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PubMed Link: https://pubmed.ncbi.nlm.nih.gov/?term=Sunit+K.+Singh&sort=date&size=100
NCBI Link: https://www.ncbi.nlm.nih.gov/myncbi/sunit%20kumar.singh.2/bibliography/public/

EDUCATION

- **Ph.D. Molecular Infection Biology, 2005**
  Univ. of Wuerzburg, Wuerzburg, Germany
- **MS, 1999**
  CIFE (Deemed University-ICAR), Mumbai, India
- **BS, 1996**
  GB Pant University of Agriculture & Technology, Pantnagar, India

POSITIONS HELD (2005-Present)

Mar 23, 2023 – Present	Director Dr. B R Ambedkar Center for Biomedical Research (ACBR), New Delhi
Mar 19, 2017 – Present	Professor of Molecular Immunology Institute of Medical Sciences, Banaras Hindu University (BHU), Varanasi
Mar 19, 2014 – Mar 18, 2017	Associate Professor of Molecular Immunology Institute of Medical Sciences, Banaras Hindu University (BHU), Varanasi
Apr 28, 2008 –Mar 18, 2014	Scientist-C, Infectious Diseases CSIR-Centre for Cellular and Molecular Biology (CCMB), Hyderabad, India
Dec 19, 2006 – Apr 27, 2008	Scientist-B, Infectious Diseases CSIR-Centre for Cellular and Molecular Biology (CCMB), Hyderabad, India
July 1, 2005 – Nov 27, 2006	Postdoctoral Scholar University of California Davis Medical Centre, Sacramento California (USA)
Jan 04, 2005 -Jun 30, 2005	Postdoctoral Associate Yale University, School of Medicine, New Haven, Connecticut, USA

OTHER PROFESSIONAL EXPERIENCE

1. 02-03-2017-01-03-2020, Adjunct Faculty, ISLS, Institute of Science, BHU, Varanasi

2. 2013-2014; Honorary Faculty Member, Faculty of Biological Sciences, Academy of Scientific and Innovative Research (AcSIR), New Delhi, India

3. 01/05/2013-30/05/2013 Visiting Scientist, Department of Pathology & Immunology, University Medical Centre, University of Geneva, Geneva, Switzerland.

4. 01/05/2012-31/05/2012 Visiting Scientist, Department of Microbiology, College of Veterinary Medicine, Chonbuk National University, Republic of Korea.

5. 01/05/2010-15/06/2010 Visiting Scientist, Section of Arbovirology, Dept of Parasitology, Academy of Science Czech Republic, Czech Republic.

6. 10/10/2009- 31/10/2009 Visiting Scientist, Dept of Pediatric Infectious Diseases and Immunology, Uni-Kinderklinik, University of Wuerzburg, Wuerzburg, Germany.

7. 23/03/2008- 22/09-2008 Visiting Scientist, Dept of Pathology, Albert Einstein College of Medicine, Bronx, New York (USA).

8. 25/05/2000 – 31/10/2001, Senior Research Fellow, National Bureau of Fish Genetic Resources (NBFGR), Lucknow, (U.P) India.

AWARDS AND DISTINCTIONS

1. 2023-Elected **Fellow of National Academy of Medical Sciences, India (FAMS)**

2. 2023-**Dr. P K Seth Memorial Oration Award**

3. 2023-**Prof. CNR Rao Education Foundation Award**

4. 2023- Elected **Fellow of Royal Society of Biology** (FRSB)

5. 2022- Elected **Fellow of National Academy of Sciences India** (FNASc)

6. 2022-**Prof. Sohail Ahmad Award** of **Indian Academy of Biomedical Sciences**

7. 2021-Elected **Fellow of Indian Academy of Neurosciences** (FIAN)

8. 2020- **ICMR-Prof. B. K Aikat Oration Award for Tropical Diseases**

9. 2019- Elected **Fellow of the Association of Biotechnology and Pharmacy** (**FABAP**)

10. 2019-**NAVBD-Molecular Biology Award** of National Academy of Vector Borne Diseases

11. 2017-**ICMR Chaturvedi Ghanshyam Das Jaigopal Memorial Award** for **Immunology**

12. 2017-**Dr. B.C. Roy Award** of Medical Council of India

13. 2016-**Outstanding Alumnus Award** by GB Pant Univ. of Agril. &Tech, Pantnagar

14. 2016-**Nature Travel Grant Award** to attend Gordon Research Conference, USA

15. 2015-**ICMR-Dr. J. B Srivastav Memorial Oration Award** for **Virology**

16. 2014- **Institute of Medical Sciences, BHU, Research Publication Award**

17. 2011-**FEBS Journal Top Cited Paper Award.**

18. July 01-08, 2011 **DAAD-Travel Grant Award**-To attend Euro-Indian Week, University of Wuerzburg, Wuerzburg, Germany.

19. Aug 24-27, 2010 **Sabin Vaccine Institute Travel Grant Award**- To attend the Smallpox Eradication Commemoration 2010 symposium (SEC2010) symposium titled "Smallpox Eradication after 30 Years: Lessons, Legacies, and Innovations at Rio de Janeiro, Brazil.

20. Aug 01-13, 2010 **Gateways Partners, GenØk, INBI and TWN, Travel Grant Award** to attend International Biosafety course at Tromso, Norway.

21. 2010-11 **"European Cooperation in Science and Technology, Belgium-Grant"**- to attend the course on Array Technologies for BSL-3 and BSL-4 pathogens-Action B28, Institute of Virology, Faculty of human Medicine, Georg August University, Gottingen, Germany.

22. 2008-09 "**NIH-Fogarty Fellow**"- AIDS International Training Program, AECOM, USA.

23. 2007-08 "**Travel Grant Award**" by Sandia National Laboratories, New Mexico, USA.

24. 2004-05 "**Best Poster Award**" in Annual convention of the German Society for Paediatric infections, Mainz, Germany.

25. 2003-04 "**Best Poster Award**" in 13th Annual conference of working groups on Juvenile and Adolescent arthritis, Halle, Germany.

26. 2001-02 "**Travel Grant Award**" by American Fisheries Society, Bethesda, USA.

27. 2001-02 "**Skinner Memorial Award**" by American Fisheries Society, Bethesda, USA.

28. 2000-01 **"Young Scientist Award**" by international Society for Environmental protection, M.M Engineering College and U.P. Forest Corporation, Gorakhpur, India.

29. 1996-97 "**National Award "SCIENTILLA-96**" in National Bio-technomeet organised by Association of Biochemical Eng. and food technologists, India at HBTI, Kanpur

30. 1992-96 "**Certificates of Honour**" by Vice Chancellor, G. B. Pant University of Agriculture & Technology, Pantnagar, India.

31. 1996-97 **"Vice Chancellor Gold Medal**" in B.F.Sc degree programme.

32. 1992-96 G B Pant University "**Merit Scholarship**" recipient.

PROFESSIONAL CONTRIBUTIONS TO SCIENTIFIC JOURNALS

1. Aug 04, 2022- Feb 11, 2023-Section Editor - PLoS Neglected Tropical Diseases

2. 2022- till date, Associate Editor Frontiers in Virology

3. 2019- till date-Editorial Board Member-Scientific Reports (Nature Publishing)

4. Feb 28,2019-Aug 03,2022-Deputy Editor (Virus Section)-PLoS Neglected Tropical Diseases

5. 2018-till date-Associate Editor-Respiratory Research (Biomed Central-BMC)

6. 2018-till date- Editor-Reviews in Medical Microbiology (Wolters Kluwer Publication)

7. 2009-till date, Editorial Board Member-Infectious Disease Reports (Page press)

8. 2008-Feb 28, 2019- Feb 28, 2019-Associate Editor, PLoS Neglected Tropical Diseases.

9. 2008-Till date- Editorial Board Member, Mediators of Inflammation (Hindawi Publish).

10. 2008- Till date- Editorial Board Member, European Journal of Inflammation

11. 2008-Till date Editorial Advisory Board Member-Current Gene Therapy (Bentham Sci)

12. 2007-2016-Corresponding Editor-International Journal of Infectious Diseases (Elsevier)

13. 2007-Till date Editorial Board Member, Future Microbiology (Future Medicine Group)

SHORT-TERM PROFESSIONAL TRAININGS

1. May 24-28, 2010, BSL-3 and BSL-4 pathogens Course, Institute of Virology, Faculty of Human medicine, Georg August University, Gottingen, Germany.

2. Aug 30-Sept 04, 2009, "BIOMICS Hands-on Workshop & Conference" Weizmann Institute of Science, Israel.

3. Feb 09-13, 2009, "Applied Training for the BSL-3 facility" organized by NIH-NIAID and Emory University USA at National Institute of Virology, Pune.

4. Apr 16, 2008, Annual Retreat, Centre for AIDS Research (CFAR), Albert Einstein College of Medicine, New York (USA).

5. June 02, 2008, Annual Retreat, Dept of Pathology, Albert Einstein College of Medicine, New York (USA).

6. Oct, 01-03, 2008, Open Door Workshop: Working with the Human Genome Sequence organised by Welcome trust UK and CCMB, Hyderabad, India.

7. Nov 28-30, 2008, Indo-German Workshop on "Molecular Epidemiology of Infectious Diseases, University of Hyderabad, Hyderabad, India.

8. Oct, 08-10, 2007, Training Programme on "Drafting of Patent Applications, Patent Prosecution and Litigation" CSIR-HRDC, Ghaziabad, India.

9. June,21-22, 2007, Training Programme on "Clinical Trials-an important component of Innovation Chain in New Drug Development" CSIR-HRDC, Ghaziabad, India.

10. July,09-13, 2007, Regional workshop and symposium on "HIV/AIDS Research in India"

organised jointly by Albert Einstein College of Medicine, New York and JNCASR, Bangalore.

11. April, 17-19, 2007, Asia Conference on Laboratory Biosecurity and Safety in Bangkok, Thailand.

12. Sept, 11-14, 2006, Training programme on "DNA Microarrays, Theory, Techniques & Analysis", Dept. of Biotechnology at School of Medicine, University of California, Davis, (USA).

13. Aug, 21-25, 2006, Training programme on "Proteomics: Fundamentals and Technology Platform" Dept. of Biotechnology, University of California, Davis, (USA).

14. Nov, 02-04, 2005, National Institutes of Health (NIH) TRAC30 workshop on siRNA and miRNAs: Modulating gene expression in the 21st century at Hyatt Regency, Lake Tahoe, California.

15. Oct, 21, 2005, Flowcytometry regional training programme on "Multiparameter Flow Cytometry and Compensation Course" organized by FlowCyte Associates at Shriners Hospital for Children Northern California, Sacramento, California.

16. Oct, 19-20, 2005, Flowcytometry regional training programme on "Basic Flow Cytometry Course" organized by FlowCyte Associates at Shriners Hospital for Children Northern California,

17. Oct, 11, 2005, Training programme on Animal Care & Use organized by Office of Environmental Health & Safety at University of California, Davis, California.

18. Oct, 08, 2005, Continuing Medical Education programme on Stem Cells organized by University of California, Davis at Sheraton Grand Hotel, Sacramento, California.

19. August, 06, 2004, Certificate programme on "Applications of Cell Flow cytometry" organized by B D Biosciences, Heidelberg, training group at Institute of Virology at University of Wuerzburg, Wuerzburg, Germany.

20. Dec, 03, 2002, Certificate programme on New Trends in DNA Cleanup & Sequencing organized by QIAGEN training group, University of Regensburg, Regensburg, Germany.

21. Oct, 08, 2002, Certificate programme on Techniques of PCR method Optimisation organized by Eppendorf training group University of Wuerzburg, Wuerzburg, Germany.

LIST OF PEER REVIEWED PUBLICATIONS

1. Ahmad, F, Keshri, V, **Singh, SK (2024),** ORF3a of SARS-CoV-2 modulates PI3K/AKT signaling in human lung epithelial cells via hsa-miR-155-5p, ***International Journal of Biological Macromolecules, 2024, https://doi.org/10.1016/j.ijbiomac.2024.131734***

2. Apoorva, **Singh SK (2024),** A tale of endurance: bats, viruses, and immune dynamics, ***Future Microbiology, 2024, 10.2217/fmb-2023-0233***

3. Pandey N, **Singh SK (2023),** MicroRNA-155 triggers a cellular antiviral immune response against Chandipura virus in human microglial cells, ***Microbes and Infection .2023 Jun 14;105173. doi: 10.1016/j.micinf.2023.105173.***

4. Shukla, A., Bhardwaj, U., Apoorva, Seth, P, **Singh, SK (2023)** Hypoxia-Induced miR-101 Impairs Endothelial Barrier Integrity Through Altering VE-Cadherin and Claudin-5. ***Molecular Neurobiology (2023). https://doi.org/10.1007/s12035-023-03662-8***

5. Bharadwaj U, **Singh SK (2023),** Zika Virus NS1 suppresses VE-Cadherin via hsa-miR-29b-3p/DNMT3b/MMP-9 pathway in Human Brain Microvascular Endothelial Cells; ***Cellular Signalling DOI: 10.1016/j.cellsig.2023.110659***

6. Singh A, **Singh SK (2023),** Direct antimicrobial effects of chemokines on Cryptococcus spp, with special emphasis on a 'CXC' chemokine, ***Journal of Medical Mycology, https://doi.org/10.1016/j.mycmed.2023.101415***

7. Shukla A, Rastogi M, **Singh SK (2021**), Zika virus NS1 suppresses the innate immune responses via miR-146a in human microglial cells, ***International Journal of Biological Macromolecules Dec 15;193(Pt B):2290-2296. doi: 10.1016/j.ijbiomac.2021.11.061***

8. Bharadwaj U, **Singh SK (2021),** Zika Virus NS1 Suppresses VE-Cadherin and Claudin-5 via Hsa-miR-101-3p in Human Brain Microvascular Endothelial Cells, ***Molecular Neurobiology, https://doi.org/ 10.1007/s12035-021-02548-x***

9. Pandey N, Rastogi M, **Singh SK (2021),** Chandipura virus dysregulates the expression of hsa-miR-21-5p to activate NF-κB in human microglial cells. ***J Biomed Sci.*** **doi: 10.1186/s12929-021-00748-0.**

10. Bharadwaj U, Pandey, N, Rastogi M, **Singh SK (2021),** Gist of Zika Virus pathogenesis, ***Virology, https://doi.org/10.1016/j.virol.2021.04.008***

11. Rastogi M, Pandey N, Shukla A, **Singh SK (2020)**, SARS Coronavirus 2: from Genome to Infectome ***Respiratory Research, 21:318. doi: 10.1186/s12931-020-01581-z***

12. Rastogi M, **Singh SK (2020)**, Japanese Encephalitis Virus exploits microRNA-155 to suppress the non-canonical NF-κB pathway in human microglial cells, ***BBA - Gene Regulatory Mechanisms, 1863, (11), 194639, https://doi.org/10.1016/j.bbagrm.2020.194639***

13. Rastogi M, **Singh SK (2020)**, Zika Virus NS1 affects the Junctional Integrity of Human Brain

Microvascular Endothelial Cells, ***Biochimie, 176 (2020), 52-61, 10.1016/j.biochi.2020.06.011***

14. Ram K, Thakur RC, Singh DK, Kawamura K, Shimouchi A, Sekine Y, Nishimura H, **Singh SK**, Pavuluri CM, Singh RS, Tripathi SN. Why airborne transmission hasn't been conclusive in case of COVID-19? An atmospheric science perspective, ***Science of The Total Environment, Volume 773, 15 June 2021, 145525. doi.org/10.1016/j.scitotenv.2021.145525***

15. Agrawal M, Pandey N, Rastogi M, Dogra S, **Singh SK (2019)**, Chikungunya Virus modulates the miRNA expression patterns in Human Synovial Fibroblasts ***Journal of Medical Virology, 92(2):139-148. doi: 10.1002/jmv.25588***

16. Rastogi M, **Singh SK (2019)**, Modulation of type-I Interferon response by hsa-miR-374b-5p during Japanese Encephalitis Virus infection in human microglial cells ***Front. Cell. Infect. Microbiol.,2019, Aug 9;9:291, 1-11. doi: 10.3389/fcimb.2019.00291***

17. Agrawal M, Rastogi M, Dogra S, Pandey N, Basu A, **Singh SK (2019)**, Chandipura Virus changes cellular miRNome in human microglial cells ***Journal of Medical Virology, 2019 Apr 24. doi: 10.1002/jmv.25491.***

18. Rastogi M, Srivastava N, **Singh SK (2018),** Exploitation of microRNAs by Japanese Encephalitis virus in human microglial cells, ***Journal of Medical Virology; Apr;90(4):648-654. doi: 10.1002/jmv.24995.***

19. **Singh SK** (**2016)**, Overview on the tricks of HIV Tat to hit the Blood Brain Barrier, ***Current HIV Research, 2016 14(5):382-388. doi: 10.2174/1570162x14666161006111153***

20. Rastogi M, Sharma N, **Singh SK** (**2016),** Flavivirus NS1: A Multifaceted Enigmatic Viral protein, ***Virology Journal 2016 Jul 29;13(1):131, doi: 10.1186/s12985-016-0590-7.***

21. Sharma N, Kumawat KL, Rastogi M, Basu A, **Singh SK** (**2016)**, Japanese Encephalitis Virus exploits the microRNA-432 to regulate the expression of Suppressor of Cytokine Signaling (SOCS) 5, ***Scientific Reports 2016 Jun 10;6:27685. doi: 10.1038/srep27685***

22. Sharma N, **Singh SK** (**2016)**, Implications of Non-coding RNAs in Viral Infections, ***Reviews in Medical Virology Sep;26(5):356-68. doi: 10.1002/rmv.1893***.

23. Sharma N, Verma R, Kumawat KL, Basu A, **Singh SK (2015),** miR-146a suppresses cellular immune response during Japanese encephalitis virus JaOArS982 strain infection in human microglial cells, **Journal of Neuroinflammation, Feb 18;12:30. doi: 10.1186/s12974-015-0249-0**

24. Johri MK, Sharma N, **Singh SK (2015)**, HIV Tat Protein: Is Tat-C much trickier than Tat-B? ***Journal of Medical Virology, Aug;87(8):1334-43. doi: 10.1002/jmv.24182.***

25. Jadhav V, Krause K-H, **Singh SK (2014)**, HIV-1 Tat C modulates NOX2 and NOX4 expressions through miR-17 in Human Microglial Cells, ***Journal of Neurochemistry. Dec;131(6):803-15. doi: 10.1111/jnc.12933.***

26. Selvamani SP, Mishra R, **Singh SK (2014),** Chikungunya virus exploits miR-146a to regulate

NF-κB pathway in human synovial fibroblasts**,** ***PLoS One. Aug 1; 9(8): e103624. doi: 10.1371/journal.pone.0103624***.

27. Mishra R, **Singh SK (2014)**, HIV-1 Tat C phosphorylates VE-cadherin complex and increases human brain microvascular endothelial cell permeability, ***BMC Neuroscience 2014 Jun 26; 15(1):80. doi: 10.1186/1471-2202-15-80)***.

28. Manocha GD, Mishra R, Sharma N, Kumawat KL, Basu A, **Singh SK (2014)**, Regulatory role of TRIM21 in type-I interferon pathway in Japanese encephalitis virus infected human microglial cells ***Journal of Neuroinflammation,*** **Feb 1;11:24. doi: 10.1186/1742-2094-11-**

29. Mishra R, **Singh SK** (**2013)**, HIV-1 Tat C modulates expression of miRNA-101 to suppress VE-Cadherin in Human Brain Microvascular Endothelial Cells, ***The Journal of Neuroscience*** *33(14):5992-6000; doi:10.1523/JNEUROSCI.4796-12.2013.* **(Included in F1000)**

F1000Prime Recommendations, Dissents and Comments for [Mishra R and Singh SK, J Neurosci 2013, 33(14):5992-6000]. In F1000 Prime, 15 May 2013; F1000Prime.com/718001871

30. Hotez P, **Singh SK,** Zhou X-N (**2013**), Advancing Sino-Indian Cooperation to combat tropical diseases (Editorial), ***PLoS Neglected Tropical Diseases 7(9), 1-4.***

31. Mishra R, Chhatbar C, **Singh SK (2012)**, HIV-1 Tat C-mediated regulation of tumor necrosis factor receptor-associated factor-3 by microRNA 32 in human microglia, ***Journal of Neuroinflammation, Jun 18;9:131. doi: 10.1186/1742-2094-9-131***

32. Han YW, **Singh SK**, Eo SK **(2012)**, The Roles and Perspectives of Toll-Like Receptors and CD4+ Helper T Cell Subsets in Acute Viral Encephalitis. ***Immune Network. 12(2):48-57***.

33. Růžek D, Salát J, **Singh SK**, Kopecký J **(2011)** Breakdown of the Blood-Brain Barrier During Tick-Borne Encephalitis in Mice Is Not Dependent on CD8+ T-cells ***PLoS One. 2011;6(5):*** **e20472. doi: 10.1371/journal.pone.0020472.**

34. **Singh SK,** Unni SK **(2011)**, Chikungunya Virus: Host Pathogen Interaction. ***Reviews in Medical Virology, 21(2)78-88. doi: 10.1002/rmv.681***

35. Chhatbar C, Mishra R, **Singh SK (2011)**, HIV Vaccine: Hopes and Hurdles. ***Drug Discov Today.,Nov;16(21-22):948-56.***

36. Unni SK, Růžek D, Chhatbar C, Mishra R, Johri MK, **Singh SK (2011)**, Japanese encephalitis virus: From Genome to Infectome. ***Microbes and Infection. 13(4) 312-21.***

37. Johri MK, Mishra R, Chhatbar C, Unni SK, **Singh SK** (2011), Tits and bits of HIV Tat Protein. ***Expert Opinion on Biological Therapy. 11 (3) 269-83.***

38. **Singh SK**, Gaur RK (**2009)**, Progress towards therapeutic application of RNA interference for HIV infection, ***BioDrugs,*** 23 (5): 269–276**.**

39. **Singh SK**, Hajeri PB (**2009)**, siRNAs: their potential as therapeutic agents - Part II. Methods of delivery, ***Drug Discovery Today***, Sep; 14(17-18):859-65**.**

40. Hajeri PB, **Singh SK (2009)**, siRNAs: their potential as therapeutic agents - Part I. Designing of siRNAs, ***Drug Discovery Today***, Sep; 14(17-18):851-8**.**

41. **Singh SK** (**2008),** RNA interference and its therapeutic potential against HIV infection. ***Expert Opinion on Biological Therapy*** **8(4):449-461.**

42. Morbach H, Richl P, Faber C, **Singh SK**, H.J Girschick (**2008)**, The kappa immunoglobulin light chain repertoire of peripheral blood B cells in patients with juvenile rheumatoid arthritis, ***Molecular Immunology, 45(14):3840-6***.

43. **Singh SK (2008),** Oral Polio Vaccine: A matter of debate ***Future Microbiology 3(4):383-385*****.**

44. **Singh SK,** Bhadra M, Girschick HJ, Bhadra U (**2008)**, MicroRNAs: Micro in size but macro in function, ***The FEBS Journal 275 (20), 4929-44***.

****Figure selected as the cover page of the journal (First & Corresponding).**

45. **Singh SK (2007),** HIV spread among women (Editorial) ***Expert Reviews of Antiinfective Therapy 5(5):755-758*****.**

46. **Singh SK (2007),** MicroRNAs: From Neurogeneration to Neurodegeneration ***Pharmacogenomics;8(8):971-8*****.**

47. **Singh SK** (**2007),** Endogenous Retroviruses-Suspects in Disease World. ***Future Microbiology 2(3), 269-275*****.**

48. **Singh SK (2007),** Topical microbicides against HIV spread: What, Where and Why? (Editorial) ***Future Virology 2(3), 219-224*****.**

49. Pleasure D, Soulika A, **Singh SK,** Gallo V, Bannerman P **(2006),** Inflammation in white matter: Clinical and pathophysiological aspects ***Mental Retardation and Developmental Disabilities Research Reviews,*** **12(2): 141-146.**

50. **Singh SK**, Girschick HJ (**2006)**, Toll like receptors in *Borrelia burgdorferi* induced inflammation, ***Clinical Microbiology and Infection*****, 12(8): 705-717.**

51. Faber C, Morbach H, **Singh SK,** Girschick HJ (**2006),** Differential expression patterns of recombination-activating genes in individual mature B cells in juvenile idiopathic arthritis ***Annals of Rheumatic Diseases*** **65(10):1351-6.**

52. **Singh SK**, Baar V, Girschick HJ (**2005)**, Expression of ICAM-1, ICAM-2, NCAM-1 and VCAM-1 by human synovial cells exposed to *Borrelia burgdorferi in vitro.* ***Rheumatology International,*** **26(9): 818-827.**

53. Morbach H, **Singh SK**, Faber C, Grammer A, Lipsky PE, Girschick HJ (**2005)**, Analysis of RAG expression by peripheral blood CD5+ and CD5- B cells of patients with childhood Systemic Lupus Erythematosus. ***Annals of Rheumatic Diseases*****,65(4): 482-7.**

54. **Singh SK**, Morbach H, Nanki T, Wirsing A, Girschick HJ (**2005)**, Differential expression

of Chemokines in Synovial cells exposed to different *Borrelia burgdorferi* isolates, ***Clinical and Experimental Rheumatology*, 23(3): 311-22**.

55. **Singh SK**, Morbach H, Nanki T, Faber C, Baar V, Girschick HJ (**2004)**, Differential expression of Matrix metalloproteinases and Cyclooxygenases in synovial cells exposed to different *Borrelia burgdorferi* isolates Geho and B31, ***Inflammation Research,* 53(12) 689-696.**

56. **Singh SK**, Girschick HJ (**2004)**, Molecular survival strategies of the Lyme disease spirochete *Borrelia burgdorferi*; ***Lancet Infectious diseases*, 4(9): 575-583**.

57. **Singh SK**, Girschick HJ (**2004)**, Lyme borreliosis: from infection to autoimmunity, ***Clinical Microbiology and Infection*, 10(7): 598-614**. (Impact Factor: 5.197)

58. **Singh SK**, Girschick HJ (**2003)**, Tick-host interaction and their immunological implications in Tick-borne diseases, ***Current Science* 85:9, 1284-1298**.

EDITED BOOKS

1. "Defense Against Biological Attacks- Vol-II" (2019)

Editors: Sunit K. Singh, Jens H. Kuhn

Publisher: Springer International Publishing, Springer Nature Switzerland AG (https://www.springer.com/gp/book/9783030030704), Pp No: 1-415.

ISBN: 9783030030711

2. "Defense Against Biological Attacks- Vol-I" (2019)

Editors: Sunit K. Singh, Jens H. Kuhn

Publisher: Springer International Publishing, Springer Nature Switzerland AG (https://www.springer.com/gp/book/9783030030520), Pp No: 1-327.

ISBN: 9783030030537

3. "Diagnostics to Pathogenomics of Sexually Transmitted Infections" (2018)

Editors: Sunit K. Singh

Publisher: John Wiley & Sons/Wiley Blackwell, USA (https://www.wiley.com/en-us/Diagnostics+to+Pathogenomics+of+Sexually+Transmitted+Infections-p-9781119380955), Pp No: 1-416.

ISBN: 9781119380955

4. "Neglected Tropical Diseases of South Asia" (2017)

Editors: Sunit K. Singh

Publisher: Springer-Verlag GmbH, Austria (https://www.springer.com/gp/book/9783319684925),

Pp No: 517-984.
ISBN: 9783319684932

5. "Special Issue on **"Respiratory Viral Infection"** for the journal **"Seminars in Respiratory and Critical Care Medicine" (2016)**

Editors: Sunit K. Singh

Publisher: Thieme, Germany
(http://as.wiley.com/WileyCDA/WileyTitle/productCd-1118644719.html), Pp No: 487-646.
Issue: 04, Volume: 37, August 2016, DOI: 10.1055/s-006-32132

6. "Human Emerging and Re-emerging Infections: Bacterial & Mycotic Infections (Vol. II)" (2015)

Editors: Sunit K. Singh

Publisher: John Wiley & Sons/Wiley Blackwell, USA
http://as.wiley.com/WileyCDA/WileyTitle/productCd-1118644719.html), Pp No: 517-984.
ISBN: 9781119074489

7. "Human Emerging and Re-emerging Infections: Viral & Parasitic Infections" (Vol-I)" (2015)

Editors: Sunit K. Singh

Publisher: John Wiley & Sons/Wiley Blackwell, USA
(http://as.wiley.com/WileyCDA/WileyTitle/productCd-1118644719.html), Pp No: 1-516.
ISBN: 9781118644713

8. "Human Respiratory Viral Infections" (2014)

Editors: Sunit K. Singh

Publisher: Taylor & Francis/CRC Press, USA (https://www.crcpress.com/Human-Respiratory-Viral-Infections/Singh/9781466583207), Pp No: 1-662.
ISBN: 9781466583207

9. "Viral Infections and Global Change" (2013)

Editors: Sunit K. Singh

Publisher: John Wiley & Sons/Wiley Blackwell, USA
http://as.wiley.com/WileyCDA/WileyTitle/productCd-1118297873.html), Pp No: 1-660.
ISBN: 9781118297872

10. "Viral Hemorrhagic Fevers" (2013)

Editors: Sunit K. Singh & Daniel Ruzek

Publisher: Taylor & Francis/CRC Press, USA

http://www.ncbi.nlm.nih.gov/nlmcatalog/101603935), Pp No: 1-608.

ISBN: 9780367379797

11. "Neuroviral Infections: General Principles and RNA Viruses" Vol-II (2013)

Editors: Sunit K. Singh & Daniel Ruzek

Publisher: Taylor & Francis/CRC Press, USA

http://www.ncbi.nlm.nih.gov/nlmcatalog/101592050), Pp No: 1-499.

ISBN: 9781466567207

12. "Neuroviral Infections: General Principles and DNA Viruses" Vol-I (2013)

Editors: Sunit K. Singh & Daniel Ruzek

Publisher: Taylor & Francis/CRC Press, USA

http://www.ncbi.nlm.nih.gov/nlmcatalog/101591963), Pp No: 1-374.

ISBN: 9781466567191

13. "Special Issue on **"Respiratory Viral Infection"** for the journal **"Seminars in Respiratory and Critical Care Medicine" (2016)**

Editors: Sunit K. Singh

Publisher: Thieme, Germany, Pp No: 572-577, Issue: 04, Volume: 37, August 2016, DOI: 10.1055/s-006-32132

BOOK CHAPTERS

1. Meghana Rastogi, Neha Pandey, Astha Shukla, S. Singh, and Sunit K. Singh, Multidimensional Roles of Microglial Cells in Neuroviral Infections, In **"The Biology of Glial Cells: Recent Advances'" (2022)**

Editors: I. Patro etal

Publisher: Springer Nature Singapore Pte

The Biology of Glial Cells: Recent Advances (ed. I. Patro etal) DOI: https://doi.org/10.1007/978-981-16-8313-8_19, Pp No: 1-731, ISBN: 9789811683121

2. Neha Pandey & **Sunit K. Singh**, **2021,** Spatiotemporal and Demographic Patterns of Transmission of Kyasanur Forest Disease Virus in India, In **"Climate, Ticks and Disease'" (2021)**

Editors: Pat Nuttal

Publisher: © CAB International 2021. Climate, Ticks and Disease (ed. P. Nuttall) DOI:

10.1079/9781789249637.0052, Pp No: 365-369, ISBN: 9781789249637

3. Meghana Rastogi & **Sunit K. Singh**, **2019,** Advances in Molecular Diagnostic Approaches for Biothreat Agents, In **"Defense Against Biological Attacks- Vol-II" (2019)**
Editors: Sunit K. Singh, Jens H. Kuhn
Publisher: Springer International Publishing, Springer Nature Switzerland AG, Pp No: 1-415, ISBN: 9783030030711

4. Santosh K. Singh & **Sunit K. Singh, 2018,** Human Immunodeficiency Virus (HIV) Infection In **"Diagnostics to Pathogenomics of Sexually Transmitted Infections" (2018)**
Editors: Sunit K. Singh
Publisher: John Wiley & Sons/Wiley Blackwell, USA, Pp No: 61-75, ISBN: 9781119380955

5. Meghana Rastogi & **Sunit K. Singh, 2017,** Kyasanur Forest Disease; In **"Neglected Tropical Diseases of South Asia" (2017)**
Editors: Sunit K. Singh
Publisher: Springer-Verlag GmbH, Austria, Pp No: 373-386, ISBN: 9783319684932

6. Sunit K. Singh, Middle East Respiratory Syndrome Virus Pathogenesis In **"**Special Issue on **"Respiratory Viral Infection"** for the journal **"Seminars in Respiratory and Critical Care Medicine" (2016)**
Editors: Sunit K. Singh
Publisher: Thieme, Germany, Pp No: 572-577, Issue: 04, Volume: 37, August 2016, DOI: 10.1055/s-006-32132

7. Sunit K. Singh, Overview on Chikungunya Virus Pathogenesis In **"Human Emerging and Re-emerging Infections: Bacterial & Mycotic Infections (Vol. II)" (2015)**
Editors: Sunit K. Singh
Publisher: John Wiley & Sons/Wiley Blackwell, USA, Pp No: 177-188, ISBN: 9781119074489

8. Sunit K. Singh, Molecular Pathogenesis of Japanese Encephalitis Virus Infection In **"Human Emerging and Re-emerging Infections: Bacterial & Mycotic Infections (Vol. II)" (2015)**
Editors: Sunit K. Singh
Publisher: John Wiley & Sons/Wiley Blackwell, USA, Pp No: 113-124, ISBN: 9781119074489

9. A. Sinha, **Sunit K. Singh,** Overview on anatomy of human respiratory system, In **"Human Respiratory Viral Infections" (2014)**
Editors: Sunit K. Singh
Publisher: Taylor & Francis/CRC Press, USA, Pp No: 3-15. ISBN: 9781466583207

10. Sunit K. Singh, Spill over Transmission and Emergence of Viral Outbreaks in Humans In **"Viral Infections and Global Change" (2013)**
Editors: Sunit K. Singh
Publisher: John Wiley & Sons/Wiley Blackwell, USA
Pp No: 343-351, ISBN: 9781118297872

11. JA Lahoti, R. Mishra, **Sunit K. Singh**, Vascular Endothelial Dysfunctions: Viral Attack and Immunological Defense**,** In **"Viral Hemorrhagic Fevers" (2013)**
Editors: Sunit K. Singh & Daniel Ruzek
Publisher: Taylor & Francis/CRC Press, USA
Pp No: 63-83, ISBN: 9780367379797

12. Ritu Mishra, **Sunit K. Singh**, Human Immunodeficiency Virus (HIV) Neuropathogenesis, In **"Neuroviral Infections: General Principles and RNA Viruses" Vol-II (2013)**
Editors: Sunit K. Singh & Daniel Ruzek
Publisher**:** Taylor & Francis/CRC Press, USA
Pp No: 457-483, ISBN: 9781466567207

13. Sunit K. Singh & P B Hajeri, RNAi: From Basics to Therapeutics, In **"Molecular and Cellular Therapeutics (2012)**
Editors: D. Whitehouse and R. Rapley
Publisher: John Willey & Sons Publication, Willey-Blackwell Press, USA,
Pp No: 140-167, ISBN: 9780470748145

14. U. Bhadra, **Sunit K. Singh,** P B Hajeri, M. Bhadra, microRNA tales in fly development", In, Regulation of gene expression by small RNAs **(2009)**
Editors: R.K.Gaur and J.J.Rossi
Publisher: Taylor & Francis Group, CRC Press, USA,
Pp No: 123-147, ISBN: 9780470748145

DETAILS OF RESEARCH PROJECTS UNDERTAKEN

Project 1: Bystander effects of ORF3a and ORF6 of SARS-CoV-2 on microRNA mediated gene regulations and their impact on inflammatory responses in Human Lung Epithelial Cells

Funding agency: SERB, Government of India

Role: Principal Investigator

Amount: INR 57,99,992

Duration: 3 years (2022-2025)

Details of the project: To understand the roles of SARS-CoV2 ORF3a and ORF6 in in Human Lung Epithelial Cells

Project 2: Design and development of broad-spectrum antiviral agents against viral proteases from Coronavirus and Flavivirus

Funding agency: DRDO (Life Sciences Research Board), Government of India

Role: Co-Principal Investigator

Amount: INR 50,54,744

Duration: 3 years (2024-2027)

Details of the project: To Design and development of broad-spectrum antiviral agents

Project 3: Epidemiological Monitoring of different Sources of City waste water keeping SARS-CoV2 in mind: A public health concern

Funding agency: SERB, Government of India

Role: Co-Principal Investigator

Amount: INR 43,12,440

Duration: 1 years (2022-2023)

Details of the project: To understand the prevalence of SARS-CoV2 in the waste-water of Varanasi region

Project 4: Study on the involvement of microRNAs in Dengue Virus Neuro-invasion and molecular Neuropathogenesis

Funding agency: ICMR, Government of India

Role: Principal Investigator

Amount: INR 44, 00,000.00

Duration: 3 years (2021-2024)

Details of the project: To understand the roles of microRNAs in molecular pathogenesis of Dengue Virus

Project 5: Role of microRNAs in Chandipura Virus Neuropathogenesis

Funding agency: Department of Biotechnology, Government of India

Role: Principal Investigator

Amount: INR 75, 23,100.00

Duration: 3 years (2018-2022)

Details of the project: To understand the roles of microRNAs in molecular pathogenesis of Chandipura Virus

Project 6: Hypoxia induced changes in Blood Brain Barrier

Funding agency: Department of Biotechnology, Government of India

Role: Principal Investigator

Amount: Rs 64, 79, 800.00

Duration: 3 years (2018-2022)

Details of the project: To understand the impact of hypoxia on Blood Brain Barrier

Project 7: Role of microRNAs in Japanese Encephalitis Virus (JEV) Neuropathogenesis

Funding agency: Department of Biotechnology, Government of India

Role: Principal Investigator

Amount: Rs 88, 47,400.00

Duration: 3 years (2016-2019)

Details of the Project: To understand the roles of microRNAs & downstream cell signalling in molecular pathogenesis of Japanese Encephalitis Virus

Project 8: CSIR Network Project on MicroRNA and HIV pathogenesis

Funding agency: Council of Scientific & Industrial Research, Government of India

Role: Principal Investigator

Amount: Rs 15,00,000.00

Duration: For 5 years but availed the support (2012-2014)

Details of the Project: To understand the roles of microRNAs in HIV pathogenesis

Project 9: Role of microRNAs and NOX NADPH oxidases in HIV induced Neuroinflammation and Neurodegeneration

Funding agency: Department of Science & Technology, Government of India

(Indo-Swiss Project)

Role: Principal Investigator

Amount: Rs 27, 08,000.00

Duration: 3 years (2012-2015)

Details of the Project: To understand the roles of microRNAs & NOX NADPH Oxidases in molecular pathogenesis of HIV

Project 10: Effects of Interaction of Hepatitis C Virus protein NS5A with Host Translation Machinery on HCV Pathogenesis

Funding agency: Department of Biotechnology, Government of India

Role: Co-Principal Investigator

Amount: Rs 72, 85,600.00

Duration: 3 years (2013-2016)

Details of the Project: To understand the roles HCV NS5 protein in HCV translation and molecular pathogenesis

Project 11: Role of mammalian Target of Rapamycin in Hepatitis C Virus infection

Funding agency: Department of Biotechnology, Government of India

Role: Co-Principal Investigator

Amount: Rs 55, 07,000.00

Duration: 3 years (2012-2015)

Details of the Project: To understand the m-TOR in HCV pathogenesis

Project 12: The interaction of myeloid-derived cells with Japanese Encephalitis Virus and its clinical application

Funding agency: Department of Science & Technology, Government of India

(Indo-Korean Project)

Role: Principal Investigator

Amount: Rs 60,20,000.00

Duration: 3 years (2011-2014)

Details of the Project: To understand the role of myeloid derived suppressor cells in JEV pathogenesis

Project 13: The study on mechanism of neuropathogenesis in Japanese Encephalitis Virus (JEV) and Tick-Borne Encephalitis Virus (TBEV) infection

Funding agency: Council of Scientific & Industrial Research (CSIR), Government of India

(Indo-Czech Project)

Role: Principal Investigator

Amount: Travel Support

Duration: 3 years (2009-2011)

Details of the Project: To understand the molecular Pathogenesis of JEV & TBEV

Project 14: Role of microRNAs in HIV Neuropathogenesis

Funding agency: Department of Biotechnology, Government of India

Role: Principal Investigator

Amount: Rs 42, 20,000.00

Duration: 3 years (2009-2012)

Details of the Project: To understand the roles of microRNAs in HIV neuropathogenesis

Project 15: Role of microRNAs in pathogenesis of Transverse myelitis

Funding agency: Shriners Children Foundation, Florida, USA

Role: Principal Investigator

Amount: USD 53, 125.00,

Duration: 2 years (2005-2006)

Details of the Project: To understand the molecular mechanism of spinal cord inflammation

PRESENTATIONS IN SCIENTIFIC MEETINGS & CONFERENCES

1. 04-03-24, **S.K. Singh**, Keynote Speaker; "Emergence of Zoonotic Viral Infections", Annual Function of Zoological Society "ZOON", Department of Zoology, Ramjas College, University of Delhi, New Delhi.
2. 26-02-24 to 28-02-24, **S.K. Singh**, Invited Lecture, "Exploitation of Cellular microRNAs by Neurotropic Viruses" International Conference on "Crossroads of Chemistry, Biology and Atmospheric Environment: A modern Perspective organised by Dept. of Chemistry, University of Delhi, Delhi.
3. 12-02-24, **S.K. Singh**, Chief Guest & Keynote Lecture; "International Symposium on "Advances in Health Science" Department of Zoology, Deshbandhu College, University of Delhi, New Delhi.
4. 06-11-23, **S.K. Singh**, Chief Guest & Keynote Speaker; "Where do Zoonotic Viruses come from?", Annual Science Festival "Plexus", Department of Biomedical Science, Shaheed Rajguru College of Applied Sciences for Women, University of Delhi, New Delhi.

5. 22-08-2023 to 23-08-2023, **S.K.Singh,** Chairperson of Technical Session 2 (Viral and Cellular Interactions) in 7th Molecular Virology Meeting, Indian Institute of Science (IISc), Bengaluru

6. 25-10-2023, **S.K. Singh,** (Invited Lecture) "Interplay between viruses and cellular microRNAs in molecular pathogenesis of viruses", in Thieme-University of Delhi Organic Chemistry Symposium-2023 organised by Thieme Publishers, Germany, https://lp.thieme.in/du-ocs23

7. 04-10-2023 to 06-10-2023, **S.K.Singh**, "**Prof. PK Seth Memorial Lecture**" titled Virokines hit hard to the Brain Microvascular Endothelial Cells in XLI Annual Meeting of Indian Academy of Neurosciences & International Conference on Brain: Chemistry to Cognition at Jiwaji University, Gwalior.

8. 29-11-2022 to 05-12-2022, **S.K. Singh,** (Invited Lecture), HIV hits hard on Blood Brain Barrier in Hands-on-Training on Flow Cytometry under DST-STUTI scheme at Department of Pharmaceutical Engineering & Technology, IIT (BHU) Varanasi

9. 27-05-2021 to 28-05-2021**, S.K. Singh, (Invited Lecture)** "Zoonotics: Now and Then", in Young Pharmacologists Symposium organised by NIPER Raebareli & Indian Pharmacological Society

10. 16-12-2021 to 19-12-2021, Rastogi, M, **Singh, SK,** 2021, Japanese Encephalitis Virus-mediated perturbation of microRNAs expression in human microglial cells P-49, Molecular Neurobiology, Indian Academy of Neuroscience (IAN), Metting. Theme: NeuroGlia in Health and Disease

11. 16-12-2021 to 19-12-2021, Pandey N, Rastogi, M, **Singh, SK,** 2021, Chandipura virus activates NF-κBp65 by increasing the expression of hsa-miR-21-5p in human microglial cells. P-52, Molecular Neurobiology, Indian Academy of Neuroscience (IAN), Metting. Theme: NeuroGlia in Health and Disease

12. 25-05-2021 to 26-12-2021**, S.K. Singh, (Invited Lecture)** "COVID19 Pandemic Preparedness: Need of Basic Science Research & International Collaboration", 4th Meeting of the BRICS Biotechnology & Biomedicine Working Group organised by Dept. of International Cooperation, Ministry of Science & Technology China and Dept. of Science & Technology, Govt.of India, New Delhi.

13. 20-12-2019 to 22-12-2019**, S.K. Singh, (Invited Lecture)** "MicroRNAs: Macro-players between Viruses and Hosts", 13th Annual Convention of Association of Biotechnology and Pharmacy and International Conference at Vignan University, Vadlamudi, Guntur, Andhra Pradesh.

14. 07-11-2019 to 10-11-2019, **S.K. Singh, (Invited Lecture)** "Molecular Tactics of HIV to hit the Blood Brain Barrier, 60th Annual Conference of "Association of Microbiologists of India (AMI-2019)" and International Symposium on "Microbial Technologies in Sustainable Development of Energy, Environment, Agriculture and Health", Central University of Haryana

15. 04-11-2019 to 09-11-2019, **S.K. Singh, (Invited Lecture)** "Neurotropic Viruses: From Neuroinvasion to Neuroinflammation, IBRO-APRC School of Neuroscience on "Blood-Brain-Barrier: From Basic Physiology to Neurological Disorders", Dept. of Biochemistry, Panjab University, Chandigarh.

16. 01-09-2019 to 14-09-2019, **S.K. Singh, (Invited Lecture)** "Neurotropic Viruses affecting Brain Homeostasis, IBRO-APRC School of Neuroscience on "Molecular Basis of Neuroinflammation Mediated Neurodegeneration", Dept. of Biochemistry, Institute of Science, BHU, Varanasi.

17. 08-04-2019-14-04-2019, **S.K. Singh, (Invited Lecture)**, Workshop on Research Methodology in Biological Sciences, Dept. of Kayachikitsa, Faculty of Ayurveda, BHU, Varanasi

18. 24-02-2019, **S. K. Singh, (Keynote Lecture)**, "Brain Storming Workshop, DBT Star College Scheme, Lecture: "Hitches and Hiccups in Research Project Formulation and Execution" U.P. College, Varanasi

19. 20-02-2019, **S. K. Singh, (Invited Lecture)**, "Public Health Threats of Emerging Viral Diseases - National Symposium on Applied Spectroscopy: Biology and Medical Science, U.P. College, Varanasi

20. 02-02-2019, **S. K. Singh, (Invited Lecture)**, "Emerging Viral Pathogens: Challenges in Diagnostics & Therapeutics", SPIRIT'19 - A National Seminar and Students Conclave, organized by The Pharmaceutical Society, Pharmaceutical Engineering and Technology, IIT, BHU, Varanasi

21. 09-01-2019-11-01-2019, **S. K. Singh, (Invited Lecture)**, "Japanese Encephalitis Virus exploits cellular microRNAs to counteract the host Immune Response",14th Conference in the series on "Vectors and Vector Borne Diseases" (ICOV-14), Bhubaneswar

22. 29-10-2018-31-10-2018, **S. K. Singh, (Invited Lecture)**, "Exploitation of microglial MicroRNA management by Neurotropic Viruses "International Conference on Neuroscience & XXXVI Annual Meeting of Indian Academy of Neurosciences", Dept. of Zoology, BHU, Varanasi.

23. 10-08-2018- 11-08-2018, **S.K. Singh, (Invited Lecture)**, "Catch & Control Approach" of Immunity against Pathogens "National Seminar on Mechanisms of Immune Response", Dept. of Molecular & Human Genetics, Banaras Hindu University, Varanasi.

24. 27-01-2018- 29-01-2018, **S.K. Singh, (Invited Lecture)**, Diverse Viruses play with the diversity of microRNAs for their pathogenesis "International Symposium on Biodiversity and Biobanking "BIODIVERSE 2018", Indian Institute of Technology (IIT), Guwahati.

25. 14-12-2017- 16-12-2017, **S.K. Singh, (Invited Lecture)**, MicroRNAs in Viral Invasion to Immune Evasion "44th Annual Conference of the Indian Immunology Society (IMMUNOCON 2017)", Institute of Science, Nirma University, Ahmedabad, Gujarat.

26. 04-03-2017 **S.K. Singh, (Keynote Lecture)**, Viruses opt for tricky routes to disguise hosts "National Seminar on Immunological Advances in Health Management: Current Scenario and Future Perspectives", Dept. of Life Sciences, Central University of Gujarat, Gujarat.

27. 11-02-2017-12-02-2017, **S.K. Singh, (Invited Lecture)**, HIV Tat exploiting Tiny microRNAs to target the junctional integrity "5th Molecular Virology Meeting", Translational Health Science and Technology Institute (THSTI), Faridabad, Haryana.

28. 02-02-2017-03-02-2017, **S.K. Singh, (Invited Lecture)**, Neurotropic viral infections and Glial Cells "DBT Brainstorming Session on Glial Cell Research in Health and Disease", Dept. of Neuroscience, Jiwaji University, Gwalior.

29. 14-11-2016 to 17-11-2016, **S.K. Singh, (Invited Lecture)**, "Circuitry of Cellular MicroRNAs and Neurotropic Viral Infections" Indo-US Symposium on Central Nervous System Virus Infection and its Therapy" at Sinclairs Retreat Dooars, Chalsa Hilltop, Jalpaiguri

30. 14-11-2016 to 17-11-2016, N. Sharma, KL Kumawat, A. Basu, **S.K Singh (Poster Presentation)**, "Japanese Encephalitis virus regulates JAK-STAT signaling by miR-432 mediated SOCS5 upregulation in human brain microglial cells" Indo-US Symposium on Central Nervous System Virus Infection and its Therapy" at Sinclairs Retreat Dooars, Chalsa Hilltop, Jalpaiguri

31. 19-10-2016 to 25-10-2016, **S.K. Singh**, "Hidden menace of Emerging and Re-emerging Viruses", Short term course "Advances in Biosciences and Bioengineering" Motilal Nehru National Institute of Technology (MNNIT), Allahabad.

32. 03-07-2016, **S.K. Singh**, "Hypoxia induced changes in Blood Brain barrier, Brain Storming

Session on Hypoxia Induced Brain Ischemia, "National Brain Research Centre (NBRC), Haryana.

33. 19-06-2016 to 24-06-2016, **S.K. Singh**, "HIV-1 Tat protein exploits the microRNA mediated regulation of Blood Brain Barrier Permeability, Gordon Research Seminar on Barriers of the CNS (GRS), Colby-Sawyer College in New London NH USA.

34. 01-05-2016 to 05-05-2016, N Sharma, KL Kumawat, **S.K Singh**, JEV regulates JAK-STAT signaling by miR-432 mediated SOCS5 upregulation in human brain microglial cells, Keystone Symposia on Molecular and Cellular Biology-2016 (Section: Positive-Strand RNA Viruses (N1)), Hyatt Regency Austin, Austin, Texas, USA.

35. 08-01-2016 to 10-01-2016, N Sharma, K.L Kumawat, **S.K. Singh**, "miR-432 Mediated Expression of SOCS5 Regulates JAK-STAT Signalling during JEV Infection, 8th RNA Group Meeting", CSIR-Centre for Cellular and Molecular Biology (CCMB), Hyderabad-500007.

36. 08-01-2016 to 10-01-2016, **S.K. Singh, (Invited Lecture)** "MicroRNA-mediated Compromise in the Integrity of Human Brain Microvascular Endothelial Cells in HIV Neuropathogenesis, 8th RNA Group Meeting", CSIR-Centre for Cellular and Molecular Biology (CCMB), Hyderabad-500007.

37. 18-09-2015 to 19-09-2015, **S.K.Singh, (Keynote Lecture)** "Emerging Viral Diseases: Threats and Contributing Factors", International Conference on New Frontiers in Industrial and Applied Biotechnology "GenoPro-2015", Dept. of Biotechnology, Invertis University, Bareilly

38. 05-09-2015 to 20-09-2015, **S.K. Singh, (Invited Lecture)** "NeuroAIDS: A travelogue of HIV from periphery to brain and exploitation of cellular machinery by HIV protein, IBRO-APRC School of Neuroscience on "Molecular Advancement in Neurobiology", DBT-BHU Interdisciplinary School of Life Sciences, BHU, Varanasi.

39. 14-06-2015 to 19-06-2015, **S.K. Singh**, "NeuroAIDS: Tricks of HIV-Tat to Hit the Blood Brain Barrier Through microRNAs", Gordon Research Seminar on Infections of the Nervous System, The Chinese University of Hong Kong, Hong Kong, China.

40. 05-11-2014 to 06-11-2014, **S.K. Singh (Dr. B.N. Bailey Invited Lecture)** "Fevers from Forests" in "NERVECON 2014" organized by Indo-Nepal Association for Peripheral Nerve Surgery at Institute of Medical Sciences, Banaras Hindu University (BHU), Varanasi.

41. Sept 27-09-2014 to 28-09-2014, **S.K. Singh (Keynote Lecture)** "Anthropogenic factors and spread of zoonotic infections" in the International Seminar "New Frontiers in Biotechnology: Functional Genomics and Proteomics" department of Biotechnology, Invertis University, Bareilly.

42. 12-07-2014 to 15-07-2014, **S.K. Singh, (Invited Lecture)**, HIV- Tat Protein Harnesses MicroRNAs to compromise the Integrity of Human Brain Microvascular Endothelial cells; at International Conference on Host- Pathogen Interaction, organised by National Institute of Animal Biotechnology (NIAB) at University of Hyderabad, Hyderabad.

43. 14-06-2014 to 15-06-2014, R. Mishra, **S.K. Singh, (Invited Lecture)**, HIV-1 Tat protein exploits the microRNA mediated regulation of Blood Brain Barrier Permeability, Gordon Research Seminar on Barriers of the CNS (GRS), Colby-Sawyer College in New London NH USA.

44. 23-02-2014 to 25-02-2014, **S.K. Singh (Invited Lecture)** "MicroRNAs and HIV Neuropathogenesis: From invasion to inflammation," Indo-US Symposium on Viral Infections of the Nervous System" at HYATT Gurgaon, India; organized by Indo-US Science & Technology Forum (IUSSTF) and National Brain Research Centre (NBRC), Manesar, Haryana.

45. 10-01-2014 to 11-01-2014, **S.K. Singh (Inaugural & Keynote Lecture)** "Role of Climate Change and Globalization on spread of Vector Borne Viral Diseases" in National Symposium on Biotechnology: Its advent and Future Promises" at Bishop Heber College, Tiruchirapalli, (T.N).

46. 13-11-2013 **S.K. Singh (Invited Lecture)** "Biosecurity Measures: Best Defence against disease outbreak" in workshop "Bio-Security and Outbreak Analysis Network" (BiSOAN-2013), organized by CR Rao Advanced Institute of Mathematics, Statistics and Computer Science (AIMSCS), University of Hyderabad, Hyderabad.

47. 16-10-2013 to 18-10-2013, **S.K. Singh, (Invited Lecture)**, Spill Over Transmissions and Risk of Infectious Diseases", XII International Conference on Vector and Vector Borne Diseases organized by University College of Science, ML Sukhadia University Udaipur, Rajasthan & National Academy of Vector Borne Diseases, Bhubaneswar.

48. 30-08-2013 to 31-08-2013, **S.K. Singh, (Plenary Lecture)** Emerging and Re-emerging viral zoonoses: A challenge to science and society, National Conference on "Dengue and Chikungunya Epidemiology and their Management in India" organized by Scott Christian College, Nagercoil, T.N and Centre for Research in Medical Entomology (CRME), (ICMR) Madurai.

49. 10-01-2013 to 11-01-2013, **S.K. Singh, (Invited Lecture)** "Association of HIV-1 Tat C protein with microRNA mediated regulation of Immune Adaptor Molecule TRAF3" in 3rd Molecular Virology Meeting at National Institute of Virology, Pune.

50. 17-10-2012 to 19-10-2012, R. Mishra, C. Chhatbar**, S.K. Singh**, HIV-1 Tat C mediated regulation of TRAF3 by microRNA 32 in human microglia" in XXXVI All India Cell Biology Conference and International Symposium organized by Bhabha Atomic Research Centre, Mumbai

51. 15-03-2012 to-16-03-2012, **S.K. Singh, (Plenary Lecture)** "HIV Neuropathogenesis: Mechanisms and Consequences" in National Symposium on "HIV and AIDS: Biology to Bedside" at Amity University, India.

52. 06-01-2011, **S.K. Singh, (Invited Lecture)** "Intersection of Climatology with Infection Biology" in National Symposium on Biotechnology: Its advent and Future Promises" at Bishop Heber College, Tiruchirapalli, (T.N)

53. 13-05-2010, **S.K. Singh, (Invited Lecture)** "Small RNAs and Viral Infection" at Institute

of Parasitology, Jihoceska University, Academy of Science Czech Republic, Czech Republic.

54. 06-03-2010 to 10-03-2010, MK. Johri, R. Mishra, C. Chhatbar, S. Krishnan, **S. K. Singh**, Role of HIV Tat Protein in HIV Pathogenesis, "Second Advanced Summer School in Africa on "Molecular mechanism of Viral infection and Propagation" organized by IUBMB/ICGEB/FEBS/FASBMB/UNESCO, Hermanus, South Aftrica.

55. 26-10-2009 **S.K. Singh (Invited Lecture)** "HIV Neuropathogenesis" at Dept. of Pediatrics, University Children Hospital, Wuerzburg, Wuerzburg, Germany

56. 30-08-2009 to 04-09-2009, **S.K. Singh**, M. Urooj, S. Krishnan, R. Mishra, C. Chhatbar, M. Horiuchi, D. Pleasure, 2009, MicroRNA profiling of Rat brain Oligodendroglial lineage Cells, "BIOMICS Hands-on Workshop & Conference" Weizmann Institute of Science, Israel.

57. 30-07-2009 to 01-08-2009, **S.K. Singh (Keynote Lecture)**, National Symposium on Prospective Aspects of Microbial Biotechnology, SFR College for Women, Sivkasi (TN).

58. 12-02-2009 to 14-02-2009, **S.K. Singh (Keynote Lecture)**, International Conference on Advances in Biosciences: From Darwin to Dolly and beyond held at Yeshwant Mahavidyalaya, Nanded (MS).

59. 18-10-2008 to 20-10-2008, **S.K. Singh (Keynote Lecture)**, National Seminar on Emerging Trends in Modern Biology at Acharya Nagarjuna University, Guntur (AP).

60. **S.K Singh**, H. Morbach, C. Faber, H.J.Girschick, Expression of Rekombination aktivating genes in human B cells after exposure to Borrelia burgdorferi, (Abstract in German) DGPI, Düsseldorf 06/2005.

61. **S.K Singh**, H. Morbach, C. Faber, H.J.Girschick, Expression of Recombination activating genes in human B cells after exposure to Borrelia burgdorferi PRES annual Congress. Paris 09/05, Clin Exp Rheumatol 2005, 23: S-8.

62. **S.K Singh**, H. Morbach, C. Faber, H.J.Girschick, Expression of Recombination activating genes in human B cells after exposure to Borrelia burgdorferi, EULAR, Vienna, 07/05, 2005.

63. H. Morbach, **S.K. Singh**, C. Faber, A. Grammer, P.E. Lipsky, H.J. Girschick, RAG1 expression by peripheral blood B cells of pediatric patients with SLE. 5th EULAR Congress, Berlin, 2004.

64. **S.K Singh**, H. Morbach, T. Nanki, C. Faber, V. Bar, H.J.Girschick, Differential expression of matrix metalloproteinases and cyclooxygenase in synovial cells infected by Borrelia burgdorferi. 5th EULAR Congress, Berlin, 2004.

65. H. J. Girschick, H. Morbach, **S. K. Singh**, Chemokine expression von synovialzellen nach infektion mit Borrelia burgdorferi. Monatsschrift f. kiderheilkunde (2003) 151/ Suppl.1.

66. H. J. Girschick, H. Morbach, U. Samfass, **S. K. Singh**, P. E. Lipsky, H. J. Girschick, 2003 Expression of RAG-1 and RAG-2 genes in peripheral B cells of children and adults with SLE, 39th

annual convention for paediatric research. Eur J Pediatrics (2003) 162: R6.

67. H. Morbach, U. Samfass, **S. K. Singh**, P. E. Lipsky, H. J. Girschick, 2003, Expression of RAG1, RAG 2 and VpreB genes in IgD+CD5+/- Peripheral B cells during Cyclophosphamide treatment in Paediatric SLE (Abstract), Arthritis and Rheumatism (2003) 48 Vol 9, S192.

68. **S. K. Singh**, A. Wirsing, V. Baar, H. Morbach, M. Frosch and H. J. Girschick, 2003, Expression of Chemokines, Metalloproteinases and Cyclooxygenases in Human Synoviocytes by different Borrelia burgdorferi Isolates (Abstract), Arthritis and Rheumatism (2003) 48 Vol 9, S519.

69. Morbach. H, Samfass, U, **Singh, S. K**., Lipsky, P. E, Girschick, H. J, 2003, Expression of RAG1, RAG2 and VpreB genes in IgD+CD5± peripheral B cells during cyclophosphamide treatment in pediatric SLE (Abstract in English/German). 13th conference of the working group on Juvenile and adolescent arthritis. Aktuelle Rheumatologie (2003), 28-G_4. DOI: 10.1055/s-2003-45081

70. **Singh S. K**, Wirsing A, Bar, V, Morbach, H, Frosch, M, Girschick, H. J, 2003. Expression of chemokines, metalloproteinases and cyclooxygenase in human synoviocytes by different Borrelia burgdorferi isolates. (Abstract in English/German). Akt. Rheumatol (2003) 28-G_6. DOI: 10.1055/s-2003-45083

MEMBERSHIP OF ACADEMICS SOCIETIES / PROFESSIONAL BODIES:

1. Member of "Inflammation Research Association (IRA)" US.

2. Past Member of "Society for Neuroscience", Washington, DC, U.S.

3. Life Member of "ISEP Science Academy", Gorakhpur (U.P), India.

4. Member of "American Fisheries Society", Bethesda (U.S.A).

5. Corresponding Member "International Society for Infectious Diseases," Massachusetts, US

6. Past Member "New York Academy of Sciences," New York, US.

7. Advisory Board Member on Infectious Diseases "European Medical Network (EuroMDnet)" Brussels, Belgium.

8. Collaborative Member-National School of Tropical Medicine, Baylor College of Medicine, Texas Medical Centre, Texas US.

9. Life Member (Membership No: 196)-National Academy of Vector Borne Diseases, Orissa,

10. Life Member (LS-245) of Indian Academy of Neurosciences

11. Life Member (LM/IIS/305/05/13) of Indian Immunology Society

12. Life Member (L-937) of Association for the Promotion of DNA Fingerprinting and other DNA Technologies (ADNAT)

13. Life Member of Society for Mitochondrial Research and Medicine (SMRM)-India

14. Life Member (Membership No: 4102) of Society of Biological Chemists, India

15. Member: European Virus Bioinformatics Center, Leutragraben, Jena, Germany

16. Member- Microbiology Society, London, UK

17. Life Member (Membership No: L/1954/2019) of Indian Society of Human Genetics

18. Life Member (Membership No: L37651) of The Indian Science Congress Association

19. Life Member of Indian Society for Malaria and Other Communicable Diseases, India

20. Life Member (Membership No: LM2254) of The Biotech Research Society, India

21. Life Member (Membership No: LM/I/549) of Society for Neurochemistry, India

22. Member (M-0103340), Infectious Diseases Society of America

23. Member (ID73887), American Society of Tropical Medicine & Hygiene

24. Life-Member (LM-307/IVS/2023), Indian Virological Society

SCIENTIFIC COURSES / WORKSHOPS ORGANISED

1. 10-07-2019 to 12-07-2019, Convener & Organizing Secretary, "Hands-on Workshop on Flow Cytometry" (jointly organized by Molecular Biology Unit & Beckman Coulter) at Molecular Biology Unit, Institute of Medical Sciences, BHU, Varanasi

2. 11-03-2019 to 12-03-2019, Organizing Secretary, "National Conference on Frontiers in Health Sciences, Institute of Medical Sciences, BHU, Varanasi

3. 17-07-2018 to 18-07-2018, Convener & Organizing Secretary, "Hands-on Workshop on Real Time-PCR" (jointly organized by Molecular Biology Unit & Agilent Technologies) at Molecular Biology Unit, Institute of Medical Sciences, BHU, Varanasi

4. 20-12-2017 to 22-12-2017, Convener, "Hands-on Workshop on Brightfield and Fluorescence Microscopy" (jointly organized by Molecular Biology Unit & Leica Microsystems) at Molecular Biology Unit, Institute of Medical Sciences, BHU, Varanasi

5. 14-11-2016 to 17-11-2016, Co-Organiser, "Indo-US Symposium on Central Nervous System Virus Infection and its Therapy" (14-11-2016 to 17-11-2016) along with Indian Institute of Education and Research (IISER), Kolkata and The University of IOWA, USA at Sinclairs Retreat Dooars, Chalsa Hilltop, Jalpaiguri, W.B., INDIA, INDIAhttp://www.iiserkol.ac.in/~indousmeeting2016/

ADMINISTRATIVE CONTRIBUTION & ORGANIZATIONAL EXPERIENCE

At the CSIR-Centre for Cellular and Molecular Biology (CSIR-CCMB), Hyderabad

1. Member: BSL-3/BSL-4 Committees of CCMB Hyderabad.

2. Member: Selection Committee for the JRF & Project Research Scholars of CCMB Hyderabad.

3. 23-06-2009-18-03-2014 Biosafety Officer-CCMB Hyderabad

4. Member-DST funded Project „Clinical Research facility for Stem cells and Regenerative Medicine“, CCMB Hyderabad.

5. 14-05-2010 to 18-03-2014 Member-Biosafety Committee, CCMB, Hyderabad.

6. 14-03-2011 to 19-03-2014 Course Cordinator-Immunology for Academy of Scientific and Innovative Research (AcSIR) New Delhi at CCMB Hyderabad.

7. 01-01-12 to 31-12-13 Member- Management Council of CCMB, Hyderabad.

8. 13-03-2012 to 12-03-2015 Member, BSL-3 Management Committee, University of Hyderabad, Hyderabad.

9. 15-03-2012 to 16-03-2012 Member “National Organising Committee for National Symposium on “HIV and AIDS: Biology to Bedside” organised by Amity University, U.P.

10. 03-07-2012 to 02-07-2015 Member-Biosafety Committee-Indian Institute of Technology (IIT), Hyderabad.

11. 18-06-2013 to 17-06-2015 Member-Information Management Committee, CSIR-Indian Institute of Chemical Technology (IICT), Hyderabad.

At the Banaras Hindu University (BHU), Varanasi

1. Head-Molecular Biology Unit (Aug 01, 2021- March 23, 2023), Institute of Medical Sciences, Banaras Hindu University (BHU), Varanasi.

2. Head-Molecular Biology Unit (Aug 01, 2017- July 31, 2020), Institute of Medical Sciences, Banaras Hindu University (BHU), Varanasi.

3. Professor Incharge (Nov 10, 2017-March 15, 2023), Centre of Experimental Medicine and Surgery (CEMS), Institute of Medical Sciences, Banaras Hindu University (BHU), Varanasi.

4. Head-Molecular Biology Unit (May 26, 2014- May 25, 2017), Institute of Medical Sciences, Banaras Hindu University (BHU), Varanasi

5. IMS-Placement Coordinator (Sept 12, 2018-March 23, 2023), Institute of Medical Sciences, Banaras Hindu University (BHU), Varanasi.

6. Member-Steering Committee (Oct 2020- March 23, 2023), Central Discovery Centre (Anusandhan Bhawan), Banaras Hindu University (BHU), Varanasi

6. Member-Institutional Biosafety Committee (IBSC) (Aug 10, 2020- March 23, 2023), Banaras Hindu University (BHU), Varanasi.

7. Member-Governing Body (March 2020- March 2023), Institutions of Eminence, BHU, Varanasi

8. Member-Central Purchase Committee (Nov 27, 2019- March 23, 2023), Banaras Hindu University Member- Working Technical Committee (Life Science), DST-PURSE Program, BHU

9. Convener-HRAMS Sub-Committee (Nov 2019), Sophisticated Analytical & Technical Help Institutes (SATHI), BHU Varanasi

10. Member-Core Management Committee (Sept 2019-March 2023), Sophisticated Analytical & Technical Help Institutes (SATHI), BHU Varanasi

11. Member-Institutions of Eminence- Foreign Faculty & Students Committee (Mar-2019-Mar 2023), BHU, Varanasi

12. External Member-DBT Star College Scheme (Dec 2018) of U.P College Varanasi

13. Convener- Research Forum (June 30, 2018- March 23, 2023), Institute of Medical Sciences, Banaras Hindu University (BHU), Varanasi.

14. Convenor; Policy Planning Committee (2014- March 23, 2023) of Molecular Biology Unit, Institute of Medical sciences, Banaras Hindu University (BHU), Varanasi.

15. Chairman, Departmental Purchase Committee (2014-2023), of Molecular Biology Unit, Institute of Medical sciences, Banaras Hindu University (BHU), Varanasi.

16. Member, Departmental Research Committee (DRC) (2014- 2023) of Molecular Biology Unit, Institute of Medical sciences, Banaras Hindu University (BHU), Varanasi.

17. Observer, (PAT-2016) - Institute of Medical Sciences, Banaras Hindu university, Varanasi.

18. 2015, Member, Review Committee, Bone Marrow & Stem Cell Transplant Programme, BHU, Varanasi.

19. 2015- 2023, Member, Departmental Quality Cell (DQC), of Molecular Biology Unit, Institute of Medical Sciences, Banaras Hindu university, Varanasi.

20. Coordinator-Board of Examiners for the Molecular Biology in Research Entrance test (RET)-Sept 2014

<u>At the University of Delhi, Delhi</u>

1. May 03, 2024 to till date, Director, Delhi School of Public Health (DSPH), Institutions of Eminence (IOE), University of Delhi, New Delhi-110007
2. May 31, 2024 to till date, External Member, Board of Studies-Allied Medical Sciences, Faculty of Allied Medical Sciences and Healthcare Skills (FAMSHS), Delhi Skill and Entrepreneurship University (DSEU), New Delhi-110007

3. 13-06-2024 to till date, Chairman, Institutional Biosafety Committee (IBSC), University of Delhi (North Campus), New Delhi

4. 26-03-23 to 25-03-25, Member Governing Body (GB), Ramjas College, University of Delhi, Delhi.

5. 14-06-23 to 13-06-25, Member Governing Body (GB), Dyal Singh College,

University of Delhi, Delhi.

6. 08-3-2 to 09-03-24, Chairperson, Selection Committee, Vallabhbhai Patel Chest Institute (VPCI)), University of Delhi, New Delhi

7. 02-01-24 to 05-01-24, VC Nominee, Selection Committee, Kalindi College, University of Delhi, New Delhi

8. 01-5-23 to 05-05-23, VC Nominee, Selection Committee, Dyal Singh Evening College, University of Delhi, New Delhi

9. 02-05-23 to 01-05-2028 Chairperson, Institutional Animal Ethical Committee, ACBR, University of Delhi.

10. 2023-till date, Chairperson, Dept. Research Committee, ACBR, University of Delhi, Delhi.

11. 18-07-2023-till date, Member, Internal Quality Assurance Cell (IQAC), University of Delhi, Delhi

12. 01-08-2023- till date, Member, Review Committee, IOE Schools, University of Delhi, Delhi

13. 2023-till date, Member, Board of Research Studies, University of Delhi, Delhi

At National Level

1. 19-10-2023, Member-Project Review Committee, DBT- SAHAJ: On-site assessment "CAR Biocompatible Materials" at GITAM (Deemed to be University), Visakhapatnam.

2. 22-06-2023, Member-Project Review Committee, DBT-BUILDER: On-site assessment RGCB Interdisciplinary Life Science Program for Research Based Learning at Rajiv Gandhi Centre for Biotechnology (RGCB) Trivandrum- 695014

3. 28-07-2022 – till date: Member Standing Committee of AcSIR in reference to NIV Virology

4. 06-01-2022 to 05-01-2025, Task Force Member-Research Resources Service Facility and Platforms (RRSFP)-Department of Biotechnology (DBT), Govt. of India, New Delhi

5. 16-04-2022, Member, Institutional Human Ethics Committee, IISER, Berhampur

6. 26-05-2022- till date-Chairman, Institutional Human Ethics Committee, All India Institute of Medical Sciences (AIIMS), Bathinda, Punjab-151001, India

7. 11-11-2021, Expert Member, Central Drugs Standard Control Organization (CDSCO), New Delhi

8. 13-05-2021, Member-Advisory Committee- Dept. of Science and Technology

(DST)- Science and Engineering Research Board (SERB)-IRHPA National Biosafety Level-3 and Level-4 Facilities

9. 27-10-2020-till date Member, Research Advisory Committee (RAC), Uttarakhand Biotechnology Council, Govt. of Uttarakhand

10. 2020-Member-DBT- 'Scientific Infrastructure Access for Harnessing Academia University Research Joint Collaboration, (DBT-SAHAJ), DBT, New Delhi

11. 2020-COVID19 Task Force Member of Science and Engineering Research Board (SERB), Dept. of Science and Technology, Govt. of India, New Delhi

12. 2020-Member-DBT-Boost to University Interdisciplinary Life Sciences for Education and Research (DBT-BUILDER), DBT, New Delhi

13. 16-04-2013-15-04-2016 Member Research Advisory Committee (RAC), Directorate of Coldwater Fisheries Research (DCFR), Bhimtal, Uttarakhand

14. 13-01-2011 to 03-03-2016 DBT, Govt. of India-Nominee-Institutional Biosafety Committee (IBSC) - Hetero Research Foundation, Hyderabad.

At International Level

a. 21-08-2024, Vice Chairperson, Consortium for Research Security in Asia (CRSA)

b. 01-12-2023 to 01-12-2024-Ambasssdor, Royal Society of Biology, UK

c. 01-01-2022 onwards, Expert Member & Instructor on "Haemorrhagic Fever Viruses "in Module 43 of Virology in European Federation of Clinical Chemistry and Laboratory Medicine (EFLM).

d. 2015-External Expert Evaluator of Faculty Member (to be tenured) in the Virology-University of British Columbia, Canada.

Societal Impact related outreach activity

COVID19 related diagnostic Activities

Lead the team to conduct the 20,354 COVID19 diagnostic tests (RT-PCR based) at the Institute of Medical Sciences, BHU, Varanasi-221005 from May 19, 2020 to July 09, 2020

COVID19 related Scientific Comments/Communication as a Public Outreach Activity

1. Animal-human transmission of virus increasing, cautions virologist Sunit Singh (The Hindu BusinessLine, Feb 11, 2020)

https://www.thehindubusinessline.com/news/science/animal-human-transmission-of-virus-increasing-cautions-virologist-sunit-singh/article30790471.ece

2. Plasma puzzle (September 20, 2020, THE WEEK)
https://www.theweek.in/theweek/current/2020/09/11/plasma-puzzle.html

3. Line of defence (August 23, 2020, THE WEEK)
https://www.theweek.in/theweek/current/2020/08/13/line-of-defence.html

4. 4. First indigenous rapid antibody test 'Kavach Elisa' ready for production (May 10, 2020, THE WEEK)
https://www.theweek.in/news/health/2020/05/10/first-indigenous-rapid-antibody-test-kavach-elisa-ready-for-production.html

5. Centre advises antibody tests for cough, cold, sore throat patients in COVID-19 hotspots (April 04, 2020, THE WEEK)
https://www.theweek.in/news/india/2020/04/04/centre-advises-antibody-tests-for-cough-cold-sore-throat-patients-in-covid-19-hotspots.html

6. COVID blood bank mulled (The Hindu, April 07, 2020)
https://www.thehindu.com/news/cities/Hyderabad/covid-blood-bank-mulled/article31283776.ece

7. First Chloroquine drug trial for COVID-19 unsuccessful, (TRIBUNE, Oct 2020)
https://tribune.com.pk/story/2184588/8-first-chloroquine-drug-trial-covid-19-unsuccessful

8. No Cure Or Vaccine, Doctors Rely On Each Other, & Guidelines (April 11, 2020)
https://www.indiaspend.com/no-cure-or-vaccine-doctors-rely-on-each-other-guidelines/

9. How close are we to a coronavirus vaccine? All you need to know **(July 26, 2020, THE WEEK)**
https://www.theweek.in/news/health/2020/07/21/good-news-from-oxford-cansino-pfizer-covid-19-vaccine-trials-all-you-need-to-know.html

10. Recovered policeman tests COVID +ve a second time. Can we ever be truly immune, explained (July 24, 2020, THE WEEK)
https://www.theweek.in/news/health/2020/07/24/recovered-policeman-tests-covid-positive-a-second-time-are-we-ever-immune-to-the-virus.html

11. Hydroxychloroquine Use for COVID-19 Coronavirus Shows No Benefit In First Small—But Limited—Controlled Trial (Mar 25, 2020, FORBES)
https://www.forbes.com/sites/tarahaelle/2020/03/25/chloroquine-use-for-covid-19-shows-no-benefit-in-first-small-but-limited-controlled-trial/#715dc99e4c86

12. Team spirit (May 03, 2020, THE WEEK)
https://www.theweek.in/theweek/cover/2020/04/23/team-spirit.html

13. Covid negative despite symptoms, being close to infected person? Here's why
https://www.indiatoday.in/coronavirus-outbreak/story/rtpcr-test-negative-covid-infected-people-symptoms-omicron-1902589-2022-01-21

14. What's the 'Delta plus' variant? And can it escape vaccines? An expert explains
https://theconversation.com/whats-the-delta-plus-variant-and-can-it-escape-vaccines-an-expert-explains-163644

15. If I've already had COVID, do I need a vaccine? And how does the immune system respond? An expert explains
https://theconversation.com/if-ive-already-had-covid-do-i-need-a-vaccine-and-how-does-the-immune-system-respond-an-expert-explains-164236

16. BA.2 Omicron sub-variant gradually replacing BA.1: Experts
https://www.indiatoday.in/coronavirus-outbreak/story/ba2-omicron-sub-variant-gradually-replacing-ba1-experts-covid-1904140-2022-01-25

17. Explained: What's the 'Delta plus' variant? And will Covid-19 vaccines work against it?
https://scroll.in/article/999282/explained-whats-the-delta-plus-variant-and-will-covid-19-vaccines-work-against-it

18. New study raises prospect of Zika virus therapy
https://thefederal.com/science/new-study-raises-prospect-of-zika-virus-therapy/

19. Is Deltacron a new COVID-19 variant? Here's what you need to know
https://www.businesstoday.in/coronavirus/story/is-deltacron-a-new-covid-19-variant-heres-what-you-need-to-know-318444-2022-01-10

20. Natural immunity, Smallpox vaccine: Easy to control Monkeypox virus, says experts
https://www.indiatoday.in/science/story/natural-immunity-vaccine-smallpox-monkeypox-virus-experts-1954854-2022-05-27

21. Monkeypox is symptomatic, cannot spread like Covid-19: Prof. Sunit K Singh
https://timesofindia.indiatimes.com/city/varanasi/monkeypox-is-symptomatic-cannot-spread-like-covid-19-prof-sunit-k-singh/articleshow/91849955.cms

22. IMS-BHU finding to help understand Zika
https://timesofindia.indiatimes.com/city/varanasi/ims-bhu-finding-to-help-understand-zika/articleshow/87560688.cms