



Genetic Selection and Associated Defects in Poultry Production

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Message from the Guest Editors

Dear Colleagues,

Genetic selection to improve the productivity of farm animals is practical and applicable in the animal industry. In the case of broiler chickens, intensive genetic selection for early rapid growth over the past decades has greatly increased growth rate and feed efficiency. The overall feed conversion rate is less than 1.8, and 2 kg market weight is reached within 6 weeks. This conversion rate of current broiler strains is at least 4-fold higher than that of Leghorn layers and their unselected ancestors in the 1950s. However, this genetically driven rapid growth rate is collaterally associated with many undesirable consequences, such as a higher incidence of ascites, tibial dyschondroplasia (TD), skeletal deformities, fatty liver and kidney syndrome, obesity, necrotic enteritis, and poor reproductive performance. In the recent decade, selection for better productivity in domestic animals has been raised to a higher plane with the issues of animal welfare.

Topics of this Special Issue will cover a wide range of interests, for example, the genetic effects of poultry species on animal reproduction, nutrition, immunology, physiology, pathology, and welfare.





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Message from the Editor-in-Chief

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