

ANTH 42

**OH today
canceled**

Wrap guenons and others; species and speciation (including HIV); macaques and baboons... later

QZ 11: Most got ½ on last question. Needed to connect rainfall & subsequent food to time of birth & early lactation.

Note: ≠ lemur seasonality ...

Quiz clock

Minutes remaining: **ONE**

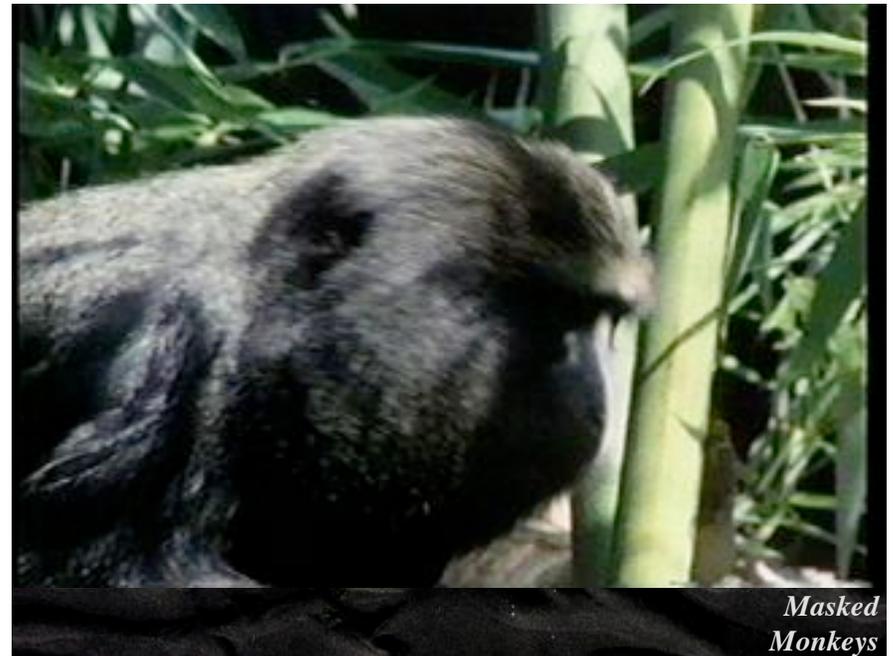
30 sec ...

5 4 3 2



WHAT did that monkey just DO??? Think about it... if that is learned, how did s/he figure that out?

*Masked
Monkeys*



*Masked
Monkeys*



Idea of “adaptive radiation”



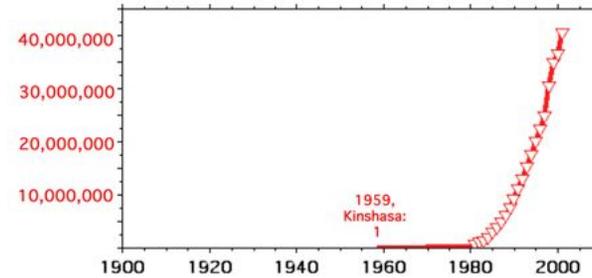
HIV - case study

1981 Starting to notice *Pneumocystis carinii* pneumonia (rare lung infection) and Kaposi's sarcoma (rare, benign cancer), in USA.

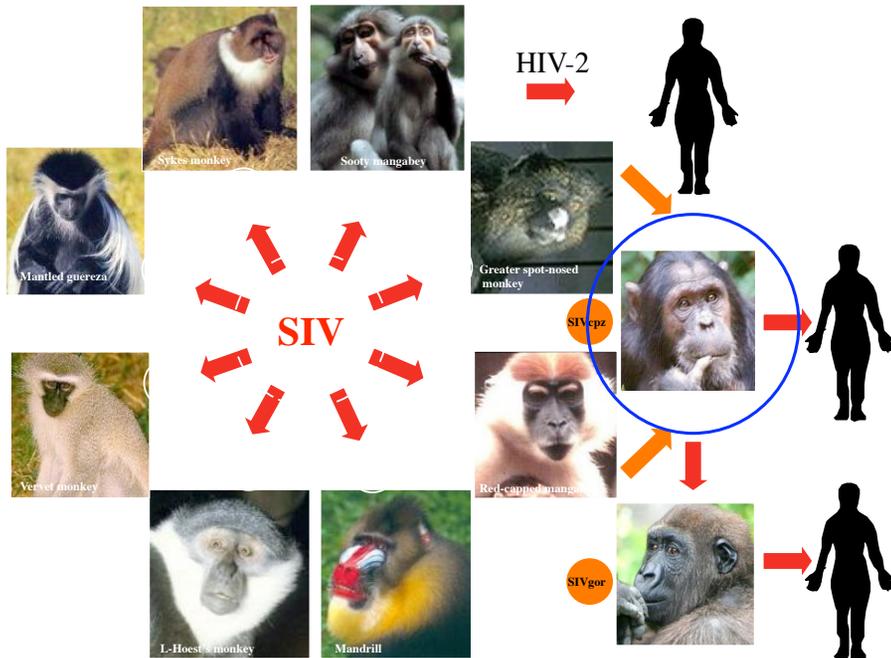
1983 AIDS identified in Africa

1985 Ronald Desrosiers SIVmac (UC Davis)

People infected with HIV, worldwide:



2009
~ 7-10 years to die.



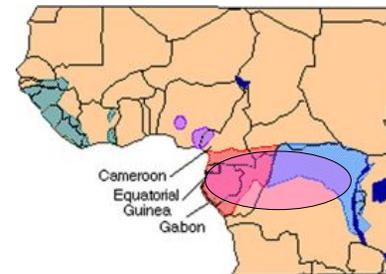
A fast overview of HIV/SIV

Human Immunodeficiency Virus / Simian IV (lentiviruses)

HIV has 2 distinct varieties:

HIV-1 - Origin in Central Africa, derived from SIVcpz

4 groups: M (main), O (outlier), N (non-M, non-O), & P



O is rare, only 6 cases of N reported, 1 of P just discovered



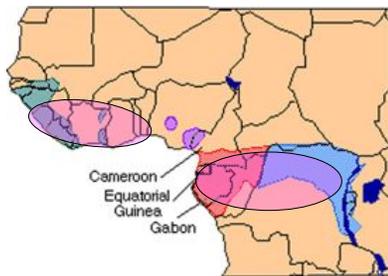
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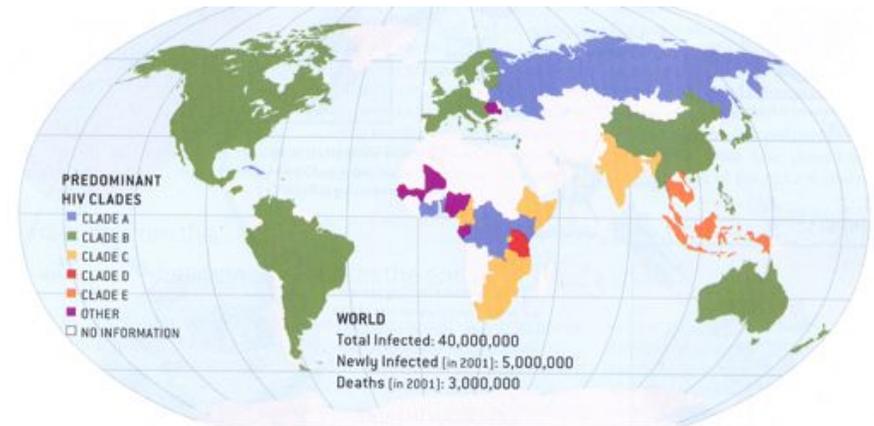
HIV has 2 distinct varieties:

HIV-1 - Origin in Central Africa, derived from SIVcpz

HIV-2 - Origin in West Africa, derived from SIVsm

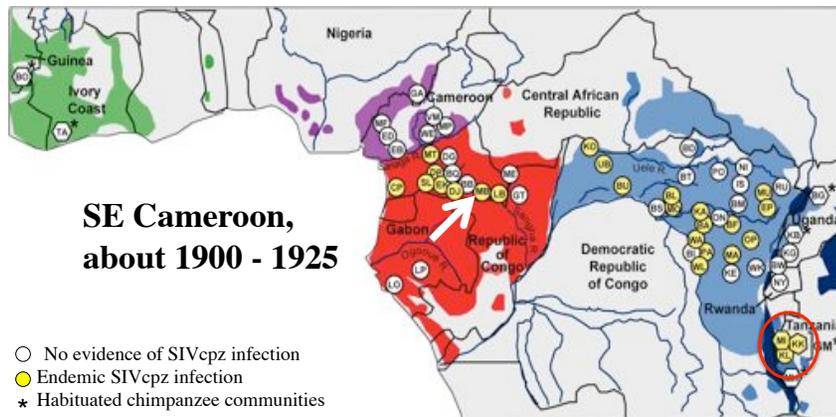


Endemic in West Africa, progresses slowly & AIDS less frequent



The pandemic clades are all HIV-1, Group M

Molecular Epidemiology of SIVcpz



SE Cameroon, about 1900 - 1925

- No evidence of SIVcpz infection
- Endemic SIVcpz infection
- ★ Habituated chimpanzee communities

Gombe: SIVcpz Infection is Associated with Decreased Female Fertility

- 22 of 30 uninfected females gave birth to 30 infants (29 birth per 90 risk years)
- 4 of 9 infected females gave birth to 4 infants (4 birth per 30 risk years)
- Odds of giving birth are 3.1 times lower for infected females ($p=0.034$).



