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BSc in Biology, University of Louvain, Belgium, 1984
MSc in Biology, University of Louvain, Belgium, 1986
PhD in Vertebrate and Human Palaeontology, University
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Assistant, Royal Museum for Central Africa, Department of African
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Keywords

Comparative neuroanatomy - comparative neurobiology of aging

Research

Brain functional morphology and asymmetries¹, brain structure variability including size-dependent changes in brain structure and the discrimination between phylogenetic and functional signals in comparative brain anatomy of primates and other mammals². Comparative neurobiology of aging in mammals³, including iron homeostasis, amyloid deposition and glial reaction. I use various histological techniques as well as new imaging technologies⁴.

Selected publications

1. **E. Gilissen** (2001) Structural symmetries and asymmetries in human and chimpanzee brains. In: Evolutionary Anatomy of the Primate Cerebral Cortex. Falk, D. and Gibson, K.R., eds. Cambridge University Press: Cambridge, 187-215

Balzeau, **E. Gilissen** (2010) Endocranial shape asymmetries in *Pan paniscus*, *Pan troglodytes* and *Gorilla gorilla* assessed via skull based landmark analysis. J Hum Evol xx: xx-xx

E.A. Nimchinsky, **E. Gilissen**, J.M. Allman, D.P. Perl, J.M. Erwin, P.R. Hof (1999) A neuronal morphologic type unique to humans and great apes. Proc Natl Acad Sci USA 96: 5268-5273

2. P.R. Manger, J. Hemingway, M. Haagensen, **E. Gilissen** (2010) Cross-sectional area of the elephant corpus callosum: comparison to other eutherian mammals. Neuroscience 167(3):815-824

N. Yamaguchi, A.C. Kitchener, **E Gilissen**, D.W. Macdonald (2009) Brain size of the lion (*Panthera leo*) and the tiger (*P. tigris*): Implications for intrageneric phylogeny, intraspecific differences, and the effects of captivity. Biological Journal of the Linnean Society 98: 85-93

3. **E. Gilissen**, M. Dhenain and J.M. Allman (2001) Brain aging in strepsirhine primates. In: Functional Neurobiology of Aging. Hof, P.R. and Mobbs, C.V., eds. Academic Press: San Diego, 421-433

P.R. Hof, **E.P. Gilissen**, C.C. Sherwood, H. Duan, P.W.H. Lee, B.N. Delman, T.P. Naidich, P.J. Gannon, D.P. Perl, J.M. Erwin (2002) Comparative Neuropathology of Brain Aging in Primates. In: Aging in Nonhuman Primates. Erwin, J.M. and Hof, P.R., eds. Interdisciplinary Topics in Gerontology Vol. 31. Karger: Basel, 130-154

4. **E. Gilissen**, R. E. Jacobs, J. M. Allman (1999) Magnetic resonance microscopy of iron in the basal forebrain cholinergic structures of the aged mouse lemur. *J Neurol Sci* 15(168): 21-27

A. Balzeau, **E. Gilissen**, W. Wendelen, W. Coudyzer (2009) Internal cranial anatomy of the type specimen of *Pan paniscus* and available data for study. *J Hum Evol* 56: 205-208