Portfolio de Inovação Carbon Nanotube Solubilization and **Activation Method** 

#### Problema

Immunizing animals using peptides requires carriers to assist the immune system in recognizing the target antigen. However, traditional peptide carriers used in experimental animal immunizations, such as BSA and KLH, can generate a humoral immune response against the animals' own organisms. This hinders the production of specific antibodies against the target antigen.

#### Solução

This technology proposes the use of carbon nanotubes (CNTs) as carriers for peptides in animal immunization. A method for solubilizing CNTs in aqueous solutions with long-term stability and a method for activating the solubilized CNTs have been developed by the inventor. The use of CNTs as lipid carriers was tested in mice and chickens, resulting in the specific production of antibodies against the antigen, without generating a humoral response, unlike the current immunization method.

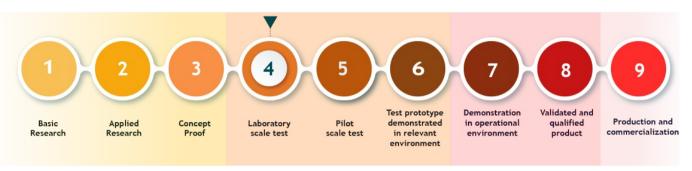
#### **Diferencial**

Non-toxic

High performance

Production of specific antibodies

## Estágio de Desenvolvimento



CONCEPT

**PROTOTYPE** 

INDUSTRIALIZATION

PRODUCTION AND

## O que buscamos?

Seeking partnerships for co-development, larger-scale evaluation of solubilized carbon nanotubes as vaccine carriers, product stability assessment, and eventual licensing of the patent for production and commercialization of solubilized nanotubes and/or services.

WANT MORE INFORMATION? CONTACT US!

# Propriedade Intelectual

## Inventores

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Tipo

Patente de Invenção

Descrição

Patent application filed in Brazil.

**VER PATENTE** 





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