Curriculum Vitae

Name : Dr. Shanker Kumar Singh

Designation: Associate Professor (Veterinary Medicine)

Date of Birth : 25/10/1980

Date of joining: Nov 22, 2023 (Associate Professor)

Oct 13, 2011 (Asst Professor)

Employee code: 801

State Reg No. : 2702 (Bihar Veterinary Council))

Address: Department of Veterinary Medicine, U.P. Pandit Deen

Dayal Upadhyaya Pashu-Chikitsa Vigyan Vishwavidyalaya Evam Go Anusandhan Sansthan (DUVASU), Mathura – 281

001, UP., India.

Residential Address: Address: B-1, Old Campus, College of Veterinary

Science and Animal Husbandry, DUVASU, Mathura - 281 001, U.P.

Telephone : +91 9897413042 E-Mail: pshankervet@gmail.com

ORCID ID : 0000-0002-0326-4226

EDUCATION

2007 - 2010 Ph.D., Indian Veterinary Research Institute, Izatnagar,

Bareilly, UP., India.

Major subject: Veterinary Medicine

Minor subjects: Veterinary Immunology and Animal

Biochemistry

Thesis project: Evaluation of antioxidant potential of *Calendula*

officinalis in canine sarcoptic acariasis.

2005 - 2007 M.V.Sc., Indian Veterinary Research Institute, Izatnagar,

Bareilly, UP., India.

Major subject: Veterinary Medicine

Minor subject: Animal Biochemistry

Thesis project: *In vitro* disease resistance and free radical scavenging potential of certain indigenous bio-organics and *in vivo* corroboration in

mice and canine

1999 - 2005 B.V.Sc. & A.H., Bombay Veterinary College, Mumbai, India.

Major: Veterinary Science and Animal Husbandry

WORK EXPERIENCE

11/ 2023 - Present

Associate Professor. Department of Veterinary Medicine, Uttar Pradesh Pandit Deen Dayal Upadhyaya Pashu-Chikitsa Vigyan Vishwavidyalaya Evam Go Anusandhan Sansthan (DUVASU), Mathura, UP., India.

10/ 2011 - 11/2023

Assistant Professor. Department of Veterinary Medicine, Uttar Pradesh Pandit Deen Dayal Upadhyaya Pashu-Chikitsa Vigyan Vishwavidyalaya Evam Go Anusandhan Sansthan (DUVASU), Mathura, UP., India.

- Teaching veterinary medicine to undergraduate, graduate, and doctoral students.
- Major research advisor for post-graduate and doctoral students.
- Conducting research in veterinary dermatology, vector-borne diseases of animals, host-parasite interactions, parasitic disease immune-pathology, and livestock production diseases.
- Team member to investigate various animal disease outbreaks in the state and country.
- Offering veterinary medical services to livestock, pets, and wildlife brought to the university hospital that are clinically ill.
- Educating farmers, owners of livestock, and veterinary specialists.
- Organizing / Participating Scientific Events
- Taking part in various activities assigned by the University.
- Supporting University Administration
- **09/2010 09/2011** Medical Veterinary Officer. Laboratory Animal Resource Section, SRMS Institute of Medical Sciences, Bareilly, UP., India
 - Maintaining laboratory animals for experimental use.
 - Conducting in vivo experimental trials in laboratory animals.
 - Therapeutic management of clinically sick laboratory animals.
 - Training undergraduate medical students for laboratory animals handling.

PROFESSIONAL TRAINING

<u>INTERNATIONAL</u>

- **01/03/2023-31/05/2023** Three-months Overseas Training (Visiting Scholar) in **Veterinary Dermatology** Unit.
 - Department of Veterinary Clinical Medicine, College of Veterinary Medicine, Veterinary Teaching Hospital University of Illinois at Urbana-Champaign, USA.

NATIONAL

- **03/01/2024-12/01/2024** 10 days short course on "'Recent Developments in Livestock Phenome Data Recording, Analysis and Interpretation in the Era of Genomics"
 - ICAR-National Research Centre on Camel, Bikaner, from 3rd to12th Jan 2024.
- **01/09/2022-30/09/2022** One-month MOOC training on "Digital Assessment and Evaluation Methodologies"
 - ICAR-National Academy of Agricultural Research and Management (NAARM), Hyderabad
- **13/05/2020 24/06/2020** Six-weeks Online Training on "Comprehensive disaster risk management framework"
 - National institute of disaster management (NIDM), Ministry of Home Affairs, Government of India, New Delhi in collaboration with the World Bank (GFDRR), Washington
- **26/09/2018 16/10/2018** 21 days ICAR Winter School Training on "Practicability, Scope and Future prospect of Ethno-Botanicals in Minimizing Antibiotic Resistance"
 - Division of Veterinary Medicine, Indian Veterinary Research Institute, Izatnagar, UP., India
- **14/09/2017 04/10/2017** 21 days national training on "Updates on Vectors and Vector Borne Diseases"
 - Department of Veterinary Parasitology, Centre of Advanced Faculty Training (CAFT) in Parasitology, Veterinary College, KVAFSU Regional campus, Hebbal, Bengaluru (Karnataka), India.
- **08/10/2013 28/10/2013** 21 days ICAR Summer School Training on "Advances in Diagnosis, Therapy and Prevention of Emerging and Re-emerging Diseases of Livestock"
 - Department of Veterinary Medicine, College of Veterinary Science, GADVASU, Ludhiana (Punjab), India.

- **26/11/2011 30/11/2011** Five days Orientation and Sensitization Workshop on "Science Writing/Journalism"
 - National Council for Science and Technology Communication, DST, New Delhi & Department of Mass Communication, Aligarh Muslim University, Aligarh, UP., India.

RESEARCH EXPERIENCE

• 12 Years +

Students Research Projects

- Evaluation of therapeutic effects of chewable fluralaner against canine sarcoptic mange
- Studies on immuno-ophthalmopathy of bovine tropical theileriosis in calves with special reference to immunomodulatory effects of injectable trace minerals complex supplementation
- Evaluation of the ameliorative potential of a polyherbal formulation on Toll-like receptors and cytokines expression in peripheral blood mononuclear cells and lesional skin of dogs with generalized demodicosis
- Studies on the ameliorative potential of a polyherbal formulation on the expression of skin barrier proteins and cytokines in dogs with atopic dermatitis
- Evaluation of the therapeutic potential of certain homoeopathic preparations in canine atopic dermatitis
- Studies on add-on effects of a polyherbal formulation on clinical recovery and immuno-competence of dogs with demodicosis
- Studies on the effects of prepartum supplementation of ammonium chloride along with immunomodulators on metabolomics and immunodynamics of periparturient indigenous cows
- Effects of prepartum supplementation of antioxidants and anionic salt on metabolic and oxidative status of transition *Sahiwal* cattle
- Metabolic profiling of cattle and buffaloes suffering from mastitis and its management using adjunctive remedial

Number of Student Guided as Major Advisor

MVSc 10 Students

1-Dr. Snaju Kumari (2021)

2-Dr. Richa Khusboo (2020)

3-Dr. Sandeep P. Soma (2019)

4-Dr. Srita Kanwal (2019)

5-Dr. Sujeet Kumar Chaudhary (2018)

6-Dr. Alok Singh (2017)

7-Dr. Vivek Kumar Singh (2016)

8-Dr. Brijesh Kumar Yadav (2015)

9-Dr. Krishna Veer Singh (2013)

10-Dr. Deepak Sharma (2013)

PhD One

1-Dr. Pradeep Kumar Ram (2020)

PROJECTS COMPLETED/ONGOING

Ongoing Projects

- **Principal Investigator** of an extramural project entitled "Clinical Evaluation of Some Homeopathic Medicines against Mites Induced Dermatitis in Dogs" funded by Central Council for Research in Homeopathy (Under Deptt. of AYUSH, Ministry of Health and Family Welfare, Govt. of India) (INR 27.47 Lakhs)
- **Co-Pi** of UPCAR, Uttar Pradesh funded project on "Evaluation of acaricide resistance and development of herbal formulations for tick control in large ruminants of Mathura" (21.08 Lakhs)
- **Co-Pi** of RKVY-RAFTAAR, Uttar Pradesh funded project on "Capacity Building & Entrepreneur Development of Farming Community through Establishment of Community Radio Station". (INR 98.57Lakhs)

Completed Projects

- **Resource Person** of UPCAR, Uttar Pradesh funded project on "Imparting Scientific Knowledge of Animal Rearing for Better Production through Technology Transfer to Livestock Owner'. (INR 14.812 Lakhs)
- **Associated Investigator** of ICAR funded Outreach Programme on Ethno-Veterinary Medicine entitled "Pharmacological Studies and Development of Polyherbal Formulation for Reproductive Disorders in Animals". (98.80 Lacs) (2014-2020)
- **Co-Pi** of RKVY; Uttar Pradesh funded project on "Strengthening of clinical diagnostic and therapeutic facilities at the university hospital for benefits of farmers and livestock owners. (INR 223.20 Lakhs)
- **Principal Investigator** of an institutionally funded project entitled "Studies on Effects of Prepartal Nutritional Supplements on Production Diseases of Indigenous Transition Cows" (INR 1.50 Lakhs)
- **Co-PI** of an institutionally funded project entitled "Evaluation of acaricidal potential of herbal essential oils against bovine ticks (1.90 Lakhs)

• **Co-PI** of an institutionally funded project entitled "Expression profile of cytokines and TLRs in cattle and buffaloes with natural tropical theileriosis" (2.00 Lakhs)

PROFESSIONAL MEMBERSHIPS

- Member of National Academy of Veterinary Science (NAVS), New Delhi.
- Member of Executive Council (Central Region Secretary) of Indian Society for Veterinary Medicine (ISVM) (2018-2023)
- Life member Indian Society for Veterinary Medicine (ISVM).
- Life member Indian Society for Advanced Canine Practice (ISACP).
- Life member -Indian Science Congress.
- Registered member Bihar Veterinary Council (BVC).
- Editorial member of International Journal of Veterinary Science and Research
- Editorial member of World Journal of Veterinary Science
- Editorial member of Journal of Veterinary Research and Animal Husbandry
- Associate Editor of International Journal of Parasitology Research
- Editorial member of "EC Veterinary Science Journal"
- Editorial member of "EC Pharmacology and Toxicology"

SCIENTIFIC CONFERENCE/SYMPOSIA/WORKSHOP ORGANIZED

- **Treasurer** of National Symposium of Indian Society for Buffalo Development on "Modern approaches for sustainable buffalo production in the scenario of climate change" held at DUVASU, Mathura (October 27-28, 2023)
- **Editorial Board Member** of 2nd Edition of International Conference on Dermatology Cosmetology: DERMATOLOGY 2023.
- **Organizing Secretary** of National Dialogue on "Sustainable growth and development of Indian Dairy Sector" of TAAS, New Delhi held at DUVASU, Mathura (December 16-17 2022)
- **Organizing member** of 2nd Annual Meeting of Society of Veterinary Science and Biotechnology (SVSB)-2014, organized at DUVASU, Mathura (UP), India.
- **Program Committee Member** (Referee) of 2nd Annual International Conference on Advances in Veterinary Science Research (VETSCI

2014) organized by Global Science and Technology Forum in Singapore.

SCIENTIFIC CONFERENCE/SYMPOSIA/WORKSHOP PARTICIPATED

- Participated in International Workshop on "Quality and Safety Audits of Foods from Animal Origin" organized at DUVASU, Mathura. (Dec 20-22, 2023)
- Participated in National Conference of Indian Society for Buffalo Development (ISBD) and Symposium on Modern Approaches for Sustainable Buffalo Production in the Scenario of Climate Change (ISBDCON 2023) organized by DUVASU, Mathura (October 27-28, 2023)
- Participated in First National Conference of Society for Promotion of Farm and Companion Animal (SPFCA) on the theme "Fostering One Health for Food Safety and Security through Sustainable Animal Husbandry & Aquaculture Practices" held at Bihar Veterinary College, BASU, Patna (November 10-11, 2022)
- Participated in 38th Annual Convention of ISVM organized by Department of Veterinary Medicine, KVAFSU, Veterinary College, Hebbal, Bengaluru (5-7 February 2020)
- Participated in 37th Annual Convention of ISVM-2019 organized by Department of Veterinary Medicine, RAJUVAS, Bikaner (1-3 February 2019)
- Participated in 36th Annual Convention of ISVM & National Symposium on "Animal Health Service delivery –The Priorities of the Professionals for Enhancing Farmers' Income"
- Participated in 1-3rd Feb2018, Organized by Department of Veterinary Medicine, Orissa University of Agriculture and Technology, Bhubaneswar.
- Participated in 35th Annual Convention of ISVM & National Symposium on "Innovative Techniques, Emerging Issues and Advancement in Veterinary Medicine to Meet the Challenges: Present and The Future" 22-24th Feb 2017, organized by Department of Veterinary Medicine, Veterinary College and Research Institute, Tirunelveli (TN).
- Participated in 34th Annual Convention of ISVM & National Symposium on "Newer Approaches in Diagnosis and Management of Animal Diseases for Sustainable Health and Production" 17-19th Feb 2016, Organized by Department of Veterinary Medicine, GADVASU, Ludhiana
- Participated in International Conference on "Challenges and Opportunities in the field of Veterinary Microbiology" and 28th Annual Convention of IAVMI 30/10/2014 to 01/11/2014., organized by Department of Microbiology, DUVASU, Mathura

 Participated in 31st Annual Convention of ISVM & National Symposium on "Advancing Veterinary Medicine and its Specialties in Farm and Companion Animals" 9-11th Jan 2013., organized by Department of Veterinary Medicine, CoVSc & AH, Mhow, NDVSU, Jabalpur (M.P.)

SCIENTIFIC JOURNALS REFEREE

- Scientific Reports
- Frontiers In Veterinary Science
- Frontiers In Immunology
- Frontiers In Pharmacology
- Experimental Parasitology
- Veterinary Quarterly
- Acta Veterinaria Eurasia
- Experimental and Applied Acarology
- Acta Parasitologica
- Tropical Animal Health and Production
- Topics in Companion Animal Medicine
- Veterinary Medicine and Science
- Molecular and Biochemical Parasitology
- Parasite Immunology
- BMC Veterinary Research
- Parasites & Vector
- Veterinary Parasitology
- Veterinary Immunology and Immunopathology
- Parasitology
- Livestock Science
- Veterinary Dermatology
- Phytotherapy Research
- Small Ruminant Research
- Veterinary Parasitology: Regional Studies and Reports
- Journal of Immunology and Immunotherapy
- Indian Journal of Animal Sciences
- World Journal of Veterinary Science
- Research Opinion in Veterinary Science
- Journal of Parasitic Diseases
- Iranian Journal of Pharmacology and Therapeutics
- Iranian Journal of Veterinary Research
- Haryana Journal of Field Veterinarian
- National Journal of Integrated Research in Medicine
- International Journal of Parasitology Research
- Proceedings of the National Academy of Sciences B: Biological Science

HONOURS AND AWARDS

- Appreciation award by Indian Society for Veterinary Medicine (ISVM)-2023
- Appreciation award Indian Society for Buffalo Development (ISBD)-2023
- Appreciation award by Indian Society of Genetics, Biotechnology Research and Development-2023
- Best Oral Presentation Award (2nd), Annual convention of VIPM society and National Symposium- held during 6th -7th May 2022 at NDUAT, Kuamarganj, Ayodhya, UP, presented by my PhD student Dr. Pradeep Kumar Ram.
- Best Oral Presentation Award (3rd), Annual convention of VIPM society and National Symposium- held during 6th -7th May 2022 at NDUAT, Kuamarganj, Ayodhya, UP, presented by my MVSc student Sanju Kumari.
- PhD student thesis awarded Shri Lal Bahadur Shastri VIPM Best PhD Thesis Award-2020 to my PhD student (Dr. Pradeep Kumar Ram)
- Awarded Membership of National Academy of Veterinary Science, New Delhi -2020
- Member of Executive Council of Indian Society for Veterinary Medicine (ISVM) (2018-2023)
- Mock Evaluator of Uttar Pradesh for National Mission of World Organization for Animal Health (OIE) for evaluation of Performance of Veterinary Services
- Awarded "Best Oral Presentation Award (1st)" in National Symposium and XIV Biennial Conference of Association of Public Health Veterinarians on "Public health challenge mitigation strategies at the confluence of One Health Approaches" held during 24-25 January 2020 at DUVASU, Mathura.
- Awarded "Best Oral Presentation Award (1st)" in "Complementary and Alternative Medicine" session of 37th Annual Convention of ISVM held during 01-03 February 2019 at RAJUVAS, Bikaner.
- Rapporteur for a Scientific Session of 36th Annual Convention and National Symposium of ISVM held during 01-03 February 2018 at Bhubaneswar.
- Awarded "Best Oral Presentation Award (1st)" in "Companion Animals Infectious Diseases" technical session of 36th Annual Convention and National Symposium of ISVM-2018 at Bhubaneswar.

- Awarded "Best Poster Presentation Award (2nd)" in Wild, Zoo & Exotic Animals Medicine" technical session of 36th Annual Convention and National Symposium of ISVM-2018 at Bhubaneswar.
- Awarded "Best Oral Presentation Award (2nd)" in 35th Annual Convention of ISVM and National Symposium (2017)
- Awarded "Best Oral Presentation Award (3rd)" in 35th Annual Convention of ISVM and National Symposium (2017)
- Awarded "Best Poster Award (3rd)" in 34th Annual Convention of ISVM and National Symposium (2016)
- Awarded "Best Poster Award (3rd)" in 32nd Annual Convention of ISVM and International Symposium (2014)
- Awarded "Best Poster award (2nd)" in XXVII IAVMI Annual Convention (2013)
- Commendation letter for Outstanding Participant in 21 days summer school training organized at GADVSU-2013
- Best Student Award for PhD (2013) (IVRI Bronze Medal for PhD)
- Vice-chancellor's appreciation letter (2013)
- Rapporteur in 31st Annual Convention of ISVM (2013)
- Best clinical article ISVM award (2009)
- Senior Research Fellowship, ICAR, (2007)
- Merit Scholarship for PhD (2007)
- Junior Research Fellowship, ICAR, (2005)

SUCCESS OF STUDENT (AS MAJOR GUIDE)

MVSc students have joined the Government Sectors

- Dr. Vivek Kumar Singh, Assistant Professor, BASU, Patna, Bihar.
- Dr. Alok Singh, Assistant Professor, NDUAT, Kumargani
- Dr. Deepak Sharma, Veterinary Officer Rajasthan Gov.
- Dr. Krishna Veer Singh, Veterinary Officer Uttar Pradesh Gov.
- Dr. Brajesh K Yadav, Veterinary Officer Uttar Pradesh Gov.
- Dr. Sanju Kumari, Veterinary Officer Uttar Pradesh Gov.
- Dr. Sarita Kanwal, Veterinary Officer Uttarakhand Gov.

Concepts/Process

(1.) **Concept** of association of TLRs in host-parasite interplay during the canine demodicosis was documented by Kumari et al. (2018) for the first time (Kumari P, Nigam R, Choudhury S, <u>Singh SK</u>, Yadav B, Kumar D, Garg SK. 2018. *Demodex canis* targets TLRs to evade host immunity and induce canine demodicosis. *Parasite Immunology* 40(3). e.12509. doi: 10.1111/pim.12509.) This published report has been cited in an

- international esteemed book of Dermatology namely "Plewig and Kligman's Acne and Rosacea. 2019. In Demodex Mites and Demodicosis. Springer, Cham., p 573-594. Additionally, this scientific report has also been cited in **14** referred research publications.
- (2.) **Concept** of T-cells response (CD4+ and CD8+ T cells regulation) in pathogenesis of canine demodicosis was documented by Singh et al. (2010) for the first time (Singh S K, Dimri U, Sharma M C, Sharma B and Saxena M. 2010. Determination of CD4+ and CD8+ T cells in the peripheral blood of dogs with demodicosis. *Parasitology* 137: 1921–1924.) This published report has been cited in an international esteemed book of Veterinary Dermatology namely "Muller and Kirk's Small Animal Dermatology" (Miller WH, Griffin CE and Campbell K L. 2013. Parasitic skin diseases. In: *Muller and Kirk's Small Animal Dermatology*, 7th edition. Philadelphia, PA: W.B. Saunders Co., p 284-342.). Additionally, this scientific report has also been cited in **39** referred research publications.
- (3.) **Concept** of development of a novel therapeutic approach having glucocorticoids sparing potential for management of canine atopic dermatitis was documented by Singh et al. (2010) for the first time by using pentoxifylline and PUFAs (Singh S K, Dimri U, Saxena S K and Jadhav R K. 2010. Therapeutic Management of canine atopic dermatitis by combination of pentoxifylline and PUFAs. Journal of Veterinary Pharmacology and Therapeutics 33: 495–498). This published report has been cited in an international esteemed book of Veterinary Science namely "Veterinary Allergy" (Mueller R S. 2014. conventional treatments: In Noli C, Wayne A F and Rantz R; Veterinary Allergy, WILLEY BLACKWELL, p 96-100). This published report is also cited in another international esteemed book of Veterinary Science namely "Kirk's Current Veterinary Therapy XV" (John D. Bonagura, David C. Twedt, 2013. Canine atopic dermatitis, Elsevier Health Sciences). This report is also cited in Proceeding of the Seventh World Congress of Veterinary Dermatology in "Advances in Veterinary Dermatology" (Rosenkrantz WS and Meldelsohn CL. 2013. Refractory Atopic Dermatitis: In Sheila M F T, Linda A F and Ann M H; Advances In Veterinary Dermatology, vol 7: WILLEY BLACKWELL, Chapter 8.8.). Additionally, this report has also been cited in 35 referred research publications.
- (4.) **Concept** of over production of reactive oxygen species and hastened apoptosis of peripheral blood leukocytes in pathogenesis of canine sarcoptic mange was revealed by Singh et al. (2011) for the first time (Singh S K, Dimri U, Sharma M C, Swarup D and Sharma B. 2011. Determination of oxidative status and apoptosis in peripheral blood of dogs with sarcoptic mange. *Veterinary Parasitology* 178: 330-338.). This published report has been cited in an internationally esteemed book namely "Intracellular Membranes—Advances in Research and

- Application: 2012 Edition" (Acton A. 2012. In: *Intracellular Membranes—Advances in Research and Application*. Scholarly Editions, Atlanta, Georgia). Additionally, this report has also been cited in **41** referred research publications.
- (5.) **Concept** of increased apoptosis of leukocytes in immuno-pathogenesis of canine demodicosis was documented by Singh et al. (2011) for the first time (Singh SK, Dimri U, Sharma MC, Swarup D, Sharma B, Pandev HO, Kumari Ρ. 2011. The role apoptosis of immunosuppression of dogs with demodicosis. Vet Immunopathol., 144: 487-492.) This published report has been cited in international esteemed book "6th edition of Jubb, Kennedy, and Palmer's Pathology of Domestic Animals" by Maxie MG; Edinburgh; New York: Elsevier Saunders pp, 628, e1). Additionally, this scientific report has also been cited in **35** referred research publications.

Methodology Developed:

Developed new rapid method "Superglue Slide Impression (SSI) **Method**" of detection of *Demodex* mites in dogs "Singh SK. 2019. Superglue Slide Impression (SSI) method: A novel diagnostic application for canine demodicosis. *Experimental and Applied Acarology*. 79(3-4):387-393.

Book Published:

A Textbook as per VCI syllabus for B.V.Sc & AH course "A Text Book of Veterinary Medicine: Production, Metabolic and Deficiency Diseases" Kalyani Publisher, New Delhi-2020

PUBLICATIONS

Total Citations : 1080 h-index : 20 i10-index : 32

Publications NAAS Rating

- **1.** Paliwal S, Shanker D, Sudan V, **Singh SK**. 2023. Comprehensive **9.20** genetic diversity and molecular evolutionary analysis of Theileria annulata isolates based on TAMS 1 gene. Ticks and Tick-borne Diseases. 14 (6): 102241.
- **2.** Khare S, Kumar M, Kumar V, Kushwaha R, Vaswani S, Kumar A, Yadav RS, **Singh SK**, Singh Y, Shukla PK. 2023. Dietary Chromium Picolinate Supplementation Improves Glucose Utilization in Transition Calf by Ameliorating Insulin Response. 201(6):2795-2810.
- **3. Singh SK**, Jaiswal AK, Kumari S, Gaur RS, Sharma P, Khushboo R, **8.60** Jaiswal M. 2022. Therapeutic effects of oral fluralaner in pet rabbits

- with severe sarcoptic mange (*Sarcoptes scabiei*). Veterinary Parasitology. 304:109693. doi: 10.1016/j.vetpar.2022.109693.
- **4.** Kumar S, Paliwal S, Sudan V, Shanker D, **Singh SK**. 2022. An **9.10** endpoint visualization loop-mediated isothermal amplification (LAMP) for detecting bubaline theileriosis. *Beni-Suef Univ J Basic Appl Sci* 11, 67. https://doi.org/10.1186/s43088-022-00251-x
- **5.** Ram PK, **Singh SK**, Sudan V. 2021. The phenotypic and haematobiochemical appraisal of tropical theileriosis in newborn calves. Tropical Animal Health and Production 53, 477. https://doi.org/10.1007/s11250-021-02889-8
- **6.** Kanwal S, **Singh SK**, Soman SP, Choudhury S, Kumari P, Ram PK, **10.60** Garg SK. 2021. Expression of barrier proteins in the skin lesions and inflammatory cytokines in peripheral blood mononuclear cells of atopic dogs. *Scientific Reports* 11, 11418. https://doi.org/10.1038/s41598-021-90992-z
- **7.** Yadav BK, Singh VK, **Singh SK**. 2021. Lipid mobilization and serum **7.10** metabolites dynamics of Sahiwal cows during the transition period. Biological Rhythm Research, 52(9), 1364-1371.
- **8.** Gaur RS, Shanker D, Sudan V, **Singh S**, Jadaun A. 2021. Associative **4.78** Diversity of ITS 1 gene in Different *Trypanosoma evansi* Isolates of Equine Origin from Semi Arid India. Journal of Animal Research, 4(11), 755-760.
- **9.** Kumar S, Sudan V, **Singh S**, Shanker D, Devi A, Gaur RS. 2021. Equi **5.00** merozoite antigen 1 (ema 1) gene based phylogenetic characterization of *Theileria equi* from Mathura, India. Journal of Veterinary Prarasitology, 35(2), 108-113.
- **10.** Ram PK, **Singh SK**, Srivastava A, Kumar G, Jaiswal AK, Yadav B, **9.90** SK Garg. 2021. Effects of Injectable Trace Minerals (ITMs) on Th1/Th2 Cytokine Balance of Newborn Calves with Tropical Theileriosis. *Biological Trace Element Research* 199 (4), 1397-1404.
- 11. Singh VK, **Singh SK**, Tripathi AK, Nakade UP, Choudhury S, Yadav **7.10** B, Garg SK. 2021. Evaluation of immuno-regulatory cytokines and negative energy balance markers drift of zebu cows during the transition period. Biological Rhythm Research 52 (2), 199-205.
- **12.** Gaur RS, Shanker D, Sudan V, Paliwal S, **Singh S**, Jadaun A. **7.50** 2021. Associative Genetic Diversity of RoTat 1.2 VSG in Different *Trypanosoma evansi* Isolates. *Acta Parasitologica* 66, 199–204.
- 13. Ram PK, Singh SK, Kumari P, Srivastava M, Sudan V, Pandey RP, 8.20

- Garg SK. 2020. Role of cytokines in the clinical manifestation of exophthalmia in newborn calves with tropical theileriosis. *Parasite Immunology* 42 (10), e12761.
- **14. Singh SK**, Singh VK, Yadav BK, Singh RK. 2020. Canine trypanosomiasis requires repeated administration of diminazene ---- aceturate. *Indian Journal of Veterinary Medicine*, 40(1), 11-15.
- **15.** Soman SP, **Singh SK**, Kumari P, Choudhury C, Singh A, Kanwal S, **8.60** Khushboo R, Garg SK. **2020**. Quantification of immuno-regulatory cytokine and toll-like receptors gene expression in dogs with generalized demodicosis. *Veterinary Parasitology* 280: 109063.
- **16. Singh SK**. 2019. Superglue Slide Impression (SSI) method: A novel **8.20** diagnostic application for canine demodicosis. Experimental and Applied Acarology. 79(3-4):387-393.
- **17.** Singh A, Kumari P, **Singh SK**, Soman SP, Choudhury S, Srivatava **8.60** A, Nigam R, Garg SK. 2019. Pre- and post-therapy circulating immuno-stimulatory and immuno-suppressive cytokines in dogs with juvenile-onset generalized demodecosis. Veterinary Parasitology 275: 108954.
- **18.** Chaudhary SK, **Singh SK**, Kumari P, Kanwal S, Soman SP, **7.40** Choudhury S, Garg SK. 2019. Alterations in circulating concentrations of IL-17, IL-31 and total IgE in dogs with atopic dermatitis. Veterinary Dermatology. 30: 383–e114.
- **19. Singh SK**, Singh VK, Ram PK, Yadav BK, Nakade UP. 2018. --- Assessment of non-corpuscular markers of protein oxidation, lipid peroxidation and antioxidant status of calves with natural tropical theileriosis. Indian J. Vet. Med. 38 (1&2), 60-63.
- **20.** Varshney JP, Kumar G, **Singh SK**. 2018. Evaluation of promising **7.80** biochemical markers of nutritional osteodystrophy in goats. Small Ruminant Research 169, 86-89.
- 21. Gupta KK, Srivastava M. Sudan V, Singh **SK**, Choudhury **7.70** Variation D. 2018. in cardiac markers S, Shanker electrocardiographic alterations in young calves naturally infected with bovine tropical theileriosis. Tropical Animal Health and Production 50(6): 1227-1230.
- **22.** Kesharwani PK, Kumar V, Roy D, Kumar M, **Singh SK**, Kushwaha **5.19** R, Vaswani S. 2018. Effect of feeding sugarcane molasses based distilleries raw spent wash on growth performance, nutrient utilization and blood biochemical parameters in heifers. Indian Journal of Animal Nutrition, 35(1): 22-30.

- **23. Singh SK**, Singh VK, Kumari P, Nakade UP, Garg SK. 2018. **7.90** Trypanosoma evansi induces detrimental immuno-catabolic alterations and condition like type-2 diabetes in buffaloes. Parasitology International 67 (2): 140-143.
- **24.** Kumari P, Nigam R, Choudhury S, **Singh SK**, Yadav B, Kumar **8.20** D, Garg SK. 2018. Demodex canis targets TLRs to evade host immunity and induce canine demodicosis. Parasite Immunology 40(3).e. 12509. doi: 10.1111/pim.12509.
- **25.** Ajith Y, Dimri U, Dixit SK, **Singh SK**, Gopalakrishnan A, Madhesh **11.80** E, Rajesh JB, Sangeetha SG. 2017. Immunomodulatory basis of antioxidant therapy and its future prospects: An appraisal. Inflammopharmacology 25(5): 487-498.
- **26.** Kumari P, Nigam R, Singh A, Nakade UP, Sharma A, Garg **8.40** SK, **Singh SK**. 2017. Demodex canis regulates cholinergic system mediated immunosuppressive pathways in canine demodicosis. Parasitology 144(10):1412-1416.
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Lead Paper/Expert Lecture in Scientific Training

- **Expert Lecture** on "Bio-markers of diagnostic importance in livestock metabolic diseases- A novel disease phenotype for herd health management" in ICAR Sponsored 10 days short course on "Recent Developments in Livestock Phenome Data Recording, Analysis and Interpretation in the Era of Genomics" held at ICAR-National Research Centre on Camel, Bikaner, from 3rd to 12th Jan 2024.
- **Lead Paper** on "Production diseases of buffaloes under impending climatic changes" in National Symposium of Indian Society for Buffalo Development on Modern approaches for sustainable buffalo production in the scenario of climate change. October 27-28, 2023 at DUVASU Mathura.

- **Expert Lecture** on "Management of Production Diseases in Goats" in ICAR Sponsored Winter School from 11th to 31st Jan, 2022 organized by Veterinary Physiology Department, DUVASU, Mathura
- **Expert Lecture** on "Production disease management of dairy cows under impending climatic changes" in DST-SERB sponsored High-end Workshop, at IVRI, Izatnagar held during 18th to 27th September 2023.

Institutional Building Activities

- Assistant Director Research
- Hostel Warden (SN Hostel)
- Internship Coordinator of Veterinary Medicine Unite
- Advisory Board Member of Institute of Para-Veterinary Sciences
- Member of Drafting Committee of DUVASU IT Policy-2022
- Member of Infrastructure and Learning Resources Committee
- Convener of Clinical Health Camps
- Member of e-tender evaluation team of the University
- Sports Counsellor- Men's Table Tennis
- In-charge of PG Laboratory, Department of Veterinary Medicine