P06 Candidate genes for social behavior, cortisol level, and the personality of common marmosets, *Callithrix jacchus*
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Specific genotypes of arginine vasopressin receptor 1a (*AVPR1a*) and µ-opioid receptor (*OPRM1*) genes are related to social behavior in humans, chimpanzees, and rhesus monkeys. We surveyed these candidate genes in 77 captive common marmosets and found (GT)n polymorphism located in the intron of *AVPR1a* where 10 alleles were categorized as either being short (S: 202-210bp) or long (L: 212-222bp). We also found A111T (Leu37Phe) and T329C SNPs in *OPRM1*.

Personality was assessed by ratings by three individuals familiar with each marmoset on the Hominoid Personality Questionnaire. Principal components analysis on 47 personality items yielded three domains labeled Dominance, Sociability, and Neuroticism. We conducted preliminary tests with unadjusted linear models to determine whether these personality domains were associated with *AVPR1a* or *OPRM1* polymorphisms. For Sociability, marmosets possessing the SS genotype of *AVPR1a* were significantly higher than marmosets possessing the LL genotype. For Neuroticism, marmosets possessing the SL or SS *AVPR1a* genotype were significantly lower than marmosets possessing the LL genotype. Also in *OPRM1* polymorphisms marmosets with the T/T genotype of both loci were higher and lower in Neuroticism, respectively. Finally we obtained cortisol hormone levels from hair samples and tested whether cortisol levels were related to genotype and/or personality. These findings, although preliminary, suggest that the same genes are responsible for personality variation across all three taxonomic families of primates.

P07 Development of a mitochondrial marker for conservation genetics of slow loris
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The slow loris is listed as ‘Vulnerable’ in the IUCN Red List because they are being overhunted for the illegal pet trade, used for meat and as ingredients of traditional medicine. In Vietnam, two species (*Nycticebus bengalensis* and *N. pygmaeus*) are found. The Center for Rescue and Conservation of Organisms (CRCO) of Hoang Lien National Park protects diverse organisms, including the slow lorises, and tries to reintroduce them to the wild. However, it is hard to get information about the original habitat of confiscated animals. The purpose of the study is to accumulate mtDNA sequence data from slow lorises of known origin, in order to establish a tracking system that infers the origin of these protected animals using DNA information. In this presentation, we report about the development of a mitochondrial marker that can detect intra-specific variation in these two species of slow lorises. In order to avoid amplifying NUMT, we amplified the target region by using a long PCR product of the 9 kb region as template DNA. Next, we determined the target 1.8 kb region spanning a full length of cyt b gene and HVSI of D-loop. Intra-specific variation was detected in both species, 9 *N. bengalensis* and 5 *N. pygmaeus* from Vietnam, including individuals without information of origin. Samples of *N. bengalensis* from Myanmar (n=2) and Laos (n=1) were included in the comparison of DNA sequence variations. The 1.8 kb region examined in this study can be applicable to the phylogeographic study of the slow lorises.

P08 距骨 cotylar fossa の形成位置と足根関節での機能：霊長類と非霊長類の差異
江木直子（京都大・霊長研）

Differences in position and joint function of cotylar fossa on the astragalus between primates and non-primates
Naoko EGI

距骨の cotylar fossa は、距骨体の内側面から距骨頚にかけて形成される窪みで、幾つかの哺乳類分類群に見られる。霊長類でも存在するが、アフリカ獣類ではこの上目の数少ない共有派生形質の候補とされ、また有胎盤類外では有袋類のカンガルーにも存在する。本研究では、これら系統的に離れた分類群間で cotylar fossa の位置と形態の違いを比較し、各分類群で位置が足根関節の可動にどのように関係するかを検討した。cotylar fossa には脛骨遠位部の内側踝が接する。近位足根関節の主な関節面である距骨体と脛骨遠位面の一軸性の可動に対して、cotylar fossa の向きと位置を観察し、どのような姿勢で距骨と内側踝-距骨 cotylar fossa の関節面が機能しているかを推定した。霊長類の cotylar fossa は距骨体の側面に