

The 13<sup>th</sup> JAB Special Seminar

第13回 JAB特別セミナー

平成27年10月19日 15:00~16:30

広島大学 生物生産学部 C301教室

# Biotechnology in avian species

## and its future application



**Prof. Jae Yong Han**

Department of Agricultural Biotechnology  
College of Agriculture and Life Science  
Seoul National University, Korea

Avian species has enormous benefits for the study of various disciplines including basic and applied science area as well as poultry as food resources. Poultry industry is a one of the biggest markets in the world and enlarges its scale continuously as the consumption grows. Besides its value as a food, avian species has been recognized as a suitable animal model for the variety of biological research and biotechnology because avian embryos can be manipulated and are accessible easily without the impact of maternal and external circumstances. With completion of chicken genome project, demands of avian species as animal model, especially in studies for identifying gene functions and genome structure, have been increased. Furthermore, rapid development of genome modulation technologies enables us to perform integrated approaches in avian biotechnology areas by means of genome editing. In this regards, avian biotechnology combined with latest genome editing technology expected to contribute the advancement of academic research as well as industry fields. Indeed, production of genome-edited avian mediated by transgenic technology and programmable genome editing was recently reported, and the technology has expected to apply to establish novel genome-edited lines for disease control and production of bio-active materials that is considered as the most valuable resources for future human race. I will introduce recent progress of avian biotechnology specifically in genome editing and discuss about future applications of genome editing technology in avian species.

本講演は5研究科共同セミナーの単位になります

