

# *"Future research in animal science"* -Industry perspective

Alfred de Vries

EAAP, Aug 2012

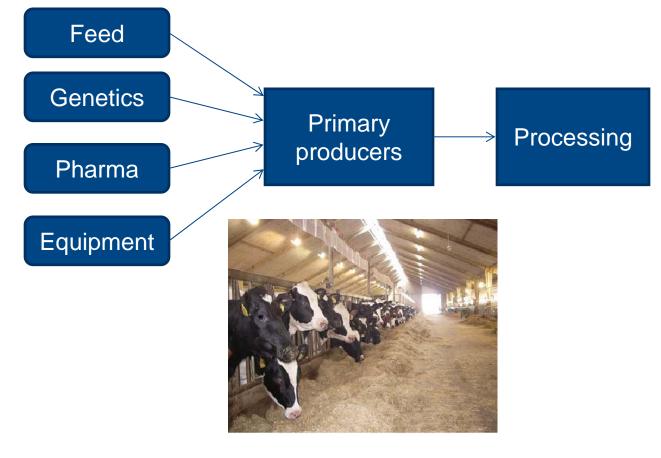
### **Outline of the presentation**

- Objectives of the industry

   → required areas of research
   (reference for animal breeding: www.fabretp.info)
- Innovation process within the industry
   →required tools and technology



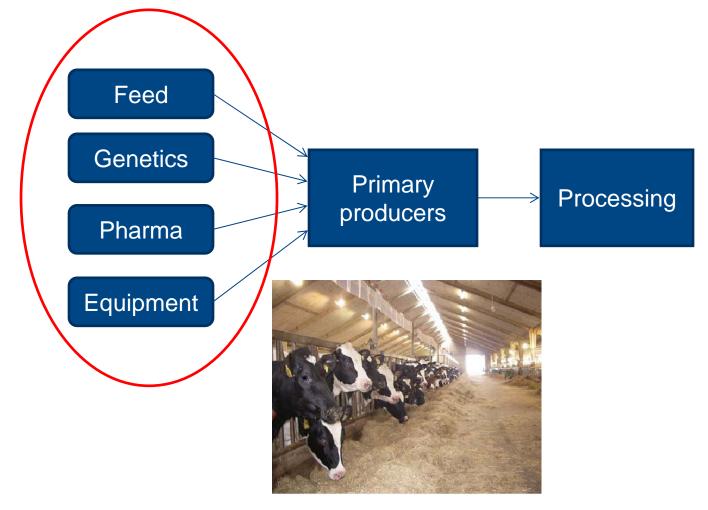
#### **Livestock Industry**





#### **Livestock Industry**

# **Scope = Supply industry**





# **Objectives of the supply industry**

- 1. Fulfil the needs of the primary producers
- 2. Contribute to sustainability of the animal production chain
- 3. Grow business
- 4. Efficient processes









# 1. Needs of the primary producers (current and future)

- Long-term profitability
- Ease of management
- Resource efficient (feed, energy, water, etc)
- Low emission of GHG, minerals, etc







# 2. Contribute to sustainability of the animal production chain (to maintain viable)

- Resource efficient (feed, energy, water, etc)
- Low emission of GHG, minerals, etc
- High animal welfare
- Good working environment
- Safe production and products







#### 3. Grow business

- Increase market share in existing markets
- New markets
- Business with chain partners (e.g. processor)
- New products
- New services

OVALERT

- Colutions for the clients







# 4. Efficient processes

- Product development
  - faster
  - reduced cost

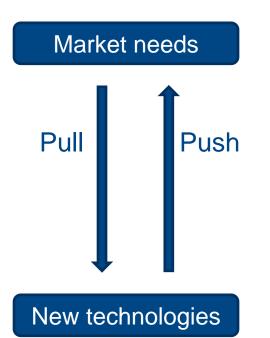


- Production and distribution (e.g. feed, genetics)
  - shorter time to market
  - guaranteed availability
  - reduced costs





# Through push and pull

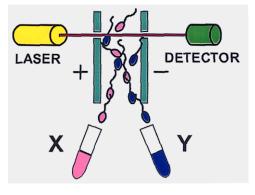






Recent examples with high impact:

•Sexed semen



•Genomic Selection

•Selection against boar taint





# From idea to new products







Short time to market is very important

→ Strong links needed between research and industry



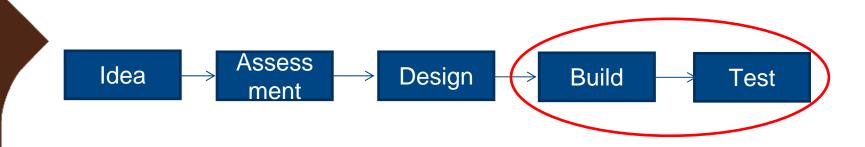
Idea  $\rightarrow$  Assess ment  $\rightarrow$  Design  $\rightarrow$  Build  $\rightarrow$  Test

We need to look at the value for the clients, but also at sustainability of the sector

# →We need: better assessment tools, e.g. <u>Life-Cycle Analysis</u>







Build and Test is getting more integrated with Product development in the field

→ We need: - indicator traits for complex traits

- methods to exploit ultra-large data sets



#### Conclusions

- The needs of the industry are fully aligned with the needs of the primary producers and society:
  - Farmer and Animal Welfare
  - Resource efficiency
  - Low emissions
  - Food safety
- Innovation requires:
  - Strong links between research and industry
  - Better assessment tools
  - Techniques to exploit field data

#### Breakthrough technology may come from unexpected fields and crazy ideas



