Detailed Curriculum Vitae of Anirban Basu

Anirban Basu, *Ph.D.*

Scientist VII, and J C Bose Fellow

National Brain Research Center,

Manesar, Gurugram, Haryana-122 052, India

Phone +91-124-2845225 (office), +91-124-2845325 (Lab)

Email: *anirban.nbrc@gmail.com*, *anirban@nbrc.ac.in*

Citizenship: Indian

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. :** (*Parasite Immunology*), 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. Positions:

A. National Brain Research Center, Manesar, Gurugram, Haryana-122052, India
Scientist VII
July 27th 2020-continuing

B. National Brain Research Center, Manesar, Gurugram, Haryana-122052, India
Scientist VI
June 3rd 2016-continuing

C. National Brain Research Center, Manesar, Gurugram, Haryana-122052, India
Scientist V
June 3rd 2011 - June 2nd 2016

D. National Brain Research Center, Manesar, Gurugram, Haryana-122052, India
Scientist IV
June 3rd 2008 - June 2nd 2011

E. National Brain Research Center, Manesar, Gurugram, Haryana-122052, India

Scientist III

June 3rd 2004 - June 2nd 2008

4. Awards and Honours:

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
18. Drs. Kunti & Om Prakash Oration Award (Basic Sciences)- (Indian Council for Medical Research)-2020.
19. J C Bose Fellowship (Science and Engineering Research Board, Ministry of Science and Technology, Government of India)-2021-2026.
20. Elected as Fellow, Indian Academy of Neurosciences (IAN)-2022.
21. Elected as a Member, Council of Indian National Science Academy (2023-2025).
22. Elected as a Vice President, Indian Academy of Neurosciences (2023-2025).

**Elected fellow of all three major national science academy in India*

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*.

C. Member grant review panels:

National:

1. Member, Innovative Young Biotechnology Award selection committee of Department of Biotechnology, Ministry of Science and Technology (2016- 2018)
2. Member, Science and Engineering Research Board (SERB), Health Science Program Advisory Committee (2017-2018)
3. Member, Basic Biology Task force of Department of Biotechnology, constituted for proposals from North East India. (2016-2018)
4. Member, Medical Science Task force of Council for Scientific and Industrial Research (2019-present)

Adhoc reviewer (International):

1. Fondation ARSEP - French MS Research Society.
2. Czech Science Foundation.
3. Wellcome Trust.
4. NC3Rs (UK).
5. Swiss National Science Foundation.
6. German Research Foundation (DFG).
7. DBT/Wellcome Trust India Alliance.

C. Important committee assignment and services to scientific community (selected):

1. Member, Council of Indian National Science Academy (2023-2025).
2. Observer, Fellowship selection committee of Indian National Science Academy, (category: Biomolecular, Structural Biology and Drug Discovery) (2023-2025).
3. Chair of the local committee (from India) of International Year of Basic Sciences for Sustainable Development (IYBSSD2022) (2022).
4. Member, Board of studies, Amity Institute of Neuropsychology & Neurosciences, Amity University. (2022-present)
5. Member, Fellowship selection committee of Indian Academy of Sciences (category: Medicine), (2019-present).
6. Member, Institutional Committee for Stem Cell Research, Regional Centre for Biotechnology, Faridabad, (2020-present).
7. Member, Board of Studies, Post-graduate program in Neuroscience, Gurugram University (2019-present).
8. Member, Institutional Human Ethics Committee of Premas Biotech, Manesar (2016-present).
9. Member, Institutional Biosafety committee of Translational Health Science Technology Institute, Faridabad (2011-2020).
10. Member, Animal Ethics Committee of Daiichi Sankyo Laboratories, Gurugram (2011-2015).
11. Member, Animal Ethics Committee of Ranbaxy Laboratories, Gurugram (2009-2013).
12. Member, Faculty promotion Committee of Translational Health Science Technology Institute, Faridabad (2011-2013).
13. Served as an international expert for faculty promotion and assessment for tenure for University of Hawaii at Manoa, and University of Minnesota Medical School.

5. Management and Institutional development activities: (*selected*)

Co-ordinator, Internal Working Group* (January 2023-continuing)

Hostel warden (2004-2008)

Chief Vigilance officer (January 2018-December 2020)

Chairperson, Grievance committee (2020-continuing)

Scientist-in-charge Animal House (January 2018-continuing)

Chairperson, Institutional Animal Ethics Committee (January 2021-continuing)

Faculty selection committee (2011-continuing)

Academic committee

Admission committee

* *This committee has been constituted to advise Director on policy matters, and monitor day to day running of the administration*

6. Memberships, Offices and Committee Assignments in professional Societies:

A). National:

1. Life Member, Indian Immunological Society (1998-present).
2. Life Member, Indian Academy of Neurosciences (2004-present).
3. Life Member, Society for Neurochemistry, India (2004-present).
4. Life Member, Society for Biological Chemists, India (2005-present).
5. Member Molecular Immunology Forum (2006-present).
6. Joint Secretary, Society for Neurochemistry, India (2007-2008).
7. Life Member the Cytometry Society, India (2010-present).
8. Member Executive Council, Indian Immunological Society (2010-2012).
9. Life Member Indian Society for Translational Research (2014-present).

B) International:

1. Member, Society for Neurosciences (2002-2008).
2. Member Asia Pacific Neurochemistry Society (2011-present).
3. Member International Society for Neurochemistry (2011-present).
4. Member, International Society for Neuroimmunology (2016-present).
5. Member, American Society for Microbiology (2019-present).

7. Teaching and mentoring:

<u>Masters and graduate (Ph.D.) students (teaching):</u>

A. Biochemistry and Cell Biology

B. Clinical neuroscience: Different aspects of Brain infection and importance of Gut microbiome in brain function, and Psychoneuroimmunology.

C. Practical courses for the Masters students (Molecular Biology)

Doctoral students:

***Completed*:**

1. Manoj Kumar Mishra (graduated 2010)
2. Sulagna Das (graduated 2010)
3. Deepak Kumar Kaushik (graduated 2013)
4. Arshed Nazmi (graduated 2014)
5. Sourish Ghosh (graduated 2016)
6. Shalini Swaroop (graduated 2018)
7. Abhishek Verma (graduated 2018)
8. Sriparna Mukherjee (graduated 2019)
9. Surajit Chakraborty (graduated 2022)
10. Meenakshi Bhaskar (graduated 2023)

On-going:

11. Shivangi Sharma
12. Stuti Mohapatra
13. Indira S Priya
14. Anirudh S

Masters students:

Completed:

1. Ayan Ghoshal, (graduated 2006)
2. Sourojit Bhowmick (graduated 2006)
3. Vivek Swarup (graduated 2007)
4. Sriparna Pradhan (graduated 2013)
5. Meenakshi Bhaskar (graduated 2017)
6. Trushnal S Waghmare (graduated 2018)
7. Masood Ahmed Wani (graduated 2019)
8. Indira S Priya (graduated 2020)
9. Ankit Kumar Shah (graduated 2021)
10. Triparna Chakraborty (graduated, 2023)

Post-Doctoral Fellows:

1. Soumya Ghosh Ph.D. (2005-2007)
2. Aruna Biswas Ph.D. (2008)
3. Kallol Dutta Ph.D. (2008-2012)
4. Rupanjan Mukhopadhyay Ph.D. (2010-2012)
5. Nabonita Sengupta Ph.D. (2012-2014)
6. Maneka Chanu Thonuajam Ph.D (2012-2014)
7. Deepak Kumar Kaushik Ph.D. (May- October 2013)
8. Harquin Foyet Simplace Ph.D. (July-2013 December) *
9. Bibhabasu Hazra Ph.D (2013- 2019)

10. Suvadip Mallick Ph.D. (2015-2018)
11. Sriparna Mukherjee Ph.D. (May-November 2019)
12. Atreye Majumdar, PhD (2021-continuing)
    *CV Raman Fellow, Senior Lecturer, University of Maroua, Cameroon

Research Assistants:

1. Sandhya Singh (2004-2005)
2. Khaleelulla Saheb (2004-2005)
3. Preeti Koli (2005-2007)
4. Amit Saxena (2005-2006)
5. Joydeep Ghosh (2006-2008)
6. Debapriya Ghosh (2007-2009)
7. Swarupa Chakrabarty (2008-2010)
8. Malvika Gupta (2009-2011)
9. Arinjay Mitra (2010-2011)
10. Dwaipayan Adhya (2010-2012)
11. Kiran Kundu (2011-2013)
12. Sriparna Mukherjee (2012-2014)
13. Noopur Singh (2013-2015)
14. Irshad Akbar (2015-2019)
15. Sujata Dev (2017-2019)

Mentored big number of students from undergraduate colleges, medical schools, and high schools.

Past lab members who are in the tenure track position or in the managerial level position at industry/R&D organization

1. Sulagna Das, Assistant Professor, Dept. of Cell Biology and Human genetics, Emory University, Atlanta. (*starting from January 2024*) (***PhD***, **2010**)
2. Vivek Swarup, Assistant Professor, Department of Neurobiology and Behavior, University of California, Irvine. ***(MSc, 2007)***
3. Deepak Kumar Kaushik, Assistant Professor, Immunology, Division of Biomedical Sciences, Faculty of Medicine, Memorial University of Newfoundland, Canada. ***(PhD, 2013)***
4. Sourish Ghosh, Senior Scientist, Indian Institute of Chemical Biology, Kolkata, India. ***(PhD, 2016)***
5. Menaka Thounaojam, Assistant Professor, Augusta University, Augusta, Georgia. ***(Post Doctoral Fellow 2012-2014)***
6. Bibhabasu Hazra, Assistant Professor, Ramakrishna Mission Vivekananda Centenary College, Department of Microbiology, Khardaha, West Bengal. ***(Post Doctoral Fellow 2013-2019)***
7. Manoj Kumar Mishra, Assessment officer, Pharmaceuticals Drugs Directorate, Health Products and Food Branch, Health Canada, Government of Canada. ***(PhD, 2010)***
8. Sourojit Bhowmick, Director, Head of Oncology Communications and Advocacy, Alkermes Plc,

Waltham, Massachusetts. ***(MSc, 2006)***

9. Ayan Ghoshal, Head of Neural Circuits Lab, Biogen, Cambridge, Massachusetts. ***(MSc, 2006)***
10. Soumya Ghosh, Senior manager, Diagnostic and Regulated materials, Merck, India. ***(Post Doctoral Fellow 2005-2007)***
11. Arshed Nazmi, Analytical Scientist 2, APC Ltd, Building 11, Cherrywood Business Park, Loughlinstown Co. Dublin. ***(PhD, 2014)***

8. Publications:

Peer reviewed publications:

***Publication summary*:**

Total Number of publications:	**152**
Research articles:	117
Reviews:	24
Commentary/Editorials:	05
Book chapters:	06
Patent:	01

Orchid ID: 0000-0002-5200-2054

Research Impact: *h* index = **54;** Total citations: **8994 [Google scholar]**

h index = **47;** Total citations: **6595 [Scopus]**

5 articles featured on cover

A. Research Articles

1. S Chakraborty, E Sen, and **A Basu** (2022) Pyruvate dehydrogenase kinase 1 promotes neuronal apoptosis upon Japanese encephalitis virus infection. ***IBRO Neuroscience Reports*** 13 (2022) 410–419.

2. N Soni, A Tripathi, S Mukherjee, S Gupta, S Mohanty, **A Basu**, A Banerjee (2022) Bone marrow-derived extracellular vesicles modulate the abundance of infiltrating immune cells in the brain and exert an antiviral effect against the Japanese encephalitis virus. ***FASEB BioAdvances***. 2022; 00:1–18.

3. S Chakraborty, and **A Basu** (2022) miR-451a Regulates Neuronal Apoptosis by Modulating 14-3-3ζ-JNK Axis upon Flaviviral Infection. ***mSphere*** 7(4): e0020822

4. R Mishra, K L Kumawat, **A Basu**, and A C Banerjea (2022) Japanese Encephalitis Virus infection increases USP42 to stabilize TRIM21 and OAS1 for neuroinflammatory and anti-viral response in human microglia. ***Virology;*** 573:131-140.

5. I P S Venkatesh, M Bhaskar, and **A Basu** (2022) Japanese Encephalitis Viral Infection Modulates Proinflammatory Cyto/Chemokine Profile in Primary Astrocyte and Cell Line of Astrocytic Origin. ***Metabolic Brain Disease;*** 37(5):1487-1502.
6. M Agrawal, M Rastogi, S Dogra, N Pandey, **A Basu**, S K Singh (2022) Chandipura Virus changes cellular miRNome in human microglial cells**.** ***J Med Virol***; 94(2):480-490.
7. M Bhaskar, S Mukherjee, and **A Basu** (2021) Involvement of RIG-I Pathway in Neurotropic Virus-Induced Acute Flaccid Paralysis and Subsequent Spinal Motor Neuron Death. ***mBio*** 12(6):e0271221.
8. D Vedagiri , D Gupta , A Mishra , G Krishna , M Bhaskar , V Sah , **A Basu** , D Nayak, M Veettil , KH Harshan (2021) Retinoic Acid Inducible Gene-I like Receptors Activate Snail to Limit RNA Viral Infections. ***Journ of Virology*** 3;95(21): e0121621.
9. S Sehrawat, R Khasa, A Deb, S Prajapat, S Mallick, **A Basu**, M Surjit, M Kalia, and S Vrati (2021) Valosin-containing protein/p97 plays critical roles in the Japanese encephalitis virus life cycle, ***Journ of Virology*** 95 :11 e02336-20
10. 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
11. 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
12. 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.
13. 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
14. 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***)
15. 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[#]]

16. 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

17. 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

18. 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.

19. 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

20. 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.

21. 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

22. 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]

23. 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]

24. 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***)

25. 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

26. 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

27. 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

28. 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

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

30. 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]

31. 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.

32. 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.

33. 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)

34. 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.

35. 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

36. 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]

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

38. 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***).

39. 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

40. 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.

41. 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.

42. 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.

43. 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.

44. 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

45. 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

46. 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

47. 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

48. 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

49. 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

50. 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

51. 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.

52. 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.

53. 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

54. 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

55. 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

56. 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

57. 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

58. 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

59. 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

60. 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.

61. 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.

62. 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*)

63. 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.

64. 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

65. 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

66. 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

67. 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

68. 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.

69. 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

70. 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.

71. 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.

72. 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.

73. 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

74. 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

75. 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.

76. 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

77. 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

78. 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

79. 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

80. 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.

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

82. 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**.**

83. 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

84. 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

85. 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**.**

86. 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

87. 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

88. 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.

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

90. 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.

91. 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.

92. 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

93. 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

94. 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

95. 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.

96. 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.

97. 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.

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

99. 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.

100. A Ghoshal, S Das, S Ghosh, M K Mishra, V Sharma, P Koli, E Sen and **A Basu** (2007) Proinflammatory mediators released by activated microglia induces neuronal death in Japanese Encephalitis. ***Glia*** 55:483-496.

101. S Bhowmick, R Duseja, S Das, M B Appaiahgiri, S Vrati and **A Basu** (2007) Induction of IP-10 (CXCL10) in astrocytes following Japanese Encephalitis. ***Neurosci Lett***. 414: 45-50.

102. H W Lin, ***A Basu**, C Drukman, M Cicchese, J K Krady and S W Levison (2006) Astrogliosis is not solely depend upon activating the type 1 Interleukin-1 receptor. ***Journal of Neuroinflammation*** 3:15 **,** (****co first author***)]

103. J Lazovic, ***A Basu**, J K Krady, R P Rothstein, M B Smith and S W Levison (2005)

Neuroinflammation and Both Cytotoxic and Vasogenic Edema Are Reduced in Interleukin-1 Type 1 Receptor-Deficient Mice Conferring Neuroprotection. ***Stroke*** 36:2226-2231 (****co first author***)]

104. J K Krady**, A Basu**, C M Allen, Y Xu, K F LaNoue, T W Gardner and S W Levison (2005) Minocycline Reduces Pro-Inflammatory Cytokine Expression, Microglial Activation And Caspase-3 Activation In A Rodent Model Of Diabetic Retinopathy. ***Diabetes*** 54:1559-65**.**

105. A Basu, J Lazovic, J K Krady, D T Maguer, R P Rothstein, M B Smith and S W Levison (2005) Interleukin-1 and the Interleukin-1 Type 1 receptor are essential for the progressive neurodegeneration that ensues subsequent to a mild stroke. ***Journ of Cereb Blood Flow and Metab*** **25:17-29** (*cover photo*).

106. S W Levison, S Druckman, G Young and **A Basu** (2003) Neural stem cell in the subventricular zone are a source of astrocytes and oligodendrocytes, but not microglia. ***Dev Neurosci*** **25**(2-4):184-196.

107. C J Kuhlow, J K Krady, **A Basu** and S W Levison. (2003) Astrocytic ceruloplasmin expression, which is induced by IL-1β and by traumatic brain injury, increases in the absence of the IL-1 type 1 receptor. ***Glia*** **44**(4):76-84.

108. A Basu, J K Krady**,** Mark O'Malley, Scott D Styren, Steven T Dekosky and S W Levison (2002) The type 1 Interleukin-1 receptor is essential for the efficient activation of microglia and the induction of multiple pro-inflammatory mediators in response to brain injury. ***J Neurosci*** **22**(14): 6071-6082.

109. A Basu, J K Krady, J R Enterline and SW Levison (2002) Transforming Groth Factor-ß1 prevents IL-1β induced microglial activation, whereas TNF-α and IL-6 stimulated activation are not antagonized. ***Glia*** **40 (1):** 109-120.

110. J K Krady, **A Basu**, S W Levison, and R J Milner (2002) Differential expression of protein tyrosine kinase genes during microglial activation. ***Glia*** **40**(1):11-24.

111. N P Sahu, C Pal, N B Mandal, S Banerjee, M Raha, A P Kundu, **A Basu**, M Ghosh K Roy and S Bandyopadhyay (2002) Synthesis of 2-(2-methyl-quinolin-4-ylamino)-*N*-phenyl acetamide: a Potential Antileismanial drug. ***Bioorg and Med Chem*** **10:** 1687-1693.

112. S Adhya, Md Q Hassan, S Mukherjee, P P Manna, **A Basu,** S Sen and S Bandyopadhyay (2002). Visceral leishmaniasis in India: promises and pitfalls of a PCR-based blood test. ***Trans of the Royal society of Trop Med and Hyg*** **96:** Supplement 1: S179-83.

113. C Pal, M Raha, **A Basu**, K C Roy, A Gupta, M Ghosh, N P Sahu, S Banerjee, N B Mandal and S Bandyopadhyay (2002) Combination therapy with indolylquinoline derivative and sodium antimony gluconate cures established visceral leishmaniasis in hamsters. ***Antimicrobial Agents and Chemotherapy.*** **46:**259-261.

114. **A Basu**, G Chakrabarti, A Saha and S Bandyopadhyay (2000) Modulation of $CD11c^+$ Dendritic cell functions in murine visceral leishmaniasis: Correlation with Parasite replication in the spleen. ***Immunology*** **99** 305-313.

115. G Chakraborti, **A Basu**, P P Manna, S B Mahato, N B Mandal and S Bandyopadhyay. (1999) Indolilquinoline derivatives are cytotoxic to Leishmania donovani promastigotes and amastigotes in vitro and effective in treating murine visceral leishmaniasis ***Journ Antimicrob Chemotherapy 43*** 359- 366.

116. P P Manna**, A Basu**, A Saha, Md Q Hassan, S Mukherjee, S Majumder, S Adhya and S Bandyopadhyay (1997) Leishmania donovani infects and survives in human lymphocyte cell lines *in vitro*. ***Current Science 73:*** 610-614.

117. G Chakrabarti, **A Basu**, P P Manna, S Bhattacharya, S Sen and S Bandyopadhyay (1996) Peripheral blood mononuclear cells of patients with Indian visceral leishmaniasis suppress natural killer cell activity in vitro. ***Trans of the Royal society of Trop Med and Hyg. 90***: 582-585.

B. Reviews:

1. A Majumdar, I P S Venkatesh, and **A Basu** (2023) Short -Chain Fatty Acids in the microbiota-Gut-Brain axis: Role in neurodegenerative disorders and viral infections. ***ACS Chemical Neuroscience*** 14(6):1045-1062.

2. A Majumdar, and **A Basu** (2022) Involvement of host microRNAs in Flavivirus induced neuropathology: an update. ***Journal of Biosciences;*** 47(3), 54

3. S Tripathi, B Shree, Mohapatra S, Swati, **Basu A***, and Sharma V* (2021) The Expanding Regulatory Mechanisms and Cellular Functions of Long Non-coding RNAs (lncRNAs) in Neuroinflammation, ***Molecular Neurobiology*** 58(6):2916-2939 (**joint corresponding author*)

4. S Chakraborty and **A Basu** (2020) The COVID-19 pandemic: catching up with the cataclysm ***F1000Research*** 9(F1000 Faculty Rev):638

5. S Ghosh and **A Basu** (2017) Neuropathogenesis by Chandipura Virus: An acute encephalitis syndrome in India. ***Natl Med J India*** 2017;30:21–5

6. **A Basu** and K Dutta (2017) Recent advances in Japanese encephalitis. ***F1000Research***. 2017 Mar 13;6:259

7. A Nazmi, B Hazra, K Dutta and **A Basu** (2014) Role of Pattern Recognition Receptors in Flavivirus Infections. ***Virus Research*** 185:32-40.

8. M C Thounajam, D K Kaushik and **A Basu** (2013) MicroRNAs in the Brain: It's regulatory role in Neuroinflammation. ***Molecular Neurobiology*** 47:1034–1044

9. D K Kaushik, and **A Basu** (2013) A friend in need may not be a friend indeed: role of microglia

in neurodegenerative diseases. ***CNS & Neurological Disorders-Drug Targets*** 12(6):726-40

10. N Sengupta, and **A Basu** (2013) Japanese Encephalitis Virus Infection: Effect on brain development and repair. ***Current Science*** 105, NO. 6: 816-820. [Special section: Clinical Neuroscience]

11. S Ghosh and **A Basu** (2012) Network Medicine in Drug Design: Implications for Neuroinflammation. ***Drug Discovery Today*** 17(11-12):600-7 [Invited review]

12. I M Ariff, A Mitra and **A Basu** (2012) Epigenetic regulation of self-renewal and fate determination in neural stem cells. ***Journ of Neurosci Research*** 90(3):529-39 (*Cover photo*)

13. S Das, and **A Basu** (2011) Viral Infection and Neural Stem/Progenitor Cell's fate: Implication in brain development and neurological disorders. ***Neurochemistry International*** 59(3):357-66. *Invited review for a special issue 'The potential of Stem Cells for 21st Century Neuroscience'.*

14. K Dutta and **A Basu** (2011) Use of Minocycline in Viral Infections. ***Ind Journ of Med Res*** 133(5):467-70

15. D K Kaushik, M Gupta and **A Basu** (2011) Microglial response to viral challenges: Every silver lining comes with a cloud. ***Frontiers in Bioscience*** 17:2187-205.

16. K Dutta, A Nazmi and **A Basu** (2011) Chemotherapy In Japanese Encephalitis: Are We There Yet? ***Infectious Disorders - Drug Targets*** 11(3):300-14.

17. S Chakraborty, A Nazmi, K Dutta and **A Basu** (2010) "Neurons Under Viral Attack: Victims Or Warriors?" ***Neurochemsitry International*** 56:727-735.

18. S Chakraborty, D K Kaushik, M Gupta and A Basu (2010) Inflammasome Signaling at The Heart of Central Nervous System Pathology. ***J Neurosci Res*** 88:1651-1631

19. D Adhya and **A Basu** (2010) Epigenetic Modulation of Host: New Insights into Immune Evasion by Viruses. ***Journal of Bioscience*** 35(4):647-663.

20. K Dutta, P N Rangarajan, S Vrati and **A Basu** (2010) Japanese Encephalitis: Pathogenesis, Prophylactis and Therapetucis. ***Current Science*** 98 (3): 22-30 (*Special section: Biology and pathogenesis of Virus)*

21. D Ghosh and **A Basu** (2009) Japanese Encephalitis - A Pathological and Clinical Perspective ***PLoS Neglected Tropical Diseases*** 3(9) e437

22. D Ghosh and **A Basu** (2008) Present Perspectives on Flaviviral Chemotherapy. ***Drug Discovery Today*** 13 (13-14): 619-624.

23. S Das and **A Basu** (2008) Inflammation: A new candidate in modulating adult neurogenesis ***J Neurosci Res*** 86 (6): 1199-1208

24. **A Basu,** J K Krady and S W Levison (2004) Interleukin 1: A master regulator of neuro-inflammation. ***J Neurosi Res*** **15; 78(2):** 151-156.

C. Editorial/Commentary:

1. S Chakraborty, and **A Basu** (2022) Catching hold of COVID-19-related encephalitis by tracking ANGPTL4 signature in blood: An Editorial Highlight for "Endothelial cell biomarkers in critically ill COVID-19-patients with encephalitis": An Editorial Highlight for "Endothelial cell biomarkers in critically ill COVID-19-patients with encephalitis" ***J Neurochem*** 161(6):458-462
2. B Hazra, S Chakraborty and **A Basu** (2017) miR-301a mediated immune evasion by Japanese encephalitis virus. ***Oncotarget*** Vol. 8, (No. 53), pp: 90620-90621
3. S Ghosh, and **A Basu** (2016) Acute Encephalitis Syndrome in India: The changing scenario. ***Ann Neurosci*** 2016; 23:131-133.
4. A Ghosh, Streit WJ, Minghetti L**,** and **A Basu** (2013) Microglia in Development and Disease. *Clinical and Developmental Immunology***; 2013:736459**
5. D Adhya, K Dutta and **A Basu** (2013) Japanese encephalitis claiming hundreds in India – epidemic in the National Capital Region imminent. ***International Health*** 5(3):166-8

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:

1. K Dutta, A Nazmi and **A Basu** (2013) Japanese encephalitis virus and human CNS infection. *In **Neuroviral Infections***, ed S.K. Singh, D. Ruzek, CRC Pr 1 LLc. [ISBN-10: 1439868522]
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)
3. K Dutta and **A Basu** (2014) Japanese Encephalitis: A Tale of Inflammation and Degeneration in the Central Nervous System. *In* ***Neuroinflammation and Neurodegeneration*** eds P.K. Peterson and M. Toborek. Springer-Science.
4. K Dutta, S Ghosh, and **A Basu** (2016) Infections and Inflammation in the Brain and Spinal Cord: A Dangerous Liaison. In ***Inflammation: The Common Link in Brain Pathologies*** eds N R Jana, **A Basu**, and P N Tandon. Springer-Science.
5. K Dutta and **A Basu** (2018) Overview on Japanese Encephalitis in South and Southeast Asia.

In ***Neglected Tropical Disease –South Asia***. ed. Sunit K Singh. Springer -Science

6. S Mohapatra, S Mukherjee, S Swaroop and **A Basu** (2022) Microglia orchestrate inflammation via HSP60 driven signaling pathway: a road map of molecular mechanism. ***The Biology of Glial Cells: Recent Advances***, 978-981-16-8312-1, 521150_1_En, (Chapter 17) Ishan Patro et al. (Eds). SpringerNature.

ANIRBAN BASU

Dated: July 12th, 2023

Place: Manesar, Haryana