# Characterization of the menstruation of the peruvian red uakari (Cacajao calvus ucayalii)



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#### Introduction:

The bald uakari is a small-medium sized monkey of Peru and Brazil that inhabits some Amazonian forests. Listed as vulnerable in the IUCN red list of threatened species, is a seed predator with a flexible social organization.

## Reproductive information:

- Sexual maturity in females: 3,6 years
- Menstrual cycle length: 14-48 days
- © Gestation: 6 months
- Lactation: 21-22 months
- Polygamy and non-strict seasonality

## Objectives:

- To increase reproductive knowledge of the species
- Histological study of uterine and ovarian structures through optical microscope
- To study the distribution of the collagen IV in the uterine wall

### Materials and methods:

The reproductive tract of 11 *Cacajao* calvus ucayalii females was used. An histological study was conducted on uterine and ovarian sections dyed with hematoxylin-eosin. An immunohistochemical protocol was performed on uterine sections to identify collagen IV expression.

#### Results:

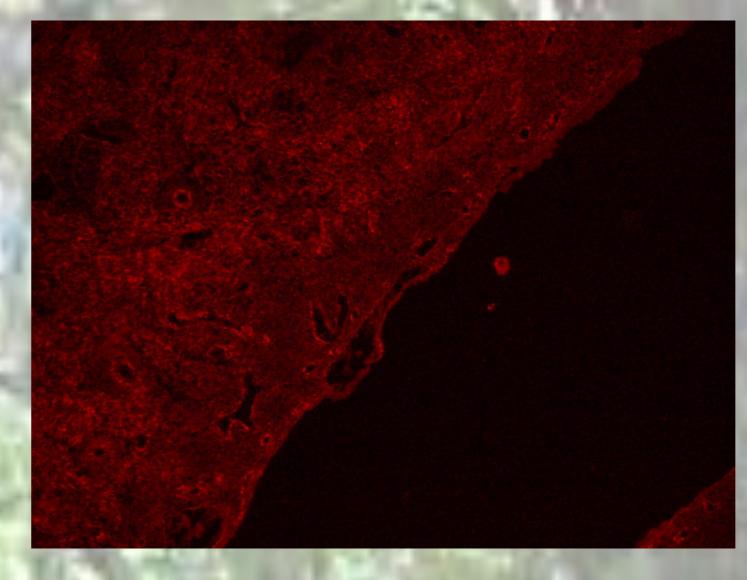


Figure 1. Expression of collagen IV during proliferative phase.
Miometrium, endometrium and uterine lumen. Fluorescence microscope.

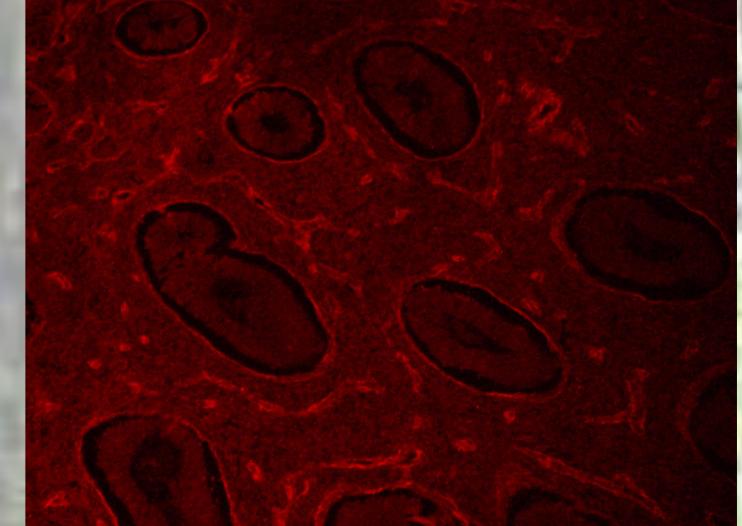
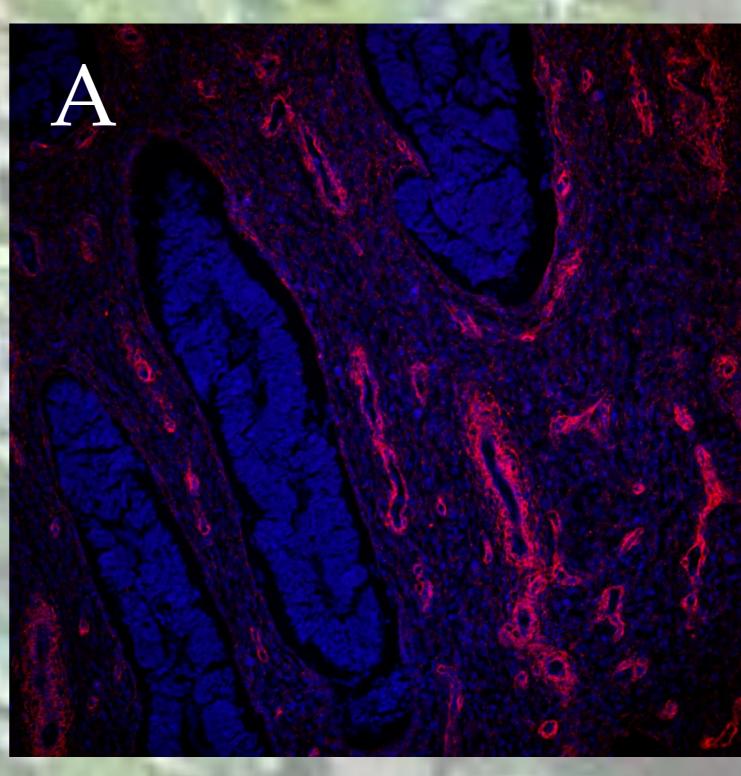


Figure 2. Expression of collagen IV during secretory phase. Endometrium with blood vessels and endometrial glands. Fluorescence microscope.



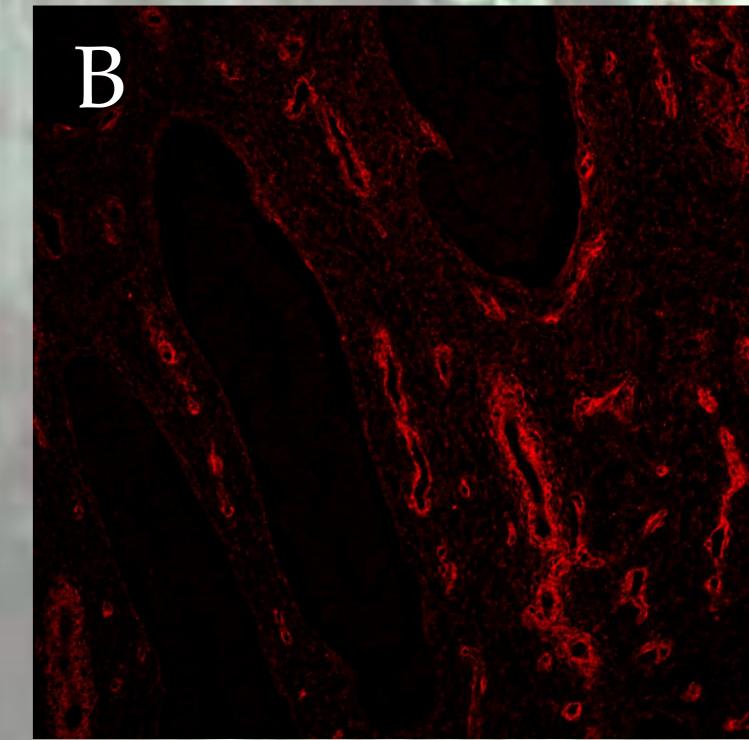


Figure 3 (A and B). Expression of collagen IV during secretory phase. Endometrium with blood vessels and endometrial glands. Cell nuclei were stained with DAPI (blue). Confocal laser scanning microscope.

#### Conclusions:

- The menstrual cycle of *Cacajao* has the same characteristics as most platyrrhines
- Collagen IV expression in the uterus of primates follows the same distribution
- Primates have a limited capacity of adaptation due to their reproductive features
- More studies must be performed in vivo (captive and wild animals)