



# The Lesion

A Biannual Newsletter of Indian Association of Veterinary Pathologists

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## From President's Desk

### President's Concerns :

1. Strengthening of Central and State Units of IAVP
2. Encouraging young pathologists to join IAVP/ICVP
3. Deterioration in standards in teaching and research in our discipline
4. Need of more goodwill and respect of members/ professionals for each other
5. Preserving history and heritage of discipline throughout the country

**Our motto should be Science (Veterinary Pathology) before self interests. Kindly think and act accordingly.**

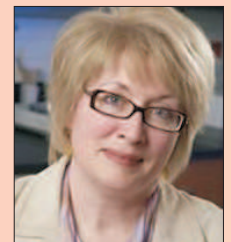


**Dr. R. Somvanshi**  
President, IAVP

## International Commentary on Toxicologic Pathologist: The Role of the Toxicologic Pathologist in Academia

**Turner, P.V.**, Haschek, W.M., Bolon, B., Diegel, K., Hayes, M.A. McEwen, B., Sargeant, A., Scudamore, M.C.L., Stalker, M. von Beust, B. and Wancket, L.M. (2014). The Role of the Toxicologic Pathologist in Academia. *Vet Pathol.*, 0300985813519652 doi:10.1177/0300985813519652

Veterinary Pathologists working as toxicologic pathologists in academic settings fill many vital roles, such as diagnosticians, educators, and/or researchers. These individuals have spent years investigating pathology problems that mainly or exclusively focus on the reactions of cells, organs, or systems to toxic materials. Thus, academic toxicologic pathologists are uniquely suited both to help trainees understand toxicity as a cause of pathology responses and also to provide expert consultation on toxicologic pathology. Most toxicologic pathologists in academia are employed at colleges of medicine or veterinary medicine, even though specific toxicologic pathology faculty appointments are uncommon in Europe and North America. Academic toxicologic pathologists typically receive lower financial compensation than do toxicologic pathologists in industry, but academic positions generally provide alternative rewards, such as higher workplace autonomy and scheduling flexibility, professional enrichment through student interactions, and enhanced opportunities for collaborative research and advanced diagnostic investigations. Regular participation by academic toxicologic pathologists in professional training opportunities (e.g., as pathology and toxicology instructors in medical and veterinary medical courses, graduate programs, and residencies) offers an important means of engendering interest and inspiring veterinarians to select toxicologic pathology and toxicology as their own areas of future expertise. For detail read *Veterinary Pathology On Line First* 19th February, 2014. *Contact: Prof. P.V. Turner, Department of Pathobiology, Ontario Veterinary College, University of Guelph, Guelph, ON, N1G 2W1, Canada. Email: pvtturner@uoguelph.ca*



### In this issue :

- From President's Desk
- Ex. Committee of IAVP
- Research Abstracts
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- Awards & Honours

### Editors

Dr. R. Somvanshi  
Dr. B.N. Tripathi

### New Director, National Research Center on Equines, Hisar: Dr. B.N. Tripathi

Dr. B.N. Tripathi has joined as Director, National Research Center on Equines, Hisar, Haryana on 20th August, 2014. He has held various positions, including Director, National Institute on Animal Health, Baghpat, UP (Govt. of India) and Head, Animal Health Division, Central Sheep and Wool Research Institute, Avikanagar, Rajasthan. Dr. Tripathi graduated from Veterinary College, Mathura, obtained his M.V.Sc. and Ph.D. degrees in Veterinary Pathology from Deemed University, IVRI, Izatnagar, UP. He started his career at NRCE, Hisar and then served at IVRI as Scientist/ Sr. Scientist and for a short span as Principal Scientist. He had several international visits such as to the UK, Denmark, Japan, Belgium, Spain, Australia, Bhutan, etc, for training, research and professional meetings. His special research interest includes pathobiology of paratuberculosis and developing molecular and immune-diagnostics against it. He has published more than 100 research papers in reputed national and international journals including those in *Veterinary Pathology*, *Veterinary Microbiology*, *Infection and Immunity* etc. He also served as Chief Editor, *Indian Journal of Veterinary Pathology*. Currently, Dr. B.N. Tripathi is Secretary General, IAVP and Secretary, ICVP. IAVP/ICVP congratulates him on this outstanding achievement and wishes him all the success for the most coveted assignment.



## International Research Abstracts by Indian Veterinary Pathologists

**Praveena, P.E.**, Periasamy, S. Kumar, A.A. and Singh, N. (2014). Pathology of experimental infection by *Pasteurella multocida* serotype A. *Vet. Pathol.*, 03009 858135 16647 DOI:10.1177/03009858135 16647



*Pasteurella multocida* serotype A:3 has been mostly implicated in pneumonic pasteurellosis in ruminants. In contrast, our previous studies have reported that both serotypes A:1 and A:3 were responsible for respiratory diseases in cattle and buffaloes. However, the pathology and pathogenesis of *P. multocida* serotype A:1 (PmA:1) infection have not been studied in ruminants. In the present study, 12- to 15-week-old buffalo calves (*Bubalus bubalis*) infected by PmA:1 had fibrinous and suppurative broncho-pneumonia with focal areas of coagulation necrosis typical of pneumonic pasteurellosis. For the first time, this study reports the lung pathology and pathogenicity of PmA:1 infection in calves. For details read Veterinary Pathology On Line First 9th January 2014

Contact: Dr. Praveena, P.E., Scientist, Aquatic Animal Health and Environment Division, Central Institute of Brackish Water Aquaculture, Chennai, TN

**Desingu, P.A.**, Singh, S.D., Dhama, K., Vinodh Kumar, O.R., Singh, R. and Singh, R.K. (2014). Development of slide ELISA (SELISA) for detection of four poultry viral pathogens by direct heat fixation of viruses on glass slides. *J. Virol. Meth.*, 209: 76-81.



The development of an easy and simpler method of slide enzyme-linked immunosorbent assay (SELISA) for the diagnosis of four economically important poultry viruses viz., Newcastle disease virus (NDV), infectious bronchitis virus (IBV), infectious bursal disease virus (IBDV) and egg drop syndrome 76 virus (EDS 76) and the use of SELISA for semi quantitation of NDV are described. The positive signals for viral aggregates were detected under light microscope. This is the first report regarding the development of SELISA based on heat fixation for the diagnosis of viral pathogens.

Contact: Dr. Desingu, P.A. Ph.D. Scholar, Avian Diseases Section, Div. of Pathology, IVRI, Izatnagar, UP

### Dr. Arvind Ingle: New President of The Laboratory Animal Scientist's Association (LASA), India

Dr. Arvind Ingle, Scientific Officer 'F' and Officer-in-Charge, Laboratory Animal Facility of the ACTREC, Tata Memorial Centre, Kharghar, Navi Mumbai, MS, has been elected as President of the Laboratory Animal Scientist's Association (LASA), India [www.lasaindia.in](http://www.lasaindia.in).



Dr. Ingle was elected as a Fellow of the NAVS in 2013 and is a recipient of the 'Best Laboratory Animal Pathologists' Award of the IAVP, 2013 and TurnKey Facility Leader of the Year-2014 Award of the ALN Magazine, USA. He is a recognized post graduate teacher of the Homi Bhabha National Institute, a Deemed University, Mumbai from November, 2013. He has published more than 60 research papers in the peer reviewed journals including one in Veterinary Pathology .

## Twin International Laurels for Dr. T.V. Anilkumar

### Fellowship of the International Academy of Toxicologic Pathology



Dr. T.V. Anilkumar has been awarded Fellowship of the International Academy of Toxicologic Pathology (IATP). The IATP is the global accreditation system for practicing toxicologic pathologists. He is the first IAVP-member to achieve this glorious recognition. Indeed, this is an inspiration for veterinary pathologists to take-up toxicologic pathology as a super specialty career option. The IAVP and ICVP congratulates Dr. Anilkumar for his achievements.

### Dr. T.V. Anilkumar, New President-Elect of the Asian Society of Veterinary Pathology

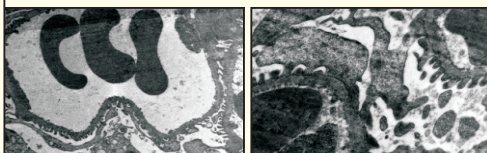
Dr. T.V. Anilkumar, Ex-Secretary General of IAVP and Ex-Examination Chair of ICVP has been declared as the President-Elect of the Asian Society of Veterinary Pathology (ASVP). He will assume the office of the President for a two year term (2016-17) at the next biannual meeting of the society in Philippines.

Asian Society of Veterinary Pathology (ASVP) is a coalition of veterinary pathology societies in Asian countries (<http://www.asvp.info>). The ASVP fosters advancement of the profession in this continent. The IAVP declared its solidarity to ASVP at the Bogor (2011) and Kulalumpur (2013) meetings. In return, the IAVP was admitted as a member of the coalition. The members of IAVP can now attend meetings of ASVP or coalition partners thereby opening up a larger avenue for participating in international events. The IAVP has a pivotal role to play for the advancement of veterinary pathology in the region. Hope this appointment will give a pivotal role to IAVP for advancing Veterinary Pathology in Asia.



ASVP-Malaysia-2013 Meeting

### Do You Recognize these Ultrastructure?



**TEM picture of Glomerular Basement Membrane (GBM):** A blood capillary with erythrocytes (E), lamina layers, podocytes (P) and filtration slits (FS, arrow) are seen. Some interstitial tissue (Int.) is also discernible. Contributors: Drs. B.L. Jangir and R. Somvanshi, Division of Pathology, IVRI, Izatnagar, UP

### Congratulations

Dr. S.K. Panda, organised 30th Veterinary Pathology Congress at OU & AT, Bhubaneswar during 21-23 Nov., 2013 in a befitting manner. IAVP congratulates and thanks him once again for this wonderful event.

## LATE NEWS

**Patent for Testing of Urea in Milk by Prof. Gulshan Narang**

Prof. Gulshan Narang (Veterinary Pathologist), Senior Disease Investigation Officer, Department of Veterinary Public Health and Epidemiology, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar, Haryana has developed a field spot test to detect urea in milk and received a Patent for "A process of testing urea in milk" vide Patent No.-250500 dated 6-1-2012.

The principle of test is that urea reacts with the indicator giving a colored reaction which can be visualized within a minute. The test is simple, rapid, economical and easy to perform under field conditions. The test is original and no other field test is available to check the urea in milk in the field. Novelty of the test developed lies in the fact that it can detect the urea in the milk within a minute and that too at farmers/consumers door step. This test will be very useful to large dairy owners collecting milk from remote areas where the presence of urea can be ascertained on the road side itself. Moreover, the household wives and any lay man can perform the test at their home and check the milk taken from vendors.

Synthetic milk consists of vegetable fat, detergent powder and urea mixed in water containing salt. This milk is similar to natural milk in color, fat content, smell, taste and specific gravity. Approximately, 1.0 per cent urea is added to make up normal protein levels of the synthetic milk which is much higher than detection limit of the indicator developed. Consumption of synthetic milk or its product damages liver, heart and kidneys and also causes swelling of limbs and impaired vision. There was a need for rapid tests for the detection of urea in the milk to prevent the adverse health hazards to common man particularly infants/small children for whom the milk forms the major part of the diet. *Contact: Prof. Gulshan Narang, Sr. D.I.O., Department of V.P.H.E., College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hissar, Haryana. E-mail: gulshan.narang@gmail.com*

**Patent Certificate****Golden Jubilee Celebration (1963-2013) of Division of Pathology, IVRI**

Golden Jubilee or 50th Foundation Day of the Division of Pathology, IVRI, Izatnagar, UP was celebrated on 6th September, 2013 with great fervor at NLVS Auditorium of Institute. The function was attended by the Director, IVRI, Joint Directors, Heads of Division as well as retired pathologists namely Dr. Lal Krishna, Former ADG (AH), ICAR, Dr. Nem Singh, Former Acting Director (IVRI), Dr. N.S. Parihar, Former Head, Dr. S.K. Chattopadhyaya, Former Acting Head, faculty members, staff and students. The function was presided over by the Dr. Gaya Prasad, Director IVRI and Guests of Honor were Dr. Shaikh Shah Hossain, Public Health Specialist, CDC, India and Dr. J.M. Kataria, Director, CARI, Izatnagar. After the welcome address by Dr. Rajendra Singh, Head, Division of Pathology, the function was marked by the unveiling of Golden Jubilee Trophy followed by honoring of retired distinguished pathologists. The retired pathologists shared their experiences of Golden Era of Division of Pathology and way forward. The Guest of Honor, Dr. Hossain delivered lecture on public health issues and Dr. Gaya Prasad in his address highlighted the importance of technological advancements in understanding the mechanism of disease process, besides emphasizing importance of conventional pathology. President, IAVP, Dr. R. Somvanshi, delivered a talk on Fifty Years of Division of Pathology. He narrated history and achievements of Division with rare pictures and documents. Dr. G. Saikumar, conducted the proceedings and Dr. K.P. Singh proposed the vote of thanks.

On this occasion, the Division and Izatnagar Chapter of IAVP organized a one day seminar on "In Quest of Understanding Pathology and Pathogenesis at Macro and Nano Levels and Striving for Better Animal Health" to reckon the history of the Division and future road map. After the inaugural function, a poster session and highlights of 50 Years of the Divisional achievements were displayed for the participants and delegates. In the afternoon, lectures by Drs. R. Singh, S.D. Singh, A.K. Sharma and G. Saikumar were delivered. In the valedictory function, the winners were given certificate of appreciation and special mementoes by the Chief Guest Dr. D.N. Kamra (Acting Joint Director, Research) and guests Dr. Lal Krishna and Dr. Nem Singh. The function ended with vote of thanks by Dr. S.D. Singh.



Dignitaries on dais including Director, IVRI, Dr. Gaya Prasad



Golden Jubilee Trophy



Golden Jubilee Poster Session

## New Appointments / Selections

IAVP/ICVP congratulates it's all members/ scholars for their outstanding achievements (selections/awards/honors/recognitions) and wishes them all the success in their future endeavours.

### New Diplomat ICVP-2013

Dr. K. Sujatha, Associate Professor, Department of Veterinary Pathology, College of Veterinary Science, Tirupati 517502, Andhra Pradesh

Dr. Selvam Ganpathy, 75A3, Thiruvalluvar Nagar, Kattukoodaloor Road, 8<sup>th</sup> Cross Street, Janaki Weigh Bridge Back-side, Vriddhachalam, 606 001, Tamilnadu.

### New Assistant Professor



**Dr. Babu Lal Jangir**, B.V.Sc. & A.H. (Bikaner), M.V.Sc.(Nagpur) , Ph.D. (IVRI)-Joined as Asstt. Professor, Department of Pathology, LUVAS, Hisar, Haryana on 31-10-2013



**Dr. Chandratre Gauri Arvind**, B.V.Sc.& A.H . (Mumbai), M.V.Sc.(Mumbai), Ph.D. (IVRI) )-Joined as Asstt. Professor, Department of Pathology, LUVAS, Hisar, Haryana on 31-10-2013



**Dr. Monjula Regon**, B.V.Sc.&A.H. (Guwahati), M.V.Sc.(Guwahati), Ph.D. (IVRI) -Joined as Asstt. Professor, Department of Pathology, Veterinary College, AAU, North Lakhimpur, Assam on 28.8.2014.



**Dr. Shyama N. Prabhu**, B.V.Sc. & A.H . (Mannuthy), M.V.Sc.(Anand ), Ph.D. 3rd year (IVRI) )-Joined as Asstt. Professor, Department of Pathology, DUDVASU, Mathura, UP on 14.10.2014

### Selection in Agriculture Research Services, 2013-14 Batch



**Dr. Siddharth Gautam**, B.V.Sc. & A.H. (Pantnagar), M.V.Sc. (Ludhiana ), Ph.D. scholar 2<sup>nd</sup> year (IVRI)



**Dr. M. Asok Kumar**, B.V.Sc. & A.H. (Pondicherry), M.V.Sc. (Pondicherry), Ph.D. scholar (IVRI)



**Dr. M. Karikalan**, B.V.Sc. & A.H. (Chennai), M.V.Sc. (IVRI), Ph.D. scholar 3<sup>rd</sup> year (IVRI)



**Dr. M. Saminathan**, B.V.Sc. & A.H.(Chennai), M.V.Sc. (IVRI), Ph.D. scholar 2<sup>nd</sup> year (IVRI)

### International Travel Grants to Dr. Manjunatha Reddy, G.B.

Dr. Manjunatha Reddy, G.B., Scientist (Veterinary Pathology), ICAR-National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI), Hebbal, Bengaluru, Karnataka obtained following international grants:

1. NAIP International Travel Grant (2013). Training on "Climate change vs Immune System: Tools and Techniques for Studying the Immune System under Changing Environment" at CRC, INSERM, Paris, France.
2. DST International Travel Grant, Govt. of India (2014) for presenting research paper on "Wild Animal Rabies in India: Possibility of Species Spill Over" at EPIZONE-2014, Copenhagen, Denmark.



**Dr. (Mrs.) Tareni Das**, B.V.Sc. & A.H., M.V.Sc. (Bhubaneswar), Ph.D. sch. 5<sup>th</sup> semester (Bhubaneswar)

### Executive Committee of IAVP

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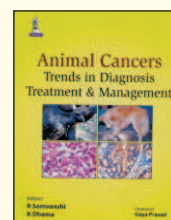
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Dr. S.K. Panda, Bhubaneswar  
Dr. B.S. Sandhu, Ludhiana  
Dr. P. Srinivasan, Chennai

**Somvanshi, R. and Dhama, K. (Editors) (2014). Animal Cancers: Diagnosis, Treatment and Management.** ISBN 978-93-5152-424-3. Pub. JAYPEE Brothers Medical Publishers (P) Ltd., New Delhi, London, Philadelphia and Panama. www.jaypee brothers.com

### NEW PUBLICATION



With Soft cover, 24 chapters, 11 colour plates + several B&W pictures and 236 pages

Cancer is an abnormal growth of cells, which tend to proliferate in an uncontrolled manner without serving any useful function in the body. Cancer is not one disease but it is a group of several different and distinctive fatal diseases, which occur in man and animals. Amongst animals- canines, poultry, bovines, equines and laboratory animals are the most frequently affected species by cancer. In cows and buffaloes, ethmoid carcinoma, horn cancer, eye cancer, lymphosarcoma, urinary bladder cancer (of enzootic bovine haematuria), etc, are common malignancies. Cutaneous warts are benign conditions. Similarly amongst dogs, mammary tumors, venereal tumors and skin tumors are major problems. In recent years, investigations have been carried out on canine mammary tumors using immuno-histochemistry and molecular techniques. Poultry viral neoplasms include Marek's disease, avian leucosis complex, Rous sarcoma, etc. Cancers are also threat to wildlife and laboratory animals. Numerous sporadic case reports are available in the literature on these ailments. Mycotoxins including aflatoxin B<sub>1</sub> affects, a wide variety of species of animals and birds and cause hepatic cancers.

Statistical data are not available on animal cancers in India owing to lack of importance as compared to economically important infectious diseases. Animal cancer study is mostly limited to case description and reporting. Compared to human medicine, veterinary medicine is lagging behind in early diagnosis and the therapeutic aspects of cancers. Some of these cancers are covered in 24 chapters of the present book by leading national experts. Since no such book is available on the topic in veterinary medicine in this country, therefore, present title Animal Cancers: Diagnosis, Treatment and Management is unique and timely covering the deadly malady of cancers in animals focusing on recent trends in the diagnosis, treatment and management. This book will not only be useful to veterinarians but also to scholars and academicians of various life sciences institutes, universities and industry.