



DEPARTMENT OF ANIMAL BIOTECHNOLOGY

College of Veterinary Science & Animal Husbandry

Navsari Centre (Kamdhenu University), Gandhinagar

Eru Char Rasta, Vijalpore, Ta: Jalalpore, Dist. Navsari - 396450



Teaching Faculty in Department

Sr. No .	Name	Designatio n	Contact Details	Joinin g Year in NAU	Qualificati on	Total Experien ce	Publicatio ns Research Papers
1	Dr Umed V Rama ni	Assistant Professor & Head	9427122129 uvramani@kamdhenuuni.edu.in	2011	Ph.D.	15 Years	42

ABOUT THE DEPARTMENT

Animal Biotechnology department established in 2012-13 after establishment of Veterinary college in 2008. Since then it is imparting in quality Undergraduate and Post Graduate education. Department also help many Post-Graduate and Doctoral students of the other departments to undertake quality research projects. The area in which biotechnology can play role in animal science are includes molecular diagnosis of animal disease, genomics, transcriptomics, micropropagation, transformation, germplasm maintenance and storage, production of commercially useful chemicals by transgenesis (drug secrete from milk) and animal genetic engineering as well as in vitro fertilization and embryo transfer technology. Animal biotechnology has also scope for molecular markers, and QTL mapping of different quantitative traits, functional genomics (proteomics, transcriptomics) resistances improvement of bacterial strains by recombinant DNA technology, fermentation and metabolic engineering. These techniques are generally used to study basic physiology, improvement in animal health, production as well as production of disease resistance animal and propagation of highly produced animal through embryo transfer and artificial insemination. All the areas will ultimately lead to animal improvement however, early diagnosis and detection of disease as well as breeding for disease resistance will have direct and immediate benefit to the farmers. Department is working on different aspects of Animal

Biotechnology for betterment of Animal and Poultry Health. Different activities are as follow:

Research Projects (External agency / Institutional project)

Sr. No.	Title	Funding Agency	Grant (in. Rs.)	Principal Investigator / Co PI	Completed / On-going
1.	Molecular characterization of major genes related to milk production in Surti buffalo at Livestock Research Station, Navsari	Institutional project (AGRESCO)	-	AS a PI	Completed
2.	Analysis of Chromosomal Abnormalities in Surti Buffalo Using Fluorescence In Situ Hybridization (FISH).	Institutional project (AGRESCO)	-	AS a Co-PI	Completed
3.	Detection of Classical Enterotoxigenic coagulase positive <i>Staphylococcus aureus</i> in Raw milk, Dairy food products and Handlers' hand swabs.	Institutional project (AGRESCO)	-	AS a Co-PI	Completed
4.	Molecular detection of <i>Mycobacterium avium paratuberculosis</i> (MAP) from goats and cattle.	Institutional project (AGRESCO)	-	AS a Co-PI	Completed
5.	Study of marine finfish and shell fish landings and their taxonomical identification at Dholai fish landing center.	Institutional project (AGRESCO)	-	AS a Co-PI	Completed
6.	Study of gut microbiota and expression of inflammatory genes in broiler fed with high fat diet and Quercetin	Institutional project (AGRESCO)	-	AS a PI	Completed
7.	Evaluation of different methods of DNA extraction in Diagnosis of Canine parvo virus infection for PCR and real time PCR	Institutional project (AGRESCO)	-	AS a Co-PI	Completed
8.	Study of genetic polymorphism in growth related genes and its association with growth	Institutional project (AGRESCO)	-	AS a Co-PI	Completed

	parameters in Surti goats				
9.	Development of multiplex PCR for detection of canine parvo virus, canine coronavirus and canine distemper virus in dogs.	Institutional project (AGRESCO)	-	AS a PI	On-going
10.	SNP study in genes related to prolificacy of Surti goats	Institutional project (AGRESCO)	-	AS a Co-PI	On-going
11.	Effect of soybean and sunflower oil supplementation on production performance and rumen metabolites in Surti does	Institutional project (AGRESCO)	-	AS a Co-PI	On-going

Achievements and List of Research Publications

Awards:

1. 2007 KKSukla GOLD medal for Best Thesis Research at Post-Graduation level
2. 2008 Selected as Research Associate in World Bank finance research Project entitled "Development of Goat having knocked down Myostatin Gene through RNA Interference Technology to Enhance the Meat Production"
3. 2010 SOCDAB-2010 YOUNG SCIENTIST AWARD for Buffalo Whole Genome Sequencing
4. 2010 Selected as Class II officer in Gujarat Public Services Commission.
5. 2014 ISAPAM 2014 BEST POSTER AWARD at NAU Navsari.
6. 2017 SOCDAB 2017 BEST POSTER AWARD at KVASU, Kerala.
7. 2017 ISVSBT 2017 BEST ORAL PRESENTATION at OAUT, Orrisa.

Recommendations:

Recommendation for Scientific Community:

1. Surti goats with BB (366 and 56 bps) genotype are found with higher body weight at 6 months of age as compared to AB (422, 366 and 56 bps) genotype when growth hormone (GH) gene is amplified using forward primer 5' CTCTGCCTGCCCTGGACT 3' and reverse primer 5' GGAGAACAGAAGGCAACC 3' and digested with *HaeIII* restriction enzyme.
2. The relative gene expression of *CSN1S1*, *CSN1S2*, *CSN3* and *C/EBP* genes show upregulation with advancement of lactation from 30 days to 90 days post partum in Surti goats with 7.79, 32.87, 21.41- and 24.68-fold increase respectively. The relative gene expression of *CSN1S2*, *CSN3* and *C/EBP* genes were positively correlated with protein percent at 30 days and 90 days post partum in Surti goats and that of *CSN2* with Test Day Milk Yield and *CSN3* with Cumulative Milk Yield were positively correlated at day 30 post partum in Surti goats.

3. The relative gene expression of *CSN1S2*, *CSN3* and *C/EBP* genes were consistently positive and significant and shared similar expression patterns in the different physiological stages compared at 30 and 90 days post partum in Surti goats.

SELECTED AS TRAINEE

1. **Molecular Methods of Poultry Disease Diagnosis** organized by Dept. of Animal Biotechnology, M V C, Chennai for 21 day training sponsored by ICAR, New Delhi FROM 6-26 February 2008.
2. Hands on Training of ***Genome Sequence FLS system (Next Generation Sequencing)*** at *State of Art Facility of Department of Animal Biotechnology* on 30 Aug 2009.
3. **Role of whole Genome Sequencing in Animal and Plant Research** from 16-25 May 2011 by AAU Anand Gujarat
4. **ICT application in Agriculture and Allied field** organized by Extension Education Institute, GoI at ATIC, NAU, Navsari during 27-29 September 2012.
5. Hands on Training of ***Real Time PCR*** at *State of Art Facility of Invitrogen Bioservices India Pvt Ltd*, Gurgaon on 10-12 April 2013.
6. ***In-silico Genome and Proteome Analysis*** on 01-05 JULY 2013 at The Bioinformatics Centre, Madras Veterinary College, Chennai, Tamilnadu
7. **Recent advances in Transgenesis in livestock** from 22 May-11 Jun 2014 at Division of Animal Genetics, Indian Veterinary Research Institute, Izatnagar-243122, Bareilly, Uttar Pradesh.
8. **Improving Reproduction Rate in Ruminants by Suitable Reproductive Technologies** from 2nd to 22nd September 2015 at Guru Angad Dev Veterinary & Animal Sciences University, Ludhiana-141004 (India).
9. **Data Analytics in Fisheries** from 10 August to 03 September, 2020 conducted by Department of Fisheries Extension, Economics and Statistics, Dr. M.G.R. Fisheries College and Research Institute, Thalainayeru, Nagapattinam.

TRAINING: AS A RESOURCE PERSON

1. **Multi-institutional teacher's training programme in Molecular Biology and Bioinformatics**. 21st Feb – 1st March, 2006. Organized by GSBTM.
2. **2nd Multi-institutional teacher's training programme in Molecular Biology and Bioinformatics-2007**. May 17th to 25th. Organized by GSBTM in association with AAU and DFS.
3. **Disease diagnosis by PCR technique**. Sep 25th-Oct 4th 2007. Sponsored by ASCAD.

Research Publications

1. Pandya, G. M., **Ramani, U. V.**, Tyagi, K. K. and Dangar, N. S. (2020). Genetic Polymorphism of GHR, LEP and MSTN Genes in Surti Goats from Organized Farm. *The Indian Journal of Veterinary Sciences and Biotechnology*, **16** (2): 21-24.
2. Janmeda, M., Pandya, G. M., **Ramani, U. V.**, Brahmkshtri, B. P., Patel N. B. and Kharadi, V. B. (2020). Relative Gene Expression Study on Casein Protein and its Regulatory Genes in Mammary Epithelial Cells of Surti Goat. *The Indian Journal of Veterinary Sciences and Biotechnology*, **16 (01)**: 54-57.
3. Trangadia, B. J., Prasad, M. C., **Ramani, U. V.**, Pandya, G. M. and Kurkure, N. V. (2020). A comparative study of serology and PCR for the diagnosis of brucellosis in goats. *Indian Journal of Animal Sciences* **90** (6): 847–850.
4. Vala, J. A., Patel, M. D., Patel, D. R., **Ramani, U. V.**, Kalyani, I. H., Makwana, P. H. and Desai, D. N. (2020). Diagnosis of Equine Herpes Virus 4 Infection using Polymerase Chain Reaction. *International Journal of Current Microbiology and Applied Sciences* **9(11)**: 887-890.
5. Janmeda, M., **Ramani, U. V.**, Pandya, G. M., Dangar, N. S., Brahmkshtri, B. P. and Kharadi, V. B. (2020). Stage Specific Expression Profile of Lipogenic Genes in Mammary Epithelial Cells of Surti and Jaffarabadi Buffaloes. *International Journal of Livestock Research*, **10 (11)**: 60-66.
6. Desai, D. N., Kalyani, I. H., **Ramani, U. V.**, Makwana, P. M., Patel, D. R. and Vala, J. A. (2020). Evaluation of three different methods of viral DNA extraction for molecular detection of canine parvo virus-2 from faecal samples of dogs. *J Entomol Zool Stud* **8(3)**:479-481.
7. Dangar, N., Pandya, G., **Ramani, U.**, Padheriya, Y., Sangma, T., Patel, S. and Devkatte, S. (2019) Study on fecundity gene GDF9 and prolificacy in Surti goats. *Indian Journal of Small Ruminants* **25(2)**: 236-238.
8. Dangar, N., Pandya, G., **Ramani, U.**, Padheriya, Y., Sangma, T., Patel, S. and Devkatte, S. (2019) Association study of fecundity gene BMPR1B with prolificacy in Surti goats under farm and field Condition. *Ind J of Vet Sci and Biotech.*, **14(4)**:17-20.
9. Atara, V., Chaudhari, C., **Ramani, U.**, Chaudhary, M., Patel, D., Patel, Y. and Patel, N. (2018) Semen characteristics in young and adult Surti buck. *Indian J. Anim. Health.* **57(2)** 219-224.
10. Bayan, J., Kharadi, V., Ramani, U., Janmeda, M., Vallabh, P., & Brahmkshtri, B. (2018). Polymorphism of Exon 2-3 of Growth Hormone Gene in Surti and Mehsani Goats by PCR- RFLP. *International Journal of Livestock Research*, **8(11)**, 64-72.
11. Bayan, J., Kharadi, V., **Ramani, U.**, Janmeda, M., Tyagi, K., Dangar, N. and Pandya, G. (2018) Genetic polymorphism of growth hormone gene exon-4 in Surti and Mehsani goats by PCR-RFLP. *The Indian Journal of Veterinary Sciences & Biotechnology* **14(1)**: 28-33.
12. Pandya, G., **Ramani, U.**, Janmeda, M., Tyagi, K. K., Brahmkshtri, B. P. and Kharadi, V. (2018) Relative gene expression analysis of β -casein gene and its transcription regulatory genes in primary buffalo mammary epithelial cells of Surti and Jaffarabadi buffaloes. *Indian Journal of Animal Sciences* **88 (3)**: 319–321.

13. Pandya, G., Ramani, U., Janmeda, M., Kharadi, V., Brahmkshtri, B., & Tyagi, K. (2018). Relative Gene Expression Analysis of beta-Casein Milk Protein and its Transcription Regulatory Genes in Surti Buffalo. International Journal of Livestock Research, 8(4), 121-127.
14. Pawar, V., Dangar, N., **Ramani, U.**, Pandya, G., Kharadi, V., and Brahmkshtri, B. (2018). Non. Genetic Factors Affecting Age at First Calving in Surti Buffaloes. International Journal of Livestock Research, 8(1): 43-48
15. Janmeda, M., **Ramani, U. V.**, Pandya, G. M., Tyagi, K. K., Kharadi, V. B., Brahmkshtri, B. P., Jyotishree Bayan and Pawar, V.D. (2017) Epigenetics: Regulation of Gene Expression. International Journal of Science, Environment and Technology 6(2): 1390 – 1396
16. Janmeda M., Kharadi V., Pandya G., Brahmkshtri B., **Ramani U.** and Tyagi K. (2017). Variation in Test Day Milk Yield and Composition at Day 15 and 60 Postpartum in Surti and Jafarabadi Buffaloes. Journal of Animal Research 7 (3): 451
17. Pandya, G. M., Ramani, U. V., Janmeda, M., Tyagi, K. K., Dangar,N. S., Gajbhiye,P. U. and Brahmkshtri, B. P. (2017).Variability in test day milk yield and milk composition at day 15 and 60 of lactation in Surti and Jaffarabadi buffaloes Indian Journal of Dairy Science. 70(6): 763- 766
18. Janmeda M., Kharadi V., Pandya G., Brahmkshtri B., **Ramani U.** and Tyagi K. (2017).Relative gene expression of fatty acid synthesis genes at 60 days postpartum in bovine mammary epithelial cells of Surti and Jafarabadi buffaloes. Veterinary World, 10 (5): 467.
19. Gadhvi, Y.H., Kharadi, V. B., **Ramani, U. V.**,Pandya, G. P., Dangar, N. S., Brahmkshtri, B. P. and Pawar, V. D. (2017). Study on DGAT1 gene polymorphism in Surti and Banni buffaloes by PCR-RFLP. The Indian Journal of Veterinary Sciences and Biotechnology 13 (02):77-82.
20. Tyagi, K., Brahmkshtri, B. P., Ramani, U. V., Kharadi, V. B., Pandya, G. M., Janmeda, Mamta., Ankuya, K. J., Patel, M. D. and Sorathiya, L.M. (2016). Test day variability in yield and composition of Surti and Mehsani buffaloes milk at 15 and 60 postpartum. Veterinary world 9: 595:600.
21. BanwariL.Y.,**Ramani,U.V.**,Pandya,G.M.andBrahmkshtri,B.P.(2015).Studyof LeptinGenePolymorphism inSurtiandJafrabadiBuffaloesbyPCR-RFLP. CurrentTrendsinBiotechnologyandPharmacyVol.9(2)151-156.
22. Pandya,G.M.,**Ramani,U.V.**,Janmeda,M.,Dangar,N.S.,Tyagi,K.,Brahmkshtri, B.P.andKharadi,V. B.(2014).piRNA:BasicsandtheirAssociationwithPIWI proteins.CurrentTrendsinBiotechnologyandPharmacy, Vol.8(3)303-308.
23. Puttalakshamma,G.,Ramani,U.V.,SinghK.M.,Patel,A.K.,Patel,A.I.andJoshi C.G.(2014).Geneticcharacterization ofparamphistomes ofbuffalo byHAT-RAPDanalysis.TurkishJournalofVeterinaryandAnimalSciences.38:7-13
24. Mehta,H.H.,Patel,A.K.,Nandasana,K.N. **Ramani,U.V.**, Koringa,P.G., Shah,R.G., Barvalia,D. R.,Kelawala,N.H.,Patil,D.B.,Rank,D.N.,Joshi,C.G.,Panchal,K. M. and Kothari, R. K. (2013). Histology and histomorphology of hormone treatedSurtibuffalouddertissue.AmericanJournalof AnimalandVeterinary Sciences8(2):66-72.
25. Mehta,H.H.,Patel,A.K.,Nandasana,K.N. **Ramani,U.V.**, Koringa,P.G., Shah,R.G., Barvalia,D.R., Kelawala,N.H.,Rank,D.N.,Joshi,C.G.,Panchal,K. M.and

- Kothari,R.K.(2013).Theeffectofhormone treatment ondrySurtibuffalo mammarygland.International JournalofPharmaandBiosciences. 4(1):298-308.
26. TripathiA.K.,**Ramani,U.V.**,Patel,A.K.,RankD.N.,JoshiC.G.(2013).Short hairpinRNA-inducedmyostatingenesilencingin caprinemyoblastcellsin vitro. AppliedBiochemistryandBiotechnology.169(2):688-94.
27. Tripathi,A.K., Koringa,P.G.,Jakhesara,S.J.,Ahir, V.B., **Ramani,U.V.**, Bhatt,V.D., Sajnani, M.R., Patel, D.A., Joshi, A.J., Shanmuga, S.J., Rank, D.N., Joshi, C.G.,(2012).Apreliminarysketchofhorncancertranscriptomein Indianzebu cattle.Gene493,124-131.
28. Singh,K.M.,Ahir,V.B.,Tripathi, A.K.,**Ramani, U.V.**,Sajnani, M.,Koringa, P.G., Jakhesara, S.,Pandya, P.R., Rank, D.N., Murty, D.S., Kothari, R.K., Joshi, C.G., (2012). Metagenomic analysis of Surti buffalo (Bubalus bubalis) rumen:apreliminarystudy.MolecularBiologyReports39,4841-4848.
29. Tripathi,A.K.,Aparnathi,M.K.,Vyavahare,S.S.,**Ramani,U.V.**,Rank,D.N.,Joshi, C.G.,(2012).Myostatingenesilencingby RNAinterferencein chickenembryo fibroblast cells. Journal of Biotechnology. 160(3-4): 140-145.
30. Tripathi A. K., SinghK.M.,VazeM.N., **Ramani,U.V.**,RankD.N.andJoshiC.G.(2012).Full lengthcDNAsynthesisofdifferentiallydisplayedESTsduringlactationin the Indianbuffalo(Bubalusbubalis).TurkishJournalof VeterinaryandAnimal Sciences36(1).
31. VaidyaM.B.,SajnaniM.R.,**Ramani,U.V.**,TripathiA. K.,BhattV. D.,PatelJ. S., ManishaM.P.andJoshiC.G.(2012).A preliminaryanalysisofrepetitive sequenceorganizationin Bubalusbubalisgenome,IndianJournalof Biotechnology11(1):62-66.
32. **Ramani,U.V.**,TripathiA.K.,VazeM.N.,NandasanaK.N.,KoringaP.G.,RankD.N. andJoshiC. G.(2011).Somatotropin-mediatedgeneexpressionprofilingof differentiallydisplayedESTsduringlactationin Indianbuffalo(Bubalusbubalis). JournalofDairyResearch78326–334.
33. KurkuteA.S.,TripathiAK.,Nadeem.S, JawaleC.V.,**Ramani, U.V.**,PandeA.M., RankD.N.,andJoshiC.G.(2011).Molecularcloningandcharacterization of rabbitmyostatingene.TheIIOABJournal.Vol.2;Issue5;2011:1–7.
34. JadejaR.N.,Thounaojam M.C.,**Ramani, U.V.**,DevkarR.V.,Ramachandran A.V. (2011).Anti-obesitypotentialof ClerodendronglandulosumColebleafaqueous extract.JournalofEthnopharmacology135(2011)338–343.
35. Thounaojam MC, JadejaRN,RamaniUV,DevkarRV,Ramachandran AV.(2011).Sidarhomboidae.RoxbLeafExtractDown-Regulates ExpressionofPPAR?2 andLeptinGenesinHighFatDietFedC57BL/6JMiceandRetardsinVitro 3T3L1 Pre-Adipocyte Differentiation. Int. J. Mol. Sci., 12:4661-4677; doi:10.3390/ijms12074661.
36. TripathiA. K.,**Ramani,U.V.**,RankD.N., JoshiC.G.(2011).In vitroexpression profilingofmyostatin,follistatin, decorinandmuscle-specifictranscriptionfactors in adultcaprinecontractilemyotubes.TheJournalofMuscleResearchandCell Motility32:23–30DOI10.1007/s10974-011-9245-x.
37. Jakhesara S.J., Koringa P.G., **Ramani, U.V.**, Ahir V.B., Soni P.S., Singh K.M., Tripathi A.K., Bhatt V.D., Patel J.S., Patel M.M., Sajnani M.R., Joshi C.G. (2010).ComparativeStudyofTanninChallengedRumenMicrobiome inGoatUsingHighThroughput Sequencing Technology. Developmental MicrobiologyandMolecularBiology,ISSN0976-5867Volume1,Number1pp.95-106.

38. TripathiA.K.,**Ramani,U.V.**,AhirV.B.,RankD.N. andJoshiC.G.(2010).A Modified enrichmentprotocolforadultcaprineskeletalmusclestemcell.Cytotechnology 62(6):483-488.
39. SinghK.M.,PandyaP.R.,ParnerkarS.,TripathiA.K.,**RamaniU.V**,KoringaP.G., Rank D.N., Joshi C.G. and Kothari R.K. (2010). Methanogenic Diversity StudieswithintheRumenofSurtiBuffaloesBasedonMethylCoenzyme M ReductaseA(mcrA)GenesPointto Methanobacteriales.PolishJournalof MicrobiologyVol.59,No3,175-178.
40. Ahir V.B.,KoringaP.G.,BhattV.D.**Ramani,U.V.**,TripathiA.K.,SinghK.M.,Dhagat U.M.,PatelJ.S.,PatelM.M.,KatudiaK.H.,SajnaniM.R.,JakhesaraS.J.and JoshiC.G.(2010). Metagenomic analysisofPoultryGutMicrobes.Indian JournalofPoultryScience.45(2):111-114.2008
41. KoringaP.G.,PatelA.K.,Nandasana K.N.,RamaniU.V.,BhongC.D.,JoshiV.K., Wadhvani K.N., Kelawala N.H., and Barvalia D.R (2008). Mammary gland biopsyin pregnantandlactatingbuffaloesin standingposition.IndianJournalof VeterinarySurgery29(1):50-51.
42. Patel, A.K., Koringa, P.G., Nandasana, K.N., **Ramani, U.V.**, Barvalia, D.R. and Panchal, K.M.(2007).Effectofbovinesomatotropin (bST)administration on the histology of mammary gland in lactating buffalo. Indian Journal of VeterinaryAnatomy,19(2).pp.22-28.

Book/Book Chapter

1. Women entrepreneur in Dairy Sector-Opportunities and Issue of HRM on Organization in Book entitled by Human Resource Management in Indian Dairy Sector

NCBI- nucleotide sequence submitted in the NCBI

Bar coding of Fish: 20

ESTs: -98 Mammarytissue,lactogenicpathway,Bubalusbubalis

GeneSpecific:-2 GH+5Cyp+3Leptin

Bacteria:- 57+191RumenUnculturedBacteria

Protozoa:- 172RumenMicrobs

WHOLEGENOMEPROJECT:One(64212)(*BubalusBubalus*)

Metagenomics: BuffaloRumenMicrobs
PoultryGutMicrobes
RumenMicrobiomeinGoat

1. “ગીગમાંજોવા મળતો સફેદ સ્પોટ સિન્ડ્રોમનો રોગ”. ડૉ. ભાવેશ ગ્રાંગિયા, ડૉ.વિપુલઆર.પટેલ, ડૉ.ગૌરવ પંડ્યા, ડૉ.યુ.વી.રામાણી, ડૉ.સી.વી.સાવાલિયા. કૃષિ વિશ્વસમાચાર. મે-૨૦૧૩
2. “દૂધાળાપણુંની પસંદગી વખતેથાનમાંરાખવાનામૂક્ષાઓ” ડૉ.ગૌરવ પંડ્યા ડૉ. ભાવેશ ગ્રાંગિયા, ડૉ.વિપુલઆર.પટેલ, ડૉ.યુ.વી.રામાણી,કૃષિ-પણુદર્શન. મે-૨૦૧૩
3. “ગુજરાતની પણ સંવર્ધન નિતી અંગેની ખેડૂતલક્ષી બાબતો. આદર્શપણુપાલનઅનેમત્સ્યપાલન” જી. એમ. પંડ્યા, મમતાજનમેદા,યુ. વી. રામાણીઅને બી. પી. બ્રહ્મકૃતી (૨૦૧૫).કૃષિ મહોત્સવબુક્લેટ : ૧૮ _ ૨૧
4. “રોગોના સચોટ નિદાન માટે મોલેક્યુલર બાયોલોજીની પદ્ધતિઓ અને તેને સંદર્ભિત બાબતો”. ડૉ. ઉમેદ રામાણી, ડૉ. ગૌરવ પંડ્યા. ડૉ. ભાવેશ ગ્રાંગિયા અને ડૉ. વિપુલપટેલ. ગોરદ્ધન ગાઈડ. મે-૨૦૧૪.

૫. “મરધાંઓમાં રસીકરણ નિષ્કળ થવાના કારણો”. ડૉ. ભાવેશ ત્રાંગડિયા, ડૉ. ગૌરવ પંડ્યા, ડૉ. ચુ.વી.રામાણી, ડૉ. વિપુલઆર.પટેલ. ગોદર્શન ગાઈડ. મે-૨૦૧૪.
૬. “પશુઓમાંજોવા મળતી જન્મજાત જનિનીક ખોડ ખાંપણ”યુ. વી. રામાણી,એન. એસ. ડાંગર અને બી. પી. બ્રહ્મકારી (૨૦૧૫). કૃષિ મહોત્સવ લુક્લેટ : ૩૦ - ૩૩
૭. “પશુઓમાંચયાપચયની બિમારીઓ અને પ્રાથમીક સારવાર” ડૉ. ગૌરવ પંડ્યા, ડૉ. ઉમેદ રામાણી, ડૉ. ભાવેશ ત્રાંગડિયા, ડૉ. વિપુલપટેલ અને ડૉ. નિખિલ ડાંગર (૨૦ નવેમ્બર ૨૦૧૭). કૃષિ પ્રભાત પેઠજ ન.-૮.

UG TEACHING

1. Courses taught,Practical Manuals and Lecture notes prepared for UG

Sr. No.	Course No	Course Name	Credit Hours
As per VCI 1993			
1.	VPB321	Animal Biotechnology	2+1
2.	AGB-111 [#]	Biostatistics and Computer Application	2+1
As per VCI 2008			
1.	VPB321	Animal Biotechnology	2+1
2.	AGB-111 [#]	Biostatistics and Computer Application	
As per VCI 2016			
3.	VMC	Veterinary Microbiology	3+1

2. Participation of faculty in activities of UG students

- a. Advisors to UG students
- b. Monitoring attendance
- c. Conduct exam and preparation of Results
- d. Advisor to game
- e. Assistance in preparation of JRF
- f. Advisor for study circle as a non-credit course
- g. As a paper setter and external examiner

PG TEACHING

3. Courses offered to M. V. Sc. and Ph. D. Students as per ICAR 2009

Sr. No.	Course No	Course Name	Credit Hours
1.	ABT 601	Basic & Applied Biotechnology	3+0
2.	ABT 603	Applied Molecular Biology	2+1
3.	ABT 604	Animal Cell Culture: Principles & Applications	1+2
4.	ABT 606	Vaccine Biotechnology	2+0
5.	ABT 609	Animal Genomics	2+1
6.	ABT 611	Techniques in Molecular Biology & Genetic Engineering	0+3
7.	ABT 702	Functional Genomics & Proteomics	2+1
8.	ABT 705	Advances in Animal Cell Culture	2+1

Photo of departmental Infrastructure**::CONTACT US ::****Assistant Professor & Head**

Department of Animal Biotechnology

College of Veterinary Science & A.H.

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Faculty Profile

Name	Dr Umed V Ramani	
Designation	Assistant Professor	
Qualification	PhD (Animal Biotechnology)	
Contact No.	9427122129	
Email ID	uvramani@kamdhenuuni.edu.in	
Joining date at NAU	01.08.2011	
Professional Experience	12 Years	
Job profile	Teaching, Research, Extension	
Exams cleared	NET, CCC+ (SPIPA, Surat), GPSC Class-II (VO)	
Additional Duties Performed	Drawing and Disbursing Officer, Veterinary College, Navsari IBSC Member, NAU, Navsari	
Publication	Teaching Manual: 2	Books Chapter/Booklets: 01
	Award:06	Lead Papers:03
	Research Papers:42	Vernacular Articles:5
	Abstracts:10	Barcode of Fish: 20 ESTs: - 98 Mammary tissue, lactogenic pathway, <i>Bubalus bubalis</i> Gene Specific: - 2 GH +5 Cyp+3 Leptin Bacteria: - 57+191 Rumen Uncultured Bacteria Protozoa: -172 Rumen Microbs WHOLE GENOME PROJECT: One (64212) (<i>Bubalus Bubalus</i>) Metagenomics: Buffalo Rumen Microbs Poultry Gut Microbes Rumen Microbiome in Goat
Recommendations	For Scientific Community:04	
Departmental Research	AS PI-03; As Co-PI-08	
Competence building	Summer School/Winter School/CAFT/Orientation: 04	
	Seminar/Symposium/Conference: 30	
Professional Membership	LifeMemberofISVIB	
	Gujarat Veterinary Council, Gandhinagar (GVC)	
	Navsari Agricultural University Teachers' Association (NAUTA)	
	LifeMemberofISVIB	
	Institutional Biosafety Committee of NAU	
	All Gujarat Veterinarians' Social Security Trust (AGVSST)	
	The Gujarat Association for Agricultural Science	