

CONFERENCE

ACADEMIE ROYALE DES SCIENCES D'OUTRE-MER (ARSOM)

CLASSE DES SCIENCES NATURELLES ET MEDICALES

26 May 2026 Brussels

Fany Brotcorne, 1st Assistant at the University of Liege – Department of Biology, Ecology, Evolution, RU SPHERES

Synanthropic primates in disturbed ecosystems : Implications for Global Health

Primates play key roles in tropical ecosystems, yet their ecological and physiological responses to human disturbance remain insufficiently understood. In Southeast Asia, rapid land-use change is intensifying human-primate interfaces, within which some species - termed synanthropes - adjust their ecology to persist in disturbed habitats and coexist with humans. Here, we examine the implications of this flexibility from a Global Health perspective. At the ecosystem scale, shifts in primate feeding ecology can alter their function as seed dispersers, with cascading effects for forest health. At the primate and human scale, increased contact rates and high population densities elevate the risk of zoonotic transmission. At an Indonesian tourism site, we document recurrent epizootic outbreaks of streptococcal infections in long-tailed macaques (*Macaca fascicularis*), alongside evidence that frequent interactions with human increase the likelihood of protozoan infections in this population. Finally, given the logistical constraints of wildlife disease surveillance, we emphasize the potential of xenosurveillance (the use of mosquitoes as “flying syringes”) as a non-invasive approach for monitoring infectious status of primates in the wild.

Keywords : anthropogenic pressure, human-primate interface, temple macaques, Asia, seed dispersal, ecosystemic services, zoonoses, infections, non invasive technologies