Hereford weaners from a mob of 40 were submitted to the laboratory. The mob consisted of illthrift weaners, which had been purchased at cattle sales, and were kept on natural pasture. The animals were also fed meal and mouldy hay. The deaths began in February, 3 calves had died before the first calf was submitted, 12 had died by the end of July.

Gross Pathology - All 3 of the calves were emaciated. The first 2 calves (calves 1 and 2) had multiple necrotic foci to 2mm and ulceration in Peyer's patches. Calf 2 also had confluent mucosal erosions along the full length of the oesophagus and confluent haemorrhagic areas over the capsular surface of both kidneys which extended 2mm into the congested cortex. Calf 3, however, had extensive suppurative bronchopneumonia involving the cranial and middle lobes of the right lung.

Microbiology - Pestivirus antigen was detected in the intestinal mucosa and mesenteric lymph node of calf 1. A mixed growth of mainly *A. pyogenes* but also *P. multocida* and *P. haemolytica* was cultured from the lung of calf 3.

Histopathology - Calf 1: Catarrhal enteritis with multifocal caseous necrosis of Peyer's patches; acute tubular nephrosis with many protein and cellular casts in tubules.

Calf 2: Diffuse severe haemorrhagic nephrosis; obstructive necrotising diphtheritic oesophagitis; catarrhal enteritis with multifocal, necrosis of Peyer's patches.

Calf 3: Spongiform encephalopathy (midbrain); subacute hepatopathy.

Mycotoxicosis was suspected as a possible cause of the outbreak. No mycotoxic organisms were found in feed. Alan Seawright sent us a copy of correspondence which described similar cases that had recently occurred in grazing cattle in Southern and Western Norway. The main lesions were nephrosis and erosive oesophagitis/enteritis. Barry Smith thought the Norwegian cases were similar to "New Zealand Mucosal Disease-like syndrome", which occurred in about 1958. The cause of nephrosis in these NZ cases has never been proven. We'd welcome any comments on our cases.

University of Tasmania

**Professor Nigel Forteath
Key Centre for Teaching and
Research in Aquaculture**

**Newnham Drive
Newnham**

**P.O. Box 1214
Launceston
Tasmania 7250
Australia**

Please address correspondence to: Dr B.L.Munday
Telephone: (003) 243 232

5 January 1993

Dr Gary Reddacliff
Newsletter Editor ASVP
C/- RVC Menangle
PMB8
Camden NSW 2570

Dear Dr Reddacliff,

I am not sure who dobed me in as State Representative (or did I agree in a moment of madness?) for the ASVP, but I shall be willing to pass on any gems which are given to me. Please note my phone number is now (003) 243 232.

I was interested to read about the outbreak of haemoglobinuria in cows grazing peas (Nov/Dec 1992 VPR). Many years ago when I was a raw new graduate on the northwest coast of Tasmania "post-parturient" haemoglobinuria was classically seen in cows grazing brassicas but was also diagnosed in cows being feed pea trash as a supplement. I have not heard of it being associated with baled pea straw which is the way the vines are now fed.

Yours sincerely,

Barry L. Munday
Senior Research Fellow

**On the 1st January 1991 the Tasmanian State
Institute of Technology and the University
of Tasmania amalgamated to form the New
University of Tasmania**

Phone: (003) 243 235 Fax: (003) 243 236

Nomination

AUSTRALIAN SOCIETY FOR VETERINARY PATHOLOGY

Nominations for ASVP Executive 1993-94

Proposer

Seconder

Acceptance of nomination

To Secretary, ASVP

The above signatures herewith nominate the persons listed for executive duty with the ASVP in 1993-94. Acceptance of the nominations with full consent is indicated by the signatures of the nominees as listed.

President

Secretary

Treasurer

Committee

Return to:

**Secretary, ASVP,
Elizabeth Macarthur Agricultural Institute,
PMB 8
Camden NSW 2570.**