Portfolio de Inovação

Animal Cranio Kit

Problema

The craniotomy technique is widely used in scientific experiments. However, it is not uncommon for researchers to go beyond the cranial covering and reach the rat's brain when carrying out the procedure, causing irreversible damage or even death to the animal. In particular, postgraduate students in neuroscience often use live rats, as there is no substitute model for training this technique in rats and other animals.

Solução

Developed from 3D printing of a rat's skull skeleton, the simulator can be used to train the craniotomy technique in rats. The 3D model has a filament that simulates bone tissue, with a thickness similar to that found in adult rat skulls. The skull is filled with material that simulates the brain, allowing the user to train the surgical technique as many times as necessary, because the heads are removable and can be exchanged for a for another head refill. The technology allows the reduction of brain-damaging accidents in scientific experiments.

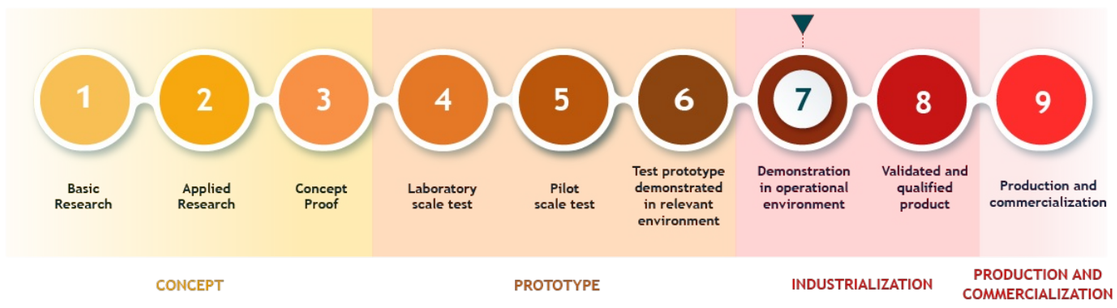
Diferencial

Unique simulator containing refill parts

Replacing the use of animals

Reducing the cost of training

Estágio de Desenvolvimento



O que buscamos?

Partnership with national and international companies with the capacity to produce the replacement kit and refill, using 3D printing, and interested in licensing the technology for production and commercialization. In addition, the group is also looking for partners who are interested in carrying out new developments related to technology through a potential joint agreement with Fiocruz.

WANT MORE INFORMATION? CONTACT US!

Inventores

Klena Sarges Marruaz da Silva

Propriedade Intelectual

Tipo
Patente de Invenção

Descrição
Patent application filed in Brazil, United States of America, Japan, China and Europe.

VER PATENTE

Tipo
Marca

Descrição
Trademark registered in Brazil

Use your phone camera to scan the QR Code:

Campus Fiocruz Maré - Av. Brasil, 4036 - Maré, Rio de Janeiro - RJ

CEP: 21040-361

portfolio@fiocruz.br

+55 (21) 3282-9080