



**CENTRE OF ADVANCED FACULTY TRAINING**  
**Veterinary Surgery & Radiology**  
**Guru Angad Dev University of Veterinary and Animal Sciences**  
**Firozpur Road, Ludhiana-141004**

**Brief Introduction about the Department:**

The Department was established in 1969 and was recognized as Centre of Advanced Studies (CAS) by ICAR in 1995 and renamed as Centre of Advanced Faculty Training (CAFT) in 2009. The department has Surgery, Anaesthesia and Radiology units. It has well established Computerized Radiography (CR), Doppler ultrasonography and echocardiography. Significant contributions have been made in ultrasonographic diagnosis and surgical treatment of diaphragmatic hernia and omasal impaction in bovine, intramedullary interlocking nailing for long bone fracture fixation in dogs and bovine. Till date the centre has conducted 24 trainings and trained more than 300 scientists/teachers working in SVU's, SAU's / ICAR institutes. Department has hosted two National congresses of Indian Society for Veterinary Surgery at Ludhiana in years 1991 and 2009.

**Objectives of CAFT:**

- i) To develop facilities to function as Centre Of Advanced Faculty Training in field of Veterinary Surgery and Radiology.
- ii) To undertake advanced education and training of scientists/faculty members of different universities and ICAR institutes in the country in the field of Veterinary, Anaesthesia, Surgery and Radiology.
- iii) Conduct of workshops, symposia, conferences and summer institutes as and when sanctioned by ICAR and other organizations.

**Faculty: Name & Designation (as on 30/09/2011):**

- 1 Dr. N.S. Saini, Professor-cum-Head
- 2 Dr. S.S. Singh, Professor
- 3 Dr. J. Mohindroo, Associate Professor
- 4 Dr. Navdeep Singh, Associate Professor
- 5 Dr. S.K. Mahajan, Associate Professor
- 6 Dr. Arun Anand, Assistant Professor
- 7 Dr. M. Raghunath, Assistant Professor
- 8 Dr. Ashwani Kumar, Assistant Professor
9. Dr. Vandana Sangwan, Assistant Professor

10. Dr. Kiranjeet Singh, Assistant Scientist
11. Dr. Tarunbir Singh, Assistant Scientist
12. Dr. Pallavi Verma, Assistant Professor

**Human Resource Development: (Particulars of short courses /Training Program for HRD conducted during the XI Plan period**

S. No	Name of training program	Period	No. of participants		
			Internal	External	Total
1	Imaging techniques for veterinary patients with special reference to Ultrasonography	Feb. 1-21, 2008	2	13	15
2	Ultrasonography and Ancillary Diagnostic Procedures for Veterinary Patients	Sept. 4-24, 2008	2	16	18
3	Ultrasonography and other Diagnostic modalities for farm and companion animals	Feb 14 - March 12, 2009	2	13	15
4	Diagnostic and surgical procedures in Veterinary Patients	Feb 18- March 10, 2010	2	10	12
5	Diagnostic and surgical procedures for thoracic and abdominal disorders in veterinary patients	Feb 11- March 3, 2011	2	17	19
6	Computerized Radiography and Interventional Diagnostic and Surgical Procedures for Veterinary Patients	Sep 30- Oct-20, 2011	2	18	20

**Infrastructure development (equipments etc.):**

Sr. no.	Name of equipment
1.	Computerised Radiography System

2.	Small animal Dentistry Unit
3.	Interlocking system for large animals
4.	Dorso-Lateral Equine surgery Table
5.	Mobile X-Ray machine (Two)
6.	Logiq 3 BT expert Color Doppler Ultrasound system
7.	Large animal anesthesia workstation
8.	Portable Ultrasound machine (Aloka) for large animals
9.	Small animal Laparoscopy Unit
10.	Blood Gas analyzer
11.	Bed Side Monitor Single Channel (Model No.5289)
12.	Defibrillator with Auto Recorder (model no. DF-2389)
13.	Spectrophotometer and Defogger
14.	Large animal dentistry equipment
15.	Vertical autoclave
16.	Positive Pressure Ventilator

### **Renovation of Lecture Room/Laboratories:**

Renovation of small animal operation theatre

Renovation of committee room, seminar room, library and radiology laboratory

### **Library upgraded:**

The Department has an updated library with about 300 latest books. A number of books have been purchased with CAS/CAFT funding and the year wise break up of purchase with CAS/CAFT funding is given below:

<b>Year</b>	<b>Number of books purchased</b>
2007	7
2008	10
2009	5
2010	6
2011	7

## **Awards/Recognitions:**

- **Appreciation Certificate** for best research paper published in IJVS( 2006-2007) was awarded to Dr. Navdeep Singh, Dr. K.I.Singh, Dr. K.S.Roy and Dr S.K.Mahajan for the paper entitled “ Evaluation of combination of antiarthritic drug and therapeutic ultrasound in acute traumatic arthritis in equines” during the 30<sup>th</sup> congress of ISVS held at COVS, Bidar (Karnatka)
- **Appreciation Certificate** Dr. J. Mohindroo, Dr. Ashwani Kumar, Dr. Vandana Sangwan, and Dr. S Singh Awarded ‘Appreciation Certificate’ in the Imaging Technique session (2007) during the 31<sup>st</sup> congress of ISVS held at Faculty of Veterinary Science, SKUAST (J), Jammu for the paper entitled “Use of B+M mode ultrasonography for evaluation of reticular health in cows and buffaloes”.
- **Gold Medal:** Dr Fromsa A and Saini NS were awarded Gold medal for best Research article in Small Animal Surgery Session (2008) for the paper entitled Prediction and mineral analysis of stones in canine patients suffering from urolithiasis at the XXXII Annual congress and symposium of ISVS held from 6-8<sup>th</sup> Nov, 2008 at Namakkal
- **Best Teacher Award** Dr M Raghunath was awarded Best Teacher Award in the year 2008-09 by the Dean, COVS, GADVASU
- **Best Clinical Department:** The Department of Veterinary Surgery and Radiology was nominated the best clinical Department in the year 2008-09 by the Dean , COVS, GADVASU.
- **Gold Medal:** Dr N S Saini, S.S. Singh, J. Mohindroo, S.K. Mahajan, M. Raghunath, N. Singh, A. Kumar, V. Sangwan, T. Singh, K. Singh were awarded gold medal for best Research article in the equine surgery session (2009) for the paper entitled “Surgical management of uterine torsion in mares” at the XXXIII annual congress of ISVS held at GADVASU Ludhiana from Nov 11-13, 2009
- **Gold Medal:** Drs J. Mohindroo, A. Kumar, K. Singh, V. Sangwan were awarded gold medal for best Research article in the Ruminant Surgery Session (2009) for the paper entitled: “Diagnosis and surgical management of reticular abscess in Bovines” XXXIII annual congress of ISVS held at GADVASU Ludhiana from Nov 11-13, 2009
- **Appreciation award:** Drs. M. Raghunath, N. Singh, T. Singh and J. Mohindroo received Appreciation award in Large animal Poster session (2009) for the paper entitled “Surgical repair of compound , non union metatarsal fracture with autogenous cancellous bone grafting and bone plating in a heifer cow” at the XXXIII annual congress of ISVS held at GADVASU Ludhiana from Nov 11-13, 2009
- **Appreciation award :** Drs. M. Raghunath and S.S. Singh received Appreciation award in orthopaedic session(2009) for the paper entitled “ Effect of interlocking nail diameter on canine long bone

diaphyseal fracture healing” at the XXXIII annual congress of ISVS held at GADVASU Ludhiana from Nov 11-13, 2009

- **Appreciation Award** : Drs. P. Verma, J. Mohindroo and S.S. Singh received the Dr. A.K. Bhargava Memorial Appreciation Award for paper published in Indian Journal for Veterinary surgery entitled “Sonographic Findings of Urinary System in dogs” at the XXXIII annual congress of ISVS held at GADVASU Ludhiana from Nov 11-13, 2009
- **Fellow of Indian Society for Veterinary Surgery (ISVS)**: Dr N.S. Saini was awarded Fellow of Indian Society for Veterinary Surgery (ISVS) on 23/7/2010 by the Indian Society for Veterinary Surgery (ISVS)
- **DST International Travel Grant and World Buiatrics Association (WBA) Scholarship** : Dr. Ashwani Kumar received DST International Travel Grant and WBA Scholarship for presenting paper at 26<sup>th</sup> World Buiatrics Congress held at Santiago, Chile from 14-18 Nov, 2010
- **Gold Medal** : Drs V. Sharma and J. Mohindroo received Dr AK Bhargava Memorial Gold medal for best paper in Indian Journal of Vety Surgery(2010) at the 34<sup>th</sup> annual congress of ISVS held at Puducherry from 8-10<sup>th</sup> Dec 2010
- **Gold medal** : Drs N.S. Saini, J. Mohindroo, S.K. Mahajan, M. Raghunath, V. Sangwan, A. Anand and N. Singh were awarded Gold medal for the best research paper in the Equine surgery session (2010) for the paper “Third Degree Perineal Laceration in Mares” at the 34<sup>th</sup> Annual Congress of ISVS held at Puducherry from 8-10<sup>th</sup> Dec 2010
- **Appreciation award**: Drs. M. Atray, M. Raghunath and T. Singh received Appreciation award for Research article in Small Animal Surgery Session for the paper entitled ‘Diagnosis and management of canine gastrointestinal obstruction cases.’ At the 34<sup>th</sup> Annual Congress of ISVS held at Puducherry from 8-10<sup>th</sup> Dec 2010
- **Consolation Award**: Dr. Ashwani Kumar, received ‘Consolation Award’ for the second best research paper entitled “Ultrasonographic evaluation of traumatic reticulo-peritonitis in cows and buffaloes” in the ‘Dr. Rishendra Verma Young Scientist Award’ session during 11<sup>th</sup> Indian Veterinary Congress and 18<sup>th</sup> conference of Indian Association for the Advancement of Veterinary Research held at Apollo College of Veterinary Medicine from 11-12 Feb, 2011.

#### **Publications 2007-2011 (XI plan):**

**International / Foreign Journals** : 12

Athar, H., Mohindroo, J., Singh, K., Kumar, A. and Raghunath, M. 2010.  
Comparision of radiography and ultrasonography for the

- diagnosis of diaphragmatic hernia in bovine. *Vet. Med. International* doi:4061/2010/939870.
- Kumar, A. and Saini, N.S. 2011. Reliability of ultrasonography at the fifth intercostal space in the diagnosis of reticular diaphragmatic hernia. *The Veterinary Record*, 169:391 doi 10.1136/vr.d4694.
- Mattoo, S., Mohindroo, J., Sangwan, V. 2010. Modified use of surgical skin staples for treatment of ear hematoma in dogs. *Online J. Veterinary Research* 4(1):28-38, 2010.
- Mohindroo J. and Singh S. 2011. Successful treatment of penile hematoma in a colt. *J. Equine Veterinary Science* doi:10.1016/j.jevs.2011.05.014 (Online first Published: Article In Press)
- Mohindroo, J., Kumar, A., Sangwan, V., Udhehiya, R. and Singh, S.S. 2008 Ultrasonographic evaluation of omasum in cows and buffaloes. *Veterinary Radiology and Ultrasound* 49(3): 295-299.
- Mohindroo, J., Kumar, M., Kumar, A. and Singh, S.S. 2007 Ultrasonographic diagnosis of reticular diaphragmatic hernias in buffaloes. *The Veterinary Record.*, 161(22): 757-758.
- Raghunath, M., Singh, N., Gopinathan, T., Singh, T., Sangwan, V., Mohindroo, J. and Sharma, A. 2008. Fracture Fixation of Femur in Hanuman langur (*Semnopithecus entellus*) with Intramedullary Pinning. *Journal of Wildlife Rehab.* 29(2-3):32-34.
- Saini, N.S. and Mohindroo, J. 2007. Rectal tear leading to intestinal evisceration through anus in a calf. *Canadian Veterinary Journal* 48: 1297-98.
- Saini, N.S., Kumar, A., Mahajan, S.K. and Sood, A.C. 2007. The use of ultrasonography, radiography and surgery in the successful recovery of diaphragmatic hernia in cow. *Canadian Veterinary Journal* 48: 757-59.
- Sangwan, V., Mohindroo, J., Singh, K., Raghunath, M. and Mahajan, S.K. 2010. Successful surgical management of enterocutaneous fistula in a mare. *Journal of Equine Veterinary Science.* **30**: 334-36.
- Singh, K., Kumar, A., Mahajan, S.K. and Saini, N.S. 2010. Successful forelimb amputation procedure on a sambar deer (*Cervus unicolor niger*). *Journal of Wildlife Rehabilitation.* **30**: 21-24.

Toor, A.S. and Saini, N.S. 2008. Diagnostic and prognostic indicators of omasal impaction in buffaloes (*Bubalus bubalis*). *Veterinary Record*. 162:275-278.

**Indian Journals** : **50**

Athar H, Mohindroo J, Singh K, Singh T and Singh O. 2011. Diagnosis and Surgical Management of abomasal Impaction in Bovines. *Indian Veterinary Journal*. **88**: 36-38.

Athar, H., Mohindroo, J., Kumar, A., Singh, K. and Sangwan, V. 2010. Diagnosis and surgical management of reticular abscess in bovines. *Indian Journal Veterinary Surgery*. **31**: 33-36.

Athar, H., Mohindroo, J., Singh, K. and Singh, T. 2011. Clinical, haematobiochemical, radiographic and ultrasonographic findings in bovines with rumen impaction. *Intas Polivet*. 11(2):180-183.

Athar, H., Mohindroo, J., Singh, K., Kumar A and Randhawa C S. 2010. Clinical, haematobiochemical, radiographic and ultrasonographic features of traumatic reticuloperitonitis in bovines. *Indian Journal of Animal Sciences*. **80**: 608-12.

Athar, H., Mohindroo, J., Singh, K., Kumar, A. and Singh, T. 2009. Ultrasonographic features of omasal impaction in bovines. *Indian J. Vet. Surg.*, 30 (2): 115-116.

Bansal, N., Uppal, V. and Kumar, A. 2008 Histomorphometrical and histochemical studies on the ovaries of domestic cat (*Felis catus*). *Ind. J. Anim. Sc.*, 78(2): 175-77.

Bansal, N., Uppal, V., Kumar, A. and Pathak, D. 2009 Histomorphochemical studies on testis of guinea pig. *Indian J. Anim. Sc.*, 79(8): 806-808.

Gatoria, I.S., Saini, N.S., Rai, T.S. and Dwivedi, P.N. 2007. Antimicrobial sensitivity pattern in urolith associated bacterial urinary tract infections in dogs. *Veterinary Practitioner* 8: 193-197

Gupta, P., Raghunath, M. and Sood, N.K. 2010. Studies on the prognosis in cases of canine mammary neoplasms based on the TNM and histological grading. *Indian J. Vet. Surg.* **31**: 8-10.

Jain, V. and Raghunath, M. 2007. Evaluation of combination of doxorubicin and cyclophosphamide for management of canine mammary neoplasms. *Indian J. Vet. Surg.* 28(2): 94-97.

Jain, V. and Raghunath, M. 2008. Prognosis of canine mammary neoplasms. *Indian Vet. J.* 85: 829-832.

- Kumar, A. and Bhalla, V.K. 2007 Management of certain ailments in zoo animals. *Zoo's Print J.*, 22(11): 2900-2901. Plus web supplement of one page on [www.zoosprint.org](http://www.zoosprint.org)).
- Kumar, A., Mahajan, S.K., Sangwan, V., Singh, K. and Saini N.S. 2011. Squamous Cell Carcinoma of tongue in a German Shepherd Dog. *Indian Veterinary Journal*, 88(9): 157-159.
- Kumar, A., Mohindroo, J. Sangwan V. 2008. Successful surgical management of long bone fractures in two birds. *Indian J. Vet. Surg.* 29(1):57-58.
- Kumar, A., Mohindroo, J., Sangwan V, Anand A and Gupta D 2008 Gastric dilatation with intestinal intussusception in a Labrador pup: A case report. *Intas Polivet* 9(2): 156-158.
- Kumar, A., Raghunath, M., Mohindroo, J. and Saini, N.S. 2008. Urethral rupture in a serving buffalo bull. *Pashudhan* 34 : 4.
- Kumar, A., Sangwan, V., Mohindroo, J., Singh, S.S., Saini, N.S., Chachra, D. and Kaur, G. 2008 Diagnostic and prognostic indicators, antibacterial sensitivity pattern and surgical treatment of perireticular abscess in cows and buffaloes. *Indian J. Anim. Sc.*, 78(2): 1329-1332.
- Kumar, M., Mohindroo, J. Kumar, A. and Singh, S.S. 2008. Clinical hemato-biochemical and ultrasonographic features of diffuse peritonitis in bovines. *Indian J. Vet. Surg.* 29(1):34-36.
- Kumar, M., Mohindroo, J., Kumar, A. and Singh, S.S. 2007 Ultrasonographic diagnosis of reticulophrenic adhesions in bovines: A report of 15 clinical cases. *Indian J Vet Surg.* 28: 117-119.
- Mahajan, S.K., Sangwan, V., Singh, K., Kumar, A., Singh C. and Saini N.S. 2011. Surgical Management of Preputial and Penile Affections in Cattle Bulls. *Indian Veterinary Journal*, 88(9): 129-131.
- Mahajan, S.K., Singh S.S., Mohindroo J., Saini N.S., Singh, N. and Sood, N.K. 2009. Ultrasound guided biopsy for the diagnosis of canine abdominal masses. *Indian J. Vet. Surg.* 30(2):101-103
- Mahajan, S.K., Singh, S.S., Bains, S.S., Sandhu, H.S. and Singh, N. 2007. Clinical studies on the management of supracondylar fractures (SCF) of femur in canine. *Indian J Vet Surg.* 28: 120-122.
- Mahajan, S.K., Singh, S.S., Mohindroo, J., Saini, N.S. and Sood, N.K. 2010. Ultrasound guided biopsy and fine needle aspiration biopsy of splenic and prostate affections in dogs. *Indian Journal of Animal Sciences.* **80**:203-208.



- Mahajan, S.K., Sood, A.C., Kumar, A., Yadav, R.K. and Singh, N. 2007 Surgical management of air gun projectile from urethra in a dog. *Ind. J. Vet. Surg.*, 28(2): 161.
- Mohindroo J, Chaudhary M and Sood A.C. 2007. Management of traumatic lung evisceration in a dog. *Indian J Vet Surg.* 28 : 160.
- Mohindroo J, Kumar A, Chaudhary M, Raghunath M, Singh SS, Singh N, Mahajan SK, Anand A and Verma P 2008 Linear foreign body in intestine mimics intussusception on ultrasonogram in a dog. *Indian J. Vet. Surg.*, 29(2): 132-133.
- Mohindroo J, Kumar A, Singh N and Raghunath M 2006 Surgical management of bilateral femur fracture in a dog. *Indian Vet. J.*, 83(12): 1302-1304.
- Mohindroo J, Verma P, Singh SS, Anand A, Mahajan SK, Singh N, Chaudhary M, Kumar A, Raghunath M, Cheema JS and Toor AS 2006 Ultrasonographic findings of three unusual conditions in dogs. *Indian J. Vet. Surgery* 27(1): 35-36.
- Raghunath M, Mohindroo J, Singh N, Kumar A and Singh SS 2007 Repair of traumatic diaphragmatic hernia in two pups. *Indian J. Vet. Surg.*, 28(2): 162.
- Raghunath M, Singh T., Mohindroo J., Sangwan V., Gupta P 2009. Wedge resection trochleoplasty and tibial tuberosity transposition for correction of grade IV medial patellar luxation in a dog. *Indian J. Vet. Surg.* 30(2): 131.
- Raghunath M., Mohindroo J., Chaudhary M., Singh N., and Sangwan V. 2008. Tension band wiring for olecranon fracture repair in a dog. *Indian J. Vet. Surg.* 29(2):134.
- Raghunath, M., Singh, M., Yadav. R.K and Singh, S.S.2008. Distribution and classification of canine long bone fractures. *Indian Vet Jr.* 84: 1243-46.
- Saini NS, Singh SS, Toor AS, Kumar A and Kaur A. 2009. Surgical management of persistent right aortic arch and patent ductus aorticus in a labrador pup. *Indian J. Vet. Surg.*, 30(1): 53-54.
- Saini, N.S., Raghunath M. and Singh, C. 2011. Surgical Repair of Persistent Urachus in a Female Cloned Buffalo Calf. *Indian Veterinary Journal*, 88(9): 127-128.
- Sangwan V, Mahajan SK, Kumar A, Verma P, Singh K and Saini NS 2009 Flexor tendon deformity in all limbs of a cow calf. *Intas Polivet* 10(1): 214-15.

- Sangwan V, Mohindroo J, Saini NS, Kumar A and Raghunath M 2008 Surgical management of peri-rectal abscess in racing haryana bullock. *Indian J. Vet. Surg*, 29(1): 59-60.
- Sangwan, V., Kumar, A., Singh, K. and Mahajan, S.K. 2011. Umbilical hernia with abomasal-umbilical fistula in a cow calf. *Vet Scan Online Veterinary Journal*, 6 (1): 83.
- Sharma V. and Mohindroo J.. 2009 Comparison of three methods to diagnose hip dysplasia in dogs. *Ind J. Vet Surg*. 30(1), 31-34.
- Singh A and Mohindroo J.2007. Ultrasonographic and radiographic diagnosis of canine urinary bladder neoplasia. *Ind J Vet Surg*. 28 : 43-45.
- Singh A., Mohindroo, J. and Rai T.S. 2008 Diagnosis and management of cystitis in dogs. *Ind. Vet. J.* :85, 499-501.
- Singh C, Mahajan SK, Mohindroo J, Sood NK and Singh SS. 2010. Ultrasound guided fine needle aspiration biopsy for the diagnosis of prostatic affections in dogs. *Indian J. Vet. Surg*. **31**: 37-40.
- Singh C., Mahajan SK, Mohindroo J, Sood NK, Saini NS and Singh SS. 2010. Accuracy of ultrasound guided FNAB for abdominal affections in dogs. *Indian Veterinary Journal*. **87**: 1210-11.
- Singh R., Mohindroo J. and Banga H.S.2008. Comparative efficacy of chemotherapeutic agents against canine neoplasms. *Indian Vet. J.* :85, 502-504.
- Singh T, Singh N, Raghunath M, Mohindroo J and Sangwan V. 2010. Surgical management of rectal prolapse in equines. *Indian J. Vet. Surg*. **31**: 63-64.
- Singh, C., Mahajan, S.K., Mohindroo, J., Sood, N.K., Saini, N.S. and Singh, S.S. 2009. Role of USGB/USG-FNAB for the diagnosis of hepatic affections in dogs. *Indian J. Vet. Path.* 33(2):130-134
- Singh, K., Gopinathan, A., Kumar, A., Mahajan, S.K., Saini, N.S. and Sood, N.K. 2009. Sertoli cell tumour in canines: A report of four cases. *Indian J. Vet. Surg*. 30(1): 55-56
- Singh, K., Thakur, N., Mohindroo, J., Gopinathan A. and Mahajan S.K. 2011 Repair of Supra-condylar Fracture of Femur in Dogs. *Indian Veterinary Journal*, 88(9): 85-87.
- Sood, N., Gupta, K., Goyal, D., Raghunath, M and Singh, A. 2008. Metastatic leiomyosarcoma of spleen in a Spitz dog. *Indian J. of Vet. Path.* 32(1): 75-77.

- Thakur, N., Singh, K., Mohindroo, J., Gopinathan A. and Uppal V. 2011. Dynamic Compression Plate for the Repair of Long Bone Fractures in Dogs. *Indian Veterinary Journal*, 88(9): 131-134.
- Uppal V, Bansal N, Pathak D and Kumar A 2009 Histomorphochemical studies on the epididymis of guinea pig. *Indian J. Anim. Sc.*, 79(8): 809-812.

**List of manuals / instructional material published (XI Plan) :**

- Saini, N.S., Mohindroo, J., Raghunath M, Singh T. (2007). Manual of advanced training course on "Diagnosis and Management of Musculoskeletal Disorders in Veterinary Practice" Nov. 1-21, 2007
- Mahajan, S.K., Saini, N.S., Singh, K. and Kumar, A. (2008). Manual of advanced training course on "Imaging Techniques for Veterinary Patients with Special Reference to Ultrasonography" Feb. 1-21, 2008
- Mohindroo, J., Raghunath, M., Singh, T. and Sangwan, V. (2008) Manual of advanced training course on "Ultrasonography and Ancillary Diagnostic Procedures for Veterinary Patients" Sept. 4-24, 2008
- Mahajan, S.K., Singh, N., Singh, K. and Saini, N.S. (2009) Manual of advanced training course on "Ultrasonography and other Diagnostic modalities for farm and companion animals" Feb 14<sup>th</sup> to March 4<sup>th</sup> 2009
- Saini NS, Mohindroo,J, Mahajan SK, Anand A, Raghunath M, Kumar A, Singh K, Singh T, Verma P, Singh N, SangwanV, Gopinathan A and Singh C. (2009) . Abstracts of the XXXIII annual congress of ISVS and international symposium on "Current trends in diagnostic imaging and management of surgical affections in dairy animals" Nov 11-13 held at Department of Surgery and Radiology, College of Veterinary Science, GADVASU, Ludhiana.
- Singh, S.S., Saini, N.S., Mohindroo, J., Mahajan, S.K., Anand, A., Raghunath, M., Kumar, A., Singh, K., Singh, T., Verma, P., Singh, N., Sangwan, V., Gopinathan, A. and Singh, C. (2009). Souvenir and compilation of lead papers of the XXXIII annual congress of ISVS and international symposium on "Current trends in diagnostic imaging and management of surgical affections in dairy animals" Nov 11-13 held at Department of Surgery and Radiology, College of Veterinary Science, GADVASU, Ludhiana.

Singh, T., Verma, P., Raghunath, M., Mohindroo, J. (2010) Manual of advanced training course on “Diagnostic and Surgical Procedures in Veterinary Patients” Feb 18<sup>th</sup>- March 10, 2010

Saini, N.S., Mohindroo, J., Mahajan, S.K. and Raghunath, M. (2010). Compendium of lectures of training programme for field veterinarians on “Ultrasound” 6-10 September held at Department of Surgery and Radiology, College of Veterinary Science, GADVASU, Ludhiana.

Mahajan, S.K., Kumar, A., Singh, K., Anand, A. and Saini, N.S. (2011). Proceedings of 23<sup>rd</sup> Advanced training course on “Diagnostic and Surgical Procedures for thoracic and abdominal affections in Veterinary Patients”, Feb 11 – March 3, 2011, Centre of Advanced Faculty Training, Department of Surgery and radiology, College of Veterinary Science, GADVASU, Ludhiana.

**Other Publications :**

Saini, N.S., Mohindroo, J, and Singh, T. (2011). “Profile” Centre of Advanced Faculty Training, Department of Surgery and Radiology, College of Veterinary Science, GADVASU, Ludhiana.

***Financial Statement***

***Expenditure under CAFT during XI plan***

Head	2007-08	2008-09	2009-10	2010-11	2011-12
Operating cost of Training	2,34,027	2,86,425	1,05,257	2,68,369	86,598
Recurring Contingency	1,99,772	1,96,591	5,172	1,99,964	1,07,568
Non-Recurring Contingency	Nil	Nil	Nil	Nil	Nil
T.A.	Nil	Nil	Nil	14,915	4,055
Library	44,940	49313	1,576	28,487	Nil
Total	4,78,739	5,32,329	1,12,025	5,11,735	1,98,221