

**MOTHER-OFFSPRING OVERLAPPING DUETTING IN GIBBONS**

H. Koda<sup>1</sup>, C. Oyakawa<sup>1,2</sup>, Alban Lemasson<sup>3</sup>

<sup>1</sup>*Primate Research Institute, Kyoto University, Inuyama, Aichi, Japan,* <sup>2</sup>*Graduate School of Agricultural Science, Tohoku University, Furukawa, Miyagi, Japan,* <sup>3</sup>*Ethologie animale et humaine, UMR 6552 – C.N.R.S., Université de Rennes 1, Rennes, Bretagne, France*

*Presenter's Email: [koda@pri.kyoto-u.ac.jp](mailto:koda@pri.kyoto-u.ac.jp)*

Duetting is a special form of singing interaction occurring in many animal species, and is generally defined as overlapping bouts of antiphonal or synchronous vocalizations by paired adult individuals or potential mates. Here, we document evidence of another type of overlapping song interaction between adult females and their offspring, that is, mother-offspring overlapping duetting. Our observations of three gibbon species indicated that immature offspring rarely produce vocalizations alone but vocalize to overlap their calls with the female-specific elaborate songs of their mothers. The call-onset time lags of overlapping calls between mother and offspring were stable, and the overlapping interactions were highly synchronised. Thus, these overlapping songs can be considered another form of duetting. Herein, we describe mother-offspring duetting and proposed the secondary function found only in gibbon duetting that would facilitate strong acoustical attachment during mother-offspring bonding.

Keywords: gibbons, duetting, vocal development, mother-offspring attachment