Postdoctoral position in bio-statistics:

Research proposal: Identification of biomarkers and development of a bio-statistics tool to predict pig digestive health from microbiota

Duration: 12 months

Expected recruitment date: from may 2017

Host institution: INRA (the French National Institute for Agricultural Research)

Research Unit: UMR1388 GenPhySE; **Full address:** 24 Chemin de Borde Rouge, 31326 Castanet Tolosan, France : **Web address**: http://genphyse.toulouse.inra.fr/

Main contact: Dr Sylvie COMBES sylvie.combes@toulouse.inra.fr, +33 (0)5 61 28 51 06

Abstract: Around weaning, piglets are very sensitive to digestive diseases. In this sense, to reduce the incidence of digestive diseases, the use of antibiotics is still the main answer, a practice which may lead to the emergence and to the dissemination of bacterial genes of anti-bio-resistance. One strategy to preserve the health status of our livestock systems is to select animals capable to face the environmental constrains, especially at critical phases like weaning. Another strategy to avoid the use of antibiotics is related to animal nutrition, which is easiest to implement and may bring positive results relatively quickly. However, there is a lack of specific tools to precisely describe and/or predict the digestive health of animals is a major issue to develop alternative strategies to the use of antibiotics. Therefore, a more detailed description of the intestinal microbiota combined with the assessment of the immune system development in face of the presence of a particular intestinal microbiota during the critical phase of weaning that piglets must face early in life is of great interest. In this sense, this post-doctoral project aims to identify markers of digestive health in piglet around weaning, and to develop a predictive tool of digestive health.

Scientific field and subject: Biology, Biostatistics

Eligibility criteria:
- Hold a PhD (or PhD will have been awarded by mobility start date);

- Be able to write and speak fluent English or French;

Applications (in English) should contain the following documents:
- A detailed Curriculum vitae with a list of publications

- Two cover letters mentioning the reference contact

- Description of past research experience and how future interests complement the proposed role

Deadline: may 15, 2017.