

**Mini-Symposium:  
The Latest Reproductive Research in Nonhuman Primates**

## Preface

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1. Reproductive hormones and the ovarian cycle in macaques  
K. Shimizu
2. Cytoskeletal dynamics during oocyte maturation and fertilization in primates with comparison to rodents  
Y. Terada, M. Tachibana, H. Hasegawa, T. Ugajin, N. Yaegashi and K. Okamura
3. Reproductive technologies and related studies in the cynomolgus monkey  
N. Shimosawa, T. Sankai and A. Ogura
4. Recent progress in reproductive technologies based on the common marmoset (*Callithrix jacchus*)  
I. Tomioka and E. Sasaki

Monkeys are indispensable for use in medical science experiments because their physiology and anatomy are similar to that of humans. However, although both are primates, monkeys differ from humans in that some species are seasonal breeders. There are also individual differences between monkeys because their heredity is not controlled, whereas heredity is controlled in the mouse. Therefore, when experimental data obtained from monkeys are analyzed, it is necessary to do so carefully.

It is hoped that the system for implementation of basic research in monkeys can be standardized. Recently, the field of human reproductive medicine has progressed rapidly, in part because of the use of embryonic stem cells and induced pluripotent stem cells. The embryonic stem cells of monkeys are extremely important because they make it possible to investigate differences in transplantation between monkeys and humans.

We planned a mini-symposium on reproductive research focusing on egg research in monkeys. Dr. Shimizu provided the latest information on sexual endocrinology, an important aspect of reproduction. Dr. Terada *et al.* described the cytoskeleton of the monkey egg, which is necessary to explain the function of the egg. The latest reproductive research in monkeys is conducted in two basic areas. Dr. Shimosawa *et al.* described the latest reproductive technology applied to the cynomolgus monkey, and Drs. Tomioka and Sasaki described that of the marmoset. This mini-symposium provided a summary of the latest reproductive research in monkeys—information that will further the efforts of researchers in the field of reproduction.