

## PROFILE

1. Name : Dr Sanjay Barua



2. Age : 46 years

3. Gender: Male

4. Designation: Principal Scientist

5. Phone: +91- 1662-278790 ; +91- 1662-275787

6. Email: sbarua06@gmail.com

7. Name of the Institute : Veterinary Type Culture Collection, ICAR-NRC on Equines, Hisar

8. Department : NA

9. Postal address : Veterinary Type Culture Collection, ICAR-NRC on Equines , Hisar, Haryana-125001

10. Highest Educational Qualification: Ph.D

11. Experiences in Academics :

Position held	Name of Institute	Period	
		From	To
Principal Scientist	Veterinary Type Culture Collection, ICAR-National Research Centre on Equines, Sirsa Road, Hisar-125001 Haryana	27.03.2012	Continuing
Senior Scientist	Veterinary Type Culture Collection, ICAR-National Research Centre on Equines, Sirsa Road, Hisar-125001 Haryana	27.03.2006	26.03.2012
Scientist (Senior Scale)	ICAR- Central Institute for Research on Goats, Makhdoom, Farah, Mathura Uttar Pradesh	01.12.2002	26.03.2006
Scientist	ICAR- Central Institute for Research on Goats, Makhdoom, Farah, Mathura Uttar Pradesh	27.03.1997	30.11.2002

**Area of Specialization/research area:** Veterinary Virology, Molecular and Diagnostic Virology, Tissue culture and Molecular epidemiology of microbes.

12. Research experience: Currently, working as Principal Scientist & Incharge at Veterinary Type Culture Collection, ICAR-NRC on Equines. Scientist has eighteen (19) years of experience in

tissue culture and characterization of viruses such as Morbilliviruses (Rinderpest, Peste des petits ruminants virus, PPRV), Herpesvirus (IBRV), Adenovirus (FAV), Reoviruses (BTV), Poxviruses (Camelpox, Buffalopox, Sheeppox, Goatpox, Orf) etc

#### **13. Association with disease diagnosis/ vaccine development:**

Associated with ongoing research programme on virus isolation, diagnosis, characterization and reposition for the past ten years at NCVTCC, ICAR-NRCE, Hisar.

#### **14. Awards/ Honors:**

Award/Recognition	Organization	Year
International Training in Advanced Biorisk Management at Australian Animal Health Laboratory (AAHL) Geelong, Victoria Australia	FAO Regional Office for Asia and the Pacific (FAORAP)	2011
International training in Bio-Security (Animal Science) in Veterinary Diagnostic Laboratory at the University of Minnesota, St. Paul, MN, USA	NAIP, ICAR, New Delhi	2010-11
ICAR Committee Member to develop protocols and strategic roadmap for conservation of microbes for Veterinary Type Culture repository.	ICAR, New Delhi	2008
Senior Research Fellowship	Indian Veterinary Research Institute Izatnagar Bareilly U.P.	1999
National Eligibility test in Veterinary Microbiology	Agricultural Scientist Recruitment Board, Indian Council of Agricultural Research, New Delhi	1994
Junior Research Fellowship for Post Graduation	Indian Veterinary Research Institute Izatnagar Bareilly U.P.	1991

#### **Research Publications**

Research articles: 31

#### **Other Publications**

Book Chapters/Manuals:	8
Abstracts/Proceeding papers:	40
Popular Articles:	10
Review Articles:	4
GenBank Submissions:	55

#### **15. Publications:**

No	Details	International impact factor	NAAS rating
1	Kumar N, <b>Barua S</b> , Riyesh T, Chaubey KK, Rawat KD, Khandelwal N, et al. (2016) Complexities in Isolation and Purification of Multiple Viruses from Mixed Viral Infections: Viral Interference, Persistence and Exclusion. <b>PLoS ONE</b> 11(5): e0156110. doi:10.1371/journal.pone.0156110	<b>3.234</b>	<b>9.23</b>
2	Thachamvally Riyesh, <b>Sanjay Barua</b> , Naveen Kumar, Naresh Jindal, Bidhan Chandra Bera, Gulshan Narang, Nand Kishore Mahajan, Devan Arora, Taruna Anand, Rajesh Kumar Vaid, Mansi Yadav, Surender Singh Chandel, Praveen Malik, Bhupendra Nath Tripathi, Raj Kumar Singh: <i>Isolation and genetic characterization of swinepox virus from pigs in India.</i> Comparative Immunology, Microbiology and Infectious Diseases 46 (2016) 60–65	<b>2.02</b>	<b>8.02</b>
3	Kumar N, <b>Barua S</b> , Riyesh T and Tripathi BN. Peste des Petits Ruminants: A Deadly Animal Plague to be Eradicated. Austin J Microbiol. 2015; 1(1) : 1004	<b>Open Access</b>	<b>Not Listed</b>
4	Bera BC, <b>Barua S</b> , Shanmugasundaram K, Anand T, Riyesh T, Vaid RK, Virmani N, Kundu S, Yadav NK, Malik P, Singh RK. Genetic characterization and phylogenetic analysis of host-range genes of Camelpox virus isolates from India. <i>Virus disease.</i> 2015 Sep;26(3):151-62.	<b>0.364</b>	<b>5.00</b>
5	Taruna Anand , Rajesh Kumar Vaid , Bidhan Ch. Bera , Jitender Singh , <b>Sanjay Barua</b> , Nitin Virmani , Rajukumar K. , Neeraj Kumar Yadav , Dinesh Nagar , Raj K. Singh and B.N. Tripathi Isolation of a lytic bacteriophage against virulent Aeromonas hydrophila from an organized equine farm. J. Basic Microbiol. 2015, 55, 1–6	<b>1.823</b>	<b>7.2</b>
6	G.G. Sonawane, B.N. Tripathi , Riyesh, T , <b>S. Barua</b> , F. Singh, Vinod Kumar S.K. Dixit, J. Kumar and R.K. Singh. Clinico-pathological features and management of an outbreak of Contagious ecthyma in an organized goat farm in Rajasthan. The Indian Journal of Small Ruminants 2015, <b>21</b> (2): 264-268	<b>Not Listed</b>	<b>4.89</b>
7	Taruna Anand, Rajesh. K. Vaid, Bidhan. C. Bera, <b>Sanjay Barua</b> , T. Riyesh, Nitin Virmani, Neeraj Yadav, Shashank Bardwaj, B.N. Tripathi: Isolation and characterization of bacteriophages against equine pathogens-novel phages revealed as phage therapy candidates. Journal of Equine Veterinary Science 04/2016; 39:S40. DOI:10.1016/j.jevs.2016.02.087	<b>0.871</b>	<b>6.87</b>
8	Anand, T., Vaid, R.K., Bera, B. C., <b>Sanjay Barua</b> , Riyesh, T., Virmani, N., Yadav N., and Malik, P. 2015. Isolation and characterization of a bacteriophage with broad host range, displaying potential in preventing bovine diarrhoea. <i>Virus Genes</i> , DOI <b>10.1007/s11262</b>	<b>1.576</b>	<b>7.58</b>
9	Riyesh T, Karuppusamy S, Bera BC, <b>Barua S</b> , Virmani N, Yadav S, Vaid RK, Anand T, Bansal M, Malik P, Pahuja I, Singh RK. Laboratory-acquired buffalopox virus infection, India. <i>Emerg Infect Dis.</i> 2014 <b>20</b> (2):324-6.	<b>5.99</b>	<b>Not listed</b>
10	Anand, T., Bera, B. C., Vaid, R.K., Shanmugasundaram, K., Sharma, G., Virmani, N., Shukla, B. N., <b>Barua, S.</b> and Singh, R.K. 2014. Molecular characterization of virulence-associated protein (Vap) family genes of pathogenic <i>Rhodococcus equi</i> isolates from clinical cases of Indian equines. <i>Ind. J. Biotech.</i> , <b>13</b> : 195-202.	<b>0.386</b>	<b>6.39</b>
11	Vaid, R. K., Shanmugasundaram, K., Boora, A., Bera, B. C., Shukla, B. N., Anand, T., Singha, H., Riyesh, T., Virmani, N., <b>Barua, S.</b> , Ahir, V. B., Koringa, P.G. Sajnani, M. R., Bhat, V. D., Rana, N., Singh, K. P., Malik, P., Singh, R. K. and Joshi, C.G. 2014. Draft Genome Sequence of <i>Pasteurella multocida</i> subsp. <i>multocida</i> B:2 Strain VTCCBAA264 Isolated from <i>Bubalus bubalis</i> in North India. <i>Genome Announc.</i> <b>2</b> (4): e00755-14. doi:10.1128/genomeA. 00755-14.	<b>Open Access</b>	<b>Not listed</b>
12	Bera, B. C., Virmani, N., Shanmugasundaram, K., Vaid, R. K., Singh, B. K., Gulati, B. R., Anand, T., <b>Barua, S.</b> , Malik, P., and Singh, R. K. 2013. Genetic Analysis of the Neuraminidase (NA) Gene of Equine Influenza Virus (H3N8)	<b>0.364</b>	<b>5.00</b>

	from Epizootic of 2008–2009 in India. Ind. J. Virol. <b>24</b> : 256-264		
13	Goyal, T., Varshney, A., Bakshi, S. K., <b>Barua, S.</b> , Bera, B. C., and Singh, R. K. 2013. Buffalo pox outbreak with atypical features: a word of caution and need for early intervention!. Int. J. Dermatol., <b>52</b> : 1224	<b>1.312</b>	<b>Not listed</b>
14	Anand, T., Bera, B. C., Riyesh, T., Vaid, R.K., <b>Barua, S.</b> , Virmani, N., Malik, P., Kumar, D., Yadav, P. S. and Singh, R.K. 2013. Cytopathogenicity of buffalopox and camelpox virus in buffalo fibroblast cells. Ind. J. Anim. Sci., <b>83</b> : 1256	<b>0.16</b>	<b>6.16</b>
15	Bera BC, Shanmugasundaram K, <b>Barua S</b> , Anand T, Riyesh T, Vaid RK, Virmani N, Bansal M, Shukla BN, Malik P, Singh RK. Sequence and phylogenetic analysis of host-range (E3L, K3L, and C7L) and structural protein (B5R) genes of buffalopox virus isolates from buffalo, cattle, and human in India. <i>Virus Genes</i> . 2012; <b>45</b> (3):488-98.	<b>1.769</b>	<b>7.58</b>
16	R. K. Vaid, K. Shanamugasundaram, Ashok Boora, T. Riyesh, B. C. Bera, B. N. Shukla, Taruna Anand, N. Virmani, <b>S. Barua</b> , N. Rana, K. P. Singh, P. Malik and R. K. Singh. 2012. Sporadic outbreak of haemorrhagic septicaemia in buffalo calves in an organized farm. Veterinary Practitioner, <b>13</b> (2):326-329.	<b>0.109</b>	<b>3.78</b>
17	Bera BC, Shanmugasundaram K, <b>Barua S</b> , Venkatesan G, Virmani N, Riyesh T, Gulati BR, Bhanuprakash V, Vaid RK, Kakker NK, Malik P, Bansal M, Gadvi S, Singh RV, Yadav V, Sardarilal, Nagarajan G, Balamurugan V, Hosamani M, Pathak KM, Singh RK. Zoonotic cases of camelpox infection in India. <i>Vet Microbiol</i> . 2011; <b>152</b> (1-2):29-38.	<b>3.127</b>	<b>8.51</b>
18	Virmani, N., Bera, B.C., Singh B.K., Shanmugasundaram, K., Gulati, B.R., <b>Barua, S.</b> , Vaid, R.K., Gupta, A.K. and Singh, R.K. 2010. Equine influenza outbreak in India (2008–09): Virus isolation, sero-epidemiology and phylogenetic analysis of HA gene. <i>Vet. Microbiol</i> , <b>143</b> : 224-237.	<b>3.127</b>	<b>8.51</b>
19	Vaid R.K., <b>Barua S.</b> , Kumar Ashok, Dwivedi D., Rana R. and Vihan V.S. 2008. Isolation and Molecular Identification of a Multi-Drug resistant <i>Pasteurella multocida</i> isolate from Sheep. Vet. Practitioner. <b>9</b> (1): 32-36.	<b>0.109</b>	<b>3.78</b>
20	<b>S. Barua</b> , B.Mondal, A.Sanyal, D.Hemadri, S.K.Bandyopadhyay and A.Rai. 2005. Sequencing and Comparative analysis of Hexon gene of Fowl Adenovirus 4 of Indian origin. Indian J. Biotech <b>4</b> : 367	<b>0.386</b>	<b>6.39</b>
21	<b>S. Barua</b> , Ashok Kumar, R.K.Vaid, R.Rana and V.S.Vihan (2005) Serological evidence of PPR and Blue tongue virus infections in a migratory flock of small ruminants. Vet Practitioner <b>6</b> (1) :26-27	<b>0.109</b>	<b>3.78</b>
22	A. Mandal, <b>S. Barua</b> , P K Rout, R Roy, H Prasad, N K Sinha and N Sharma (2005) Factors affecting the prevalence of mortality associated with Pneumonia in a flock of Muzaffarnagari sheep. Ind. J. Anim. Sciences <b>15</b> (4) : 407-410	<b>0.16</b>	<b>6.16</b>
23	<b>S. Barua</b> , R.K.Vaid, R.Rana and Ashok Kumar (2005) Pox in sheep and goats: Pock marks in small ruminant health. In. Proceedings of National Academy of Sciences, India. Infectious diseases of domestic animals and Zoonoses in India. Ed. V. Tandon and B. N. Dhawan. 75+	<b>0.40</b>	<b>6.00</b>
24	Vinod Gupta, Ashok Kumar, R Rana, V.S.Vihan and <b>S. Barua</b> (2005) Therapeutic effect of different antimicrobial combinations on survivability of kids suffering from colibacillosis. Vet Practitioner. <b>6</b> (2): 112-113	<b>0.109</b>	<b>3.78</b>
25	A. Rai, <b>S. Barua</b> and N.Rai (2005) Induction of immune response in chicken vaccinated with a plasmid DNA encoding Fowl Adenovirus 4 Hexon gene. J. Immunol. Immunopathol. <b>7</b> (1) : 58-60	<b>Not Listed</b>	<b>3.61</b>
26	Ashok Kumar, <b>S Barua</b> , R Rana and VS Vihan (2004). Epidemiological behaviour of Foot and Mouth disease virus (type O) in goats. Veterinary Practitioner <b>5</b> : 134-137	<b>0.109</b>	<b>3.78</b>
27	<b>S. Barua</b> , R. K. Vaid, Ashok Kumar, R. Rana and V. S. Vihan. (2004). Reproductive disorders of small ruminants-a viral perspective. Intas Polivet <b>5</b> (II).297-301	<b>0.532</b>	<b>4.69</b>

<b>28</b>	Ashok Kumar, R Rana, VS Vihan, <b>S Barua</b> , Vinod K Gupta and HA Tiwari. (2004). Epidemiological features observed in Contagious pustular dermatitis in kids. Indian J. Animal Sci. <b>74</b> (11): 1113-1115	<b>0.16</b>	<b>6.16</b>
<b>29</b>	<b>Barua, S</b> , Vaid, R.K., and Rana, R (2004). An epidemiological investigation of PPR outbreak in small ruminants. Indian Vet. Med. Jour <b>28</b> : 51-54	<b>Not Listed</b>	<b>4.33</b>
<b>30</b>	<b>Barua, S</b> and Rai, A. 2003. Cloning of hexon gene of fowl adenovirus 4 in mammalian expression vector. Indian J. Comp. Microbiol. Immunol. Infect. Dis. <b>24</b> (2): 33	<b>Not Listed</b>	<b>3.61</b>
<b>31</b>	<b>Barua, S</b> and Rai, A. (2003). Polymerase chain reaction for amplification of FAV-4 hexon gene fragments for use as diagnostic tool. Indian J. Comp. Micro. Immun. Inf. Dis. Vol <b>24</b> 2003 pp 85-87	<b>Not Listed</b>	<b>3.61</b>