Curriculum Vitae of Anirban Basu

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1. Education:

A. **B. Sc.:** (*Life Science/ Physics/ Chemistry*), School of Life science, Viswa-Bharati University, Santiniketan, India, 1991

B. **M. Sc.:** (*Zoology*), School of Life Science, Viswa-Bharati University, Santiniketan, India, 1993

C. **Ph.D.:** (*Immunology*), CSIR-Indian Institute of Chemical Biology, Kolkata, India, 1998

2. Post Doctoral Training:

Post-Doctoral Research Fellow, Neural and Behavioral Sciences, The Pennsylvania State University College of Medicine, Hershey, Pennsylvania, USA. 1999-2004

3. Awards and Honors:

A. Awards/Fellowships/Oration and Endowment Lectures:

1. **National Bioscience Award for Career Development**- (Department of Biotechnology, Ministry of Science and technology, Government of India), 2010.
2. **Elected to Fellowship in the National Academy of Sciences**, **India** (NASI)-2011*
3. **Vasvik Industrial Research Award** (Biological Sciences and technology)-2011
4. **J B Srivastav Oration Award** (Indian Council for Medical Research)-2011
5. **Rajib Goyal Prize** (Life Sciences)-2012-13
6. **Elected to Fellowship in the West Bengal Academy of Science and Technology** (WAST), 2012
7. **NASI- Reliance Industries Platinum Jubilee Award** for Application Oriented Innovations in Biological Sciences-2013.
8. **Tata Innovation Fellowship** (Department of Biotechnology, Ministry of Science and Technology, Govt. of India)-2015-2020

9. **Senior Scientist Oration Award** (Indian Immunology Society)-2015
10. **Elected to fellowship in the Indian National Science Academy** (INSA)-2017*
11. **Sreenivasaya Memorial Award** of Society of Biological Chemist (India)-2017
12. **Basanti Devi Amir Chand Prize** (Indian Council for Medical Research)-2017
13. **Prof. S. S. Katiyar Endowment Lecture** of The Indian Science Congress Association (ISCA)-2018.
14. **Dr. Y.S. Narayana Rao Oration Award** (Indian Council for Medical Research)-2018
15. **Elected to Fellowship in the Indian Academy of Sciences** (IASc)-2018*
16. **Elected to Fellowship in the American Academy of Microbiology** (AAM)-2019
17. **K T Shetty Memorial Oration Award** (Indian Academy of Neurosciences)-2019 (*awarded in 2020*)

B. Member of Editorial Boards (include full Journal name)

- 2012- September 2018: Editorial Board, ***Scientific Reports*** (Nature Publication Group)
- 2012-present Editorial Board, ***Journal of Neuro-inflammation*** (Biomed Central)
- 2012-present Editorial Advisory Board, ***F1000 Research***.
- 2012-2018: Faculty member in the ***Faculty of 1000*** **in the section Neurological Disorders**-Infectious Diseases of the Nervous System.
- 2013: Guest Editor, ***Clinical and Developmental Immunology***; for a special issue "Microglia in Development and Disease".
- 2014-2017: Academic Editor; ***PLoS One***.
- 2014- Present: Handling editor, ***Journal of Neurochemistry***.
- 2015-Present: Editorial board member of ***Metabolic Brain Disease***
- October 2018- ***Co-Section Head*****; Faculty of 1000 for the Infectious Diseases of the Nervous System Section** (*which forms part of the Neurological Disorders Faculty*).

* F1000 Faculty Member of the Year Award for the Faculty of Neurological Disorders-2012, 2013, and 2016*

**The awards recognize Faculty Members who have made the most significant contribution to the F1000 service over the past year, as judged by their editorial team*.

4. Publications:

Peer reviewed publications:

***Publication summary*:**

Total Number of publications:	**139**
Research articles:	109
Reviews:	21
Commentary/Editorials:	04
Book chapters:	05
Patent:	01

Orchid ID: 0000-0002-5200-2054

Research Impact: *h* index = **48;**

Total citations: **7157** ***[Google scholar]***

5 articles featured on cover

A. Research Articles

1. M A Wani, S Mukherjee, S Mallick, I Akbar, and **A Basu** (2020) Atorvastatin ameliorates viral burden and neural stem/progenitor cell (NSPC) death in an experimental model of Japanese encephalitis. ***Journal of Biosciences*** 45:77
2. B Hazra, S Chakraborty, M Bhaskar, S Mukherjee, A Mahadevan, **A Basu** (2019). miR-301a regulates inflammatory response to Japanese Encephalitis Virus infection via suppression of NKRF activity. ***Journal of Immunology*** 5;203(8):2222-2238
3. S Mukherjee, I Akbar, R Bhagat, B Hazra, A Bhattacharyya, P Seth, D Roy, **A Basu** (2019) Identification and classification of hubs in miRNA target gene networks in human neural stem/progenitor cells following Japanese encephalitis virus infection. ***mSphere*** 4(5). pii: e00588-19.
4. M Agrawal, M Rastogi, S Dogra, N Pandey, **A Basu**, S K Singh (2019) Chandipura Virus changes cellular miRNome in human microglial cells***. J Med Virol***. 2019;1-11.
5. H P Kalmode, S S Patil, K L Handore, P R Athawale, R Dandela, A K Verma, **A Basu**, D S Reddy (2019) Neural Anti-inflammatory Natural Product Periconianone A: Total Synthesis and Biological Evaluation. ***European Journal of Organic Chemistry*** (13), 2376-2381
6. S Mukherjee, I Akbar, B Kumari, S Vrati, **A Basu**[#], A Banerjee (2019) Japanese Encephalitis Virus-induced let-7a/b interacted with the NOTCH-TLR7 pathway in microglia and facilitated neuronal death via caspase activation, ***Journal of Neurochemistry*** 149(4):518-534 (#joint corresponding author). (***Cover page article***)

7. A Ojha, A Bhasym[$], S Mukherjee[$], G K Annarapu, T Bhakuni, I Akbar, T Seth, N K. Vikram, S Vrati, **A Basu**[#], S Bhattacharyya, P Guchhait (2019) Platelet factor 4 promotes rapid replication and propagation of Dengue and Japanese encephalitis viruses. ***EBioMedicine*** 39:332-347. [AB[$], and SM[$] equal contribution; all the JE virus related animal study reported in this communication has been done by SM, and IA at NBRC, under the supervision of AB[#]]

8. S Mukherjee, N Sengupta, A Chaudhuri, I Akbar, N Singh, S Chakraborty, A R Suryawanshi, A Bhattacharyya, and **A Basu** (2018) PLVAP and GKN3 Are Two Critical Host Cell Receptors Which Facilitate Japanese Encephalitis Virus Entry Into Neurons. ***Scientific Reports*** 8(1):11784

9. A K Verma, T S Waghmare, G R Jachak, S C Philkhana, D S Reddy, and **A Basu** (2018) Nitrosporeusine ameliorates Chandipura virus Induced inflammatory response in CNS via NFκb inactivation in microglia. ***PLoS Neglected Tropical Diseases*** 12(7):e0006648

10. AK Verma, S Ghosh, and **A Basu** (2018) Chandipura Virus Induced Neuronal Apoptosis via Calcium Signaling Mediated Oxidative Stress. ***Front Microbiol*** 6;9:1489. doi: 10.3389/fmicb.2018.01489.

11. S Swaroop, A Mahadevan, S K Shankar, Y K Adlakha, and **A Basu** (2018) HSP60 critically regulates endogenous IL-1β production in activated microglia by stimulating NLRP3 inflammasome pathway. ***J Neuroinflammation*** 15(1):177. doi: 10.1186/s12974-018-1214-5

12. S Mahanti, A Majhi, R Adhikary, S Ghosh, **A Basu**, and B Bishayi (2017) Exogenous Interleukin-10 and ciprofloxacin treatment reduces inflammation and helps to improve cognitive behavior in acute and chronic restrain stressed mice infected with *Eschericia coli*. ***Indian Journal of Bichemistry & Biophysics*** 54: pp 241-257.

13. A Verma, P Tripathi, N Rai, **A Basu**, A Jain, V Atam, M Agarwal, and R Kumar (2017) Long-Term Outcomes and Socioeconomic Impact of Japanese Encephalitis and Acute Encephalitis Syndrome in Uttar Pradesh, India. ***Int J Infect***. 4(4):e15607

14. S C Philkhana[$], A K Verma[$], G R. Jachak, B Hazra, **A Basu*** and D S Reddy* (2017) Identification of new anti-inflammatory agents based on nitrosporeusine natural products of marine origin. ***Eur Journ of Med Chemistry*** Jul 28;135:89-109 [SCP[$] and AKV[$] equal contribution; AB* and DSR* joint corresponding author], [All the biological assays reported in this communication has been done by AKV, and BH at NBRC, under the direct supervision of AB]

15. M Nain, S Mukherjee, S Karmakar, A Paton, J Paton, M Abdin, **A Basu**, M Kalia, and S Vrati (2017) GRP78 is an important host-factor for Japanese encephalitis virus entry and replication in mammalian cells. ***Journal of Virology*** Feb 28; 91(6). pii: e02274-16. [All the primary cortical neuron related experiments mentioned in this communication has been done by SM at NBRC, under the supervision of AB]

16. B Hazra, K L Kumawat, **A Basu** (2017) The host microRNA miR-301a blocks the IRF1-mediated neuronal innate immune response to Japanese encephalitis virus infection. ***Science Signaling*** 10(466):eaaf5185. (***Cover page article***)

17. S Mukherjee, N Singh, N Sengupta, M Fatima, P Seth, A Mahadevan, S K Shankar, A Bhattacharyya, **A Basu** (2017) Japanese encephalitis virus induces human neural stem/progenitor cell death by elevating GRP78, PHB and hnRNPC through ER stress. ***Cell Death & Disease;*** 8(1):e2556

18. P Mall, AVerma, **A Basu**, Chandrakanta, S F Khan, A Jain, P Tripathi, S Jain, A Parihar, R Kumar (2016) Clinical and magnetic resonance imaging features in survivors of acute encephalitis syndrome in Uttar Pradesh, India. ***Curr Pediatr Res*** 2016; 20 (1&2): 245-249

19. S Ghosh, S Mukherjee, N Sengupta, A Roy, D Dey, S Chakraborty, D J Chattopadhyay, A Banerjee, and **A Basu** (2016) Network analysis reveals common host protein/s modulating pathogenesis of neurotropic viruses. ***Scientific Reports*** 1; 6:32593

20. N Sharma, K Kumawat, M Rastogi, **A Basu**, and S Singh (2016) Japanese Encephalitis Virus exploits the microRNA-432 to regulate the expression of Suppressor of Cytokine Signaling (SOCS) 5. ***Scientific Reports;*** 6:27685

21. A K Verma, S Ghosh, S Pradhan, and **A Basu** (2016) Microglial activation induces neuronal death in Chandipura virus infection. ***Scientific Reports***; 6:22544.

22. R Kumar, **A Basu**, S Sinha, Das M, Tripathi P, Jain A, Kumar C, Atam V, Khan S, Singh AS (2016) Role of oral Minocycline in acute encephalitis syndrome in India - a randomized controlled trial. ***BMC Infect Dis***. 2016 Feb 4;16(1):67. [The clinical trial mentioned in this communication, has been done based upon the preclinical research performed at AB's laboratory at NBRC. AB also contributed significantly in designing and managing this trial]

23. B Kumari, P Jain, S Das, S Ghosal, B Hazra, A C Trivedi, **A Basu**, J Chakrabarti, S Vrati, A Banerjee (2016) Dynamic changes in global microRNAome and transcriptome reveal complex miRNA-mRNA regulated host response to Japanese Encephalitis Virus in microglial cells. ***Scientific Reports***. 2016 Feb 3; 6:20263.

24. S Swaroop, N Sengupta, A R Suryawanshi, Y K Adlakha, **A Basu** (2016) HSP60 plays a regulatory role in IL-1β-induced microglial inflammation via TLR4-p38 MAPK axis. ***J Neuroinflammation.*** 2016 Feb. 2; 13(1):27.

25. K L Handore, P D Jadhav, B Hazra**, A Basu*,** and D S Reddy* (2015) Total Syntheses and Biological Evaluation of (±)-Botryosphaeridione, 2 (±)-Pleodendione, 4-epi-Periconianone B, and Analogues. ***ACS Medicinal Chemistry Letters*** 6 (11), pp 1117–1121 [* joint corresponding

author], (All the biological assays reported in this communication has been done by BH at NBRC, under the supervision of AB)

26. S Mahanti, A Majhi, K Kundu, **A Basu**, and B Bishayi (2015) Systemic Staphylococcus aureus infection in restraint stressed mice modulates impaired immune response resulting in improved behavioural activities. ***Journ of Neuroimmunology*** 288:102-13.

27. S Ghosh, G. Vinodh Kumar, **A Basu**, and A Banerjee (2015) Graph theoretic network analysis reveals protein pathways underlying cell death following neurotropic viral infection. ***Scientific Reports*** 5:14438

28. S Vasaikar, S Ghosh, P Narain, **A Basu**, and J Gomes (2015) HSP70 mediates survival in apoptotic cells–Boolean network prediction and experimental validation. ***Frontiers in Cellular Neuroscience*** 9:319. [All the biological assays reported in this communication has been done by SG at NBRC, under the supervision of AB]

29. N Sengupta, S Mukherjee, P Tripathi, R Kumar, A R Suryawanshi, **A Basu** (2015) Cerebrospinal Fluid Biomarkers of Japanese Encephalitis. ***F1000 Research*** 4:334

30. S Ghosh, S Mukherjee, and **A Basu** (2015) Chandipura Virus Perturbs Cholesterol Homeostasis Leading to Neuronal Apoptosis. ***Journal of Neurochemistry*** 135(2):368-80 (***cover page article***).

31. N Sharma, R Verma, K L Kumawat, **A Basu** and S K Singh (2015) miR-146a suppresses cellular immune response during Japanese encephalitis virus JaOArS982 strain infection in human microglial cells. ***Journal of Neuroinflammation*** 18;12(1):30

32. S Mukherjee, S Ghosh, A Nazmi, and **A Basu** (2015) RIG-I Knockdown Impedes Neurogenesis in a Murine Model of Japanese Encephalitis. ***Cell Biol Int*** 39(2):224-9.

33. P P Manna, S K Hira, **A Basu**, and S Bandyopadhyay (2014) Cellular therapy by allogeneic macrophages against visceral leishmaniasis: role of TNF-α. ***Cellular Immunology*** 290(1):152-163.

34. A Nazmi, S Mukherjee, K Kundu, K Dutta, A Mahadevan, S K Shankar, and **A Basu** (2014) TLR7 is a key regulator of innate immunity against Japanese Encephalitis Virus infection. ***Neurobiology of Disease*** 69: 235-247.

35. D K Kaushik, M C Thounajam, A Mitra, and **A Basu** (2014) Vespa tropica venom suppresses lipopolysaccharide mediated secretion of pro-inflammatory cyto-chemokines by abrogating nuclear factor-κ B activation in microglia. ***Inflammation Research*** 63(8):657-65.

36. M C Thounajam, K Kundu, D K Kaushik, S Swaroop, A Mahadevan, S K Shankar, and **A Basu** (2014) MicroRNA-155 Regulates Japanese Encephalitis Virus Induced Inflammatory Response by Targeting src Homology 2-Containing Inositol Phosphatase-1. ***Journal of Virology*** 88(9): 4798–4810

37. M C Thounajam, D K Kaushik, K Kundu, and **A Basu** (2014) microRNA-29b Modulates Japanese Encephalitis Virus Induced Microglia Activation by Targeting Tumor Necrosis Factor Alpha-induced Protein 3 (TNFAIP3) ***Journ of Neurochemistry*.** 129(1):143-54

38. A Majhi, K Kundu, R Adhikary, M Banerjee, S Mahanti, **A Basu**, and B Bishayi (2014) Combination therapy with Ampicillin and Azithromycin in an experimental pneumococcal pneumonia is bactericidal and effective in down regulating inflammation in mice. ***Journal of Inflammation*** 24; 11(1):5

39. N Sengupta, S Ghosh, S V Vasaikar, J Games, and **A Basu** (2014) Modulation of Neuronal Proteome Profile in Response to Japanese Encephalitis Virus Infection. ***PLoS One*** 9(3):e90211

40. K L Kumawat, D K Kaushik, and **A Basu** (2014) Acute exposure to lead acetate activates microglia and induces subsequent bystander neuronal death via caspase-3 activation. ***Neurotoxicology***; 41C:143-153

41. G D Manocha, R Mishra, N Sharma, K L Kumawat, **A Basu** and S K Singh (2014) Regulatory role of TRIM21 in type-I interferon pathway in Japanese encephalitis virus infected human microglial cells. ***Journal of Neuroinflammation*** 11:24

42. A Nazmi, I M Ariff, K Kundu, K Dutta, and **A Basu** (2014) Neural Stem/Progenitor Cells induces conversion of encephalitogenic T-cells into CD4+-CD25+- FOXP3+ Regulatory T-cells. ***Viral Immunology*** 27:2; 48-59

43. K Kundu, K Dutta, A Nazmi and **A Basu** (2013) Japanese encephalitis virus infection modulates the expression of Suppressors of Cytokine Signaling (SOCS) in macrophages: Implications for the hosts' innate immune response. ***Cellular Immunology*** 3; 285(1-2):100-110.

44. S Ghosh, K Dutta and **A Basu** (2013) Chandipura Virus induces Neuronal Death through Fas-mediated Extrinsic Apoptotic Pathway. ***Journal of Virology*** 87(22):12398-406.

45. D K Kaushik, M C Thounajam, K L Kumawat, M Gupta, and **A Basu** (2013) Interleukin-1β orchestrates underlying inflammatory responses in microglia via Krüppel-like factor 4. ***Journ of Neurochemistry*.** 127(2):233-244

46. D Adhya, K Dutta, K Kundu and **A Basu** (2013) Histone deacetylase inhibition by Japanese Encephalitis Virus in Monocyte/Macrophages: A Novel Viral Immune Evasion Strategy. ***Immunobiology*** 218: 1235– 1247

47. I M Ariff, M C Thounajam, S Das and **A Basu** (2013) Japanese Encephalitis virus infection alters both neuronal and astrocytic differentiation of Neural Stem/progenitor Cells. ***J Neuroimmuno Pharmacology***; 8(3):664-76

48. V Haridas, K S Rajgokul, S Sadanandan, T Agrawal, V Sharvani, M V S Gopalkrishna, M B Bijesh, K L Kumawat, **A Basu** and G R Medigeshi (2013) Bispidine-amino acid conjugates act

as a novel scaffold for the design of antivirals that block Japanese encephalitis virus replication. ***PLoS Neglected Tropical Diseases*** 7(1): e2005

49. P Mal, K Dutta, **A Basu** and B Bishayi (2013) Azithromycin in Combination with Riboflavin Decreases the Severity of Staphylococcus aureus Infection Induced Septic Arthritis by Modulating the Production of Free Radicals and Endogenous Cytokines. ***Inflammation Research*** Mar; 62(3):259-73

50. A Majhi, A Mahanti, K Kundu, K Dutta, **A Basu** and B Bishayi (2013) Increased resistance of immobilized-stressed mice to infection: correlation with behavioral alterations. ***Brain, Behaviour, and Immunity*** 28:115-27

51. P Mal, S Dutta, D Bandyopadhyay, K Dutta, **A Basu** and B Bishayi (2012) Gentamicin in combination with ascorbic acid regulates the severity of Staphylococcus Aureus induced septic arthritis in mice. ***Scan J Immunol*** 76(6):528-40

52. N Sehgal, KL Kumawat, **A Basu** and V Ravindranath (2012) Fenofibrate reduces mortality and precludes neurological deficits in survivors in murine model of Japanese encephalitis viral infection. ***PLoS One*** 7(4): e35427.

53. A Nazmi, R Mukhopadhyay, K Dutta and **A Basu** (2012) STING mediates neuronal innate immune response following Japanese encephalitis virus infection. ***Scientific Reports*** 2012, 2:347.

54. D K Kaushik, R Mukhopadhyay, K L Kumawat, M Gupta and **A Basu** (2012) Therapeutic targeting of Kruppel like factor 4 abrogates microglial activation. ***Journal of Neuroinflammation*** 9(1), 2012:57 (*Recommended article by Faculty of 1000*)

55. D K Kaushik, M Gupta, K L Kumawat and **A Basu** (2012) NLRP3 inflammasome: Key mediator of neuroinflammation in murine Japanese Encephalitis. ***PLoS One*** 7(2); 2012:e32270.

56. E Sen, **A Basu**, L B Willing, T F Uliasz, J L Myrkalo, S J Vannucci, S J Hewett and S W Levison (2011) Pre-Conditioning Induces the Precocious Differentiation of Neonatal Astrocytes to Enhance Their Neuroprotective Properties. ***ASN Neuro*** 3(3). pii: e00062

57. A Nazmi, K Dutta and **A Basu** (2011) RIG-I Mediates Innate Immune Response in Mouse Neurons Following Japanese Encephalitis Virus Infection. ***PLoS One*** 6(6):e21761

58. A Nazmi, K Dutta, S Das, and **A Basu** (2011) Japanese Encephalitis Virus Infected Macrophages Induces Neuronal Death ***J Neuroimmuno Pharmacology*** 6(3):420-33

59. S Das, K Dutta, K L Kumawat, A Ghoshal, D Adhya and **A Basu** (2011) Abrogated Inflammatory Response Promotes Neurogenesis in a Murine Model of Japanese Encephalitis. ***PLoS One*** 6(3); e17225

60. S Majumdar, K Dutta, S K Manna, **A Basu** and B Bishayi (2011), Possible protective Role of Chloramphenicol in TSST-1 and coagulasae positive *Staphylococcus aureus* induced septic arthritis with altered level of inflammatory mediators. ***Inflammation*** 34(4):269-82.

61. A Nazmi, K Dutta and **A Basu** (2010) Antiviral and Neuroprotective Role of Octaguanidinium Dendrimer-Conjugated Morpholino Oligomers in Japanese Encephalitis. ***PLoS Neglected Tropical Diseases*** 4(11) e892

62. D K Kaushik, M Gupta, S Das and **A Basu** (2010) Krüppel-like factor 4, a novel transcription factor regulates microglial activation and subsequent neuroinflammation. ***Journal of Neuroinflammation*** 7 (1):68.

63. S Das, S Chakraborty and **A Basu** (2010) Critical role of lipid rafts in virus entry and activation of Phosphoinositide 3' Kinase / Akt signaling during early stages of Japanese Encephalitis Virus infection in neural stem/progenitor cells. ***J Neurochem*** 115 (2): 537-549.

64. U K Misra, J Kalita, R Srivastava, P P Nair, M K Mishra and **A Basu** (2010) A Study of cytokines in tuberculous meningitis: clinical and MRI correlation. ***Neurosci Lett*** 483 (1): 6-10.

65. K Dutta, K L Kumawat, A Nazmi, M K Mishra, and **A Basu** (2010) Minocycline Differentially Modulates Viral Infection And Persistence In An Experimental Model Of Japanese Encephalitis. ***J Neuroimmuno Pharmacology*** 5(4):553-65

66. K Dutta, M K Mishra, A Nazmi, K L Kumawat and **A Basu** (2010) Minocycline Differentially Modulates Macrophage Mediated Peripheral Immune Response Following Japanese Encephalitis Virus Infection. ***Immunobiology*** 215: 884-893

67. D Nandi, M K Mishra, **A Basu** and B Bishayi (2010) Effects of IL-18 and IL-10 pre-treatment on the alteration of endogenous cytokines in liver and spleen of mice with experimental endotoximia. ***Indian Journal of Experimental Biology*** 48 (11): 1103-1110.

68. S Ghosh, D K Kaushik, J Gomes, S Nayeem, S Deep and **A Basu** (2010) Changes in cytosolic Ca^{2+} levels correspond to fluctuations of lactate levels in crosstalk of astrocyte-neuron cell lines. ***Indian Journal of Experimental Biology*** 48(06):529-537

69. K Dutta, D Ghosh, A Nazmi, K L Kumawat and **A Basu** (2010) A Common Carcinogen Benzo[a]pyrene Causes Neuronal Death in Mouse via Microglial Activation ***PLoS One*** 5(4): e9984

70. J Kalita, R Srivastava, M K Mishra, **A Basu** and U K Misra (2010) Cytokines and chemokines in viral encephalitis: a clinicoradiological correlation. ***Neurosci Lett*** 31; 473(1):48-51

71. D Nandi, M K Mishra, **A Basu** and B Bishayi (2010) Protective effects of Interleukin-6 in Lipopolysaccharide (LPS) induced experimental endo-toxemia are linked to alteration in hepatic anti-oxidant enzymes and endogenous cytokines. ***Immunobiology*** 215: 443-451

72. R Mukhopadhyay, M K Mishra, **A Basu** and B Bishayi (2010) Effect of particular antigenic stimulation or in vivo administration of Interleukin-6 on the level of steroidogenic enzymes in adrenal glands and lymphoid tissues of mice with parallel alteration in endogenous inflammatory cytokine level. ***Cellular Immunology*** 261 (2010) 23–28.

73. S Das, D Ghosh and **A Basu** (2009) Japanese encephalitis virus induce immuno-competency in neural stem/progenitor cells. ***PLoS One*** 4(12): e8134

74. M K Mishra, K Dutta, S K Saheb and **A Basu** (2009) Understanding the molecular mechanism of blood brain barrier damage in an experimental model of Japanese Encephalitis: Correlation with minocycline administration as a therapeutic agent. ***Neurochemsitry International*** 55(8):717-233**.**

75. D Ghosh, M K Mishra, S Das, D K Kaushik and **A Basu** (2009) Tobacco carcinogen induces microglial activation and subsequent neuronal damage. ***J Neurochem*** 110 (3): 1070-1081

76. K Dutta, D Ghosh and **A Basu** (2009) Curcumin protects neuronal cells from Japanese Encephalitis virus mediated cell death and also inhibits infective viral particle formation by dysregulation of Ubiquitin proteasome system. ***J Neuroimmuno Pharmacology*** 4(3): 328

77. M K Mishra**,** D Ghosh, R Duseja and **A Basu** (2009) Antioxidant potential of Minocycline in Japanese Encephalitis Virus infection in murine neuroblastoma cells: Correlation with membrane fluidity and cell death ***Neurochemistry International*** 54 : 464-470**.**

78. R Mukhopadhyay, M K Mishra, **A Basu** and B Bishayi (2009) Modulation of steroidogenic enzymes in murine lymphoid organs after immunization with soluble antigen. ***Immunological Investigations*** 38(1):14-30

79. M K Mishra, K L Kumawat and **A Basu** (2008) Japanese Encephalitis Virus differentially modulate the induction of multiple pro inflammatory mediators in human astrocytoma and astroglioma cell lines. ***Cell Biology International*** 32: 1506-1513

80. J Ghosh, V Swarup, A Saxena, S Das, A Hazra, P Paira, S Banerjee, N B Mondal and **A Basu** (2008) Therapeutic Effect of a Novel Anilidoquinoline derivative- 2-(2-methyl-quinoline-4ylamino)-N-(2-chlorophenyl)-acetamide In Japanese Encephalitis: Correlation with in vitro neuroprotection. ***Int J Antimicrob Agents*** 32 (2008) 349–354.

81. S Das and **A Basu** (2008) Japanese Encephalitis virus infects neural progenitor cells and decreases their proliferation. ***J Neurochem*** 106(4):1624-36

82. S Das, M K Mishra, J Ghosh and **A Basu** (2008) Japanese Encephalitis Virus infection induce IL-18 and IL-1β in microglia and astrocytes: Correlation with in vitro cytokine responsiveness of glial cells and subsequent neuronal death. ***Journal of Neuroimmunology*** 195 (2008) 60–72.

83. V Swarup, J Ghosh, S Das and **A Basu** (2008) Tumor necrosis factor receptor-associated death

domain mediated neuronal death contributes to the microglial activation and subsequent release of proinflammatory mediators in Japanese Encephalitis. ***Neurochemistry International*** 52 (2008) 1310–1321.

84. M K Mishra and **A Basu** (2008) Minocycline neuroprotects, reduces microglial activation, inhibits caspase-3 induction, and viral replication following Japanese Encephalitis. ***J Neurochem*** 105(5):1582-95

85. V Swarup, J Ghosh, M K Mishra and **A Basu** (2008) Novel strategy for treatment of Japanese Encephalitis using Arctigenin, a plant lignan. ***Journ Antimicrob Chemotherapy*** 61(3):679-88

86. J K Krady, H W Lin, C M Liberto, **A Basu**, S G Kremlev and S W Levison (2008) Ciliary neurotrophic factor modifies microglial reactivity to promote motor neuron survival. ***J Neurosci Res*** 86 (6): 1199-1208

87. V Swarup, S Das, S Ghosh and **A Basu** (2007) Tumor Necrosis Factor Receptor-1 Induced Neuronal Death by TRADD Contributes to the Pathogenesis of Japanese Encephalitis. ***J Neurochem*** 103(2): 771-83.

88. V Swarup, J Ghosh, R Duseja, S Ghosh and **A Basu** (2007) Japanese Encephalitis Virus infection decrease endogenous IL-10 production: correlation with microglial activation and neuronal death. ***Neurosci Lett.*** 420(2): 144-9.

89. V Swarup, J Ghosh, S Ghosh, A Saxena and **A Basu** (2007) Anti-Viral and Anti Inflammatory Effect of Rosmarinic Acid in an Experimental Murine Model of Japanese Encephalitis. ***Antimicrobial Agents and Chemotherapy,*** 51(9) 3367-70.

90. V Sharma, M Mishra, S Ghosh, **A Basu,** P Seth and E Sen (2007) Modulation of Interleukin-1□ mediated inflammatory response in human astrocytes by flavonoids: Implications in neuroprotection. ***Brain Res. Bull.*** 15; 73(1-3): 55-63.

91. M K Mishra, P Koli, S Bhowmick and **A Basu** (2007) Neuroprotection conferred by astrocytes is insufficient to protect animals from succumbing to Japanese Encephalitis. ***Neurochemistry International*** 50:764-773.

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B. Reviews:

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C. Editorial/Commentary:

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D. Patent:

The author of 1 invention in the field of Microbiology/ New drug discovery:

1. A process for the preparation of 2-methyl-4-(acetonilido)- amino quinoline, a novel compound useful as an antilieshmanial agent. N P Sahu, N B Mandal, S Banerjee, A P Kundu, M Raha, S Bandyopadhyay, C Pal, **A Basu** and G Chakrabarti [*Patent No: 191818, Country: India, File date: 1999-08-19*]

E. Book Chapter:

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2. D K Kaushik and **A Basu** (2013) Microglial activation: measurement of cytokines by flow cytometry. *In* Microglia: Methods and Protocols, ed J L. Venero, B Joseph, ***Methods Mol Biol***; 1041:71-82 Springer Protocols (Humana Press)
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