### Who we are

Founded in 2003, PharmEste is a company involved in research and development in the chemical, pharmaceutical and pharmacological fields. Our goal is to find new drugs with pain-killing and anti-inflammatory activity to be used in the clinical setting.



#### Our skills

PharmEste is based on the cooperation between the founding partners, who are internationally renowned in the pharmacological (clinical and experimental) field as well as in the medicinal chemistry field, a consolidated scientific team made up by active scientists and a managing team with experience gained in some of the most important pharmaceutical multinational companies.

## **Our activities**

Capsaicin, the pungent substance contained in the plants of red pepper, can selectively activate a protein located on the sensory neurons which transmit pain impulses. This protein, the molecular target of our research, is called Transient Receptor Potential Vanilloid 1 (TRPV1). The activation of the receptor TRPV1 caused by endogenous lipids, by acid pH and by high temperatures leads to a strong sensation of burning soreness or real pain. PharmEste's primary goal is to obtain innovative, new generation drugs that can antagonise the activity of the TRPV1 receptor. Animal testing has shown that TRPV1 antagonists are active in the treatment of various physiological and pathological conditions, such as neuropathic pain, inflammatory pain and some disorders of the urogenital system.

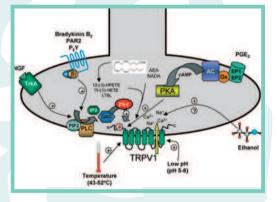
#### **Our services**

Design, research and development of new drugs for neuropathic pain and disorders of the genito-urinary tract.

# **Technology and Equipment**

- Laboratory of chemical synthesis of new substances with selective and relevant pharmacological activity;
- Pharmacology laboratories:
  - Receptor binding in isolated membranes and/or cells
  - Fluorescent microscopy
  - Analysis of the intracellular calcium gradient in primary sensory neurones
  - Behavioural test





# **Our clients**

Together with international venture capital companies interested in the acquisition of active participations in the bio-medical sector, we develop products of interest for companies of the bio-medical field interested in the acquisition of products at different stages of clinical development phase.



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