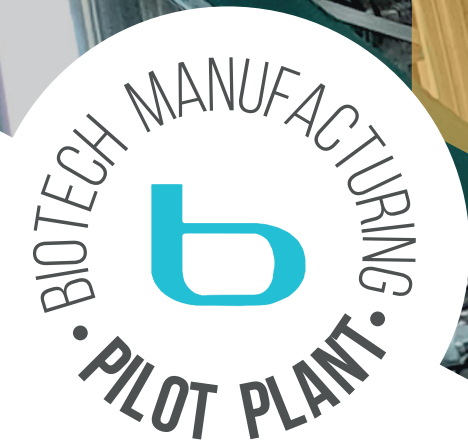




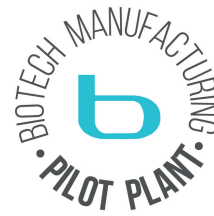
**YOU HAVE AN IDEA**

**WE MAKE IT GROW**  
... LITERALLY



## ABOUT US

Biomar MT is a family owned company dedicated to develop new microbial natural solutions for different industries. More than 25 years of fermentation and natural products chemistry experience endorse our expert team. Biomar has just inaugurated new facilities to fill the gap between the laboratory and the industry, with a fully equipped pilot plant specialized in optimizing and scaling-up fermentation processes.



## OUR FACILITIES

### 750 m2 fully dedicated to GMP fermentation

Volumes up to **3000 L** can be covered in house.

For larger volumes we can explore your requirements with our collaborators

- Raw materials warehouse
- Dispensing area
- Inocula preparation room
- QC Laboratory: microbiology and physico-chemical
- ATEX processing area: filtration, extraction, decanters, flash chromatography, prep-HPLC
- Clean room
- Intermediate & Final Product storage areas



## EXPERT TEAM



### ANTONIO FERNÁNDEZ

#### Scientific Director

CEO of Biomar since 2002. PhD from the MD Anderson Cancer Center in Houston. Scientist at the Dana-Farber Cancer Institute and the Children's Hospital of Boston Surgical Research Laboratories.



### NÚRIA MARTÍNEZ

#### Head of Production Plant

Master in Biotechnology Bioprocess Engineer in the Pilot Plant of the MELISSA project at the European Space Agency. 15 years of experience in bioprocess development at laboratory, pilot and semi-industrial scales.



### JAVIER MARCOS

#### Pilot Plant Coordinator

DSP Specialist. More than 35 years of work experience in Biotech Manufacturing Plants. Pilot Plant safety expert.



### CARLOS PARDO

#### Global Quality Manager

Master in Biochemistry, Molecular Biology and Biomedicine. More than 10 years experience in Pharma Quality Systems.

More than 25 years growing a great range of microorganisms and over 15 years of experience in microbial fermentation manufacturing guarantee a quick and efficient process performance.

We have completed hundreds of processes for different applications and from different levels of initial development.

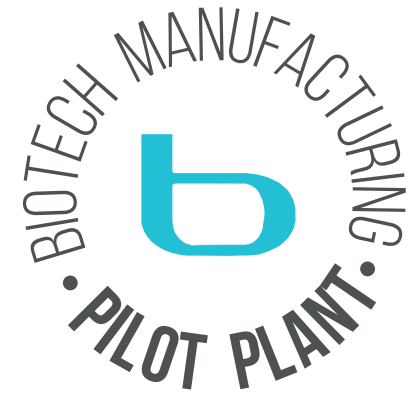
Our team is specialized in the optimization and scale-up of laboratory methods into industrial processes for either bacteria, actinomycetes or fungi to produce different products: biomass, proteins, or small molecules.

The balanced team of upstream and downstream scientists thoroughly work on every stage of the process to optimize: the producing strain, the media, the seed train, the fermentation parameters, the titer, the product recovery process, the batch sizes, and, of course, the associated costs.

# WHAT WE DO

## BIOPROCESS SCALE-UP

- Proof-of-concept from lab scale to semi-industrial
- Viability studies
- Bioprocesses concept design
- Downscale Studies
- Efficient Tech Transfer System
- Production for efficacy tests



## PROCESS DEVELOPMENT

- Rapid Project Assessment
- Cell Bank Storage and Maintenance
- Strain Optimization
- Media Optimization
- Fermentation Optimization for  
Bacteria, Actinomycetes, Fungi and Yeast
- DSP Development  
from biomass recovery to small molecules purification
- Wide analytical Techniques *in house*:  
microbiology, NMR and HR-MS
- Other services

## CUSTOM MANUFACTURING

- GMP & non GMP productions
- Numerous process monitoring and control options
- Batch Manufacturing for different industries
- Wide range of product type:  
biomass, proteins, extracts and  
highly pure small molecules
- Several available techniques:  
solid preparation, micro and ultrafiltration,  
homogenization, precipitation/crystallization,  
solvent extraction, chromatography, etc.
- Grams to kilograms productions

# OUR KEY TO YOUR SUCCESS



**YOUR IDEA IS WHAT  
REALLY MATTERS**

We will take care of your project as it would be our own, protecting its integrity and its scope throughout the process.



**SCALE IT UP!**

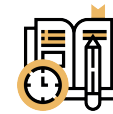
From lab to pre-industrial stage, our in-house bioreactors will turn your idea into a real product ready for the next step.



**FEEL THE CONFIDENCE OF  
BEING IN GOOD HANDS**

With more than 15 years of experience, our highly qualified team will work hand in hand with you to tailor an experimental design.

A dedicated project manager will walk you through the whole process



**RESULTS IS  
WHAT YOU NEED**

We will deliver an easy to replicate, efficient and robust process.

Our Tech Transfer Dossier will guide you through every step.



**LEAVE THE OPTIMIZATION  
TO US**

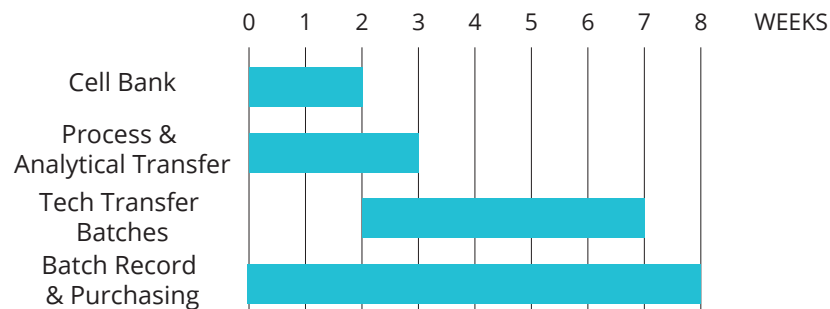
Identifying critical parameters, limiting factors & bottlenecks is our speciality.



**WE HAVE YOUR BACK**

You can count on our technical support to follow your project's growth.

## TECH TRANSFER PROCESS



# SUCCESS STORIES

## BIOPROCESS SCALE-UP

- PRODUCT TYPE: Protein
- ORGANISM: Recombinant Bacterium
- INITIAL TITRE: 4-6 (OD)
- FINAL TITRE: 150-200 (OD)
- KEY FOR SUCCESS: Fermentation Strategy
- NUMBER OF DSP STEPS: 3

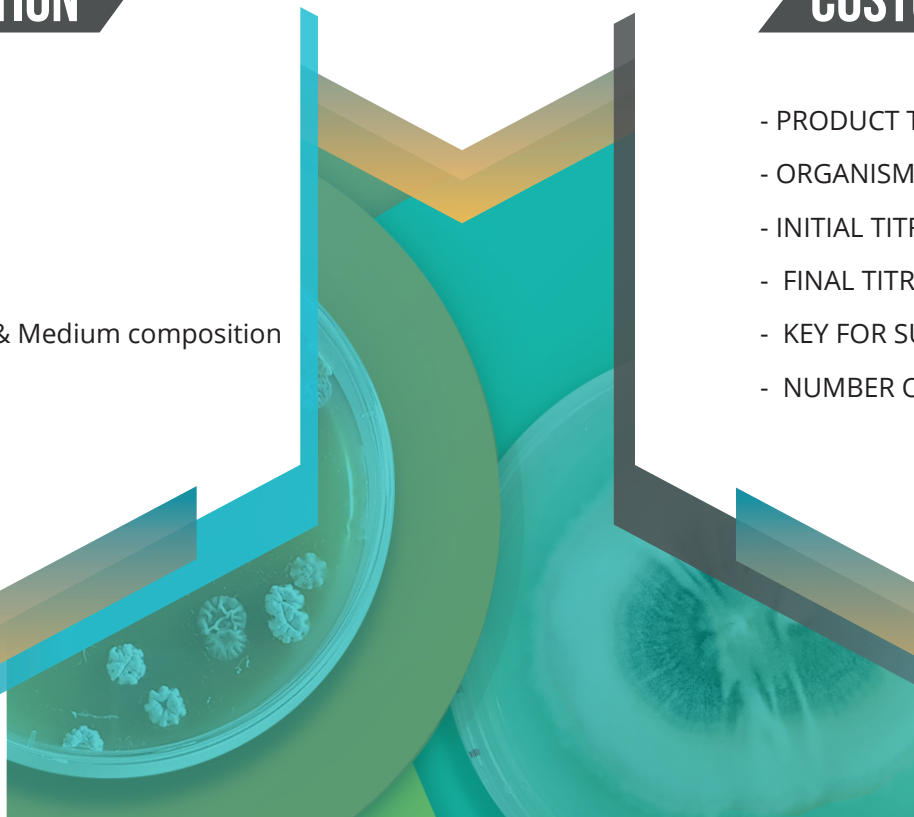


## PROCESS OPTIMIZATION

- PRODUCT TYPE: Siderophore
- ORGANISM: Actinomycete
- INITIAL TITRE: 50 mg/L
- FINAL TITRE: 1500 mg/L
- KEY FOR SUCCESS: Strain Selection & Medium composition
- No. OF DSP STEPS: 5

## CUSTOM MANUFACTURING

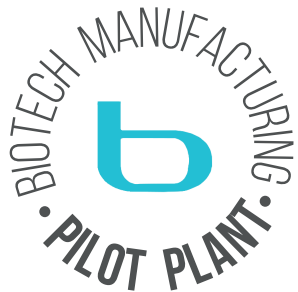
- PRODUCT TYPE: Macrolactone
- ORGANISM: Filamentous fungi
- INITIAL TITRE: 140 mg/L
- FINAL TITRE: 800 mg/L
- KEY FOR SUCCESS: Fermentation Media
- NUMBER OF DSP STEPS: 5





**biomar**  
MICROBIAL TECHNOLOGIES

**25 YEARS**  
UNCOVERING SOLUTIONS  
FROM THE OCEANS



+34 987 849 200



m.fernandez@biomarmt.com  
a.castro@biomarmt.com  
www.biomarmt.com



Instituto Biomar S.A.  
Parque Tecnológico de León, M10.4  
24009. León. Spain

