




# DEPARTMENT OF VETERINARY PATHOLOGY

College of Veterinary Sciences & Animal Husbandry,  
Narendra Dev University of Agriculture & Technology,  
Kumarganj-224229, Faizabad, U.P. (India)

## OUR OBJECTIVES

- ❖ To produce competent Veterinary Pathologists for accurate disease diagnosis
- ❖ Post Graduate Teaching
- ❖ To make accurate disease diagnosis of the cases brought to the Teaching Veterinary Clinical Complex (TVCC)
- ❖ To know the exact cause of death by conducting Post Mortem Examination
- ❖ To conduct basic and applied research in the field of Veterinary Pathology
- ❖ To participate in the Extension activities of the University
- ❖ To diagnose the disease at cellular/tissue level by using Histopathological Technique and Biopsy

S. No.	Name of Faculty with Mobile No.	Designation	Qualification	Date of Birth	Year of Appointment	
1.	<b>Dr. Debasish Niyogi</b> 8004133869	Associate Professor & Head	M.V.Sc. Ph.D. (Veterinary Pathology)	09.08.1975	2001	
2.	<b>Dr. Desh Deepak Singh</b> 9415918431	Assistant Professor	M.V.Sc. Ph.D. Persuing (Veterinary Pathology)	10.03.1977	2004	
3.	<b>Dr. K. K. Tripathi</b> 9410038185	Assistant Professor	M.V.Sc. (Veterinary Pathology)	16-12-1972	2013	

## HISTORY OF THE DEPARTMENT

- Department was established in 2000 with one Assistant Professor (Fixed Pay) Dr. Debasish Niyogi
- In August 2004, Dr. Desh Deepak Singh was appointed as Assistant Professor in the Department
- In December 2004, Dr Ashwini Kumar Singh was appointed as Assistant Professor and left the University in June 2008 to join the post of Assistant Director, National Institute of Animal Health, Baghpath
- Separate building for Post Mortem Examination was constructed adjacent to the College building in 2009
- M.V.Sc. Programme in Department was started in 2012

## FACULTY MEMBERS OF THE DEPARTMENT

### SUPPORTING STAFF OF THE DEPARTMENT (NON TEACHING)

S.No.	Name	Designation
1.	Mr. Ram Kumar	Account Clerk
2	Mr. Umashanker	Laboratory Assistant
3.	Mohd. Ibrahim ansari	Typist clerk/Store Keeper
4.	Mr. Amarnath	Animal Attendent
5	Mr. Ram Deen	Sweeper

## LAUREL WON BY THE DEPARTMENT

- Achieved 1<sup>st</sup> position in poster presentation award on the paper entitled “**Potential of *Tinospora cordifolia* ..... in Diabetic Rabbits**” in the 8<sup>th</sup> Convention & Seminar on “Advances in Soft Tissue Surgery in Farm and Companion Animals” Organized by Indian Society for Veterinary Surgery (U.P. Chapter) held on 1<sup>st</sup> March, 2014 at, College of Veterinary science and Animal Husbandry, N.D.U.A.T., Kumarganj, Faizabad.
- Received **Best Poster Award on the research paper entitled “ Sorghum Poisoning in buffaloes: Therapeutic management and Post mortem finding”** in ANA Workshop-cum-Symposium on “Nutritional Challenges and Strategies for Sustainable Animal Production and Health in Eastern Plain Zone” held at C.V.Sc. & A.H., N.D. University of Agriculture & Technology, Kumarganj, Faizabad on 23<sup>rd</sup> January, 2016

## INTERNATIONAL VISITS

- **Dr. D. D. Singh** visited **Istanbul, Turkey** to attend and present research paper in **World Poultry Congress-2004** held at Istanbul, Turkey, June 8-13, 2004.

# Infrastructure

## A. Building

- Separate Building for Post Mortem Examination of large animal, small animal and poultry with carcase and other waste disposal facility
- Histopathology Laboratory-1
- Clinical Pathology Laboratory-1
- Tissue Processing Facility Laboratory-1
- Museum-1
- Post Graduate Research Laboratory-1
- Store Room-1
- Office of the Department-1
- Chambers for Assistant and Associate Professor-5
- Chamber of Head of Department-1

**B. Instruments and other facilities:** - Nearly all equipments and instruments required for undergraduate teaching as recommended by VCI are available in the department

### Equipments

- Cryostat Microtome
- Rotary microtome, AO Spencer type with thin sectioning facility
- Paraffin floatation bath (temp. Contrl 55-65<sup>0</sup> C)
- Paraffin bath/oven
- Dark field illumination with projecting units
- Phase contrast microscope
- Monocular and Binocular microscopes
- Over head Projector (OHP) LCD Projector with screen
- Digital Camera with PC for Microscopic Photography
- Refrigerator
- Deep Freeze
- Centrifuge
- Deep Freeze
- Hot air oven (Temp. 250°C)
- Microtome knife sharpener to and fro with side shifting arrangements (Automatic)
- Autopsy table for birds (S.S. top with drain)
- Autopsy table for small animals
- Specimen cutting table
- Autopsy knives
- Post-Mortem sets ( with chisels, saw rib cutter, shears, bone cutter, saw, sharpener, etc.)
- Bone cutting saw electric
- Carcase trolley/carcase van (fully covered)
- Platform balance (large and small)
- Monopan digital balance (for weighing organs)

## ACTIVITIES OF THE DEPARTMENT

### 1. Teaching Activity

- ❖ Undergraduate and Postgraduate Teaching
- ❖ **Study Material Prepared by Department**

#### A. Book(s)

<b>Title</b> <b>Year</b>	<b>Author (s)</b>	<b>Publisher</b>
Bovine Mastitis and 2004	S.V. Singh, S. Jaiswal	I.B.D.C. Lucknow
Udder Affections	<b>D.D. Singh</b> and H.N.Singh	

#### B. Laboratory Manuals Prepared

<b>Title</b>	<b>Course No.</b>	<b>Author(s)</b>
▪ General Veterinary Pathology	VPP-211	D. Niyogi and D.D. Singh
▪ Systemic Pathology	VPP- 221	D. Niyogi and D.D. Singh
▪ Special Pathology- I	VPP- 311 (Old VCI)	D. Niyogi and D.D. Singh
▪ Special Pathology- II	VPP- 321 (Old VCI)	D. Niyogi and D.D. Singh
▪ Special Veterinary Pathology	VPP- 311 (New VCI)	D.D. Singh and D. Niyogi
▪ Avian Pathology	VPP- 321 (New VCI)	D.D. Singh and D. Niyogi

**C. Posters and Charts:** - About 50 posters and charts are prepared on various topics related to UG course which are displayed in the gallery of the Department

**D. Histopathological slides:** - About 200 histopathological slides of different pathological conditions are available in the department

**E. Power point presentation:** - Power point presentation on various topics of UG courses are prepared for UG students teaching.

### Courses Offered in the Department:

#### Under-Graduate Courses (B. V. Sc. & A.H.)

<b>S. No</b>	<b>Title of the course</b>	<b>Course Number</b>	<b>Credit Hours</b>
1.	General Veterinary Pathology (New VCI)	VPP- 211	1+1
2.	Systemic Pathology (New VCI)	VPP- 221	2+1
3.	Special Veterinary Pathology (New VCI)	VPP- 311	2+1
4.	Special Pathology- I (Old VCI)	VPP- 311	2+1
5.	Special Pathology- II (Old VCI)	VPP- 321	2+1
6.	Avian Pathology (New VCI)	VPP- 321	1+1

7.	Aquatic Animal Diseases, Health Care and Management (New VCI)	VPP- 322	1+1
8.	Veterinary Clinical Practice (New VCI)	VCP- 411	0+5
9.	Veterinary Clinical Practice (New VCI)	VCP- 421	0+5
	Veterinary Clinical Practice (New VCI)	VCP- 511	0+5
10	Veterinary Laboratory Diagnosis- I (Old VCI)	VLD- 421	0+2
11.	Veterinary Laboratory Diagnosis- II (Old VCI)	VLD- 511	0+2

### Post-Graduate Courses (M.V.Sc.)

S.No.	Title of the course	Course No	Credit hours
1.	General Pathology	VPP- 611	2+1=3
2.	Immunopathology	VPP- 612	2+1=3
3.	Animal Oncology	VPP-613	2+1=3
4.	Systemic and Special Pathology Part-I	VPP-614	2+1=3
5.	Pathology of Swine diseases	VPP-616	1+1=2
6.	Systemic & Special Pathology Part-II	VPP-621	2+1=3
7.	Systemic & Special Pathology Part-III	VPP-622	2+1=3
8.	Clinical and Postmortem Pathology	VPP-623	1+2=3
9.	Pathology of Poultry Diseases	VPP-624	2+1=3
10.	Nutritional Diseases	VPP-625	2+1=3
11.	Pathology of Bovine diseases	VPP-626	2+1=3
12.	Special problem	VPP-690	0+2=2
13.	Seminar	VPP-691	0+1=1

## 2. Research Activity

- Post Graduate Thesis Research
- **Thrust Area of Research**
  - ❖ Immunopathology
  - ❖ Toxicopathology
  - ❖ Immunomodulation
  - ❖ Biopsy
  - ❖ Diagnosis of Diseases prevailing in Eastern Uttar Pradesh
- **Research Project in the Department:** - “Evaluation of Homeopathic Medicines in Animal health management with special reference to Mastitis along with preliminary investigations on other concern diseases in the animals of Eastern Uttar Pradesh and their scientific validation” **Funding Agency : -UPCAR (Dr D.D. Singh, Co-Principle Investigator )**

### **3. Clinical Activities: -**

- Clinical Examination of Blood, Urine, Skin Scraping and Faecal samples for Disease Diagnosis of the cases brought to the Teaching Veterinary Clinical Complex (TVCC) and animals kept at Teaching Livestock and Poultry Farm (TLPF)
- Post Mortem Examination of Bovines, Equines, Caprine, Canine, Felines and Birds for Disease Diagnosis brought to the Teaching Veterinary Clinical Complex (TVCC) and animals kept at Teaching Livestock and Poultry Farm (TLPF)
- Histopathology of Tissue samples brought from State Government Veterinary Hospitals, Teaching Veterinary Clinical Complex, and Teaching Livestock and Poultry Farm (TLPF)

### **4. Extension Activities**

- ❖ Extension activities during Kisan Melas organized by the University
- ❖ Training of Veterinary Officers (VOs) in workshops organized by University in collaboration with Department of Animal Husbandry, Government of Uttar Pradesh
- ❖ Training of Livestock Extension Officers (LEOs) in workshops organized by University in collaboration with Department of Animal Husbandry, Government of Uttar Pradesh
- ❖ **TV Talks:** - TV talks of **Dr. D. D. Singh** were recorded and broadcasted for the Anndata Programme of ETV Uttar Pradesh

## **PERSONEL ACHIEVEMENTS OF THE FACULTY MEMBERS OF THE DEPARTMENT**

### **A. MEMBERSHIP OF PROFESSIONAL SOCIETIES**

#### **Dr. D. Niyogi**

- Registered in West Bengal Veterinary Council(Under Veterinary Council of India)
- Life Member, Indian Association of Veterinary Pathologists
- Life Member, West Bengal Veterinary Association
- Life member, Association of Public Health Veterinarians
- Life member, Indian Journal of Animal Health

#### **Dr. D. D. Singh**

- Registered Member of Veterinary Council of India (VCI)
- Life Member, Indian Association of Veterinary Pathologists
- Life Member, Society for Immunology and Immunopathology
- Life Member, Indian Association of Veterinary Public Health specialists
- Registered in Uttar Pradesh Veterinary Council

**B. PARTICIPATION IN REFRESHER COURSE/ SUMMER INSTITUTE:**

<b>Name of Faculty Member</b>	<b>S. No.</b>	<b>Title of the Course</b>	<b>Duration</b>	<b>Year</b>	<b>Name of Organization/ Institute</b>
<b>Dr. Debasish Niyogi</b> Assoc. Professor	1.	Communication skills and Technical Writing	21 days	2005	Directorate of Human Resource Management, CCSHAU, Hisar
	2.	Current Methods in Veterinary Microbiology	21 days	2006	Department of Veterinary Microbiology, CCSHAU, Hisar
	3.	Biosecurity in Animal Health Coupled with Infectious and Xenobiotic Residues and Mitigation	15 days	2011	West Bengal University of Animal & Fishery Sciences, Kolkata
<b>Dr. Desh Deepak Singh</b> Asstt.Professor	1.	Methods of Virology in Disease Diagnosis	21 days	2006	Department of Veterinary Microbiology, Veterinary College, Hisar
	2.	Latest Trends in Disease Diagnosis with Special Reference to Animal Neoplasm	21 days	2007	Department of Veterinary Pathology, Madras Veterinary College, Chennai
	3.	Cross Sectoral Disaster Risk reduction Strategies in Livestock Sector – An Orientation for Teachers of Veterinary Colleges	21 days	2012	Bihar Veterinary College, BAU, Patna

Summary of Publications	
Research paper in international journals (referred)	02
Research paper in national journals (NAAS Accredited)	70
Review article in referred journals/Research paper in Univ. journal/Lead paper	14
Books/Manuals (published by publishers)	--
Manuals (Institute level)	06
Chapter in book	
Popular articles in magazine/research paper in non referred journals	24
Abstracts Published in compendium,	80

## A . Popular article/ Review article/ Lead Papers:

1- **fu;ksxh Mh0** (2003 nq/kk: i"kvksa esa xHkkZ/kku dk leL;k,a ,oa funku A vf/kd mRikknu gsrq

i"q/ku izca/ku izf"k{k.k A izlkj funslky; A ujsUnz nso d`f`k ,oa ikS?ksfxd fo"fo|ky; A dqekjxat]

QStkckn A *V<sup>a</sup>sfuax eSuqvy &41*] i`B la0 55&56A ¼Dhudharu Pashuo me garvadhan ki samasya abom nidhan. Adhik Utpadan hetu pashudhan pravhandhan prashikshan. Directorate of Extention,

N..D.U.A.T., Kumarganj, Faizabad. *Training manual – 41*, p55-56)

2- **fu;ksxh Mh0** (2003 i"kvksa ls ekuo esa QSyus okyh fcekjh ,oa mldk funku A vf/kd mRikknu gsrq i"q/ku izca/ku izf"k{k.k A izlkj funslky; A ujsUnz nso d`f`k ,oa ikS?ksfxd fo"fo|ky; A dqekjxat] QStkckn A *V<sup>a</sup>sfuax eSuqvy &41*] i`B la0 66&73 A ¼Pashuo se manav me phelnewali bimari abom uska nidhan. Adhik Utpadan hetu pashudhan pravhandhan prashikshan. Directorate of Extention, N.D.U.A.T., Kumarganj, Faizabad. *Training manual – 41*, p. 66-73

1. **Niyogi D.** (2004): Effect of industrial toxic waste on livestock and preventive approach. *Compendium : Work shop on emerging new technologies for control of diseases to improve livestock production* (21-22 May, 2004) held at C.V.Sc. & A.H., N.D.U.A.T., Kumarganj, Faizabad.
2. **Niyogi D.;** Singh D.D. and Singh A.K.(2005): Pathognomonic lesions of important viral diseases. Training manual for training programme on extention methods on disease control. (July 4-13 & 14-23, 2005) organized by C.V.Sc.& A.H., N.D.U.A.T., Kumarganj Faizabad. 39-45 pp.
3. Singh A.K.; **Niyogi D.**and Singh D.D.(2005):Pathognomonic lesions of important bacterial diseases Training manual for training programme on extention methods on disease control. (July 4-13 & 14-23, 2005) organized by C.V.Sc.& A.H., N.D.U.A.T., Kumarganj Faizabad. 39-45 pp.
4. Singh D.D.; **Niyogi D.** and Singh A.K.(2005): Clinical examination of blood and interpretation for diagnosis of diseases of animals. Training manual for training programme on extention methods on disease control. (July 4-13 & 14-23, 2005) organized by C.V.Sc.& A.H., N.D.U.A.T., Kumarganj Faizabad. 39-45 pp.



7- flag ,0 ds0] flag ts0 ih0] **fu;ksxh Mh0** ,oa oekZ Mh0 ,u0(2005 A i"kvksa ds izeq[k ?kkrd jksxksa dk y{k.k ,oa cpko A *iwokZUpy [ksrh]* **15¼3½%** 51&53 A Pashuo ke pramukh ghatak rogo ka lakshan abom bachao. *Poorvanchal Kheti*, 15(3), p51-53)

8- flag ,0 ds0]] **fu;ksxh Mh0]** feJk ,0 ,oa oekZ Mh0 ,u0.(2005 A cdjh ,oa HksM+ks dh egkekjh ih0 ih0 vkj0 A *iwokZUpy [ksrh]* **15¼6½%** 22&23 A (Singh A.K.; **Niyogi D.**; Mishra A. and Verma D.N.(2005): Bakrio abom bhedo ki mahamari "PPR". *Poorvanchal Kheti*,15(6), p22-23)

9- flag Mh0 Mh0] flag ,l0 oh0] **fu;ksxh Mh0]** ,oa oekZ Mh0 ,u0.(2005 A jsfcl] ,d ?kkrd tquksfVd jksx A *iwokZUpy [ksrh]* **15¼8½%** 18&19 A Singh D.D.;Singh S.V.;**Niyogi D.**and Verma D.N.(2005): Rabies, ek ghatak zoonotic rog. *Poorvanchal Kheti*,15(8), p18-19)

**10- fu;ksxh Mh0]** flag ,0 ds0 ,oa flag Mh0 Mh0 ¼2005½A e`r i"qk ls mrdks dk ,d+=.k ,oa ifj{k.k gsrq QjsfUld iz;ksx"kkvksa dks izs"ku A V<sup>a</sup>sfuax eSuqvy vkWu iz;ksx"kyvksa esa ifj{k.k gsrq ueqk dk ,d=.k ,oa isz"ku A i`B la0 30&33 A i"qk pfdRlk ,oa i"qkiky egkfo[ky;] u0 ns0 d`f`k ,oa izkS|ksfxd fo"fo[ky; ] dqekjxat] QStkckn A **Niyogi D.**; Singh A.K.and Singh D.D.(2005): Mrita pashu se utako ka ekatran abom parikshan hetu forensic prayogshalayo ko preshan. *Training manual on Prayogshalayayo me parikshan hetu namuno ka akotran abom preshan.* p30-33 C.V.Sc&A.H., N.D.U.A.T.,Kumarganj, Faizabad,)

11- flag Mh0 Mh0] **fu;ksxh Mh0** ,oa flag ,0 ds0 ¼2005½ A jDrks ds uequks dk ,od=.k ,oa ifj{k.k gsrq izs"ku A V<sup>a</sup>sfuax eSuqvy vkWu iz;ksx"kyvksa esa ifj{k.k gsrq ueqk dk ,d=.k ,oa isz"ku A i`B la0 1&3A i"qk pfdRlk ,oa i"qkiky egkfo[ky;] u0 ns0 d`f`k ,oa izkS|ksfxd fo"fo[ky; ] dqekjxat] QStkckn A Singh D.D.; **Niyogi D.**and Singh A.K.(2005): Rakto ke namuno ka akatran abom parikshan hetu preshan. *Training manual on Prayogshalayayo me parikshan hetu namuno ka akotran abom preshan.* p1-3. C.V.Sc&A.H., N.D.U.A.T., Kumarganj, Faizabad.)

12- flag ,0 ds0] **fu;ksxh Mh0** ,oa flag Mh0 Mh0 ¼2005½ A mrd fod`fr ifj{k.k gsrq uequksa dk ,od=.k] laj{k.k ,oa isz"ku A V<sup>a</sup>sfuax eSuqvy vkWu iz;ksx"kyvksa esa ifj{k.k gsrq ueqk dk ,d=.k ,oa isz"ku A i`B la0 42&45 A i"qk pfdRlk ,oa i"qkiky egkfo[ky;] u0 ns0 d`f`k ,oa izkS|ksfxd fo"fo[ky; ] dqekjxat] QStkckn A Singh A.K.; **Niyogi D** and Singh D.D.(2005): Utak vikriti parikshan hetu namuno ka akatran , sanrakshan abom preshan. *Training manual on Prayogshalayayo me parikshan hetu namuno ka akotran abom preshan.* p42-45. C.V.Sc&A.H., N.D.U.A.T.,Kumarganj, Faizabad.)

13- flag ,0 ds0] **fu;ksxh Mh0** ,oa flag Mh0 Mh0 ¼2005½ A i"qk "ko ifj{k.k dh fof/k;kj ,oa folZtu esa dh tkus okyh lko/kkfu;kj A V<sup>a</sup>sfuax eSuqvy vkWu iz;ksx"kyvksa esa ifj{k.k gsrq ueqk dk ,d=.k ,oa isz"ku A i`B la0 135&137A i"qk pfdRlk ,oa i"qkiky egkfo[ky;] u0 ns0 d`f`k ,oa izkS|ksfxd fo"fo[ky; ] dqekjxat] QStkckn A (Singh A.K.; **Niyogi D** and Singh D.D.(2005):Pashu sav parikshan ki bidhiya abom bisarjan me ki janewali sabdhaniya. *Training manual on Prayogshalayayo me parikshan hetu namuno ka akotran abom preshan.* p135-137. C.V.Sc&A.H., N.D.U.A.T.,Kumarganj, Faizabad.)

14- flag Mh0 Mh0] flag ,l0 oh0] **fu;ksxh Mh0]** ,oa oekZ Mh0 ,u0 ¼2006½ A i"qk O;olk;vksa )kjk euq';ksa esa QSyusokys jksx A *iwokZUpy [ksrh]* **15¼8½%** 18&19 A Singh D.D.;Singh S.V.;**Niyogi D.**and Verma D.N.(2006): Pashu babsayo dwara manushayo me phelnewale rog. *Poorvanchal Kheti*,16(2), p25-27)

15- feJk ,0] oekZ Mh0 ,u0] **fu;ksxh Mh0** ,oa flag ,l0 ds0 ¼2006½ A Msjh QkeZ ij uotkr cNM+s@cNM+h dh ns[kHkky dSls djsa A *iwokZUpy [ksrh]* **16¼5%** 22&24 A Mishra A.; Verma D.N.;

**Niyogi D.** and Singh S.K.(2006) : Dairy farm par navjaat bachhde / bachhdi ki dekhbhal kaise kare. *Poorvanchal Kheti* 16 (5), p22-24.)

16- "kqDy ch0 ds0 ,oa fu;ksxh Mh0 ¼2009½A xk;ksa esa nqX/k Toj dkj.k ,oa fuokj.k A ekMuZ [ksrh] 7 ¼4½% 30&31

17. Joshi R.K., Joshi N., Shukla V. K., **Niyogi D.**, Singh Y. D. and Mukhopadhaya S.K. (2009). Loop-mediated isothermal amplification of DNA (LAMP) : A novel tool for diagnosis. *J. Interacad.* **13(3)**: 387-395

18. Ganguly S., Paul I., **Niyogi D.**, Mukhopadhayay S. K. and Samanta I.(2009). Swine Influenza - A pandemic threat to swine and human. *Livestock Line*,**3(6)**: 27-30

19. Mukhopadhayay S. K., Seth D., **Niyogi D.**, Singh Y. D. and Goswami A.(2009). Nanobiotechnology : A Novel Tool In Veterinary Science. *Unmesh*, pp. 34-37

20. Thiyagaseelan, C., **Niyogi, D.**, Ganguly, S., Paul, I. and Mukhopadhayay, S. K.(2010). Laboratory animal handling techniques- a reach out to researchers & veterinary scientists..*Indian Pet J.*, **4**: 11-13

21. Hrangkhawl, T., **Niyogi, D.**, Sarkar, S., Singh, Y. D., Ganguly, S., Paul, I. and Mukhopadhyay, S. K. (2010). Effect of organic acid salts and mannan oligosaccharide on the performance and its pathobiological changes in the intestine, liver and kidneys of broiler birds. *Poultry Line*,**10(7)**: 8

22. Barman, B., **Niyogi, D.**, Ganguly, S., Paul, I. and Mukhopadhayay. S. K. (2010). Studies on pathobiological and haematobiochemical effect of lysine chloride and lysine sulphate on broiler birds. *Poultry Line*, **10(9)**: 64

23. Choudhary P.K., Choudhary G.K., **Niyogi D.** and Singh H. N. (2010). Advances in fluid therapy in rumen drinking and acidosis in milk-fed calves: An overview. *Intas Polivet*, **11(2)**: 132-139

24. Ganguly, S., **Niyogi D.**, Ali, I., Kumar, D., Ganguli, M., Kumar, G. K. and Mukhopadhayay S. K.(2011). Milk borne diseases of public health importance and strategies for prevention and control. Compendium of Annual Conference of Association of Public Health Veterinarians and National Seminar on "Challenges and Strategies for Veterinary Public Health in India held at Patna, Bihar on February, 2011. Pp 49-57

25. Kumar, S., **Niyogi, D.**, Ganguly, S., Paul, I. and Mukhopadhayay S. K.(2011). Haematological, biochemical and pathomorphological studies of induced levofloxacin toxicity in broiler chicken. *Poultry Line*, **11(8)** : 93

26. **Niyogi, D.** and Singh. D. D. (2012). Diagnostic approach for important bacterial diseases by pathological lesions. Compendium of training programme on "Recent advances in improvement of health and management of livestock" held on 10-19 January, 2012 and organized by College of Veterinary Sciences & Animal Husbandry, N.D.U.A.T., Kumarganj, Faizabad. p. 48-58

27. **Niyogi, D.** and Singh. D. D. (2012). Biosecurity measures for mitigation of transboundary poultry diseases with special reference to highly pathogenic avian influenza. Compendium of training programme on "Recent advances in improvement of health and management of livestock" held on 10-19 January, 2012 and organized by College of Veterinary Sciences & Animal Husbandry , N.D.U.A.T., Kumarganj, Faizabad. p. 212-222

28. Singh. D. D. and **Niyogi, D.** (2012). Role of cytopathology in disease diagnosis. Compendium of

training programme on “Recent advances in improvement of health and management of livestock” held on 10-19 January, 2012 and organized by College of Veterinary Sciences & Animal Husbandry, N.D.U.A.T., Kumarganj, Faizabad. p. 34-39

29. Singh. D. D. and **Niyogi, D.** (2012). Diagnostic approach for important Viral diseases by pathological lesions. Compendium of training programme on “Recent advances in improvement of health and management of livestock” held on 10-19 January, 2012 and organized by College of Veterinary Sciences & Animal Husbandry, N.D.U.A.T., Kumarganj, Faizabad. p. 40-47

30. Choudhary, P.K., Choudhary, G.K. and **Niyogi, D.** (2012). Emu farming : Prospect in rural area of India. Compendium of training programme on “Recent advances in improvement of health and management of livestock” held on 10-19 January, 2012 and organized by College of Veterinary Sciences & Animal Husbandry, N.D.U.A.T., Kumarganj, Faizabad. p. 69-71

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32- fu; lxxh Mh , oafI g Mh- Mh- 2012/A Ård fodfr foKku i jh{k.k grq dš s djs ueuka dk , d=.k | j {k.k , oa i šk. kA dšEi fM; e& i f'k{k.k dk; žE “ i 'kqLokLF; j {kk , oa i žU/ku ea uohu i ž kj rduhd " 22 Qjohj &02 ekp] 2012 vk; kst d i 'kq fpfdRI k foKku , oa i 'kq kyu egkfo | ky; ] ujbñª nŃ d f" k , oa i š| kšxd fo'of o | ky; ] d [k] xat] Qš kcknA i 0 136&138

33- fu; lxxh Mh , oafI g Mh- Mh- 2012/A dš s djs & jDr ds ueuka dk , d=.k , oa i jh{k.k grq i šk. kA dšEi fM; e& i f'k{k.k dk; žE “ i 'kqLokLF; j {kk , oa i žU/ku ea uohu i ž kj rduhd " 22 Qjohj &02 ekp] 2012 vk; kst d i 'kq fpfdRI k foKku , oa i 'kq kyu egkfo | ky; ] ujbñª nŃ d f" k , oa i š| kšxd fo'of o | ky; ] d [k] xat] Qš kcknA i 0 131&132

34- fl g Mh- Mh- , oafu; lxxh Mh 2012/A er i 'kq l s dš s djs Årdka dk , d=.k , oa i jh{k.k Qkj šU d iz kš'kkyk/vka dks i šk. kA dšEi fM; e& i f'k{k.k dk; žE “ i 'kqLokLF; j {kk , oa i žU/ku ea uohu i ž kj rduhd " 22 Qjohj &02 ekp] 2012 vk; kst d i 'kq fpfdRI k foKku , oa i 'kq kyu egkfo | ky; ] ujbñª nŃ d f" k , oa i š| kšxd fo'of o | ky; ] d [k] xat] Qš kcknA i 0 133&135

35- fl g Mh- Mh- , oafu; lxxh Mh 2012/A dš s djs i 'kq' ko i jh{k.k vš fol žtu ea D; k&D; k ys l ko/kf u; k; A dšEi fM; e& i f'k{k.k dk; žE “ i 'kqLokLF; j {kk , oa i žU/ku ea uohu i ž kj rduhd " 22 Qjohj &02 ekp] 2012 vk; kst d i 'kq fpfdRI k foKku , oa i 'kq kyu egkfo | ky; ] ujbñª nŃ d f" k , oa i š| kšxd fo'of o | ky; ] d [k] xat] Qš kcknA i 0

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37- fnokd]j] v]k]-i]h] ;kno] oh] t]ksh] v]k]-cls , oa fu ;**lxh] MhA** (2015). lk'kq/ka ea t]hok.kq/ka cls }kjk gkks okys i ed]k j]ksx , oa jkd]Fkka i nk]py [k]hA **25(3)**:23-24.

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57. **Niyogi, D.**, Mukhopadhyay, S. K., and Ganguly, S. (2012). Immunopathological effect of induced chronic arsenic intoxication in broiler birds. Souvenir, XLII Re-Union of Students of BVC, F/O-VAS (BCKV) & West Bengal University of Animal & Fishery Sciences, Kolkata and National Symposium on “Veterinary & Medical Sciences in Health. Environment and Food Security” held on 10-11 January, 2012. p. 52
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67. Singh, D.D., **Niyogi, D.**, Singh, J.P., Singh, A., Kumar, Y., Paswan, S., Joshi, R.K. and Singh, H.N. (2013). Post-Mortem findings of Traumatic Injury of Vertebral Column in a Wild Langoor. Souvenir Cum Compendium, of National Seminar on “Emerging challenges and Resource Management for Food Security” and First U.P. Agricultural Science Congress organized by N.D.U.A.T., Kumarganj on 17-19 August, 2013. p.262
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Seminar on “Pathology of Disease of Poultry, Avian Wild life and Pet Birds” from 21-23 November, 2013, held at College of Veterinary Sciences and A.H., Orissa University of Agriculture & Technology, Bhubaneswar-751003, Odisha, India. Pp. 341-342

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74. **Niyogi, D.**, Mukhopadhyay, S. K. and Singh, H.N. (2014). Pathomorphological effects of induced chronic arsenic intoxication in broiler birds. **Abstract Compendium** of Veterinary Pathology Congress-2014, 31<sup>st</sup> Annual conference of IAVP and National Symposium on “Impact of Climate Change on Pathobiology of Diseases of Animals, Poultry and Fish” from 13-15

November, 2014, held at College of Veterinary Sciences and A.H., Anand Agriculture University, Anand -388001, Gujarat, India. P. 29.

75. Kumar, Y., Singh, D.D., **Niyogi, D.**, Paswan, S. and Singh, H.N. (2014). Clinicopathological studies of sub-acute lead toxicity in broiler birds and its mitigation with vitamin E and selenium. **Abstract Compendium** of Veterinary Pathology Congress-2014, 31<sup>st</sup> Annual conference of IAVP and National Symposium on “Impact of Climate Change on Pathobiology of Diseases of Animals, Poultry and Fish” from 13-15 November, 2014, held at College of Veterinary Sciences and A.H., Anand Agriculture University, Anand -388001, Gujarat, India. P. 40.
76. Kumar, M., Ray, S., Singh, K.N., **Niyogi, D.** and Tripathi, K.K. (2015). Gross anatomical and biochemical studies of the ovaries of Black Bengal goats. Souvenir of XXIX Annual Convention of Indian Association of Veterinary Anatomists and National Symposium on “Recent Concepts and Applications of Veterinary Anatomy for improvement of Livestock Health and Production” from 11-13 February, 2015, held at College of Veterinary Sciences and A.H., Chhattisgarh Kamdhenu Vishwavidhyalaya, Anjora, P.B. 6, Durg-491001, Chhattisgarh, India. P. 17.
77. Yadav, B.L., **Niyogi, D.**, Tripathi, K.K., Yadav, B.S., Vaish, A. and Kumar, M. (2015). Ameliorative effect of vitamin e and selenium on clinicopathological changes of subacute toxicity of chlorpyrifos in broiler birds. *Compendium : Veterinary Pathology Coongress-2015*, XXXII Annual Conference of Indian Association of Veterinary Pathologists, VI Annual Meeting of Indian College of Veterinary Pathologists and National Symposium on “Challenges and Advances in Disease Diagnosis of Livestock, Poultry and Fish: Redefining the Role of Veterinary Pathologists” held at NTR College of Veterinary Science, Sri Venkateswara Veterinary University, Gannavaram, Andhra Pradesh from December 3-5, 2015.P-321
78. Yadav, B.L., **Niyogi, D.**, Tripathi, K.K., Joshi, R.K., Singh, G.K. and Yadav, B.S. (2015). Ameliorative effect of vitamin e and selenium on pathomorphological changes of subacute toxicity of chlorpyrifos in broiler birds. *Compendium : Veterinary Pathology Coongress-2015*, XXXII Annual Conference of Indian Association of Veterinary Pathologists, VI Annual Meeting of Indian College of Veterinary Pathologists and National Symposium on “Challenges and Advances in Disease Diagnosis of Livestock, Poultry and Fish: Redefining the Role of Veterinary Pathologists” held at NTR College of Veterinary Science, Sri Venkateswara Veterinary University, Gannavaram, Andhra Pradesh from December 3-5, 2015.P-32
79. **Niyogi, D.**, Kumar, M., Tripathi, K.K., Diwakar, R.P. and Singh, G.K. (2015). Histopathological Observation of Hyperkeratosis in Buffalo Due to Vitamin-A Deficiency. Proceedings of ANA Workshop-cum-Symposium on “Nutritional Challenges and Strategies for Sustainable Animal Production and Health in Eastern Plain Zone” held at C.V.Sc. & A.H., N.D. University of Agriculture & Technology, Kumarganj, Faizabad on 23<sup>rd</sup> January, 2016. P-88
80. Tripathi, K.K., **Niyogi, D.**, Kumar, M., Promod and Singh, G.K. (2015). Effect of Hypovitaminosis A and E on skin. Proceedings of ANA Workshop-cum-Symposium on “Nutritional Challenges and Strategies for Sustainable Animal Production and Health in Eastern Plain Zone” held at C.V.Sc. & A.H., N.D. University of Agriculture & Technology, Kumarganj, Faizabad on 23<sup>rd</sup> January, 2016. P-84
81. Singh, G.K., **Niyogi, D.**, Singh, V.K., Tripathi, K.K., Vaish, A., Yadav, B.S. and Chaturvedi, S. (2015). Consequences for Animal Production in Cyanogenesis in Sorghum Forage and Hay.

Proceedings of ANA Workshop-cum-Symposium on “Nutritional Challenges and Strategies for Sustainable Animal Production and Health in Eastern Plain Zone” held at C.V.Sc. & A.H., N.D. University of Agriculture & Technology, Kumarganj, Faizabad on 23<sup>rd</sup> January, 2016. P-68

## **Summer/Winter school/ Seminar/Symposium/Workshop/Conference attended:**

1. XX Annual Conference and National symposium on “Basic pathology and animal diseases—A need for fresh approach in Indian Scenario” (12-14 Nov. 2003) held at Department of Veterinary Pathology, C.V.Sc. & A.H., Jabalpur, M.P.
2. Asian congress of zoo and wild life veterinarians and work shop on “Quarantine, Restraint and translocation of wild animals” (4-5 Feb. 2004) held in Lucknow, U.P. India.
3. National Seminar on “opportunity and challenges for the sustainable livestock production” (14<sup>th</sup> March 2004) held at C.V.Sc.&A.H., N.D.A.U.T., Kumarganj , Faizabad.
4. Work shop on emerging new technologies for control of diseases to improve livestock production (21-22 May, 2004) held at C.V.Sc. & A.H., N.D.U.A.T., Kumarganj, Faizabad.
5. Seminar on “Animal husbandry and Nutritious food” (16 July, 2004) organized by C.V.Sc. & A.H., N.D.U.A.T., Kumarganj, Faizabad and sponsored by American Soyabean Association (ASA).
6. XXI Annual Conference of Indian Association of Veterinary Pathologists (IAVP) and National symposium on “Advances in Pathological Techniques in diagnosis of Animal, Bird and Fish Diseases” (23-25 Nov., 2004) held at Yuba Bharati Crirangan Auditorium, Salt Lake, West Bengal.
7. Summer School on “Communication Skills and Technical Writing”organized by the Academy of Agricultural Research and Education Management , Directorate of Human Resource Management ,sponsored by I.C.A.R.and held at CCS Haryana Agricultural University, Hisar(Haryana) from Sept.7-27,2005
8. Training course on “Current Methods in Veterinary Microbiology” organized by ICAR Centre of Advanced Studies in Veterinary Microbiology, CCS Haryana Agricultural University, Hisar(Haryana) from Jan.17 toFeb.06, 2006
9. First Annual Conference of (STPI) and Seminar on “Current trends in Toxicologic pathology in India” and Continuing Professional Development (CPD) seminar held on 25-27 August, 2006 in Bangalore organized by Society for Toxicologic Pathology in India (STPI) in association with British Society of Toxicological Pathologists (BSTP).

10. V<sup>th</sup> Central Zone Regional Workshop on “Feeding practices for sustainable livestock production in central zone of India” held at College of Veterinary Science & Animal Husbandry, N.D.U.A.T., Kumarganj, Faizabad(UP) from 20-21 November, 2006.

11. XXXVII Re-Union of Present and Past Students of Bengal Veterinary College, Bidhan Chandra Krishi Viswavidyalaya & West Bengal University of Animal & Fishery Sciences, Kolkata held on 10-11 January, 2007.

12. “Training on Handling the Bird Flu Operation” held on 31<sup>st</sup> January, 2007 at West Bengal Veterinary Council Seminar Hall, 37, K. B. Sarani, Kolkata-700037 organised by Faculty of Veterinary and Animal Sciences, WBUAFS, 37 & 68 K. B. Sarani, Kolkata-700037

13. National seminar on “Animal Biotechnology as a Tool for Improving Animal Health and Productivity” held on 16<sup>th</sup> May, 2007 at Faculty of Veterinary and Animal Sciences, Belgachia, Kolkata.

14. XXIV Annual Conference of IAVP and National Symposium on “Immunopathological and molecular approaches for disease diagnosis in livestock and poultry including wild animals” and Satellite Seminar on “Laboratory Animal Pathology: Influence of nature and nature on pathology and research results” (1-3 October, 2007) held at Department of Veterinary Pathology, College of Veterinary Science, Sri Venkateswara Veterinary University, Tirupati (India).

15. XXXVIII Re-Union of Present and Past Students of Bengal Veterinary College, Bidhan Chandra Krishi Viswavidyalaya & West Bengal University of Animal & Fishery Sciences, Kolkata held on 10-11 January, 2008.

16. 8<sup>th</sup> Indian Veterinary Congress & XV Annual conference of IAAVR and National Symposium on “Public private partnership (PPP) in Veterinary Research and Education Sector” on 22<sup>nd</sup> - 24<sup>th</sup> February, 2008; organized by Faculty of Veterinary and Animal Sciences, West Bengal University of Animal & Fishery Sciences, Belgachia, Kolkata - 700037, West Bengal, India; and Indian Association for the Advancement of Veterinary Research (IAAVR).

17. Silver Jubilee Annual Conference of IAVP & International Symposium on “Quality Assurance in Pathology and Disease Diagnosis” & Satellite Seminar on Descriptive Gross and Microscopic Veterinary Pathology in Necropsy, Biopsy and Certification Examination organized by CADRAD, IVRI, Izatnagar 243 122, Bareilly (UP), India from 10-12 November, 2008.

18. XXXIX Re-Union of Present and Past Students of Bengal Veterinary College, Bidhan Chandra Krishi Viswavidyalaya & West Bengal University of Animal & Fishery Sciences, Kolkata held on 10-11 January, 2009.

19. National symposium on “Organic Livestock Farming- Global Issues, Trends & Challenges” and National conference of ISAPM from 26-28 February, 2009 held at Department of APM, W.B. University of Animal and Fishery Sciences, Kolkata.

20. National Seminar on “Reforms in Higher Education : Meeting the Challenges” held on February 12, 2010 at Vidyasagar University, Midnapore, Paschim Medinipur, West Bengal, India organized by University District Committee, WBCUTA.

21. University District Committee (WBCUTA) Biennial Conference, 2010 held on February 13, 2010 at Vidyasagar University, Midnapore, Paschim Medinipur, West Bengal, India.



22. XXVII Annual Conference of IAVP and C L Davis Satellite Seminar on “Evolving Role of Pathology in Pharmaceutical Non-Clinical Safety Assessment: Paradigm Shifts, Globalization and GLP Compliance” and National Symposium on “Recent Trend in Diagnosis and Pathology of Emerging and Re-emerging Diseases of Livestock and Poultry” organized by Department of Pathology, C. V. Sc., AAU, Khanapara, Guwahati, Assam, India from November 25-27, 2010.

23. National Training Programme on “Biosecurity in Animal Health Coupled with Infectious and Xenobiotic Residues and Mitigation” Sponsored by NAIP (ICAR), New Delhi and organized by Veterinary Pharmacology and Toxicology and Veterinary Medicine, Ethics & Jurisprudence, West Bengal University of Animal & Fishery Sciences, Kolkata held on 1<sup>st</sup> December-15<sup>th</sup> December, 2011.

24. XLII Veterinary Re-Union of Present and Past Students of Bengal Veterinary College, Bidhan Chandra Krishi Viswavidyalaya & West Bengal University of Animal & Fishery Sciences, Kolkata held on 10-11 January, 2012.

25. National symposium on “Veterinary & Medical Sciences in Health, Environment and Food Security ” Organised by Scientific Sub-Committee, 42<sup>nd</sup> Re-Union of Students of Bengal Veterinary College, Faculty of Veterinary and Animal Sciences, Bidhan Chandra Krishi Viswavidyalaya & West Bengal University of Animal & Fishery Sciences, Kolkata held on 10-11 January, 2012.

26. Participated and Acted as **Rapporteur** in the First U.P. Agricultural Science Congress on “**Emerging Challenges and Resource Management for Food Security**” held from 17-19<sup>th</sup> August 2013 in N.D.U.A.T., Kumarganj, Faizabad.

**27. Participated, presented research paper and acted as Rapporteur** in Veterinary Pathology Congress-2013, 30<sup>th</sup> Annual conference of IAVP and National Symposium on “Advances and Applications of Diagnostic Pathology for Disease Management in Livestock, Poultry, Pet, Fish, Laboratory Animal and Wild life” and C.L. Davis Satellite Seminar on “Pathology of Disease of Poultry, Avian Wild life and Pet Birds” from 21-23 November, 2013, held at College of Veterinary Sciences and A.H., Orissa University of Agriculture & Technology, Bhubaneswar-751003, Odisha, India.

**28. Participated** in the 8<sup>th</sup> Convention & Seminar on “**Advances in Soft Tissue Surgery in Farm and Companion Animals**” Organized by Indian Society for Veterinary Surgery (U.P. Chapter) held on 1<sup>st</sup> March, 2014 at, College of Veterinary science and Animal Husbandry, N.D.U.A.T., Kumarganj, Faizabad.

**29. Participated,** Presented a **Lead Paper and a Research Paper and Acted as Rapporteur** in Veterinary Pathology Congress-2014, 31<sup>st</sup> Annual conference of IAVP and National Symposium on “Impact of Climate Change on Pathobiology of Diseases of Animals, Poultry and Fish” from 13-15 November, 2014, held at College of Veterinary Sciences and A.H., Anand Agriculture University, Anand -388001, Gujarat, India.

**30. Participated, presented a lead paper, a Poster and acted as Rapporteur** in **Veterinary Pathology Coongress-2015**, XXXII Annual Conference of Indian Association of Veterinary Pathologists, VI Annual Meeting of Indian College of Veterinary Pathologists and National Symposium on “Challenges and Advances in Disease Diagnosis of Livestock, Poultry and Fish: Redefining the Role of Veterinary

Pathologists” held at NTR College of Veterinary Science, Sri Venkateswara Veterinary University, Gannavaram, Andhra Pradesh from December 3-5, 2015.

**31. Participated, presented a Poster and acted as Rapporteur** in ANA Workshop-cum-Symposium on “Nutritional Challenges and Strategies for Sustainable Animal Production and Health in Eastern Plain Zone” held at C.V.Sc. & A.H., N.D. University of Agriculture & Technology, Kumarganj, Faizabad on 23<sup>rd</sup> January, 2016.