



**Department of Veterinary Pathology,
College of Veterinary Science and Animal Husbandry,
Kamdhenu University,
Rajpur (Nava), Himmatnagar.**

About the Department:

The Department of Veterinary Pathology was established in the year 2019. The Department's primary responsibility and goal is to provide undergraduate and post graduate students with an excellent education. The Department is endowed with fully equipped laboratories. Department of Veterinary Pathology also actively engaged in providing disease diagnostic service in the form of haematology, urinalysis and post mortem examination to benefit the animal owners.

Research Area:

1. Clinical Pathology
2. Pathoepidemiology
3. Etiopathology
4. Pathomorphology
5. Oncology
6. Toxicopathology

Project Details:

Sr. No.	Title of Research Programme	PI	Year	Status
1	Patho-epidemiological study of jaagsiekte sheep retrovirus infection in the sheep and goats population in Gujarat, India	Dr. Jasmi G. Patel	2023	On Going
2	Metformin toxicity on the intestine and gills of adult zebrafish (<i>Danio rerio</i>)	Dr. Jasmi G. Patel	2023	On Going

Achievements/ Awards:

- ❖ Chancellor's Gold Medal (2010)- Dr. J. G. Patel
- ❖ Best Oral Presentation Award by IAWW (2014)- Dr. J. G. Patel
- ❖ Second Best Poster Presentation Award by IAWW (2014)- Dr. J. G. Patel
- ❖ Best Oral Presentation Award by BTSE (2018)- Dr. J. G. Patel
- ❖ IAVP-Appreciation Award by IAVP (2018)- Dr. J. G. Patel
- ❖ Best case presentation Award by ICVP (2018) - Dr. J. G. Patel
- ❖ IAVP-Gang-Mana Sharma Award for (2019) – Dr. J. G. Patel
- ❖ Second best oral presentation award by Zonal Conference of IAVP (2020) - Dr. J. G. Patel
- ❖ GAAS Best PhD Thesis award (2020)- Dr. J. G. Patel
- ❖ Third Best Poster Presentation Award by IAVP (2022)- Dr. J. G. Patel

List of Faculty Publication:

1. Patel, J.G.; Joshi, D.V.; Patel, B.J. and Raval, S.H. (2013). Effect of oral administration of potassium dichromate on haematological parameters in Wistar rats (*Rattus norvegicus*). *Indian Journal of Veterinary Pathology*. 37(2): 215–217.
2. Raval, S.H.; Kaul, L.; Joshi, D.V.; Patel, B.J.; Priyadarshi, B.H. and Patel, J.G. (2013). Pathomorphology of spontaneously occurring hepatic affections in buffaloes of North Gujarat. *Indian Journal of Veterinary Pathology*. 37(2): 204–205.
3. Bhalodiya, S.J.; Patel, B.J.; Joshi, D. V.; Raval, S.H.; Patel, J.G.; Zapadia, B.B. and Jagoda, M.. (2014). Toxicopathology of induced carbofuran toxicity in Wistar rats (*Rattus norvegicus*). *AGRES*. 3(3): 217–230.
4. Dhavadiya, N.S.; Joshi, D.V.; Patel, B.J.; Raval, S.H. and Patel, J.G. (2014). Pathomorphological studies on spontaneous occurring hepatic lesions in sheep (*Ovis aries*). *Ruminant science*. 3(1): 41–43.
5. Jadav, R.D.; Patel, B.J.; Joshi, D.V.; Patel, J.G. and Raval, S.H. (2014). Toxicopathological studies of experimentally induced meloxicam toxicity in wistar rats (*Rattus norvegicus*). *Wayamba Journal of Animal Science*. 6: 870–875.
6. Patel, J.G.; Joshi, D.V.; Patel, B.J. and Raval, S.H. (2014). Biochemical and Pathomorphological Study of Potassium Dichromate-induced Nephrotoxicity in Wistar Rat. *Journal of Advanced Veterinary Research*. 4(1): 12–17.
7. Raval, S.H.; Joshi, D.V.; Patel, B.J.; Patel, J.G. and Patel, P. (2014). Extramedullary haematopoiesis in spleen of Wistar rat: A case report. *Indian Journal of Veterinary Pathology*. 38(2): 131–132.
8. Lambade, P.S.; Joshi, D.V.; Patel, B.J.; Patel, J.G.; Raval, S.H. and Patel, J.D. (2015). Clinicopathological studies of experimentally induced Nickel Chloride in Wistar rats (*Rattusnorvegicus*). *Indian Journal of Veterinary Pathology*. 39(1): 41–45.
9. Machhaliya, M.H.; Patel, B.J.; Joshi, D. V; Raval, S.H. and Patel, J.G. (2015). Pathomorphological studies on spontaneously occurring pulmonary lesions in buffaloes (*Bubalusububalis*). *Ruminant Science*. 4(1): 51–53.
10. Raval, S.H.; Joshi, D.V.; Patel, B.J.; Patel, J.G. and Bhatt, N.G. (2015). Histological and Immunohistochemical Characterisation of T-Cell Lymphoma in A Camel. *Journal of Camel Practice and Research*. 22(2): 247–250.
11. Raval, S.H.; Joshi, D.V.; Erin, B.; Bruce, W.; Patel, B.J.; Patel, J.G. and Parmar, S.N. (2015). Metastatic cholangiocellular carcinoma in Kankrej bullock. *Indian Journal of Veterinary Pathology*. 39(3): 243–246.
12. Raval, S.H.; Joshi, D.V.; Patel, B.J.; Patel, J.G.; Bhatt, N.G. and Dodiya, V.D. (2015). Myxosarcoma in the nasal cavity of a Kankrej bullock. *Indian Journal of Veterinary Pathology*. 39(3): 247–248.
13. Raval, S.H.; Joshi, D.V.; Patel, B.J.; Patel, J.G.; Patel, S.J.; Karanti, A.M. and Panchbuddhe, B.N. (2015). Renal dysplasia in labrador male dog: A case report. *Indian Journal of Veterinary Pathology*. 39(1): 87–89.
14. Raval, S.H.; Joshi, D.V.; Patel, B.J.; Patel, J.G.; Prajwalita, S.; Panchal, H.M. and Patel, P.G. (2015). Hair follicle tumors in dogs: A report of two cases. *Indian Journal of Veterinary Pathology*. 39(1): 84–86.
15. Raval, S.H.; Joshi, D.V.; Patel, B.J.; Sutariya, P.; Patel, J.G. and Parmar, S.N. (2015). Monostotic fibrous dysplasia in the nasal sinus of Marwari mare: A Case Report. *Indian Journal of Veterinary Pathology*. 39(4): 358–359.

16. Raval, S.H.; Joshi, D.V.; Sutariya, P.; Patel, B.J.; Patel, J.G. and Joshi, K.R. (2015). Fibroadenoma of mammary gland in a Mehsana buffalo. *Indian Journal of Veterinary Pathology*. 39(4): 347–348.
17. Patel, J.G.; Joshi, D.V.; Patel, B.J.; Raval, S.H. and Lambade, P.S. (2016). Potassium Dichromate induced genotoxicity and oxidative stress in Wistar rats (*Rattus norvegicus*). *Indian Journal of Veterinary Pathology*. 40(1): 42–46.
18. Patel, S.J.; Joshi, D. V; Raval, S.H.; Patel, B.J.; Patel, J.G.; Chauhan, H.C.; Chandel, B.S.; Patel, B.K. and Shah, N.M. (2016). Clinicopathological studies of *Pasteurella multocida* B□: 2 experimental infection in rabbits. *Indian Journal of Animal Sciences*. 86(4): 380–386.
19. Raval, S.H.; Joshi, D.V.; Patel, B.J.; Patel, J.G.; Bhatt, N.G.; Charavala, A.H. and Desai, G.D. (2016). A dose response study of monosodium iodoacetate induced femorotibial osteoarthritis in Wistar rats. *Indian Journal of Veterinary Pathology*. 40(4): 327–330.
20. Raval, S.H.; Joshi, D.V.; Soni, M.; Patel, J.G.; Charavala, A.H. and Patel, B.J. (2016). Cervical leiomyosarcoma in a crossbred cow. *Indian Journal of Veterinary Pathology*. 40(2): 172–173.
21. Raval, S.H.; Joshi, D.V.; Suthar, B.N.; Patel, B.J.; Patel, J.G.; Desai, G.D. and Rathod, P.T. (2016). Pathomorphology of spontaneously occurring female genital tract lesions in buffaloes of North Gujarat. *Indian Journal of Veterinary Pathology*. 40(2): 162–164.
22. Raval, S.H.; Patel, A.M.; Patel, J.G.; Charavala, A.H.; Patel, B.J. and Joshi, D.V. (2016). Trichoepithelioma in goat: A case report. *Indian Journal of Veterinary Pathology*. 40(4): 354–355.
23. Patel, J.G.; Joshi, D.V.; Patel, B.J. and Raval, S.H. (2017). Pathology of experimentally induced acute toxicity of potassium dichromate in Wistar rats (*Rattus norvegicus*). *Indian Journal of Veterinary Pathology*. 41(1): 75–77.
24. Raval, S.H.; Joshi, D.V.; Patel, B.J.; Patel, J.G.; Sutariya, P.; Soni, M. and Rathod, A.S. (2017). Bovine dental tumors: A report of four cases. *Indian Journal of Veterinary Pathology*. 41(2): 119–122.
25. Raval, S.H; Parmar, R.S; Patel, J.G; Patel B.J; and Joshi, D.V (2017). Pheochromocytoma in Kankrej Bullock – A case report. *The lesions (newsletter of Indian Association of Veterinary Pathologists)*, 7 (1&2): 5
26. Patel, J.G.; Patel, B.J.; Joshi, D.V.; Patel, S.S.; Raval, S.H.; Parmar, R.S.; Chauhan, H.C. and Chandel, B.S. (2017). Culture based isolation of pathogenic bacteria associated with respiratory disease complex in broiler with special reference to *ornithobacterium rhinotracheale* from India. *Journal of Pure and Applied Microbiology*. 11(4): 1919–1924.
27. Desai, G.D., Patel, B.J., Patel, J.G., Joshi, D. V, Raval, S.H., Joshi, K.R., Charavala, A.H. and Rathod, A.S. (2017). Pathological studies on subacute toxicity of thioglycolic acid in Wistar rats (*Rattus norvegicus*). *Indian J. Vet. Pathol*. 41(4): 251–256.
28. Parmar, R.S.; Raval, S.H.; Patel, J.G.; Srivastava, A.K.; Joshi, H.R.; Mithapirji, R.M.; Patel, B.J. and Joshi, D.V. (2018). Endometrial carcinoma in a rabbit-A case report. *Indian Journal of Veterinary Pathology*. 42(1): 74–76.

29. Patel, J. B., Patel A. M., Sutaria, P. T. , Patel, P. B., Patel, J. G. and Patel, A. M. (2018). Diagnosis and management of horn cancer in buffaloes. *Intas Polivet*. 19(2): 292-294.
30. Patel, J.G.; Patel, B.J.; Patel, S.S.; Raval, S.H.; Parmar, R.S.; Joshi, D.V.; Chauhan, H.C.; Chandel, B.S. and Patel, B.K. (2018). Metagenomic of clinically diseased and healthy broiler affected with respiratory disease complex. *Data in Brief*. 19: 82–85.
31. Patel, J.G.; Raval, S.H.; Parmar, R.S.; Patel, B.J.; Joshi, D.V.; Chauhan, H.C. and Patel, A.C. (2018). Whole genome shotgun sequencing of *pasteurella multocida* strain skn1 isolated from sheep. *International Journal of Research*. 05(12): 5497–5502.
32. Raval, S.H.; Joshi, D.V.; Parmar, R.S.; Patel, B.J.; Patel, J.G.; Patel, V.B.; Ghodasara, D.J.; Chaudhary, P.S.; Kalaria, V.A. and Charavala, A.H. (2018). Histopathological classification and immunohistochemical characterization of canine mammary tumours. *Indian Journal of Veterinary Pathology*. 42(1): 19–27.
33. Raval, S.H.; Parmar, R.S.; Chhatpar, K.D.; Patel, J.G.; Patel, B.J. and Joshi, D.V. (2018). Accidental closantel toxicosis in camels. *Indian Journal of Veterinary Pathology*. 42(1): 15–18.
34. Raval, S.H.; Parmar, R.S.; Suthar, A.N.; Patel, J.G.; Modh, U.J.; Patel, Z.H.; Patel, B.J. and Joshi, D.V. (2018). Primary pulmonary adenocarcinoma in a Labrador retriever dog. *Indian Journal of Veterinary Pathology*. 42(2): 130–132.
35. Parmar, R.S.; Raval, S.H.; Chhatpar, K.D.; Patel, J.G.; Pandya, M.M.; Jani, H.D.; Thakor, K.D.; Patel, B.J. and Joshi, D.V. (2019). Peritoneal epithelioid mesothelioma in German shepherd dog - A case report. *Indian Journal of Veterinary Pathology*. 43(4): 285.
36. Patel, J.G.; Raval, S.H.; Parmar, R.S.; Suthar, A.N.; Joshi, N.H.; Patel, B.J. and Joshi, D.V. (2019). Pathology and metagenomics based diagnosis of tuberculosis in Bikaneri Camel (*Camelus dromedarius*). *Indian Journal of Veterinary Pathology*. 43(3): 189–192.
37. Raval, S.H.; Joshi, D.V.; Parmar, R.S.; Patel, J.G. and Patel, B.J. (2019). Correlation of histological subtypes, grading and lymphovascular invasion in canine mammary carcinomas. *Indian Journal of Veterinary Pathology*. 43(3): 193–197.
38. Patel, J.G.; Mithapirji, R.M.; Raval, S.H.; Parmar, R.S.; Patel, S.J.; Patel, B.J.; Joshi, D.V. and Jani, H.D. (2020). Ocular amelanotic melanoma in goat - A case report. *Indian Journal of Veterinary Pathology*. 44(1): 56.
39. Patel, J.G.; Raval, S.H.; Parmar, R.S.; Patel, S.S.; Patel, R.L.; Patel, B.J. and Joshi, D. V (2020). Detection of *Trypanosoma evansi* in cross breed cattle of North Gujarat. *Ruminant Science*. 9(1): 55–58.
40. Raval, S.H.; Parmar, R.S.; Patel, J.G.; Patel, B.J.; Pandya, M.M.; Jani, H.D.; Modh, S.P. and Sindhi, P.I. (2020). Injection site reaction to repeated intravenous bolus injection of diclofenac sodium in tail vein of wistar rat. *International Journal of Pharmaceutical Sciences and Research*. 11(5): 2104–2111.
41. Parmar, R.S., Raval, S.H., Patel, A.C., Patel, R.M., Patel, H.A., Patel, S.S., Patel, J.G., Patel, B.J. and Joshi and D.V. (2021). *Rhodococcus equi* infection in Marwari male foal: A case report. *Indian J. Vet. Pathol*. 45(1): 73–76.
42. Pawar, M.M., Joshi, P.C., Gami, Y.M., Patil, S.S., Patel, M.P. and Patel, J.G. (2021). The effects of dietary ricinoleic acid from castor oil on the zootechnical traits and haemato-biochemical profile of lactating Kankrej cows. *Vet. arhiv*. 91(2): 125–135.
43. Parmar R.S., Patel S.S., Patel H.A., Patel J.G., Patel M.A. and Benkar J.B. (2021).

- Aspergillosis in broiler chicken- a case report. JIVA, 19: (2):156-161.
44. Rathod P.B., Patel J.G., Modh S.P., Raval S.H., Parmar R.S., Patel B.J., Bhati N.B., Sindhi P.I., Thakor K.D., Kumbhani T.R. (2021). Study of Ameliorative Effect of vitamin C on Indoxacarb Induced toxicity on hematobiochemical parameter in male Wistar rats. International Journal of Agriculture Sciences. 13(10):10902-10905.
45. Patel J. G., Prajapati B. I., Parmar R. S., Raval S. H., Patel R. L., Patel S. S., Patel B. J., Joshi D. V., Solanki K. M., Modh S. P., Patel D. S.(2022). Hematological and molecular finding of *Trypanosoma evansi* in buffaloes of North Gujarat. Emer Life Sci Res. 8(1): 22-27.
46. Sindhi, P. I. ., Raval, S. H. ., Singh, R. D. ., Parmar, R. S. ., Patel, J. G., Patel, B. J. ., & Joshi, D. V. . (2022). Thallium induced sub-chronic toxicity profile in Wistar rats. Ind J Vet Sci and Biotech. 18(5):121-127.
47. Patel S.S., Parmar R.S., Antiya S.P., Patel A.C., Patel J.G., Shrimali M.D. & Modh S.P. (2022). Pathomorphological studies on field outbreak of Marek's disease in layer flock. International Journal of Agriculture Sciences. 14(10):11799-11801.
48. Rathod, P.B., Patel, J.G., Modh, S.P., Raval, S.H., Parmar, R.S., Sindhi, P.I., & Joshi, D.V. (2023). Pathomorphological Studies on Experimentally Induced Indoxacarb Toxicity and its Amelioration with Vitamin C in Male Wistar Rats. Ind J Vet Sci and Biotech. 19(3), 1-5.
49. Kumbhani, T.R., Raval, S.H., Parmar, R.S., Patel, J.G., Becharaa, V. J., Sindhi, P.I. & Modh, S.P. (2023). Vulvar complex apocrine carcinoma in a Horse (Equus caballus): A case report and review of literature. Journal of Equine Veterinary Science. 127:1-3.

Academics:

Undergraduate (UG)

Theory and Practical (as per VCI MSVE, 2016)

Veterinary Pathology Credit hours : 4 + 2 = 6	
Theory	
1	Unit 1: General Veterinary Pathology
2	Unit 2: Systemic Veterinary Pathology
3	Unit 3: Animal Oncology, Veterinary Clinical Pathology and Necropsy
4	Unit 4: Pathology of Infectious and Non-Infectious Diseases of Domestic Animals
5	Unit 5: Avian Pathology
6	Unit 6: Pathology of Diseases of Laboratory and Wild Animals
Practical	
1	Unit 1: General Veterinary Pathology
2	Unit 2: Systemic Veterinary Pathology
3	Unit 3: Animal Oncology, Veterinary Clinical Pathology and Necropsy
4	Unit 4: Pathology of Infectious and Non-Infectious Diseases of Domestic Animals
5	Unit 5: Avian Pathology
6	Unit 6: Pathology of Diseases of Laboratory and Wild Animals

Postgraduate (PG) Courses

Sr. No.	Course No.	Course title	Credit
1.	VPL 501	General pathology*	2+1
2.	VPL 502	Techniques in Pathology*	0+2
3.	VPL 503	Animal oncology	1+1
4.	VPL 504	Clinical pathology*	1+1
5.	VPL 505	Necropsy procedures and interpretations*	1+1
6.	VPL 506	Necropsy Conference*	0+1
7.	VPL 507	Systemic pathology*	2+1
8.	VPL 508	Pathology of Infectious Diseases of Domestic Animals*	2+1
9.	VPL 509	Toxicopathology	2+1
10.	VPL 510	Avian pathology*	2+1
11.	VPL 511	Pathology of Wild/ Zoo and Aquatic Animal Diseases	2+1
12.	VPL 512	Pathology of laboratory animals, fish and Wild animals	2+1
13.	VPL 591	Master's Seminar*	1+0
14.	VPL 599	Master's Research	30

*Core Courses

Ph. D. Courses

Sr. No.	Course No.	Course title	Credit
1.	VPL 601	Molecular and Ultrastructural Basis of Cell Injury*	2+1
2.	VPL 602	Molecular Basis of Inflammation	1+1
3.	VPL 603	Molecular Basis of Neoplasia	1+1
4.	VPL 604	Immunopathology*	2+1
5.	VPL 605	Advances in Diagnostic Pathology	1+2
6.	VPL 606	Pathology of Nutritional and Metabolic Disturbances	2+1
7.	VPL 607	Pathology of Important Emerging and Re-Emerging Diseases of Pets and Livestock	2+1
8.	VPL 608	Research Methodology in Pathology*	1+0
9.	VPL 609	Necropsy Conference I*	0+1
10.	VPL 690	Special Problem	0+1
11.	VPL 691	Doctoral Seminar-I*	1+0
12.	VPL 692	Doctoral Seminar-II*	1+0
13.	VPL 699	Doctoral Research	70

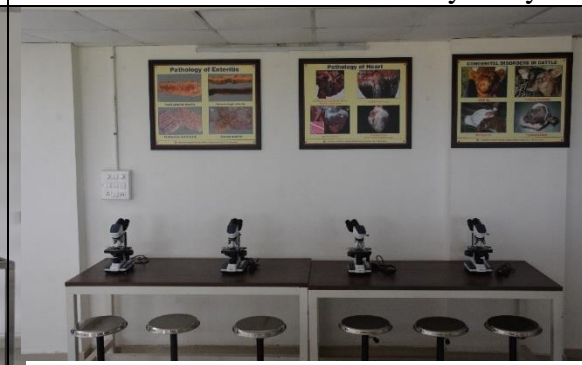
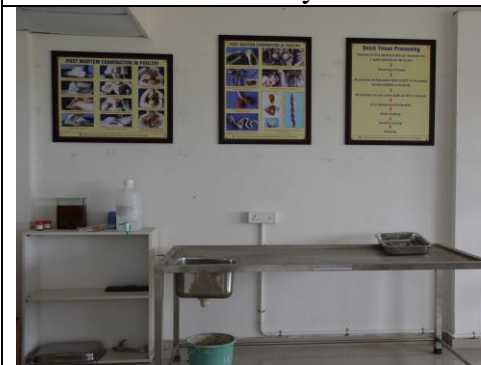
*Core Courses



Haematoanalyzer



Clinical Biochemistry analyzer



Laboratories



Automated Microtome and Paraffin embedding station