
Guest Editor:

Pankaj Seth, Ph.D,
Professor,
Molecular and Cellular Neuroscience,
Neurovirology Section,
National Brain Research Centre,
NH-8, Manesar-122051, India.

Background: Neurotropic viruses, neurodegenerative disorders and inflammatory conditions of the central nervous system (CNS) are one of the leading causes of morbidity and mortality to the mankind. During the past two decades, scientific fraternity has witnessed major advancements in unravelling the pathogenesis of Human immunodeficiency Virus – 1 (HIV-1) infection in the CNS. Invasion of HIV-1, often leads to neurocognitive and motor deficits in HIV/AIDS patients commonly studied under the field of NeuroAIDS. Despite enormous positive outcomes in combating AIDS morbidity and mortality, neurological involvement during HIV/AIDS remains a relentlessly progressive disease with an incapacitating fate in many cases.

In the current setting of combined anti-retroviral therapy (cART), HIV-Associated Neurocognitive Disorders (HANDs) has transformed into a chronic disease that often intersects with aberrant immune responses, metabolic abnormalities, substance abuse, aging, and neurodegenerative disorders like Alzheimer’s, that have significant effect on the disease course. As the virus continues to evolve and HIV/AIDS pandemic enters the fourth decade, strategies for better diagnosis, prevention and treatment remain imperative for our battle against the virus.

In an attempt to have a comprehensive and current picture of the field, I have invited articles from basic and clinical researchers that have made significant contributions to neuroAIDS research as well as a representative of funding agencies, like NIH. There has been an enthusiastic response to our request for contributing the articles and I have consent and tentative titles from most of them.

The same are provided below –

1. Prof. Avindra Nath and Dr. Guhan Li, NINDS/NIH, USA – Astrocytes as an HIV reservoir.


3. Prof. Joan W Berman, Albert Einstein University, USA - Opioids and opiod replacement therapies: their impact on monocyte-mediated HIV neuropathogenesis.

4. Prof Shilpa Buch, University of Nebraska, USA - Opiates and HIV go hand in HAND.

5. Dr. Eliseo Eugenin, PHRI-Rutgers University, USA - Novel mechanisms of HIV CNS dysfunction.
6. Prof. Pankaj Seth, National Brain Research Centre, India – *HIV-1 and Neural Stem cells*.

7. Dr. Sunit K Singh, Center for Cell and Molecular Biology and Banaras Hindu University, India – *Overview of the Tricks of HIV-1 Tat to Hit the Blood Brain Barrier*.

8. Dr. Jeymohan Joseph, NIMH, USA - *NIMH Domestic and Global Priorities in NeuroAIDS and CNS Eradication Research*.

9. Dr. Jun Zhu, University of South Columbia, SC, USA (Confirmation awaited).

10. Dr. Mudit Tyagi, George Washington University (GW) School of Medicine and Health Sciences (SMHS), USA (Confirmation awaited).

**Keywords:**

NeuroAIDS  
Drug abuse  
HIV-1  
Viral latency  
Central Nervous System  
Blood Brain Barrier  
Neurodegeneration  
Neural Stem cells

1. Submission of manuscripts for review: 30/09/15  
2. Peer review complete: 30/12/15  
3. Final approval of the manuscripts for publication: 28/02/16  
4. Submission deadline: 30/04/16