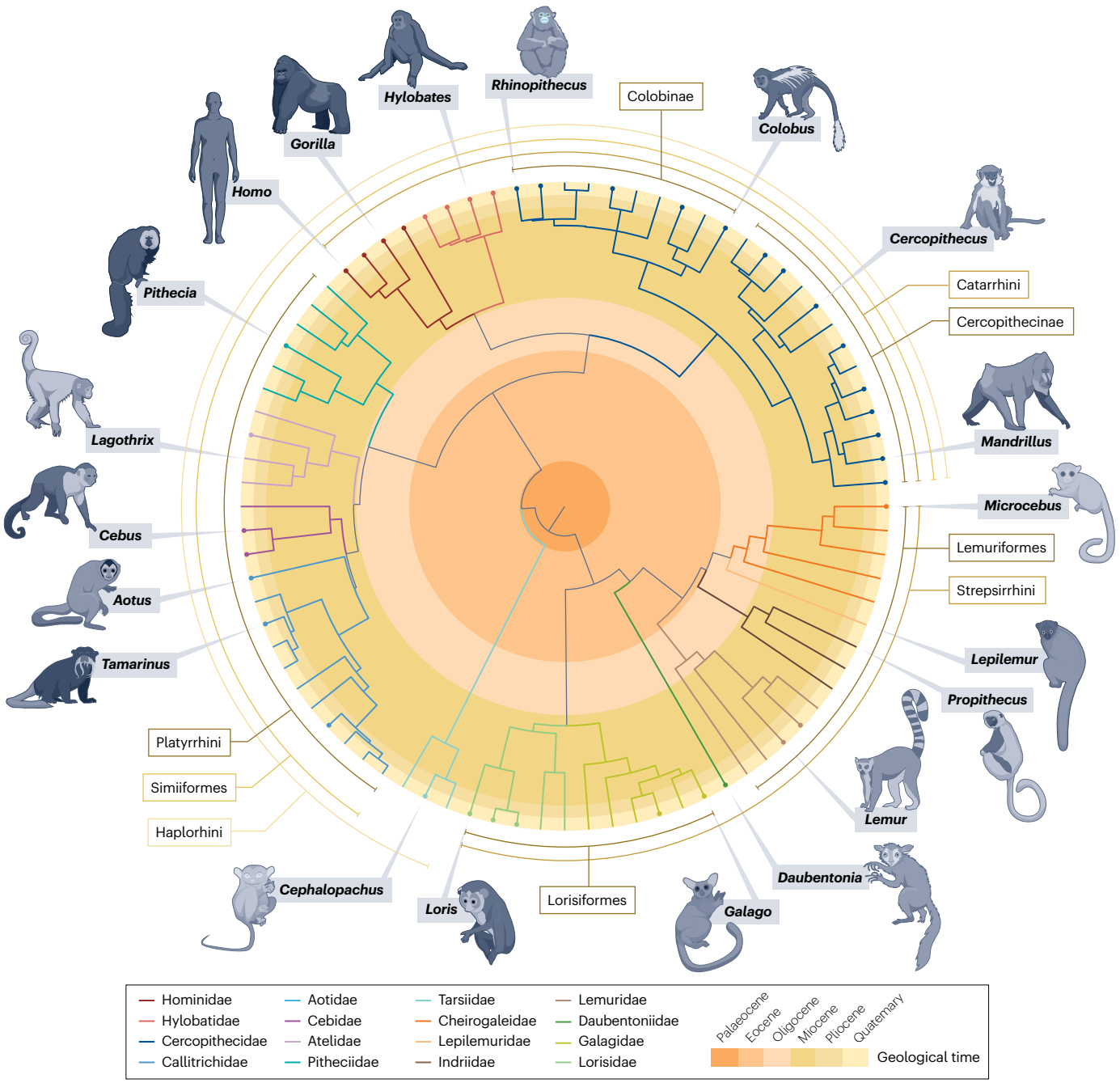

Fig. 1 | Time-calibrated phylogeny of extant primates. Overview of phylogenetic relationships among the 84 extant primate genera along with their higher-level classification, with representative species illustrations. Radial sectioning corresponds to divergence time. Clades are coloured according to family and higher-level classifications are bracketed and labelled. Genera for which high-quality reference genomes are available are denoted with a circle on the branch tip. Phylogenetic data and divergence times are from ref. 30, or have been recalculated from refs. 25,226–231.

diversity of environments in which primates live, it is not surprising that primates exhibit a variety of adaptations for identifying and making use of sensory information[54]. Vision and olfaction are the best studied senses in primates, whereas less information is available for taste. Comparative studies of the two mechanical senses – hearing and touch – are still largely missing for primates[54].

Vision

The common ancestor of all living primates was very probably nocturnal, and nocturnality remains the dominant condition among Strepsirrhini[55]. Most Strepsirrhini (like many other nocturnal vertebrates) have a tapetum lucidum, a layer in the retina that reflects light and enhances night vision[56]. The tapetum lucidum is absent