Neural dysfunction and neuroinflammation in African brain disorders

1R21NS064888-01A1 (April 2010 – May 2012)

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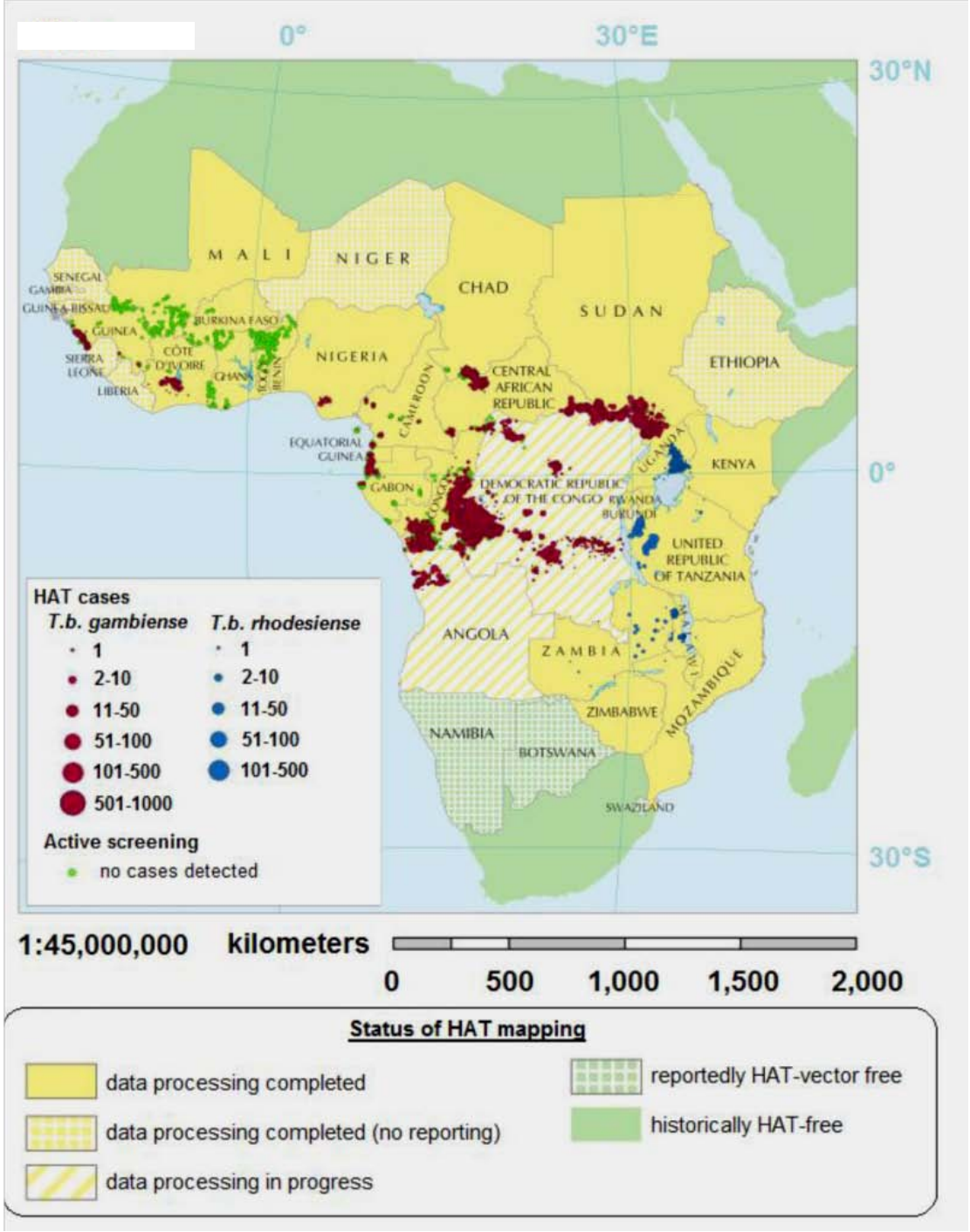
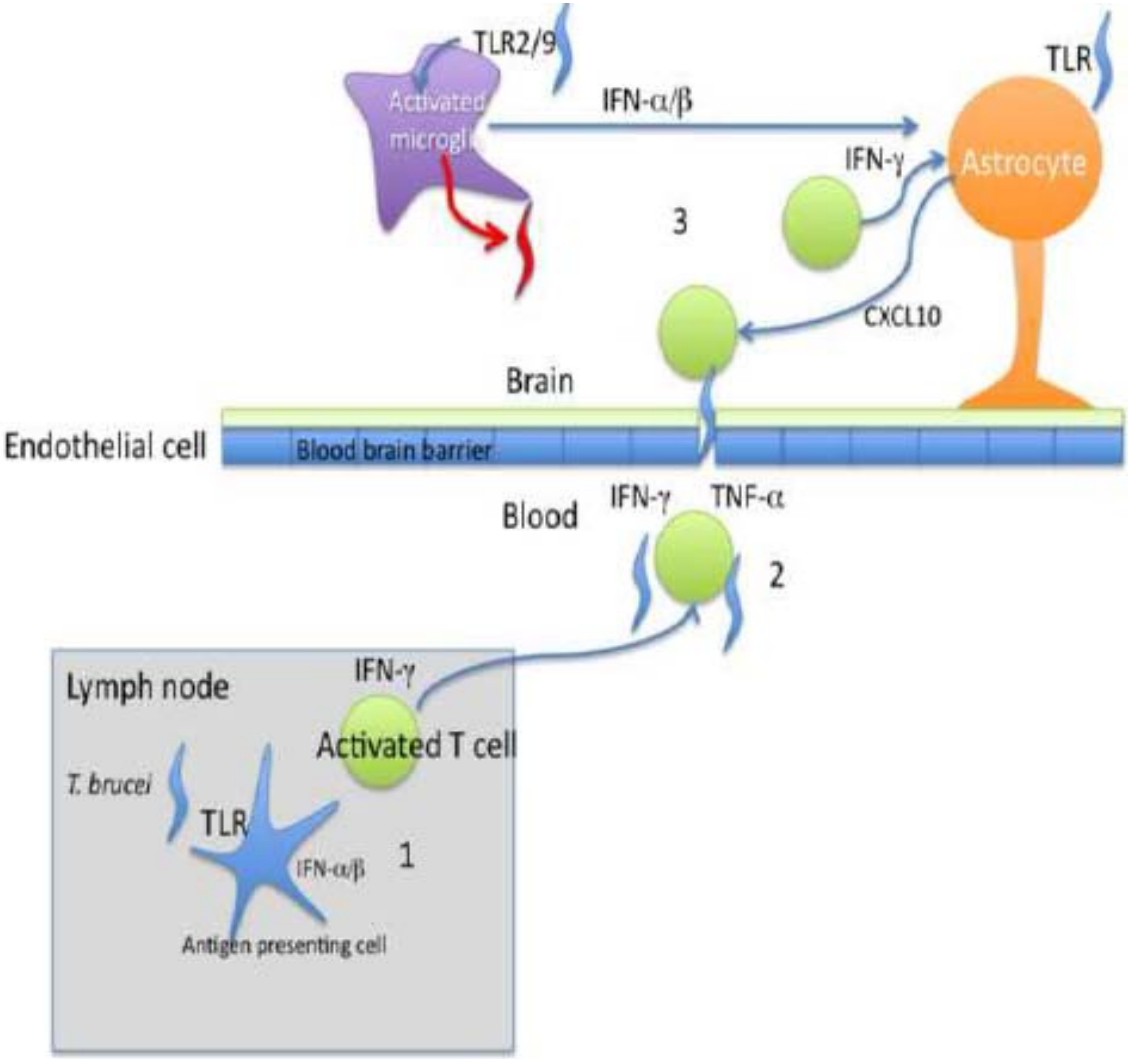


Simarro 2010

Trypanosome brain invasion and expression of inflammatory molecules



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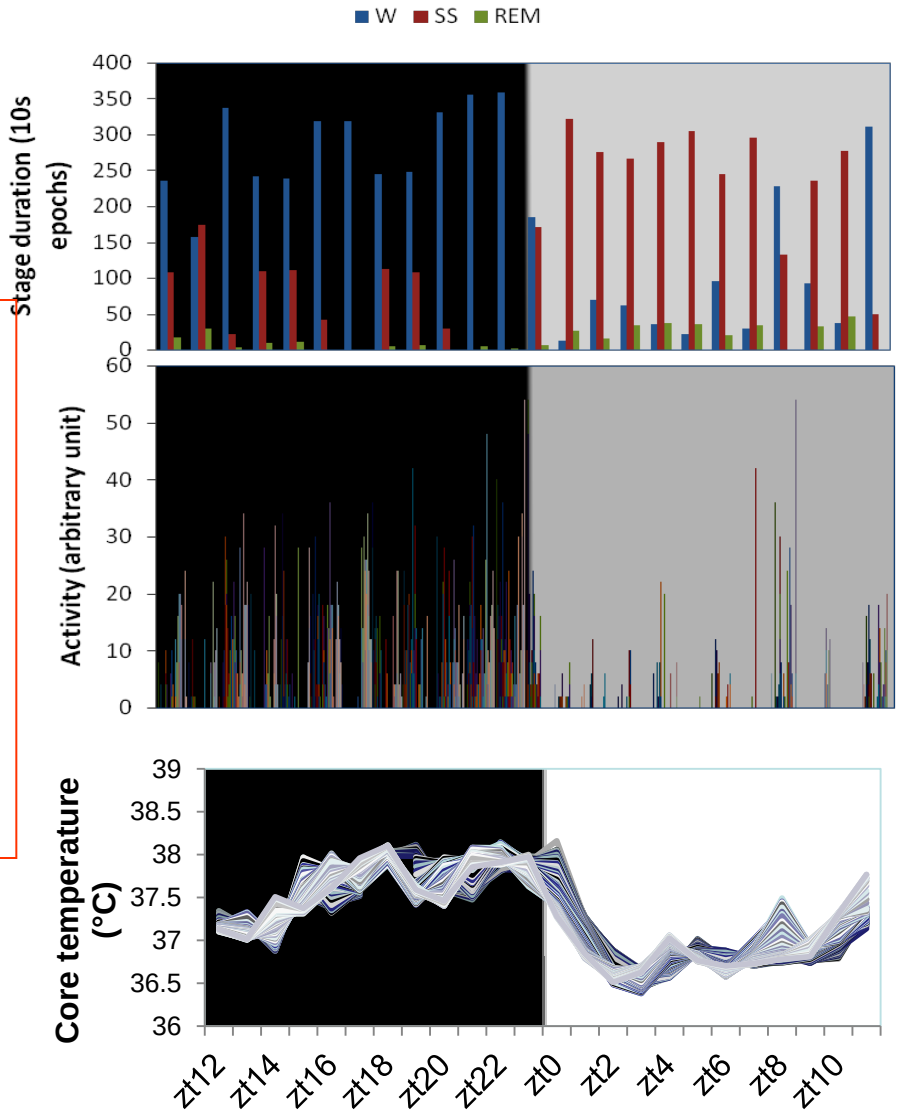
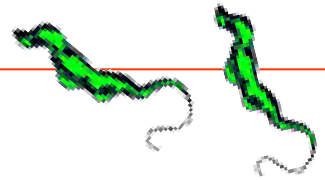
Dark phase

Light phase



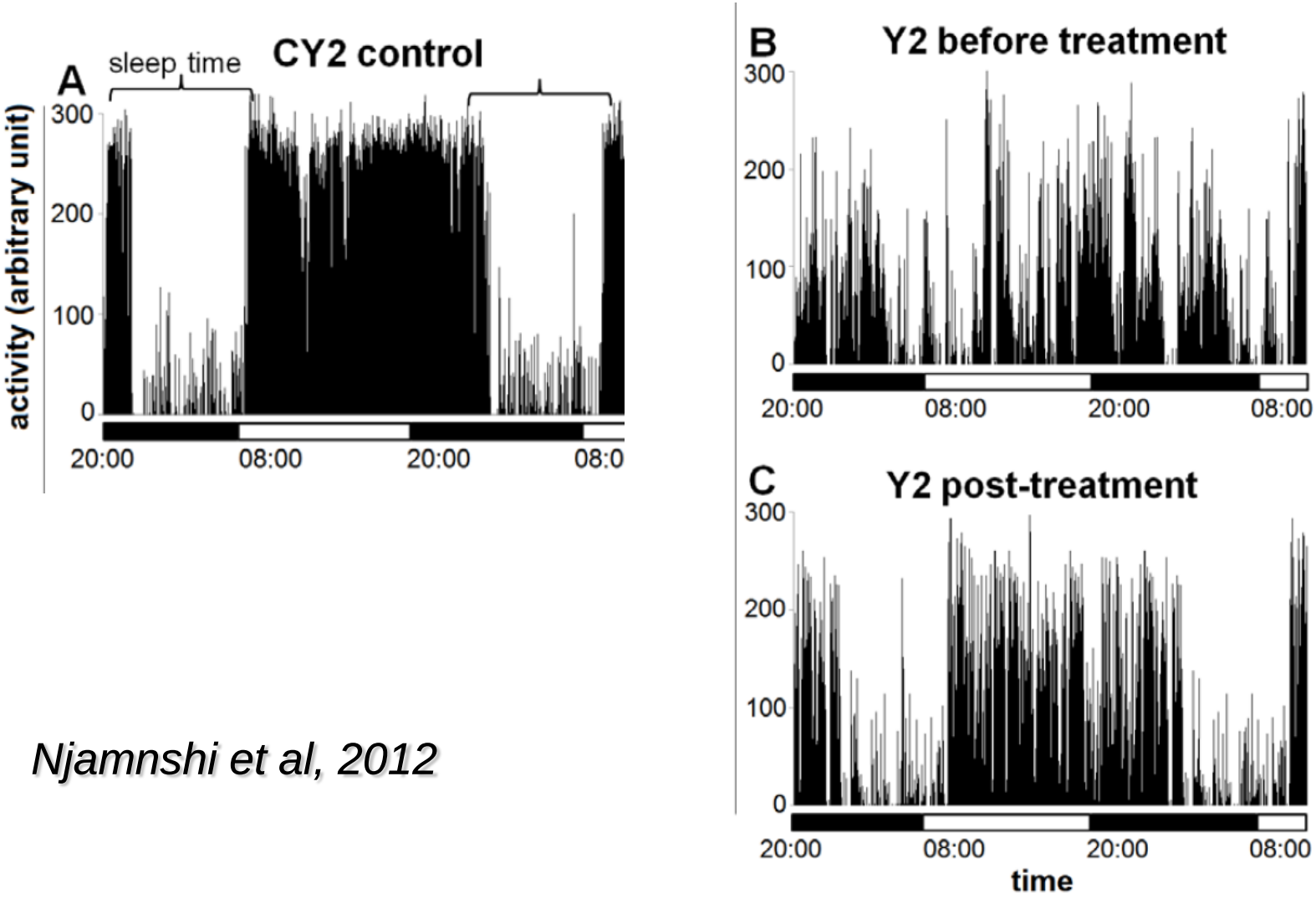
Telemetric monitoring of *Tb brucei*-infected rats at the time of neuroinvasion

and verification of parasite in brain parenchyma

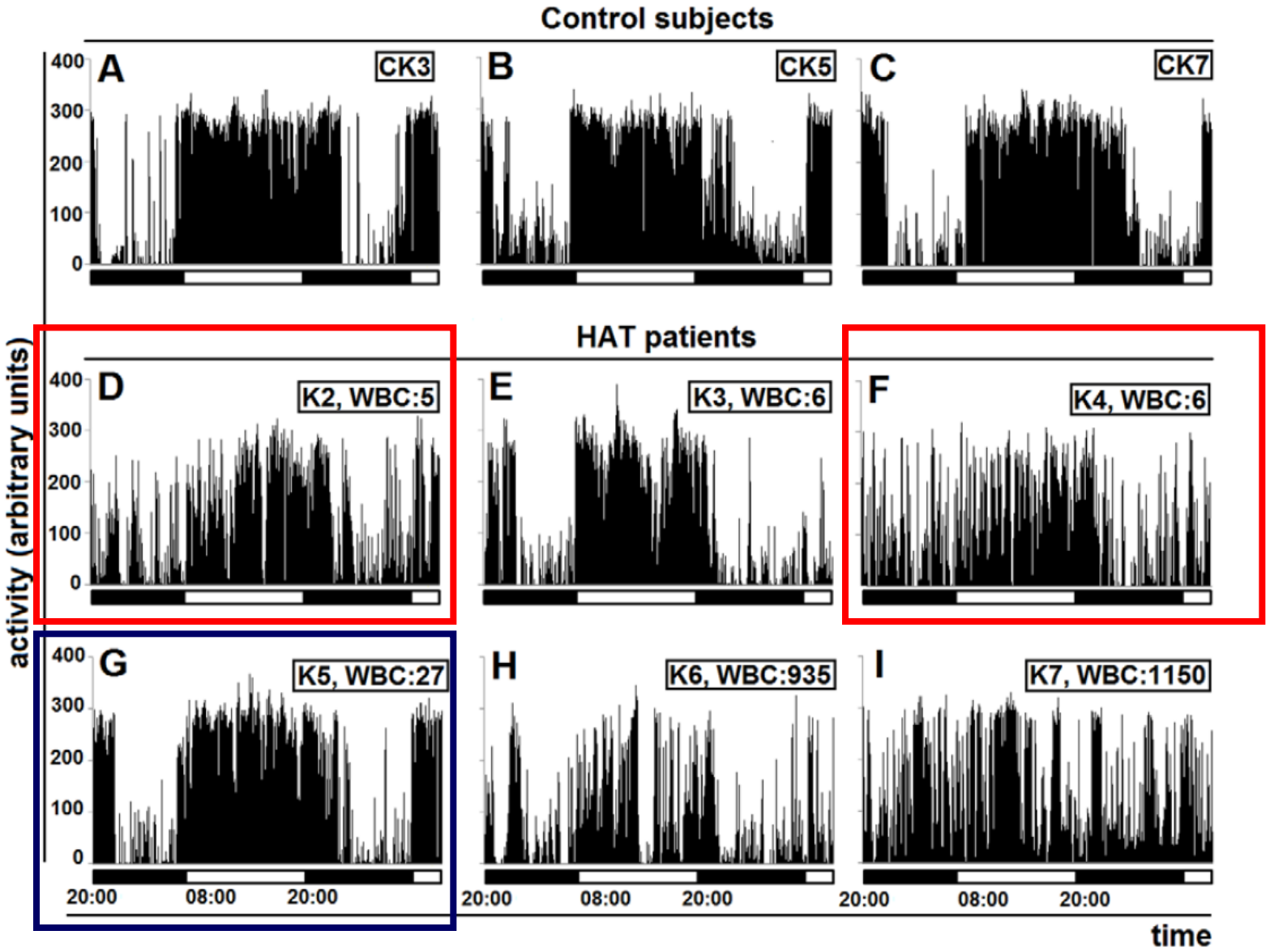


Results show that onset of functional changes revealed by sleep-wake anomalies precede *Tb* neuroinvasion. Their severity parallels disease progression

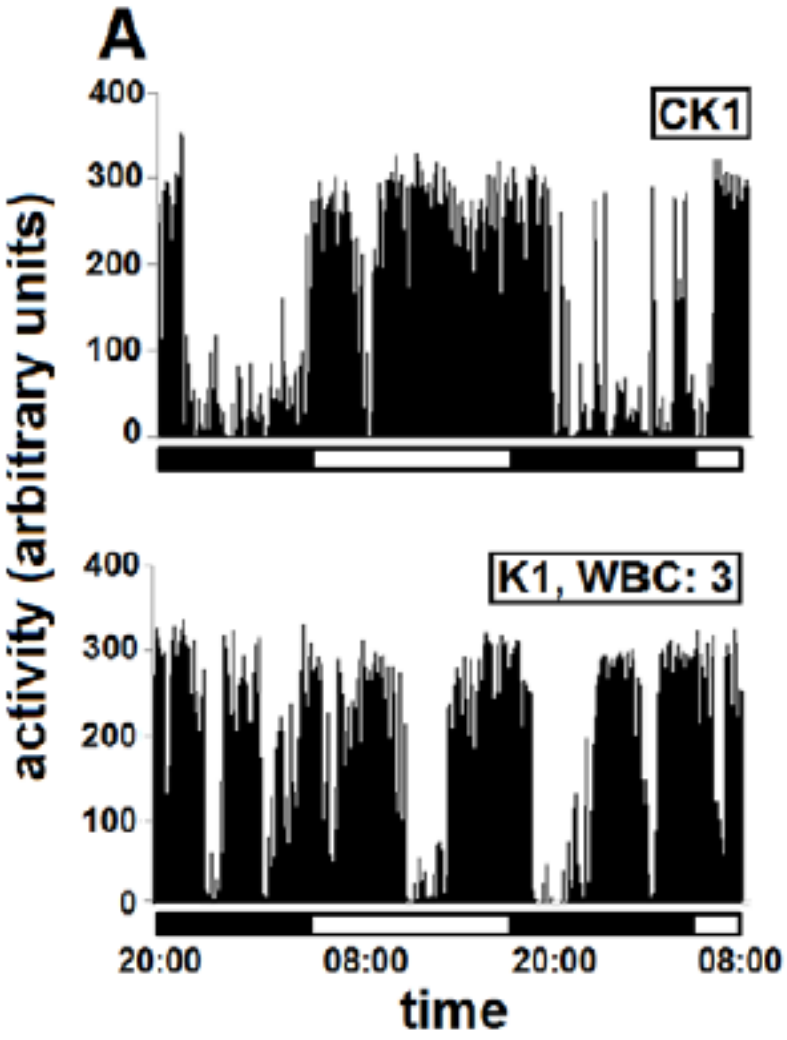
HAT patient



Njamnshi et al, 2012



Njamnshi et al, 2012



5 year-old healthy child

5 year-old child affected by HAT

Njamnshi et al, 2012

Teaching event for medical students: NIH-Fogarty teaching workshop ”Sleep and Infections”
University of Yaoundé 1, 6 April 2011

Symposium des Neurosciences

Thème: Le Sommeil et les Infections

media
awareness of the event,
March 2012

April 2011

November 2011

April 2012

April 2012

Newly constructed Neuroscience Laboratory in FMBS, University of Yaoundé 1 with preliminary experiments for rest-activity recording in rats

Built on the results and accomplishments of this R21 project, an R01 application entitled "Neural dysfunction and neuroinflammation in African brain disorders" : submitted in January 2012.

- involves all the three partners of the R21 project
- foresees coordination by Partner 2 (University of Yaoundé I) instead of Partner 1 (Karolinska Institutet)
- to emphasize that the capacity building has progressed effectively for coordination transfer.
- This project focuses on specific pathogenetic questions on nervous system involvement in HAT and its comparison with that in toxoplasmic encephalitis.