Institut Pasteur, Paris, and the LuLISA project

Founded

1888

Mission

Contribute to the prevention and treatment of disease, especially infectious disease, through research, education and public health actions

Scope

France and the world

Goals

- Decipher the basic mechanisms of living organisms to move scientific knowledge forward and lead to cutting-edge medical applications
- Put scientific expertise to work to ensure the health of populations and individuals throughout the world
- Promote discovery, innovation and technology transfer through a transversal multidisciplinary approach to research
- Propose high-quality teaching by top-level experts to scientists and scientific and medical professionals worldwide

Insitut website

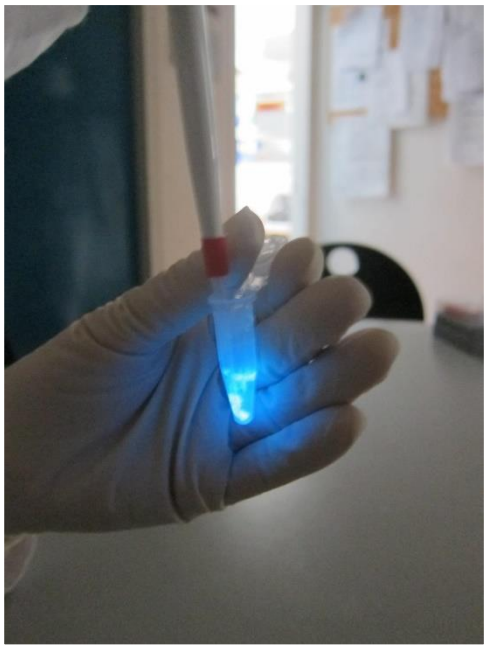
The LuLISA project - *Luciferase-Linked Immunosorbent Assay*

What?

The LuLISA project aims to develop a quick, accessible method for general practitioners to diagnose various food allergies using a few drops of blood.
This method is based on a new generation of markers, the luciferases, which give off signals that are thousands of times more intense than those produced by enzymes in ordinary diagnoses.
In the current context, Institut Pasteur has also adapted the project to track the progress of collective immunity against Covid-19.

How?

- By increasing the sensitivity of specific immunoglobulin detection for better detection of allergies
- By using bioluminescence to quantify patient immunoglobulins and assist in diagnosis
- By proposing a solution that can easily be used on a large scale and for various application, such as allergology departments, general practitioners and medical emergencies



Why?

In the long term, the LuLISA project will also enable identifying allergies so that allergic patients can be informed quickly and clearly, so that treatment can be precisely evaluated and so that the risks tied to allergies encountered during hospitalization can be limited. Pinpointing allergies will be quicker, safer for patients and available at a lower cost.

Duration of support

For 3 years

Roquette Foundation for Health