



Improving immune competence: screening for new parameters describing the innate immune status in chicken

Fanny Calenge, Pascale Quéré, Sascha Trapp, Sandrine Grasteau, Elisabeth Duval, Irène Gabriel, Bertrand Bed'Hom

► To cite this version:

Fanny Calenge, Pascale Quéré, Sascha Trapp, Sandrine Grasteau, Elisabeth Duval, et al.. Improving immune competence: screening for new parameters describing the innate immune status in chicken. 8. European Symposium on Poultry Genetics (ESPG), Sep 2013, Venise, Italy. hal-01193926

HAL Id: hal-01193926

<https://hal.science/hal-01193926>

Submitted on 6 Jun 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

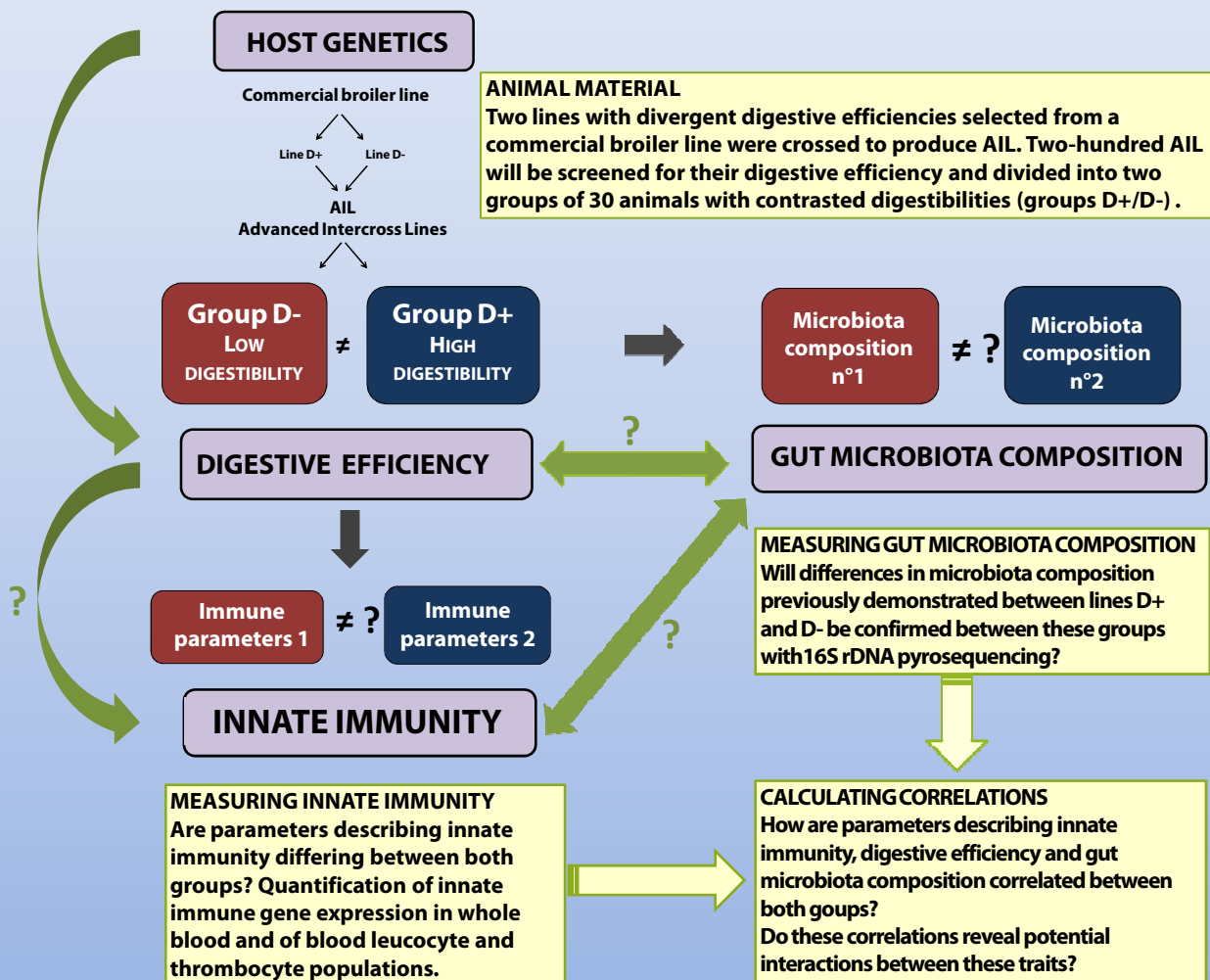
IMPROVING IMMUNE COMPETENCE: SCREENING FOR NEW PARAMETERS DESCRIBING THE INNATE IMMUNE STATUS IN CHICKEN

F. CALENGE^{1,2*}, P. QUÉRÉ^{3,4}, S. TRAPP^{3,4}, S. GRASTEAU⁵, E. LE BIHAN-DUVAL⁵, I. GABRIEL⁵, AND B. BED'HOM^{1,2}

INTRODUCTION

Introducing new parameters related to immune competence in selection programs could counterbalance some of the deleterious consequences on health and welfare of the intense selection conducted so far for chicken production-related traits. An ongoing project, described below, is aiming at both developing non invasive and rapid methods to describe innate immunity (i.e. by using whole blood samples) and at describing the correlations of innate immunity with digestive efficiency and gut microbiota composition.

PROJECT DESCRIPTION



CONCLUSION

This descriptive project will allow a better understanding of the complex interactions of innate immunity with gut microbiota and digestibility. Following projects will assess which of the parameters describing innate immunity or gut microbiota composition are predictive of the animal's immune competence after challenges with pathogens. On the other hand, the role of host genetics will be investigated to identify host genes predicting the immune competence, which could be selected to produce chicken with improved immune competence.

