

# NEWS IN NEUROVIROLOGY

Official newsletter of the  
*International Society for NeuroVirology*

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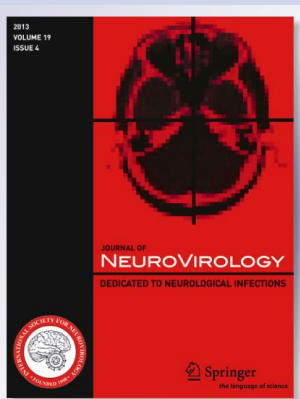
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**Journal of  
NeuroVirology**

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## ISNV 2021 – symposium preview A message from the meetings committee

*Lynn Pulliam, Ph.D. - Co-chair, Brian Wigdahl, Ph.D. - Co-chair  
Lena Al-Harathi, Ph.D., Bruce Brew, AM, MBBS, DMedSci, DSci, FRACP,  
FAAN, Michael Nonnemacher, Ph.D., Chris Power, M.D., FRCPC, Valerie  
Wojna, M.D.*

The meetings committee has been working together on an exciting agenda that will feature a number of world-renowned experts in timely areas such as COVID-19 and Emerging Pathogens.

The virtual symposium will occur over 3 afternoons and highlight exciting research on COVID in the brain, Nipah and Hendra viruses, HIV Cure/Eradication, HIV/Aging, and Topics in Neurovirology, including gene editing of HSV.

As in previous years, the sessions will be comprised of invited plenary speakers and short talks from selected abstracts where cutting-edge research has been identified by the Abstract Review Committee.

As always, in recognition and support of our rising young scientists, we will showcase our junior investigators in a separate session consisting of those who exhibit excellence in scientific research in various topics relative to the program.

As a first, we will host a virtual poster session where real time engagement with presenters will allow us to continue the tradition of this vital activity of sharing knowledge and forming future collaborations. In addition, the posters will remain online for the duration of the symposium so attendees may peruse at their leisure.

This has been a very difficult 14 months not only because of the pandemic but the seemingly daily challenges of injustice against people of color. Inclusiveness is more important than ever and as educators and biomedical scientists, we will continue to fight discrimination. Our Diversity lecture this year will focus on unconscious bias in the workforce and in our research as a reminder to all of us that we can do better.

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# Symposium preview

Continued from page 1

As we know, one of the most important aspects of the symposium is the networking/socializing. We encourage our attendees to take advantage of the virtual platform features outside of the “main conference hall” and catch up with old friends and make new ones.

This year’s meeting may be a little different, but the emphasis remains on an educational experience which can only be had at an ISNV conference. We encourage you all to be ambassadors of ISNV by enhancing the visibility of this exciting educational and research exchange opportunity to your students, trainees, and colleagues. The overall strength of the Society rests with an active membership across the United States and with our international colleagues located in countries around the world.

## Register for ISNV symposium

Registration for the 17th International Symposium on NeuroVirology and 2021 Conference on HIV in the Central Nervous System are now being accepted.

Fees (given in US \$) are as follows:

1. Scientist/Faculty/Clinician: ISNV member = \$150, non-member = \$450
2. Student/ postdoctoral fellow: ISNV member = \$50, non-member = \$150

Registration is available online at [www.isnv.org/shop](http://www.isnv.org/shop) or simply click the red circle below to register now.



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# Remembering Ned Sacktor

By Justin McArthur, M.D.

Johns Hopkins University School of Medicine

Ned C. Sacktor, a Johns Hopkins neurologist whose pioneering research on HIV/AIDS-associated cognitive dysfunction made him an international leader in the field, died November, 11, 2020, of pancreatic cancer. He was 57.

Because of his impact in global neurology, Sacktor was asked to serve as President of the World Neurology Foundation in 2016. Beginning in the early 1990's, Sacktor's studies of the link between HIV/AIDS and dementia had a profound impact. His studies in sub-Saharan Africa represented some of the first AIDS-related neurological research there. He conducted the first clinical trial of a potentially cognitive-enhancing agent, minocycline, in Uganda. In collaboration with Makerere University, he also performed one of the first comprehensive studies of the clinical characterization of HIV dementia in Kampala, Uganda. In addition, he examined the impact of HIV subtypes on cognitive performance in Uganda. Until recently, Sacktor also was involved in another NIH study examining neurological complications in one of the largest cohorts of HIV-positive individuals in the rural Rakai district of Uganda.

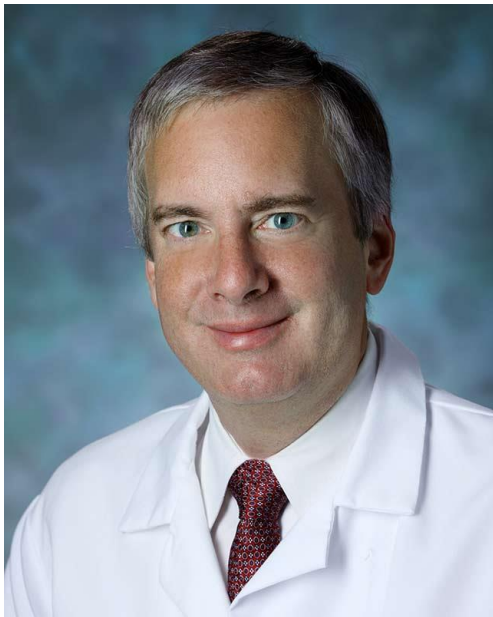


Image: JHU.edu

In the United States, Sacktor played a leading role in the NeuroAIDS research community, establishing groundbreaking clinical research within the large Multicenter AIDS cohort study (MACS) established in 1982 and the AIDS Clinical Trials Group established by the NIH in 1987, playing a leadership role in both.

He was instrumental in developing the HIV dementia program at Johns Hopkins in collaboration with Justin C. McArthur, current director of the Department of Neurology, and the late Richard T. Johnson (1931-2015), McArthur's predecessor as department head. Initially, this program was funded as the Research Center for AIDS Dementia and other retrovirus-related neurological disorders from 1999-2003, and continues to this day. As it evolved and grew, Sacktor's program became the leader and driver of studies relating to cognitive disorders in HIV/AIDS.

While developing this comprehensive research program, Sacktor also maintained a strong commitment to clinical work and was beloved by his patients, including those with different memory disorders, such as Alzheimer's disease, and vascular dementia. Patients were referred to him from around the country.

A Baltimore native, Sacktor graduated summa cum laude from Harvard in 1984, and obtained his medical degree from the University of Pennsylvania in 1988. He completed his neurology residency in 1992, at the Columbia University's Neurological Institute of New York. He was awarded a research fellowship in the Division of Behavioral Neurology at Columbia's Presbyterian Hospital, where he launched his research in the cognitive manifestations of HIV/AIDS.

Based on Sacktor's record of accomplishments in research, patient care, and teaching, he was recruited to join the Johns Hopkins University School of Medicine as an Instructor in 1994. He was promoted to a full professorship in 2009.

Sacktor was invited to give lectures throughout the United States and on six continents. These presentations were delivered in China, Uganda, Tanzania, Australia, Brazil, Germany, Italy, Portugal, and the United Kingdom.

As President of the Maryland Neurological Society in 1998, Sacktor organized and moderated several educational forums. They included programs highlighting current topics in the management of dementia and recent research by Johns Hopkins and University of Maryland neurology residents.

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# Remembering Ned Sacktor

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A prolific writer, Sacktor had a unique way of producing over 190 research articles. Throughout his career, he continued to write his papers and grant applications in an almost-indecipherable pencil script on a yellow legal pad. These were transcribed lovingly into Word documents by his devoted secretarial “code breakers.”

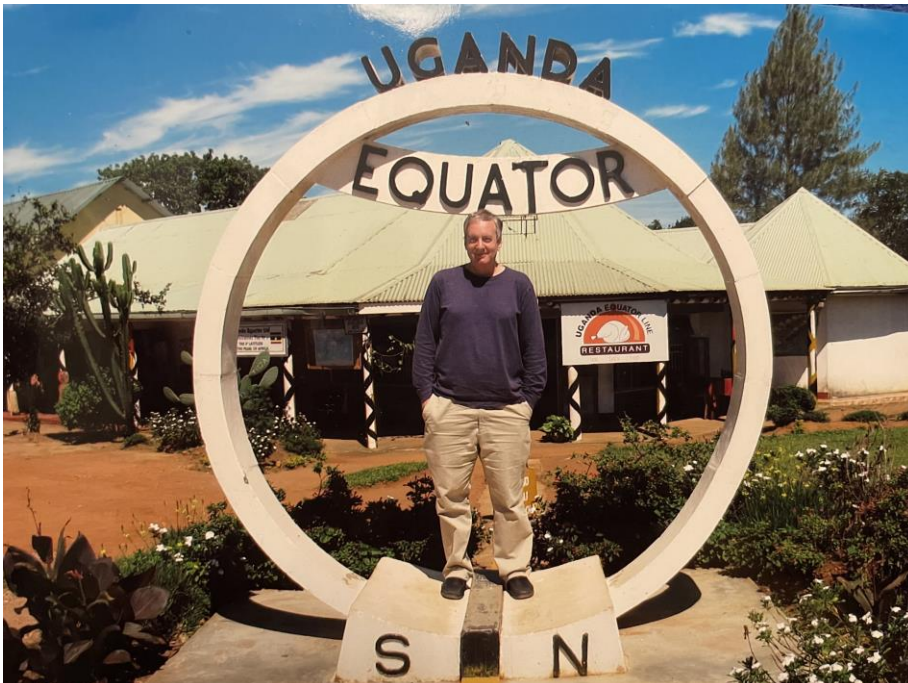
A devoted family man, husband and father, Sacktor loved photography, nature, and travel, always valuing time spent in Downeast Maine. He is survived by his wife Christine M. Layton, Ph.D., an alumna of the Bloomberg School of Public Health’s Department of Health Policy and Management, and their two teenaged daughters, Elizabeth and Laura. His brother, Todd Sacktor, M.D. is also a neurologist and neuroscientist at SUNY Downstate Health Sciences University.



Ned Sacktor in Uganda.  
Image credit: JHU



Ned Sacktor, Kerala, India.  
Image credit: Avi Nath



Ned Sacktor, Uganda.  
Image credit: Christine M. Layton

Here are some of the papers we are reading right now. Click the link to access the paper directly. Do you have a paper of interest to share? [Message us](#) and we will share it with the ISNV community.



Image credit: JHU

**Tory Johnson:** In this [applied immunology study published in Nature](#) the authors made a unique discovery about SARS-CoV-2 biology by closely studying the immune response to the virus. Here the authors studied the quantity, subtypes, and affinity of antibodies in patients at 1 and 6 months after infection with SARS-CoV-2. They noted that while IgG and IgM antibody levels decreased, IgA antibodies remained at consistent levels and importantly these antibodies demonstrated ongoing somatic hypermutation and increased affinity. This suggested to the authors that antigen persistence must be occurring, as affinity maturation requires antigen. Confirming this hypothesis, they found persistent viral presence (RNA and protein) in the small bowel of 50% of patients who underwent biopsy, suggesting that like other RNA viruses, SARS-CoV-2 may persist longer than originally conceptualized. This may have important implications for patients suffering from long-haul COVID.

**Rajnish Dave: COVID-19 in People Living with HIV (PLWH):** As the COVID-19 pandemic started there was concern that PLWH may be disproportionately affected by the disease. Data on COVID-19 disease in PLWH as well as individuals on HIV Pre-exposure Prophylaxis (PrEP) remains scarce. Questions about the effects of these two pandemics on a highly susceptible population have not been answered until recently. Hadi *et al* , AIDS 2020, 34:F3–F8 ([Characteristics and outcomes of COVID-19 in patients with HIV: a multicenter research network study](#)) & Mellor *et al* , AIDS 2021, 35:F1–F10 ([Risk of adverse coronavirus disease 2019 outcomes for people living with HIV](#)) provide some clarity on this topic. Hadi and coworkers analyzed clinical outcomes in 50,167 COVID-19 patients (49,763 non-PLWH & 404 PLWH). They found a large burden of comorbidities and high-risk features in patients with HIV presenting with COVID-19. Crude COVID-19 mortality was higher in PLWH. However, this higher mortality was driven by the higher burden of comorbidities. Mellor and coworkers also determined that PLWH had a higher risk of COVID-19 mortality compared to non-PLWH. There was insufficient data on the effect of CD4 T-cell count and HIV viral load on COVID-19 outcomes to draw any conclusions.



Image credit: UNMC



**Dianne Langford:** [This paper](#) found that SARS-CoV-2-related CNS abnormalities are observed in children. The most common imaging patterns were post-infectious immune-mediated acute disseminated encephalomyelitis-like changes, myelitis and neural enhancement. Significant pre-existing conditions were absent and most children had favorable outcomes. In four previously healthy children, cerebellar SARS-CoV-2 viral inclusions and co-infections including VZV, TB, and MRSA proved fatal.

A [Journal of Neuroscience](#) paper found Tau in the medial temporal lobe of cognitively normal older adults. Could this be an early indicator of potential cognitive decline? Data indicated a reduction of activity for repeated stimulus presentations compared to novel stimuli.

Image credit: Temple University