

Dr. Joseph Cook
Curator of Mammals
Museum of Southwestern Biology

11/9/11

Dear Dr. Cook,

A graduate student of mine, Guanzhu Han, has recently identified elements of an ancient integrated lentivirus in published sequence of *Mustela putorius*. In order to confirm and categorize this finding, we feel it is necessary to probe (via PCR) the genome of *M. putorius* and closely related species for this "fossil" virus. Sequence confirmation of this virus in *M. putorius* and/or related species will help greatly to date the introduction of this virus and to better characterize the introduction of historical lentivirus in mammals in general. It should be noted that this virus is a relic integrated into the genome of *M. putorius* and not a free living virus.

We don't have access to required DNA at this institution and field collection of the required species would require an onerous level of funding and time, hence our need to request this material from a Natural History Museum.

Our methods, in brief, will be to extract genomic DNA from small (100mg) pieces of tissue using commercial kits and then probe the recovered genomes for this lentivirus with PCR primers directed against the published sequence. Any products developed will then be sequenced and publications will contain citations and genbank records that conform to your policies.


My lab has extensive experience recovering and sequencing DNA from archival FFPE tissues, mammalian fecal samples, and frozen and ethanol preserved tissue samples as well as primer design. The duration of this project is anticipated to be less than one year. Support for this research effort will come from the David and Lucile Packard Foundation.

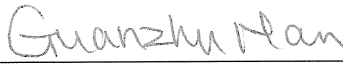
We are requesting small amounts of preserved (frozen or ethanol) somatic tissue from the following samples in your collection, though we will gladly accept substitutes.

<i>M. erminea</i> -	#221783	<i>M. eversmanni</i> -	#215159
<i>M. frenata</i> -	#157290	<i>M. lutreola</i> -	#157775
<i>M. nivalis</i> -	#195221	<i>M. putorius</i> -	#67471
<i>N. vison</i> -	#143833	<i>M. americana</i> -	#145744
<i>G. gulo</i> -	#214643	<i>G. cuja</i> -	#205157
<i>L. canadensis</i> -	#214889		

Many thanks for your attention on this matter and we look forward to hearing from you.

Sincerely,

 11/9/11
Michael Worobey
Associate Professor
Dept. of Ecology and Evolutionary Biology
University of Arizona

 9/11/2011
Guanzhu Han
Graduate Student
Dept. of Ecology and Evolutionary Biology
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