In This Issue...

- **HISTORICAL PERSPECTIVE:**
  Treating HIV Patients in the Bronx and Beyond (p.2)
  The Bronx has been an epicenter of HIV since the epidemic began and researchers at the Albert Einstein College of Medicine and the Montefiore Medical Center (AECOM/MMC) have been on the forefront of HIV research. Melissa Cosenza-Nashat discusses how the Center for AIDS Research helps support HIV investigators in both the clinical and basic science settings and how research at AECOM/MMC branches out to other countries.

- **SCIENTIFIC REVIEW:**
  HIV-1 Dynamics in the Host Cell (p.10)
  The retroviral genome has evolved to contain the minimal components required for its replication. As a retrovirus, HIV has adapted to efficiently use numerous host cell proteins to positively regulate the various steps of its lifecycle. On the other hand, numerous proteins involved in innate immunity can have a negative impact on viral replication. Masha Sorin and Ganjam Kalpana take an in-depth look at the host proteins that modulate HIV replication and discuss potential targets for therapy.

- **MEDICAL REVIEW:**
  Global Antiretroviral Therapy: The Hope Within Pandora’s Box? (p.25)
  HIV does not exist in a vacuum and is prevalent in developing nations that have endemic diseases such as malaria and tuberculosis. In addition, poverty and inadequate health care systems are almost insurmountable obstacles that must be faced in trying to control the pandemic, especially in Africa. Carol Harris, Asqual Getaneh, and José M. Zuniga vividly describe the situation on multiple levels and highlight the possible paths that world leaders can take in order to address AIDS in Africa.

- **SCIENTIFIC REVIEW:**
  The Pathogenesis of HIV-associated Dementia: Recent Advances Using a SCID Mouse Model of HIV-Encephalitis (p.32)
  Highly active antiretroviral therapy (HAART) has been a successful treatment in limiting many opportunistic pathogens in HIV-infected patients. However, HIV-associated Dementia (HAD) is more prevalent, despite its decreasing incidence since the pre-HAART era. Jennifer Cook and William Tyor review the clinical symptoms and pathological entities of HAD. They also describe recent experiments performed with a Severe Combined Immunodeficiency mouse model of HIV encephalitis and its capacity to test potential therapies for the disease.

- **MEDICAL REVIEW:**
  Prevention and Treatment of HIV Infection in Injection Drug Users in the Bronx (p.41)
  One contributing factor to the incidence of HIV in the Bronx is the high number of injection drug users (IDUs). Injection drug use can promote HIV transmission because IDUs exercise behaviors such as unsafe injection practices and high-risk sex behaviors. Megha Ramaswamy, Kenneth Harris, Melissa Stein, and Julia Arnsten discuss the current treatment programs available for HIV-infected IDUs and the interventions being utilized at individual, social, structural, and medical levels that will be important for controlling HIV spread in this population.

- **MEDICAL RESEARCH REPORT:**
  Occupational Exposures to Potentially Infectious Material Among Guatemalan Health Care Workers (p.49)
  Guatemalan health care workers (HCWs) are at serious risk for contracting HIV and other bloodborne pathogens from patients due to occupational exposures to potentially infectious material. Blanca Samoya, Matthew Anderson, Eduardo Arathoon, Claudia Hernandez, Daniel Bourque, and Carlos Vela studied a cohort of HCWs in the Hospital General San Juan de Dios in Guatemala City to determine the incidence of accidental occupational exposures to potentially infectious body fluids. They discuss their results and propose suggestions on how to reduce risk for staff and trainees.

- **MEDICAL RESEARCH REPORT:**
  Blood Transfusions and HIV Risk in Kumba, Cameroon (p.53)
  In some developing nations, the technology and resources necessary for organized blood banking systems and the ability to perform screening for HIV and other bloodborne pathogens has only recently become available. Both of these uses are not widespread. In Cameroon, transfusions are commonly performed for complications due to pregnancy, but also for those suffering from malaria and sickle cell anemia. By studying a small cohort of patients and data from three transfusion centers, Yaron Langman, Joseph Becker, Ernest Drucker, Matthias Eyong, Peter Enyong, and Preston Marx test the knowledge base of the patients and discuss the capabilities of the medical centers. They also explore the notion that transfusions past and present pose a significant risk for HIV transmission in Kumba, Cameroon.

- **BOOK REVIEW:**
  We Are All the Same – A Story of a Boy’s Courage and a Mother’s Love (p.61)
  Kakuri Omari reviews this touching, non-fictional work that tells a tale of a young Zulu boy, born with HIV, and how he and his foster mother became advocates for equal treatment of HIV-infected patients and better access to HAART therapy.

- **BOOK REVIEW:**
  Angels in America (p.63)
  This poignant play-turned-movie received much praise and many awards for its depiction of HIV-infected New Yorkers. Aimée Luers explores its complicated plot and themes in this review.