

COMPANY DOSSIER



**GCG**Genomics

**The business of science**



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# Why are we here?

The agricultural sector needs access to state-of-the-art biotechnology to grow and compete at the highest level. Only a handful of companies have access to the most modern tools, the technical knowledge to take advantage of them, and the economic resources to implement them.

GC GENOMICS was born with the idea of democratizing agrogenomic biotechnology, facilitating its access to both breeders and producers with the aim of maximizing their productivity in a sustainable and environmentally friendly way.

Our methodology allows us to integrate customized genomic data adapted to your farm model, at a cost of up to ten times lower than the market price, guaranteeing better results and services.

At the same time, we believe that knowledge is essential to convert new scientific advances into attractive and easy-to-use tools for companies in the sector. We achieve this by gradually educating our customers as we work with them. Understanding our technology is essential to realize its full potential.

# Our purpose: Science and biotechnology within your reach

GC GENOMICS is an advanced biotechnology company that provides scientific and technological services to the agriculture industry. Our purpose is to democratize these solutions and make them more accessible to breeders and producers, in order to increase the value of their biological assets and optimize their resources in a sustainable way.



## Mission

To increase the value of biological assets through state-of-the-art biotechnology and our proprietary methodology that integrates genomics, statistics, and artificial intelligence, all of which help us predict the productive values and integrate them efficiently in decision making.

# Values

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## INNOVATION AND DEVELOPMENT

Our technology and services are based on years of experience in cutting-edge scientific research, which has convinced us that this development has a beneficial impact on society.



## TRUST

We build a bridge between science and agriculture through basic and more complex services related to genomic sciences. The possibilities are endless.



## CUSTOMER ORIENTED

Customized solutions adapted to every need, breed, and species of interest, taking into account all possible variables and the demands of an ever-changing market.



## RURAL DEVELOPMENT & SUSTAINABILITY

We are committed to native species, breeds and plant varieties that have been traditionally abandoned, but which are essential for a sustainable model in the rural economy and biodiversity.



## KNOWLEDGE TRANSFER

We believe it is essential to transmit knowledge to our customers as we build trust. A market educated in the science and technology it needs is a market destined to grow.



# Effective solutions on demand

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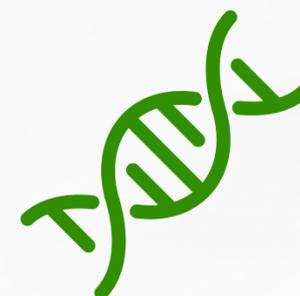
## SEQUENCING OF GENOMES, TRANSCRIPTOMES AND EPIGENOMES

Get your reference genome; sequence and annotate the molecular "instructions" for your species.



## PROTECT YOUR BIOLOGICAL ASSETS

Identifica tus variedades vegetales y razas animales con tu propio identificador o código de barras genético.



## CREATE YOUR OWN GENE PANEL

SNPs DNA Chips are unaffordable for much of the agriculture industry and do not exist for many species of interest. For a price of up to 10 times lower than a SNPs DNA Chip, you can genotype your population with the same resolution.



## GENOME ASSOCIATION

Build a genome-wide association map and characterize the genetic architecture of traits of agronomic interest.

# Predicting at birth which animals will be profitable is now possible thanks to DNA analysis

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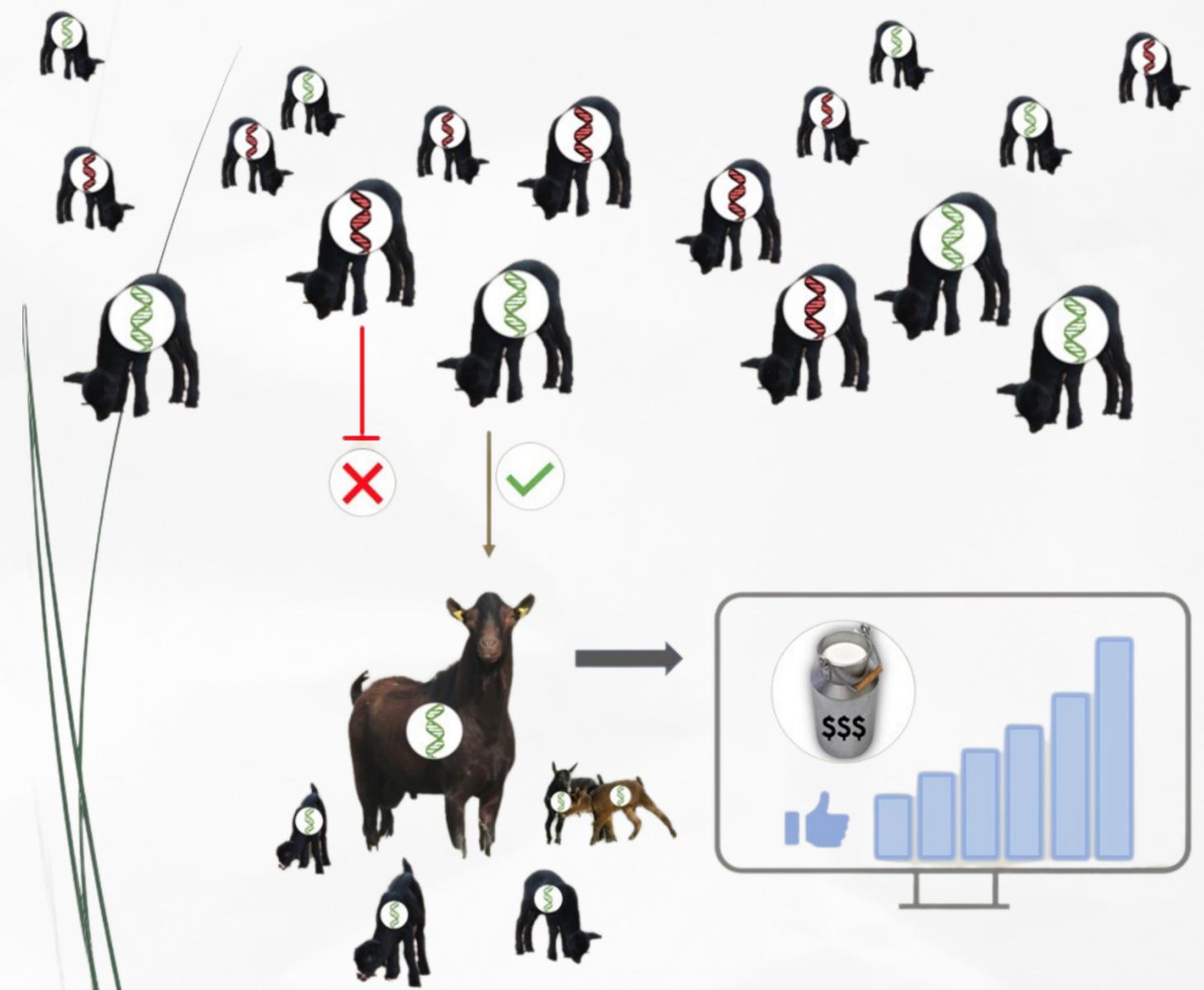
## GENOMIC SELECTION

Increase the value of your crop or livestock production; predict the genetic value of your animals at birth and plants at germination and save the opportunity cost of their maintenance.



## POPULATION GENOMICS

Sequence hundreds or thousands of individuals and characterize the genetic variability of your species or population.



# The possibilities are endless

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## METAGENOMICS

Identify microbial profiles associated with plant health and productivity and formulate your biofertilizers based on these microorganisms.



ACCTGTATTTCATAAGTGGGCAT

# Safety and profitability

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## PROTECT YOURSELF AGAINST FRAUD

Control of the genetic quality of the varieties and genetic lines sold to you by large seed companies and multinational animal genetics companies.



High-quality seed  
High productivity  
High cost



Low-quality seed  
Low productivity  
Low cost



Mixed batch  
Medium to low productivity  
High cost



%?



%?

Control and quantify the quality of your investment

# Needs covered through adapted and personalized services

//09

Animal

Plant

Insects

Bioinformatics

Consulting

Knowledge transfer



# Animal

DNA and RNA extraction for genetic analysis, germplasm, etc.

Breed certification.

Pedigree and parentage verification by traditional method (microsatellites).

Genetic diseases.

Carriers of genes of interest (color, hair, etc.).

True inbreeding coefficients: pedigree inbreeding is not accurate. We compute the true kinship between individuals and maximize the genetic diversity of your population.

# Vegetal

DNA and RNA extraction.

Variety and parentage verification.

Marker development and validation.

Carriers of genes of interest (resistance, recessive, etc.).

Micropropagation (cloning from small tissue samples).

Doubled haploids: obtaining pure lines in a single generation.

Virus detection and cleaning in varieties of interest.

Field experiments: test your varieties in varied environments.

# Insects

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Genetic reference panels: create isogenic lines and maintain the variation of the species in reduced spaces and at a low cost.

Systems genetics: genetically characterize traits of interest (protein, fat, feed conversion rate, etc.).

Creation of commercial lines.



# Bioinformatics

Customized bioinformatics solutions.

Development of methods, algorithms, statistical models and simulations.

# Consulting

Evaluation of R&D projects.

Evaluation of breeding and genetic improvement projects.

Agricultural production engineering.

Data repository.

# Knowledge transfer

Theoretical and practical courses in biology, genetics, genomics, statistics and experimental design, engineering, etc.

Publication of scientific articles.

R&D services and technology transfer to third parties.



# About us

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## **MIGUEL GALLACH**

### **Chief Scientific Officer.**

Doctor in Biology, specialized in molecular and evolutionary genetics, population genetics, breeding, genomic applications and statistics. More than 15 years of scientific research in universities in Spain, USA and Austria, where he was a university professor for seven years.



## **JAVIER GALLACH**

### **Chief of Operations and Foreign Business Development**

Industrial engineer with experience in several different disciplines, including agriculture, greenhouses, and automation systems. He lives between Spain and China, working on foreign business development.



## JENNIFER GAGE

### Chief Administration Officer and Head of International Relations

Senior administrator and translator with experience in human resources and international relations. She has over twelve years of experience at the International Atomic Energy Agency, United Nations.



## ISABEL BALBONTÍN

### Director of Business Development in the Iberian Peninsula

Economist and lawyer, with experience in project management, industrial property and fundraising. Elected member of the Plenary of the Chamber of Commerce of Badajoz and a member of several national business networks.



## JORGE SÁNCHEZ

### Laboratory Head

Biotechnologist with a MSc in applied plant biology. He has extensive experience in scientific dissemination, plant biotechnology and molecular biology.



## **EDGAR O'MORA**

### **Senior Advisor for Business Development in Latin America**

More than 30 years of experience in business development in agriculture and technology in Latin America.



## **ROLANDO GONZÁLEZ SANTAJULIANA**

### **Chief Livestock Advisor in Argentina**

Professor of Agricultural Marketing and Business Development, Universidad Nacional de Rosario, Argentina.



## **TONY MELCKENBEEK**

### **Strategic Advisor**

Over 20 years of international experience in the fields of finance and accounting in public and private companies. He has held numerous international commercial positions related to operational finance management, banking, equity financing, IPO launches and logistics.

# Contact



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**GCGenomics**  
The business of science