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Paléoécosystèmes et Paléoprimatologie  
Salle 410, bât. B35 (3ème étage, aile nord)

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## Investigating the Later Pleistocene Dietary Behavior of Cercopithecids from the Middle Awash Study Area (Afar Rift, Ethiopia)

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Two newly recovered, large fossil assemblages from the later Pleistocene of Ethiopia offer an unprecedented opportunity to study dietary behaviors in the likely ancestors of the extant colobus monkeys (*Colobus guereza*), baboons (*Papio hamadryas*), and vervets (cf. *Chlorocebus*) living in the Afar Region of Ethiopia (Brasil et al., 2023 a,b; Taylor et al., 2023). A total of 977 cercopithecids have been recovered spanning two

main time horizons, the Faro Daba beds (ca. 100,000 years ago) and the Chai Baro beds (>158,000 years) of the Dawaitoli Formation (Niespolo et al., 2021).

One of the most exciting aspects is the presence of cf. *Chlorocebus* in both Faro Daba and Chai Baro beds. Recent studies suggest subtle postcranial differences, with Faro Daba individuals exhibiting more arboreal adaptations, possibly reflecting microevolutionary changes or non-genetic behavioral variation (Taylor et al., 2022). We hypothesize that these variations within the same species are related to behavioral adaptations driven by environmental changes and involve dietary shifts. To investigate, we analyzed dental wear and dental microwear in 328 individuals housed at the National Museum of Addis Ababa (Ethiopia). Using a newly developed wear scoring system (Krueger et al., in review), we assigned macrowear scores on lowers molars. By integrating dental wear and dental microwear analysis, we will test if locomotory and dietary behaviors provide a richer understanding of microevolution in Late Pleistocene primates.

