

# ANIMAL GENETICIST

Animal Geneticists analyze the genetic makeup of animals in order discover which genes cause them to behave certain ways. Geneticist may also study animal health to determine what causes animals be immune to specific diseases, or fail to thrive in certain environments.

## WHAT RESPONSIBILITIES WILL I HAVE?

- Provide insight into how methods and processes that support genetic evaluation can be improved
- Summarize and communicate genetic trends for reports
- Continually review and communicate data input and output needs of the breeding programs
- Analyze phenotypes (physical characteristics) available from the global production system to understand what makes profits for customers
- Find ways to improve selection decisions and develop approaches to accelerate genetic differentiation between different breeds
- Assist in the mapping of genomes for various species
- Compare the genetic makeup of one animal or species to another in order to how the gene affects reproduction or growth
- Develop new ways to evaluate traits in animals
- Investigate disease resistance
- Crossbreed animals to obtain new combinations of desirable characteristics
- Conduct quantitative research around breeding program activities and processes



## WHAT EDUCATION & TRAINING IS REQUIRED?

A Bachelor's degree in genetics or related field (animal science, biology, poultry science, dairy science) followed by a Master's; some roles may require a doctorate

## THE FOLLOWING HIGH SCHOOL COURSES ARE RECOMMENDED...

Agricultural education, animal science, biology, anatomy, chemistry, mathematics, writing, computer courses

## TYPICAL EMPLOYERS

Animal pharmaceutical companies, laboratories, state or federal government, breeding companies, universities

## FUTURE JOB MARKET/OUTLOOK



## SUGGESTED PROFESSIONAL ORGANIZATIONS & ASSOCIATIONS

- International Society for Animal Genetics
- Genetics Society of America

## AVERAGE ANNUAL FULL-TIME SALARY

\$111,000