Training the future generations of animal breeders: example of EGS-ABG, a European joint PhD program

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Aim of the doctoral program

The aim of EGS-ABG is to generate the future key international leaders of the animal breeding and genetics sector, whether for employment in academia or in industry.

- More and more international business
- High rate of innovation
- Highly competitive sector
- Diversity of employers
- Diversity of organizations

Must contribute to meet the challenges presented by the increasing demand of food while reducing the impacts on environment and biodiversity

Do we really train for the future?
International:

4 Partners & 6 Assoc. Partners + joint supervision + mobility
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4-year PhD program

2 host institutions
(among the 4 Partners)

Joint supervision
Compulsory mobility:
2 + 2 yrs or 3 + 1 yrs

Possibility of internship
(6 months)
in one Associated Partner
International:
26 candidates, 19 countries + common activities + networking

Year of enrolment

- 2011
- 2012
- 2013
Innovation:
A majority of topics are in the front of science

Distribution of topics of PhD projects in 3 categories

\[ N = 35 \]
26 projects started, in 2011, 2012 or 2013
9 projects scheduled to start on Sept. 2014

- **Red**: Methods for using high density genomics data in animal breeding and selection
- **Blue**: Genetic variability of some traits: fertility, robustness, health, feed efficiency, ...
- **Green**: Population management, biodiversity, life cycle assessment
Links with the ABG industry

EFFAB is an Associated Partner in the Consortium, with one representative in the International advisory board and input in some courses.

A majority of projects are based on data collected on farm or in the stocks of breeding companies.

Industry (private or cooperative breeding organizations) is the second funder of the programme ($N = 35$ PhD projects).
Employability of the future doctors

Enrolment is a highly competitive process: each year, about 9 fellowships for 100 to 150 applicants. Stringent criteria for awarding.

International and multicultural touch of the program.

Links between science and industry. Scientific exposure, exchanges with breeders.

Emphasis put on training: 30 ECTS must be credited during the program (about half a year for training). Scientific courses + courses in transferable skills. Research schools ‘ABG and the society’. Individual training and career plan.
What about food security

October 27-November 1st, 2013
At the ILRI campus, Addis Ababa (Ethiopia)

EGS-ABG Research School
Animal Breeding and Sustainable Food Security
Jointly organized by ILRI and EGS-ABG

Open to other PhD candidates
Information and registration: http://www.egsabg.eu/spip.php?article26

Photos: C.F. Chen (Taipei University); J. Lazard (CIRAD-AquaTrop); J.M. Duplan (formaly INA P-G)
Conclusion

The EGS-ABG Consortium has the ambition to train the future key international leaders of the animal breeding and genetics sector and we feel we are taking steps that should enable us to achieve this goal.

http://www.egsabg.eu