



Dr. Sabahat Gazal
Assistant Professor/ Junior Scientist
Veterinary Microbiology and Immunology
SKUAST-Jammu, India
Contact: +917006252941
Email: gazalsabahat@gmail.com

Career objectives Looking forward to be a part of a dynamic team in an organization where my knowledge and skills could be enriched; and to work for challenging job/assignment which adds to my knowledge and expertise.

Education

Degree	Discipline	Year	University	Grade
Ph.D.	Pathobiology	2016-2021	Pennsylvania State University, USA	4 on 4
M.V.Sc (Masters in Veterinary Sciences)	Veterinary Microbiology and Immunology	2008-2010	Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu (SKUAST-Jammu)	8.47 (84.7%) Recipient of University Merit Certificate
B.V.Sc (Bachelors in Veterinary Sciences)	All degree subjects as per Veterinary Council of India	2003-2008	SKUAST-Jammu	7.42 (74.2%)

Ph.D. Research Elucidating the role of host factors in henipavirus budding

M.V.Sc Research G and P Typing of group A rotavirus from lambs

Awards/ Fellowships

- University Merit certificate** for M.V.Sc Veterinary Microbiology in 2010
- ICAR-NET** 2011
- ICMR-JRF** 2011
- ICAR-SRF** 2011
- Netaji Subhas ICAR International fellowship** 2015
- Qualified **GRE** with an overall rank of 311 on 340
- Qualified **TOEFL** with score of 106 on 120
- IELTS** band score 7.5
- From 2016-2021, worked as a graduate student at **Pennsylvania State University, USA** and was conferred PhD in Pathobiology in 2021
- Appointed as member of **Divisional Level Task** force for assessing progression of Lumpy Skin Disease and suggest preventative measures, vaccination strategies and treatment protocols for controlling LSD in the UT of J&K in Aug 2022.
- Awarded **1st prize** in the presentation entitled "Comparative sensitivity of LAMP and PCR assays for detection of *Streptococcus agalactiae*" by Rizwana Zargar, P. Raghuvanshi, S. Gazal, A. Rastogi, Aditi Lal Koul et al. at International Conference on Recent Trends in Bioinformatics and Biotechnology for Sustainable Development organized by FVSc &AH, SKUAST-Jammu from Oct 12-13, 2017

12. **1st Prize** in oral presentation: Parul Gupta, Raman Taggar, A.K. Das, R. Katoch, Nishant Kumar, D. Chakraborty, D. Kumar, V. Vohra, S. Gazal. Increased expression of interleukins following challenge with *Hemonchis contortus* in Rambouillet crossbred sheep in National symposium on Policy planning for Livelihood security through Domestic Animal biodiversity & XIII Annual convention on Society for conservation of Domestic Animal Biodiversity organized by Division of Animal Genetics and Breeding, Faculty of Veterinary Sciences and Animal Husbandry, SKUAST-Jammu, R.S. Pura from Feb 11-12, 2016
13. Awarded **3rd prize** in poster presentation on the topic “Phenotypic and genotypic characterization of Extended Spectrum Beta lactamase producing *Klebsiella pneumoniae* in bovines from Jammu region India” by Deep Shikha, M. Rashid, Sabahat Gazal, M. A. Bhat, A. K. Taku et al. in XXXIV Annual Convention of Indian Association of Veterinary Microbiologists, Immunologists and Specialists in Infectious Diseases and National Conference on Current Trends in Immunodiagnosics & Vaccinology for health of livestock and poultry organized by Department of Veterinary Microbiology, ICAR-Centre of Advanced Faculty Training, College of Veterinary Sciences, LUVAS, Hisar from May 27-28, 2022
14. Acted as a **rappporteur** in XXXIV Annual Convention of Indian Association of Veterinary Microbiologists, Immunologists and Specialists in Infectious Diseases and National Conference on Current Trends in Immunodiagnosics & Vaccinology for health of livestock and poultry organized by Department of Veterinary Microbiology, ICAR-Centre of Advanced Faculty Training, College of Veterinary Sciences, LUVAS, Hisar from May 27-28, 2022
15. Acted as **rappporteur** during XXVII Annual Convention of ISVIB and National conference on ‘Leveraging Emerging Biotechnologies for One Health’ organized by Divisions of Veterinary Microbiology and Immunology and Animal Biotechnology, SKUAST-Kashmir from July 27-29, 2023.
16. **Best poster** presentation award for the poster entitled ‘Epidemiology of Lumpy skin disease across the UT of J&K and GPCR based characterization of the outbreak virus of 2022’ by Sabahat Gazal, GA Badroo, Deep Shikha et al. during technical session 1 in XXVII Annual Convention of ISVIB and National conference on ‘Leveraging Emerging Biotechnologies for One Health’ organized by Divisions of Veterinary Microbiology and Immunology and Animal Biotechnology, SKUAST-Kashmir from July 27-29, 2023.
17. Awarded **ISVIB best poster presentation award-III, 2022** for ‘Epidemiology of Lumpy skin disease across the UT of J&K and GPCR based characterization of the outbreak virus of 2022’ by Indian Society for Veterinary Immunology and Biotechnology for scientific work on through poster presentation in the field of Veterinary Immunology and Biotechnology.

Trainings/Workshops

- Participated in 21 days training on “Recent advances in disease diagnosis and vaccines” organized by Department of Veterinary Microbiology, College of Veterinary Science & Animal Husbandry, Jabalpur (M.P) from July 27, 2021 to August 16, 2021.
- Participated in 21 days online International e-Training cum Orientation Programme entitled “Immunology – A Tool for Disease Management” organized by Department of Veterinary Microbiology, College of Veterinary Science & Animal Husbandry, Mhow (M.P.) from 11th October 2021 to 31st October 2021.
- Participated in National workshop on Lumpy Skin Disease in India: Current scenario and future challenges organized by ICAR, NIVEDI Bengaluru on 27th January, 2023
- Participated in 11 days International online workshop on "Scientific Writing & Publication" from 30th April to 10th May 2022 conducted by Indian Veterinary Journal (IVJ).
- Participated in IP Awareness/Training program under National Intellectual Property Awareness Mission on July 13, 2022.
- Participated in 12th UGC-Networking Resource Centre Workshop on Molecular Virology organized by Indian Institute of Science, Bangalore from 20th March to 31st March 2015.
- Participated in 5th Science conclave/INSPIRE Internship program organized by MHRD-DST at IIT-A from Dec 8-14, 2012.

Seminars/ Posters/ Conferences attended in USA

- Attended American Society of virology (ASV) meet held at University of Maryland (USA) from July 14 to July 18, 2018 and presented the poster entitled “Linking paramyxovirus M proteins to ESCRT through angiomotins”.
- Attended Life Sciences symposium held at Penn State University (USA) on May 18th, 2018 and presented poster entitled “AmotL1 links paramyxovirus M protein with ESCRT”.
- Participated in Graduate exhibition 2019 organized by Penn State (USA) from March 22 to 24, 2019 and presented poster entitled “AmotL1 acts as an adapter and links paramyxovirus M protein to ESCRT machinery”.
- Presented poster at We Are the World Weekend Showcase organized by Penn State (USA) on March 29, 2019.

Projects

1. CoPI in HADP project on ‘Development and evaluation of a new generation vaccine against Newcastle disease in chicken’ vide No. AUJ/FVSc/2023-24/F-99/1205-1216 dt 13-07-2023
2. CoPI in the University funded project on Diagnosis and Interventinal strategies for prevention and control of Shiga toxin producing E. coli from animals, poultry, foods of animal origin and livestock reares sanctioned vide No. AUJ/DR/2021-22/F-50/587-628 dt. 7.06.2021
3. CoPI in DBT Project on Exploration of respiratory metagenome of small ruminants and establishment of referral diagnostic facility (BT/PR12582/BPA/118/50/2014 dt: 25.03.2015)
4. CoPI in the University funded project on Diagnosis and management of economically important ‘poultry diseases’ sanctioned vide No. AUJ/FVSc/VPP/21-22/URF-PD/06-11 dt. 23.03.2022

Publications

S. No	Publication Title	Type	Journal	NAAS rating of Journal 2023
1	Nipah and Hendra Viruses: Deadly Zoonotic Paramyxoviruses with the Potential to Cause the Next Pandemic Sabahat Gazal, N. Sharma, S. Gazal, M. Tikoo, Deep Shikha, G.A. Badroo, M. Rashid and SJ Lee.	Review	Pathogens 2022, 11(12), 1419	10.53
2	Predominance of rotavirus genotype G6P[11] in diarrhoeic lambs. Sabahat Gazal, A. K. Taku, B. Kumar	Research	The Veterinary Journal (2012) 193(1): 299-300	8.75
3	Group A rotavirus and bacterial agents associated with diarrhea induced hospitalizations in children below 5 years of age in Jammu. Sabahat Gazal, A. K Taku, M. A. Bhat, G. A. Badroo.	Research	Indian Journal of Medical Microbiology (2014) 32(1): 57-59.	7.35
4	Outbreaks of virulent Newcastle Disease in pigeons and backyard fowls of Jammu region SA Andrabi, N Nashiruddullah, Deep Shikha, Sabahat Gazal , N Bandi, R Abrol, Biswajit Brahma, S Rahman, Pankaj Gowsami, Shilpa Sood, JA Ahmed, DA Nehru	Research	Scientist (2022) NAAS 2022 6.87	7.72

5	Virulence Characterization of <i>Dichelobacter nodosus</i> from Clinical Cases of Ovine Footrot. Badroo, G.A., Taku, A., Mir, I.A., Bhat, M.A., Kumar, B. and Gazal, S.	Research	Israel Journal of Veterinary Medicine (2017) 72 (1): 17-21	6.32
6	Molecular Characterization and Antimicrobial Resistance Profiling of Extended Spectrum Beta-lactamase (ESBL) Producing <i>Escherichia coli</i> in Bovines from J and K, India Deep Shikha, Variender Singh Wazir, Mohd Rashid, Mohd Altaf Bhat, Indica Sharma, Anil Taku, Sabahat Gazal , Shekhar Mishra, Mehak Tikoo, Bhanu Partap Singh	Research	Indian Journal of Animal Research (2021) 10.18805/IJAR.B-4877	6.43
7	Serogroup, detection, antibiotic resistance patterns and virulence gene profile of <i>Escherichia coli</i> isolated from diarrheic sheep Sabahat Gazal , A. K. Taku, M.A. Bhat, Bablu Kumar, G.A. Badroo	Research	Indian Journal of Animal Sciences (2012) 82(11):1290-1292	6.29
8	Phenotypic and genotypic characterization of extended spectrum beta- lactamases producing <i>klebsiella pneumoniae</i> in bovines from jammu region, india Deep Shikha, Virendera Singh Wazir, Mohd Rashid and Sabahat Gazal	Research	Ruminant Science (2021) 10 (2):253-259.	5.47
9	Revelation of antibiotic resistant bacteria from cases of bovine mastitis Sabahat Gazal , Asif Iqbal, Irfan Mir, Manzoor Ahmad	Research	Indian Journal of Field Veterinarians 8(2): 75	5.58
10	Isolation of fungi associated with an outbreak of Degnala Disease in Jammu 2012 Sabahat Gazal , Irfan Mir, Asif Iqbal, Reyaz Chauhan, Abid Ali, Manzoor Ahmad	Research	Indian Journal of Field Veterinarians 8(2): 73	5.58
11	Prevalence and bacteriological examination of clinical and sub-clinical cases of caprine Mastitis in Jammu, India. Anil Taku, Gulzar Ahmad Badroo, Sabahat Gazal , Irfan Ahmad Mir, M.A. Bhat, R.K. Bhardwaj, Rajni Kanta Sharma, Amitoz Kour, Hamid Shah and Faizan Javaid.	Research	Journal of Pure and Applied Microbiology (2016) 10(2):1585-1589	5.05
12	The study of aerobic bacterial flora of the upper respiratory tract of equines from Jammu and Kashmir region of India Irfan Ahmad Mir, Bablu Kumar, Anil Taku, N. Wani, Farah Naz Faridi, Showkat Ahmad Dar, Sabahat Gazal , Gulzar Ahmad Badroo, Aijaz Ahmad Zargar and Asif Iqbal.	Research	Vet World (2013) 6(9): 623-627	4.83

13	Determination of virulence factors and antibiotic resistance with special emphasis on extended spectrum β lactamase producing <i>Escherichia coli</i> from sheep and goats in Jammu, India Shekhar Mishra, M. Rashid, Deep Shikha, Sabahat Gazal , Mehak	Research	SSRN https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4292965	
14	A rare case of <i>Malassezia pachydermatis</i> induced stomatitis in a dog R. Bhardwaj, Sabahat Gazal , A. K. Taku, M.A. Bhat	Research	The Indian Veterinary Journal (2013) 90(11): 69	-
15	VP7 gene based detection of group A rotavirus from lambs in Jammu Sabahat Gazal , A. K. Taku, B. Kumar et al.	Research	The Indian Veterinary Journal (2012) 89 (8): 9-10	-
16	Effect of paddy straw and pine leaves as bedding material on the live performance of broiler chicks Gourav Sharma, Asma Khan, Sabahat Gazal	Research	The Indian Veterinary Journal (2015) 92 (4): 27 - 30	-
17	Electropherotyping of rotavirus from lambs in Jammu Sabahat Gazal , A.K. Taku, Bablu Kumar, M. Maqbool, S. Bashir	Research	Journal of Research-SKUAST-J (2011) 10(1): 8-11	-
18	Metagenomics - Accessing the Inaccessible Sabahat Gazal , Irfan A Mir, Asif Iqbal	Review	International Journal of Livestock Research (2012) 2:2	-
19	Ovine rotaviruses S. Gazal , I.A. Mir, A. Iqbal, A.K. Taku, B. Kumar, M.A. Bhat	Review	Open Veterinary Journal (2011) 1: 50-54	-

Sequences published in GenBank, NCBI

S.No.	Title
1	Taku AK., Bhardwaj R., Gazal S , Bhat MA, Badroo GA and Sawant P. <i>Proteus mirabilis</i> strain Jammu 16S ribosomal RNA gene, partial sequence. GenBank Acc. KP401767.1
2	Taku AK, Badroo GA, Kumar B, Bhat MA, Mir IA. and Ghazal S . <i>Dichelobacter nodosus</i> clone Jammu 01B proline-glycine repeat protein (pgr) gene, partial cds. GenBank Acc. JN601141.1
3	Taku AK, Badroo GA, Kumar B, Bhat MA, Mir IA. and Ghazal S . <i>Dichelobacter nodosus</i> strain Jammu integrase A2 gene, partial cds. GenBank Acc. JN574475.1
4	Shikha D, Bhat MA., Rashid M., Gazal S . and Wazir VS. 2021. <i>Escherichia coli</i> strain SHV-B1 plasmid SHV family beta-lactamase (blaSHV) gene, partial cds. GenBank acc. MZ817078.1
5	Shikha D, Bhat MA, Rashid M, Gazal S . and Wazir VS. <i>Escherichia coli</i> strain CTXM15-B2 plasmid CTX-M family beta-lactamase (blaCTX-M) gene partial cds. GenBank acc. MZ817079.1
6	<i>Escherichia coli</i> strain CTXM15-C3 plasmid CTX-M family beta-lactamase (blaCTX-M) gene partial cds. 2021. Shikha D, Bhat MA, Gazal S , Rashid M and Wazir VS. GenBank acc. MZ817080.1

7	Shikha D, Bhat MA, Gazal S , Rashid M and Wazir VS. Escherichia coli strain SHV-C4 plasmid SHV family beta-lactamase gene, partial cds GenBank acc. MZ817081.1
8	Badroo GA, Farooq S, Gazal S , Kashoo, Z. and Bhat MA. Lumpy skin disease virus isolate Kashmir G-protein-coupled chemokine receptor gene, complete cds GenBank acc. OQ355030.1
9	Akhter S, Gazal S , Badroo G, Bhat MA, Brahma B. and Gazal S. Lumpy skin disease virus isolate Jammu. GenBank acc OR209679
10	Gazal S , Badroo G, Bhat MA, Farooq S, Akhter S, Gazal S. and Brahma B. Lumpy skin disease virus isolate Poonch, J&K. GenBank acc OR209678
11	Sharma N, Balaji N, Gazal S . 2023. Pseudomonas protegens strain JNB1001 16S ribosomal RNA gene, partial sequence GenBank acc OR387387
12	Sharma N, Balaji N, Gazal S . 2023. Pseudomonas putida strain JNB1003 16S ribosomal RNA gene, partial sequence GenBank acc OR387478
13	Sharma N, Balaji N, Gazal S . 2023. Serratia liquefaciens strain JNB1002 16S ribosomal RNA gene, partial sequence GenBank acc OR387476
14	Sharma N, Balaji N, Gazal S . 2023. Serratia rubidaea strain JNB1004 16S ribosomal RNA gene, partial sequence GenBank acc OR387479

Techniques known

- PCR, Gel electrophoresis of DNA
- Cloning, Plasmid maxiprep and miniprep
- Cell culture, Transfection
- VLP isolation
- PAGE, Western blotting
- Fluorescence microscopy
- Co-Immunoprecipitation assays
- Membrane co-flotation assay
- TCID50
- HA/HI tests
- Isolation and identification of bacteria
- Basic bacteriology techniques

Permanent address

Lane 3, Moh. Fatehpur Gujran
Upper Paloura, Jammu, J&K, India
Pin: 180013 P.O. Roop Nagar, India

University address

Division of Veterinary Microbiology
Faculty of Veterinary Sciences
Sher-e- Kashmir University of Agricultural Sciences & Technology
of Jammu (SKUAST-Jammu), R.S. Pura-181102, India