

# PTP SCIENCE PARK



***Adding value  
from research***

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# *Parco Tecnologico Padano*

Adding value from research

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PTP - SCIENCE PARK

GOVERNANCE

FONDAZIONE PARCO TECNOLOGICO PADANO



# PTP - SCIENCE PARK

PTP Science Park is the spin-off of the Fondazione Parco Tecnologico Padano activities. The mission of PTP Science Park is the **promotion of scientific research and technology transfer in agri-food, life sciences and bioeconomy sectors** through: coordination between organizations for the creation of a **Research Pole in Lodi area**; the management of a Business Accelerator as a tool to encourage the creation and **development of innovative companies**; the promotion of the internationalization of research and higher education; **the creation of research programs and the provision of high value-added services.**

## R&D



In a global world it is necessary to innovate to compete. PTP, thanks to its research programs, its certified laboratories and its high-throughput automated platforms, develops **innovative projects in agri-food, bio-economy and health sectors**, to promote innovation and technology transfer. We offer a **complete line of services** for the creation of new products: from formulation studies, to experimental tests, to registrations, up to positioning and product communication.

## SMeL

PTP, through its SMeL laboratory, authorized to operate as a **specialized medicine service laboratory**, offers **advanced molecular biology services** in the fields of **translational medicine and forensic genetics**. Its activity is to support the universities research, medical research institutes and pharmaceutical companies but also individual professionals operating in biomedical, nutritional, phytotherapeutic, cosmetic and pharmaceutical sectors.



## Certifications

PTP agri-food laboratory, in possession of ministerial accreditations and ISO17025, offers a wide range of analytical services to face and solve problems related to **food safety, product certification and supply chain control**, in full compliance with the procedural guidelines. To **protect producers and consumers**, for safe and quality food, PTP has developed its own brand: **DNA Controllato®**. We are able to analyze any organic material containing DNA, offering a guaranteed and univocal identification of each product, from seeds to food.



## Incubator

ALIMENTA is an **international technological accelerator** dedicated to companies willing to increase their turnover and marginality, facing the challenges of international markets and **developing high-technology products, technologies and services**. ALIMENTA is the space designed to **transform brilliant ideas into innovative technological companies**, in a dynamic and avantgarde environment. We offer **cooperation contracts at different levels**: providing co-working offices, sharing complex R&D projects, cooperating to the production and market launch of innovative products.



# GOVERNANCE

PTP Science Park S.c.a. r.l. is a non-profit consortium company established on 5/15/2018 as a spin-off of the activities of Parco Tecnologico Padano, to which, starting from 03/01/2019, all the activities of Parco Tecnologico Padano and its subsidiary Parco Tecnologico Padano s.r.l. have been transferred.

## PTP SCIENCE PARK MANAGING BOARD

**CRISTIANO DEVECCHI**  
PRESIDENT

▪

**ERMANNIO BACCHI**  
VICE PRESIDENT

▪

**ANDREA DI LEMMA**  
CEO

## R&D

**SANDRO SECCO**  
BUSINESS DEVELOPMENT  
MANAGER

▪

**VITTORIO LUCCHINI**  
OPERATION MANAGER

▪

**RUTH ALBAROSA**  
QUALITY CONTROL  
MANAGER

## LAB SERVICES

**SARA BOTTI**  
MEDICAL MANAGER SMEL

▪

**VINCENZA BATTAGLIA**  
TECHNICAL LAB MANAGER

▪

**MARIA FIORELLA GRECO**  
AGRI-FOOD  
SERVICES COORDINATOR



# FONDAZIONE PARCO TECNOLOGICO PADANO

MEMBERS  
AND  
ADMINISTRATIVE  
ORGAN

FOUNDING  
MEMBERS

MERITORIOUS  
MEMBERS

BOARD OF  
DIRECTORS  
MEMBERS

EXTERNAL  
LEGAL AUDITOR

STEERING  
COMMITTEE

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## Members and administrative Organ

A decisive role in the implementation of the Lodi Innovation Cluster has been played by: **Regione Lombardia** ▪ **Provincia** ▪ **Comune e Camera di Commercio di Lodi** ▪ **Università degli Studi di Milano** ▪ **Fondazione Cariplo** ▪ **Fondazione della Banca Popolare di Lodi**. Currently, in the Board of Fondazione Parco Tecnologico Padano, together with the three founding members, there are also representatives of other institutions with which the Park actively collaborates.

## Founding members

PROVINCIA DI LODI

COMUNE DI LODI

CHAMBER OF  
COMMERCE  
MILANO,  
MONZA-BRIANZA,  
LODI



## Meritorious members

UNIVERSITY OF MILAN  
▪  
CITTÀ METROPOLITANA  
DI MILANO  
▪  
MUNICIPALITY OF MILAN  
▪  
ASSOCIAZIONE ITALIANA  
ALLEVATORI  
▪  
CARIPO FOUNDATION  
▪  
ISTITUTO SPERIMENTALE ITALIANO  
“LAZZARO SPALLANZANI”





# R&D

Breeding new ideas

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THE COMPLETE OFFER  
R&D  
INDUSTRIAL  
COMPLEX PROJECT MANAGEMENT  
REGULATORY  
MARKETING  
TRAINING



# THE COMPLETE OFFER

The Padano Technology Park offers a **complete offer for agribusiness companies**; from targeted consultancy, in which we provide our experience to the needs of your company, to carry out the activities that companies want to outsource.

## SPECIAL FERTILIZERS

- BIOSTIMULANTS
- MICROELEMENTS
- LIQUID OR POWDER NPK

## AGROCHEMICALS

- HORMONAL SUBSTANCES
- HERBICIDES
- FUNGICIDES
- INSECTICIDES

## SEEDS

- HORTICULTURAL
- FULL FIELD INDUSTRIALS
- CEREALS
- INNOVATIVE CROPS

## INNOVATIVE PRODUCTS

- MICROORGANISMS
- HORMONE-LIKE SUBSTANCES
- SPECIAL VEGETABLE EXTRACTS

## ANIMAL NUTRITION

- DIETS OPTIMIZATION
- DIAGNOSTICS
- PROBIOTICS





# R&D

## Study of new products



FORMULATION  
OF NEW  
PRODUCTS

INDUSTRIAL  
FEASIBILITY

PHYSICAL AND  
CHEMICAL  
FEASIBILITY

IDENTIFICATION  
OF RAW  
MATERIALS

PROCESS  
OPTIMIZATION

## Different levels of testing

**TESTING IN VITRO:** Similar activity ▪ Genomics ▪ Phenomics ▪ Proteomics ▪ Metabolomics

**IN VIVO TESTING:** Growth chamber ▪ Jar ▪ Greenhouse ▪ Full field plots ▪ Full field test strip

**REPORTING:** Management of technical information of each product (and related raw materials and suppliers): Formula, Technical data sheet, Label, Safety data sheet, Technical positioning etc. ▪ Management of experimental tests all over the world: protocol definition, activity management, reporting, communication ▪ Defense plans ▪ Relations with official bodies (Universities, Ministries, etc.) ▪ Assistance in the field ▪ Fertilization plans



## Test management with certified bodies

TEST RECOGNITION  
FOR PRODUCT  
REGISTRATION

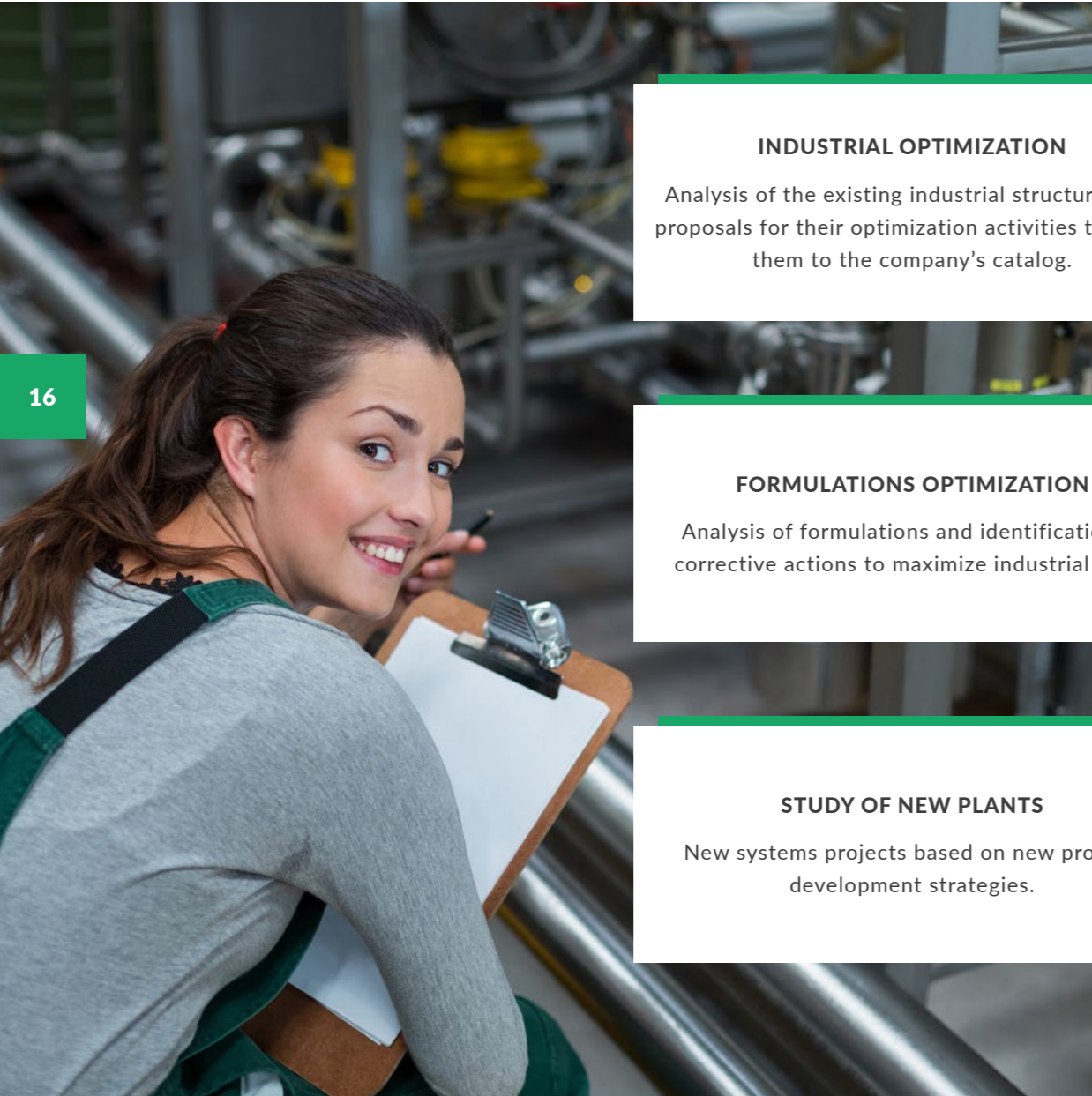
PUBLICATIONS  
EVIDENCE IN  
SCIENTIFIC  
JOURNALS

PRODUCT  
COMMUNICATION  
ACTIVITY



# INDUSTRIAL

Maximize industrial yields based on the catalog



## INDUSTRIAL OPTIMIZATION

Analysis of the existing industrial structures and proposals for their optimization activities to adapt them to the company's catalog.

## FORMULATIONS OPTIMIZATION

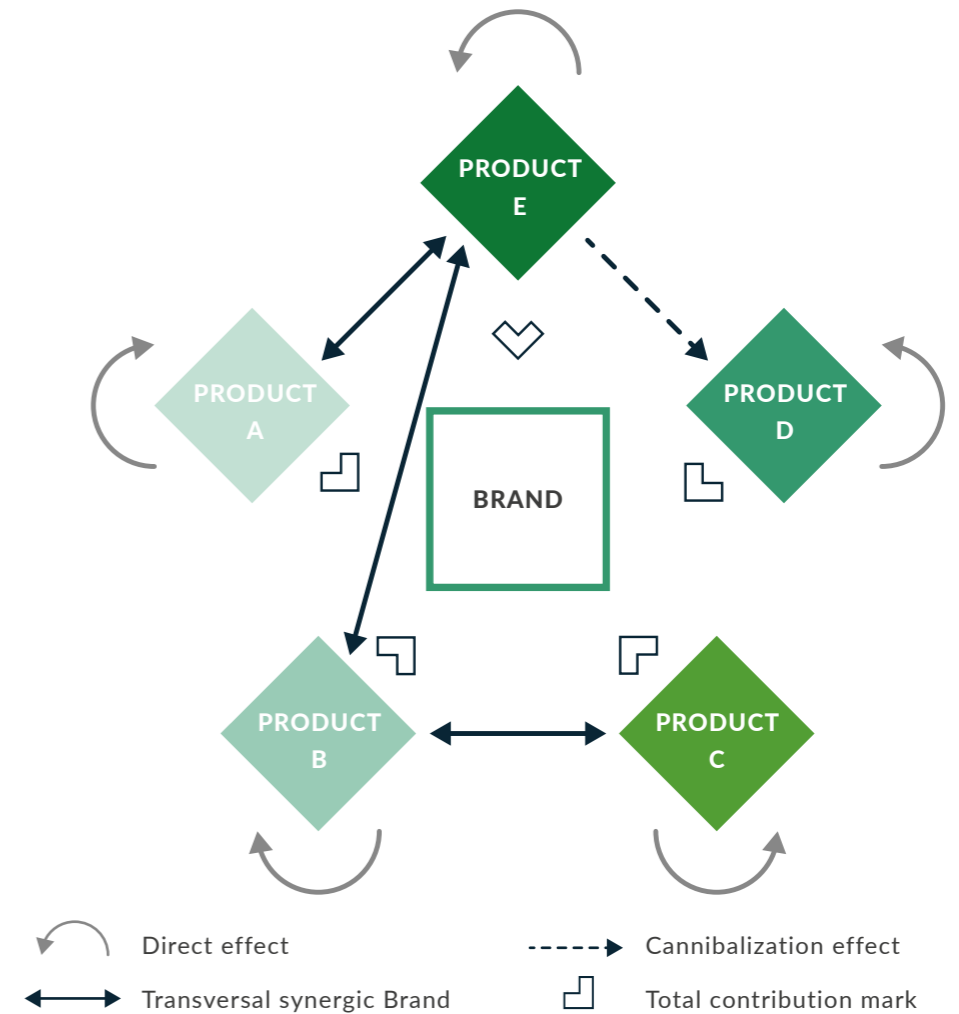
Analysis of formulations and identification of corrective actions to maximize industrial yield.

## STUDY OF NEW PLANTS

New systems projects based on new product development strategies.

# Product Mix Optimization

Analysis of the product mix in relation to industrial activity: identification of the most profitable products at industrial level.





# COMPLEX PROJECT MANAGEMENT

We offer consulting services to companies that are willing to challenge to improve their performances. Management and coordination of the various internal and external company functions. The success of a project depends on the coordination of people and the management of timing; It is essential that the various functions carry out their tasks in the correct timing, as in an orchestra.

- R&D
- REGULATORY
- MARKETING
- SALES
- MANAGEMENT CONTROL
- SUPPLY CHAIN
- PRODUCTION
- QUALITY CHECK
- ADMINISTRATION

# REGULATORY

RECORDING OF  
TECHNICAL MEDIA  
ALL OVER  
THE WORLD

PLANT  
CERTIFICATION

CREATION  
OF LABELS  
IN WORD  
OR GRAPHIC  
FORMAT

CERTIFICATES FOR  
TECHNICAL  
VEHICLES  
FOR ITALY AND  
ABROAD





# MARKETING



## ANALYTICAL MARKETING AND MARKET RESEARCH

An analysis of the competition and an analysis of the demand in order to build your product portfolio more suited to your needs.

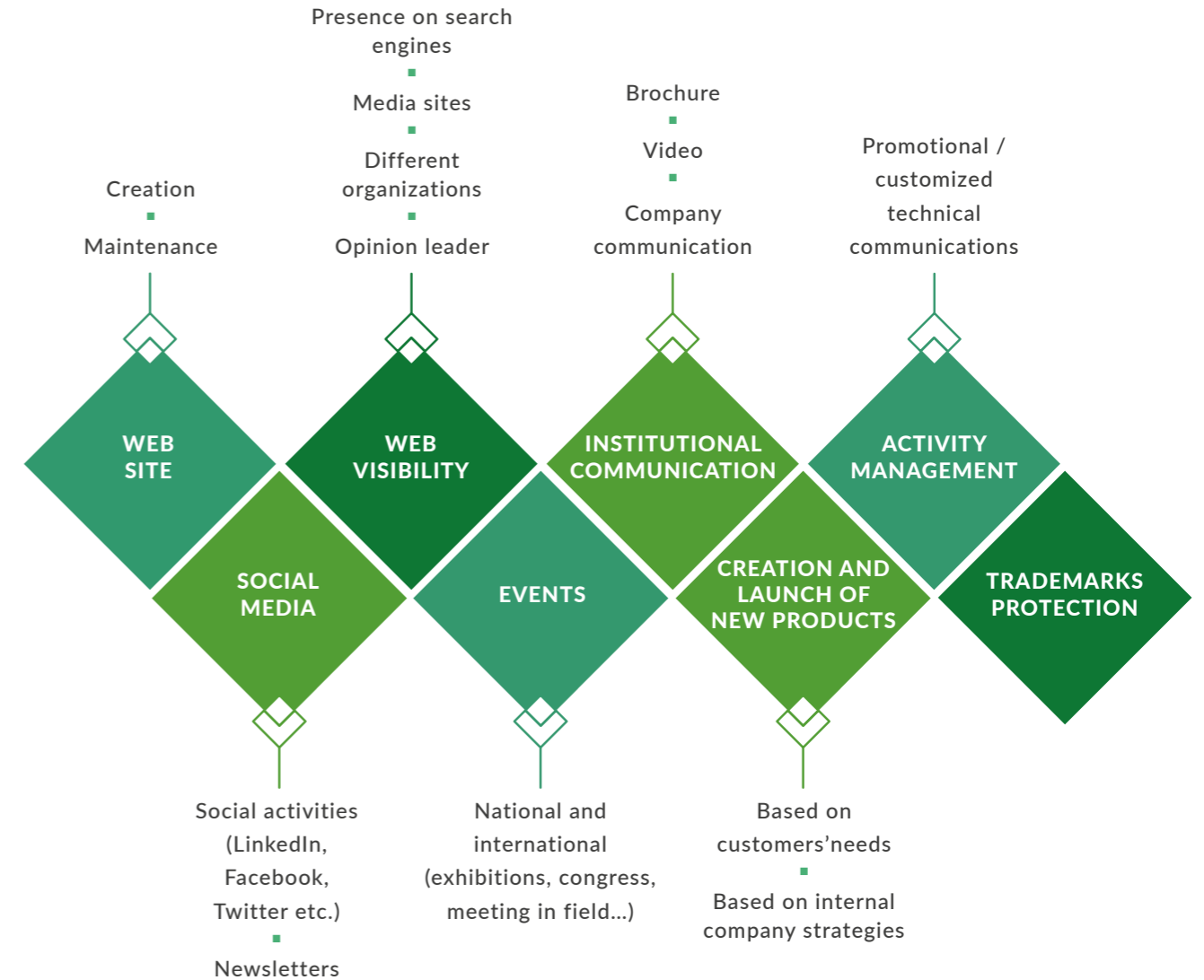
## STRATEGIC MARKETING AND WIDE-RANGING PROGRAMMING

Planning of long-term objectives, which take into account the global profitability and its product / service portfolio, aiming at maximizing the result.

## OPERATIONAL MARKETING AND THE FINAL PART OF THE WHOLE PROCESS

to realize concretely the strategies defined in the previous phases, disposing of the resources (money, professionalism, technology) in the most effective way.

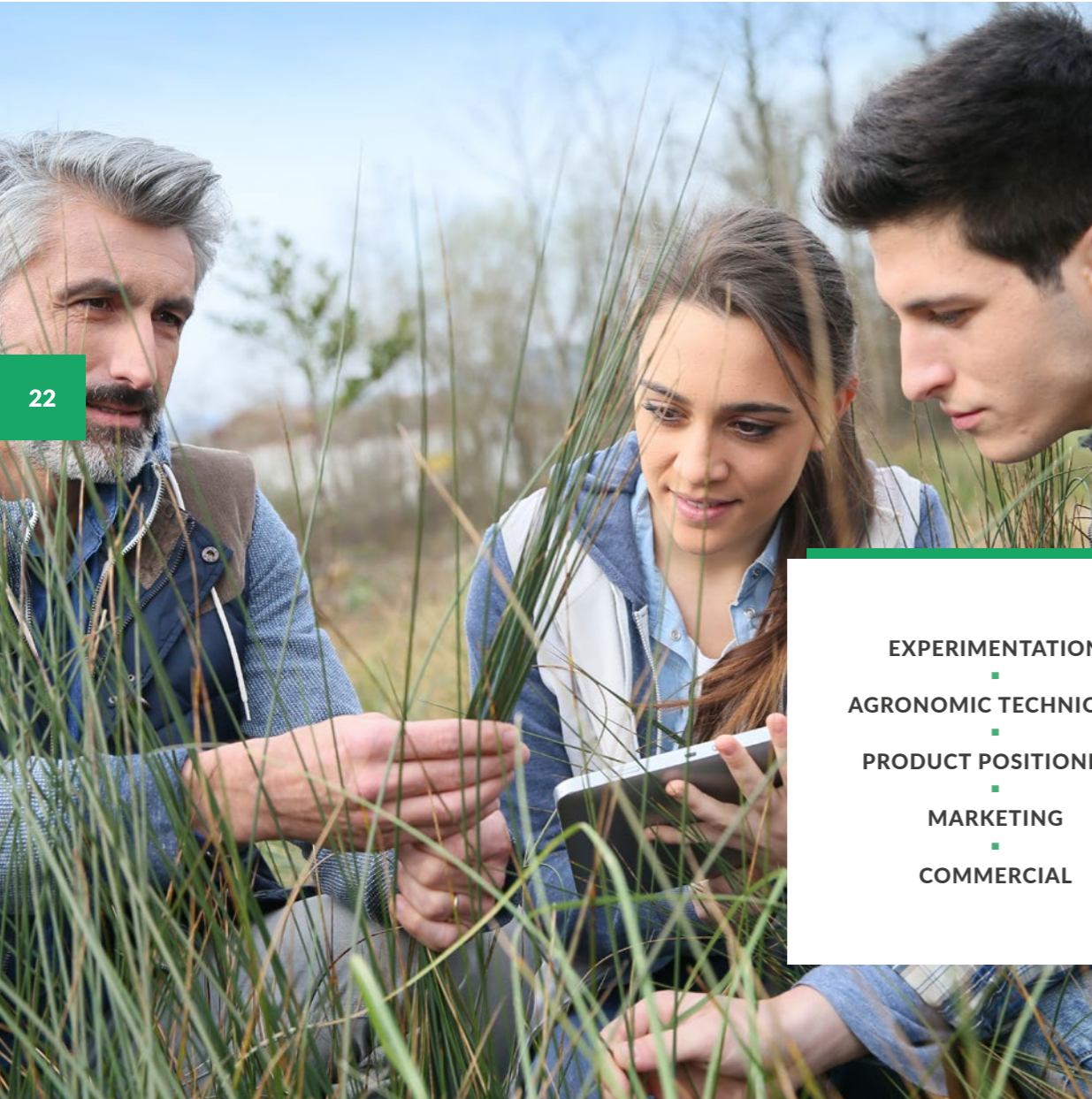
## Activities





# TRAINING

Classroom and field training



- EXPERIMENTATION
- AGRONOMIC TECHNIQUES
- PRODUCT POSITIONING
- MARKETING
- COMMERCIAL

# Products



- FERTILIZERS
- AGROCHEMICALS
- ANIMAL NUTRITION
- INNOVATIVE PRODUCTS (EG. MICROORGANISMS)
- SEEDS





## *SMeL*

Innovate to create value

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MOLECULAR BIOLOGY SERVICES

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FORENSIC GENETICS SERVICES

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# MOLECULAR BIOLOGY SERVICES

PTP SMEL laboratory, authorized to operate as a specialized medicine service laboratory, offers advanced molecular biology services in the fields of translational medicine and forensic genetics. Its activity is to support the universities research, medical research institutes and pharmaceutical companies but also individual professionals operating in biomedical, nutritional, phytotherapeutic, cosmetic and pharmaceutical sectors.

## Basic molecular biology services

- Isolation and purification Nucleic Acids, DNA and RNA from various biological matrices
- Quality control of extracted nucleic acids
- Fragment analysis service (Genotyping) with the possibility of using the complete service, ie DNA extraction, amplification and analysis on ABI 3730XL or, alternatively, to request only amplification and travel of the fragments, or run alone
- Sanger disjointment service with the possibility of using the electrophoretic only run, sequencing and running service or, alternatively, requesting the most complete service which also includes amplification, purification, sequencing and travel

## Next generation sequencing services (NGS)

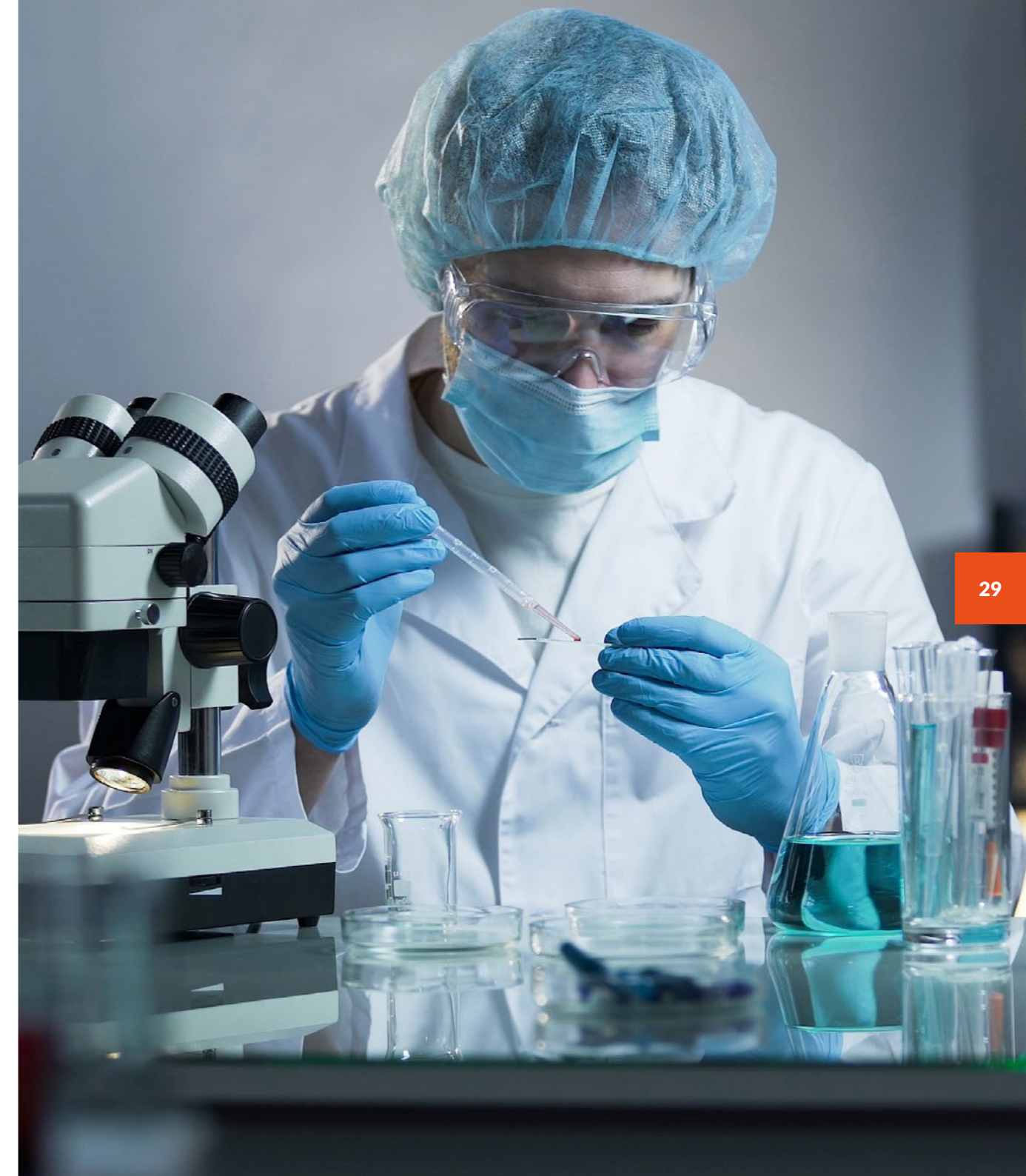
- Enrichment of target regions by hybridization techniques and Primer-extension (PEER) techniques
- Whole Genome Sequencing (Whole Genome Sequencing)
- Metagenome sequencing (Metagenomics)
- Exome Sequencing (Exome Genome Sequencing) either complete (Whole Exome Sequencing) or clinical (Clinical Exome Sequencing)
- RNA sequencing (Transcriptome)
- Sequencing by Bisulfite (Methyloma)
- Chip-Seq sequencing, for the study of DNA-protein interactions
- Bioinformatics services





## FORENSIC GENETICS SERVICES

The genomic platform is able to provide a specialized service of **Forensic Genetics** having dedicated specific environments to this purpose and having defined a precise workflow. This flow begins with the inspection of the samples in a specific dedicated environment where it is possible to collect biological traces, with the possibility of external supervision protected by a glass window. Subsequently the biological samples are analyzed in a laboratory dedicated to Forensic Genetics and structured with a one-way path to avoid any possible risk of contamination. The system is currently in the ISO 17025 accreditation phase for the technical test to identify the individual genetic profile.







# Certifications

We work to ensure our clients get a quality product

- 32 DNA CONTROLLATO®
- 34 GMOs
- 34 ANIMAL DNA
- 34 MICROBIOME
- 35 PLANT DIAGNOSTICS
- 35 ANIMAL DIAGNOSTICS
- 36 CHEMICAL ANALYSIS
- 38 QUALITY CHECK



# DNA CONTROLLATO®

Food safety, traceability and quality are fundamental elements. To protect this right, a stringent EU legislation establishes controls and guarantee systems. Unfortunately, as demonstrated by the crises and frauds experienced in recent years, the current methods are not always quick and effective.

To provide more guarantees, PTP has developed the **DNA CONTROLLATO® brand to certify the quality of agri-food products**. This trademark can be placed on the product and granted free of charge to those companies that accept a voluntary control plan to certify their productions.

## Cos'è il DNA?

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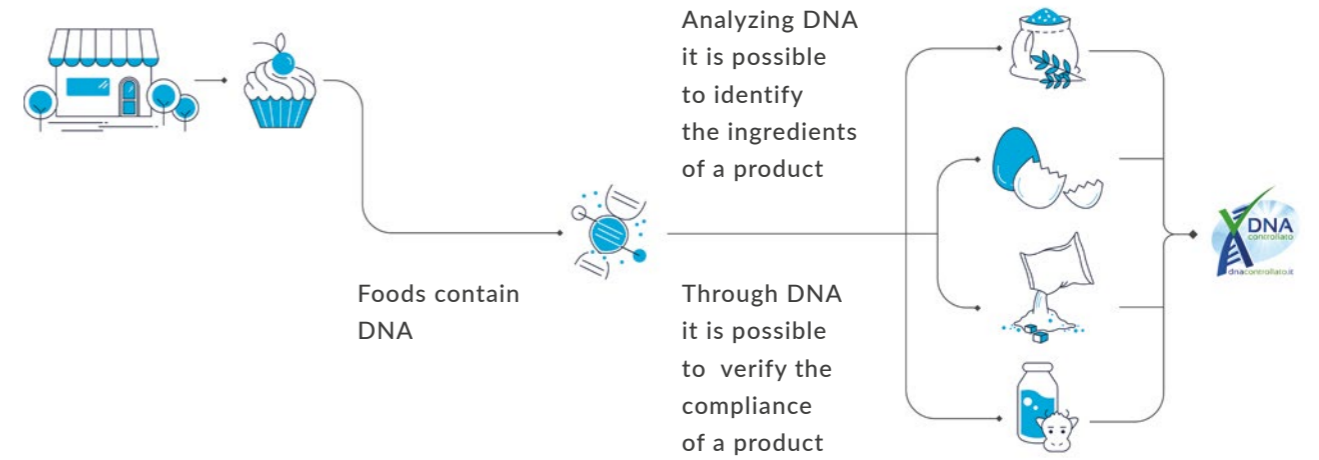
ALL LIVING THINGS HAVE DNA

DNA IS A BIOLOGICAL BAR CODE

THANKS TO DNA IT IS POSSIBLE TO IDENTIFY THE ORIGIN OF A PRODUCT

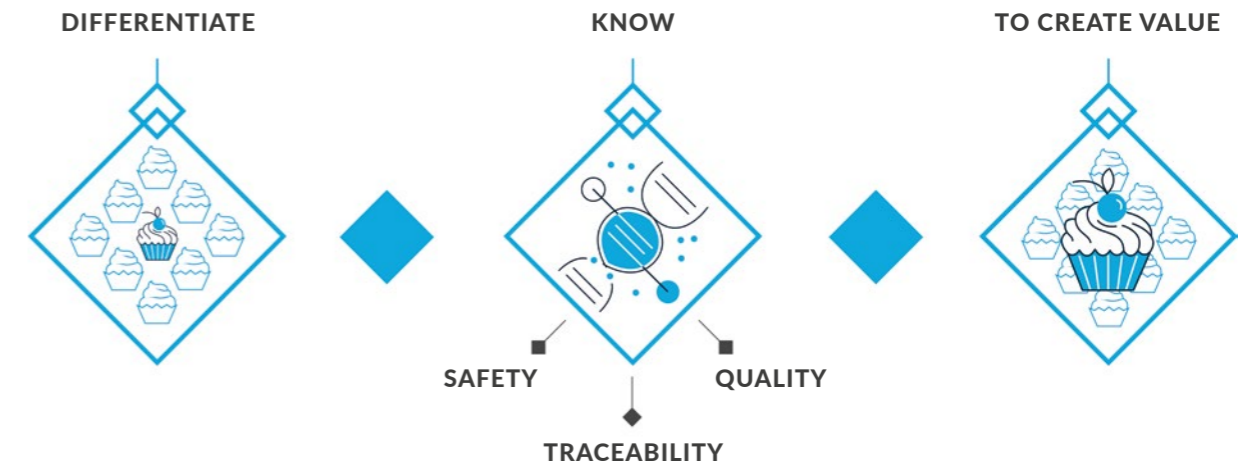


## Il DNA negli alimenti



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## Perchè DNA Controllato®?





## GMOs

PTP has developed **innovative methods able to detect the presence of genetically modified organisms** both in seeds and in products destined to human nutrition and animal feed. With reference to controls on corn and soy seeds, the ENSE method is applied, in accordance with the Ministerial Decree 27/11/2003 G.U.R.I. of 12/03/2003. PTP is also able to provide Fastdata results in just 36 hours after receiving samples.

## ANIMAL DNA

Many **Made in Italy products** can also be consumed in countries that follow religions with certain restrictions on the consumption of certain types of meat. For those Italian companies that want to export their products to these countries, PTP has developed a system to determine the possible presence of traces of meat and derivatives of pork origin.

## MICROBIOME

**Control methods to detect and quantify bacterial and fungal microorganisms species on any system** (soil, plant, animals, food products). PTP has developed DNA-based molecular methods able to recognize and quantify the presence of microorganisms, with high sensitivity and rapidity. This enable us to optimize time and increase the security of results.

## PLANT DIAGNOSTICS

PTP offers services for companies operating in the nursery sector, aimed at **identifying the presence of pathogens early and thus avoiding the spread of plant diseases**. The phytodiagnostic laboratory at PTP is accredited by Lombardy Region and Sicily Region for molecular phytodiagnostic analysis. The developed methods allow to detect viruses, viroids, bacteria, phytoplasmas and fungi and can be realized with the **PLUS system (Pre-Lab Unit System)**, which allows to carry out a part of the analysis directly in the company, saving both on the analysis costs and on the time needed to know the outcome.

## ANIMAL DIAGNOSTICS

In recent years there has been a considerable **technological advancement** also referring to the zootechnical world, both in terms of company management and that of product quality control. In this context, PTP offers tools and services specifically dedicated to animal husbandry, ranging from diagnostic systems for diseases to technologies for Livestock Precision Farming aimed at improving qualitative, quantitative yields and animal welfare.





# CHEMICAL ANALYSIS

PTP offers services for companies according to official analysis methods. Analysis of the composition of any type of product, for the identification of any organic or mineral molecule such as:

## TAG AND / OR QUALITATIVE ANALYSIS

- FODDER QUALITY
- QUALITY OF FOOD PRODUCTS
- FRUIT AND VEGETABLE QUALITY
- QUALITY OF PROCESSED PRODUCTS
- AGROCHEMICAL COMPOSITION

## MINERALS

- FERTILYZERS ANALYSIS
- CONTENT ANALYSIS FOR HEAVY METALS BOTH FOR HUMANS OR ANIMALS FOOD
- LEAF AND SOIL ANALYSIS

## ORGANIC MOLECULES

- ANALYSIS OF PESTICIDE RESIDUES
- ANALYSIS OF THE PRESENCE OF HORMONES



## QUALITY CHECK

Parco Tecnologico Padano provides **traceability** services to identify, even in processed food products, the presence / absence of specific animal species, fish and vegetables; control services to detect **pathogen** contamination in food products; control services to detect and quantify the presence of **GMOs** in raw materials and transformed matrices.

### Traceability

Control methods to **identify**, even in processed food products, **the presence / absence of specific animal species, fish and vegetables**. In some cases, in particular for processed products, it is not possible to identify the raw materials used. To overcome this problem, PTP has developed **DNA-based methods** that can accurately determine the identity of the raw materials used, with reference to species, breed or variety.

### Pathogens

Control methods to **detect bacterial and fungal contamination in food products**. The microbiological safety of food must be guaranteed at all levels of the food supply chain. One of the fundamental objectives of control systems is **to detect the presence of pathogens in raw materials or in production lines**. PTP has developed **DNA-based molecular methods** able to recognize the presence of potential risks with high sensitivity and rapidity. This makes it possible to optimize times and increase product safety.

### GMOs

Control methods to **detect and quantify the presence of GMOs in raw materials and transformed matrices**. The indication of the presence of GMOs on the label is an element of transparency guaranteed by the EC regulation 1830/2003. **DNA analysis** developed by PTP specialists allows **the precise detection and quantification of the presence of genetically modified organisms** both in raw materials and in processed products.







# *Incubator*

Company oriented

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- SPACES
- RESIDENT SERVICES
- COMPANIES



# SPACES

To request more information and to know all the details, we invite you to visit our website.



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4  
TEMPORARY  
OFFICE

RESIDENTIAL  
OFFICES

GALLERY

12  
COWORKING  
STATIONS

LABORATORIES

RECEPTION

6  
MEETING  
ROOMS

CONGRESS  
ROOM

BAR /  
CAFETERIA



# RESIDENT SERVICES

Promote your ideas and turn them into reality. Parco Tecnologico Padano provides spaces equipped for business teams, start-ups and companies.

EQUIPPED  
LABORATORIES  
■  
OFFICES  
■  
MEETING ROOMS

RECEPTION  
■  
MAIL DELIVERY  
■  
FIBER-OPTIC  
COMMUNICATION

GUARD  
■  
SUPERVISED  
CAR PARK

COMMON TECHNICAL  
AREA  
■  
WASTE AND  
DISPOSAL AREAS

BAR  
■  
FOOD SERVICE



# COMPANIES





NOTES

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NOTES

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University of Milan - Faculty of Veterinary Medicine

Veterinary hospital

Zooprophylactic institute

**PTP** SCIENCE PARK

Crea

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Visit the website [www.ptp.it](http://www.ptp.it)

The mission of **PTP Science Park** is the promotion of **scientific research** and technology transfer in **agri-food**, **life sciences** and **bioeconomy** sectors.

Incubator

Certifications

SMeL

R&D

