

The 9th LaMer special seminar

12/1th
15:00-16:00

Species difference of xenobiotic metabolizing genes in birds

Birds adapt to diverse environments, and show great variation. Xenobiotic metabolism is one of the important factors when life adapt to environment. Xenobiotic metabolism enzymes such as Cytochrome P450 (CYP) and UDP-glucuronosyltransferases (UGT) act coordinately in metabolizing exogenous chemicals. For clarifying xenobiotic metabolism species difference in birds, we analyzed online database and classified genes of CYPs and UGTs. Moreover using Roche GS junior or illumine Hiseq, RNA sequence analysis was performed. Then identifying genes and comparing mRNA expression levels were analyzed. Based on genomic information, most birds contain similar P450s homologs. However in birds UGTs exhibit great diversity. In mammals UGTs evolved affected by habitats and feedings. This study showed similar evolution might occur in bird lineage.

Lecturer :

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Venue

**The 6th floor
meeting room**

**Science Research
Building1
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