ABSTRACTS

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Infants exposed to caregivers infected with SARS-CoV-2 may have heightened infection risks due to their intensive care and feeding needs. However, there is limited research on COVID-19 outcomes in exposed infants beyond the neonatal period. Between June 2020 – March 2021, we conducted interviews and collected capillary dried blood spots from 46 mothers diagnosed with COVID-19 (COVID+ group) and their infants (aged 1-36 months old) for up to two months following maternal infection. Comparative maternal-infant data were also collected from a control group of mothers with no known SARS-CoV-2 infections or exposures (n = 26, control group), and from mothers who tested SARS-CoV-2 negative following suspected infection (n = 11, COVID-group). Most infants (87%) were breastfed during the study. Maternal and infant blood spots were self-collected with HemaSpot-HF devices and analyzed for anti-SARS-CoV-2 S-RBD IgG and IgA positivity and anti-SARS-CoV-2 S1 + S2 IgG concentrations.

Among COVID+ mothers and their infants, mean probability of seropositivity was lower for infants vs. mothers (0.54 vs. 0.87 for IgG; 0.33 vs. 0.85 for IgA), and likelihood of infant infection was positively associated with the number of maternal symptoms and total other household infections reported. Among the control group, 44% of mothers but none of their infants tested antibody positive. No samples returned by COVID-mothers or their infants tested antibody positive. Our results demonstrate minimal risk to infants following exposure to maternal COVID-19 infection, including for breastfeeding infants, and the utility of at-home biomarker collection for antibody monitoring.

Employing the power of the Tooth Fairy or Ratón Pérez in developing a community-engaged scientific collection of deciduous teeth

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Tradition says that when children lose a baby tooth, they should place it underneath their pillow while they sleep and the *Tooth Fairy* will trade the lost tooth for a small gift. In Spain and other Hispanic-speaking countries, that little fairy takes the form of a mouse called *Ratón Pérez*. All of these baby teeth and the parents who carefully recorded when they were shed represent a tremendous opportunity to study in detail the deciduous dentition. Here, we introduce the *Ratón Pérez Collection* to the scientific community and invite collaborators to utilize the resource.

The Dental Anthropology Group of the National Research Centre on Human Evolution (CENIEH) organized the first campaign of the *Ratón Pérez Collection* in 2014. Since then, campaigns have been carried out every year, growing into a highly successful community-engaged project that teaches children about science and includes them in the endeavor. The collection currently comprises more than 4,000 teeth from children between the ages of 2 and 15 years. Each tooth is associated with basic information about the individuals, their parents, and grandparents (sex, date and place of birth, ancestry, country of residence), as well as important data about early life history (pregnancy duration, breast-feeding, bottle-feeding) and other relevant information provided by the donors. We present an overview of these demographic features and discuss this in context with published comparative data.

Given the scarcity of deciduous dental samples available, the *Ratón Pérez* collection is highly valuable for disciplines ranging from forensic, dental and anthropological fields.

Female copulation calls of chimpanzees (*Pan troglodytes*) at Gombe National Park, Tanzania: advertisement and partner diversification

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In many different primate species, members of one or both sexes produce copulation calls: acoustically distinct vocalizations given during or immediately after mating. Researchers have proposed many potential explanations for the function of these signals. Here, we analyze a sample of 2632 mating events observed at Gombe National Park, Tanzania (1987−2015) to test predictions of these hypotheses using information-theoretic model selection methods. We found that female chimpanzees were more likely to produce copulation calls earlier in their reproductive cycles, closer to the onset of turgescence (model-averaged parameter = 0.22, 95% CI = 0.04−0.40). We also found that nulliparous females were more likely to produce copulation calls (model-averaged parameter = -1.00, 95% CI = -1.38- -0.62) and females produced copulation calls less frequently when higher-ranking females were present (model-averaged parameter = -0.11, 95% CI = -0.19− -0.03). Using a subset of well documented reproductive cycles, we found that females who had mated with a greater proportion of potential male partners were less likely to produce a copulation call during a mating event (logistic regression, β = -0.54, t=-3.84, p<0.01). Females who produced copulation calls were more likely to subsequently mate with a new copulation partner, as opposed to mating with the same partner (chi-squared test, x^2 = 13.63, df = 1, p < 0.01). These results suggest that female chimpanzees employ copulation calls to attract attention from additional males, promoting paternity confusion. They also appear to modulate call production in response to audience effects.

Preliminary Estimates of Maxillary Canine Sexual Dimorphism in Early Miocene Catarrhines using the Coefficient of Variation (CV) Method

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Sexual dimorphism is difficult to assess in the fossil record as determining the sex of a given specimen is impossible to know with certainty. As such, it is preferable to estimate sexual dimorphism in extinct primates without assigning sex to specimens, a task commonly accomplished by the coefficient of variation (CV) method (Plavcan and Cope, 2002). A preliminary analysis of maxillary canine sexual dimorphism for five early Miocene catarrhine species was carried out using