

265th Regular Open Seminar (2021 Jan 20)

Title : Searching for genes underlying a variety of phenotypes using genetic resource of chickens**Speaker :** Tatsuhiko GOTO (Assistant Professor, Obihiro University of Agriculture and Veterinary Medicine)**Related RISH mission :** Mission 5 (Quality of the Future Humanosphere)

Abstract : Genetic control of livestock production is major concern for enhancing food production in the world. Since chicken is well known as the most important meat and egg producers, elucidating genetic mechanisms will provide some benefits in future livestock industry.

From several decades ago, genotype-phenotype relationship has been investigated in chickens. Nowadays, next-generation sequencer (NGS) is available even in individual research groups. Therefore, some interesting findings of genotype-phenotype relationship easily can be found. In this talk, I will show brief overview of genetic mapping study and some remarkable examples of genotype-phenotype relationship in chickens. Moreover, I will introduce future researches planned in my Lab by indicating characteristics of many kinds of Japanese indigenous breeds of chickens.

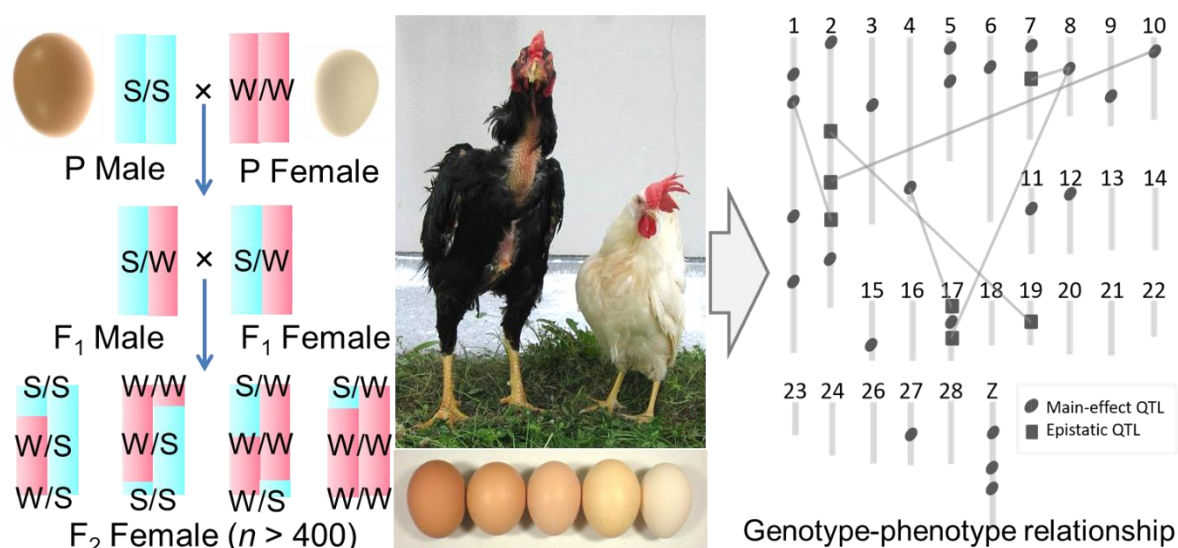


Fig. 1 Genetic mapping for understanding genotype-phenotype relationship using F₂ population based on two chicken breeds, which are Oh-Shamo (Japanese Large Game) and White Leghorn.