

# Xenograft of functional tissues on a chorioallantoic membrane: an alternative to animal experimentation.

NIRDÉ Philippe<sup>1</sup>, RICHARD Sylvain<sup>2</sup>, MARCHI Amanda<sup>2</sup>

1 : CNRS UMR 5247 – Inst. Biomolécule Max Mousseron – Faculté de Pharmacie – 15 avenue Charles Flahault – BP 14491 – 34093 Montpellier cedex 5 - France, philippe.nirde@umontpellier.fr, (33+) 411 759 758

2 : INSERM U1046 – CNRS UMR 9214 – CHU Arnaud de Villeneuve – 371 avenue Gaston Giraud – 34295 Montpellier cedex 5.

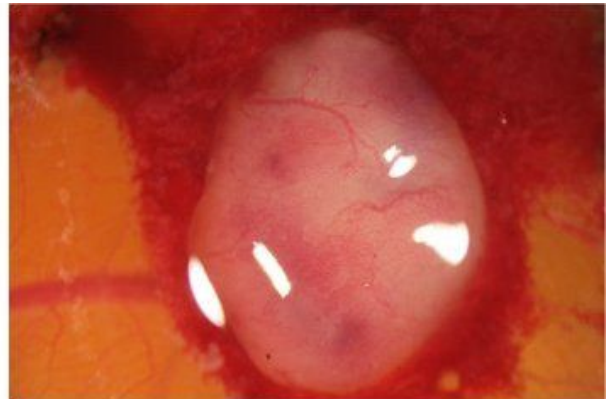
## **SUMMARY** ((300 words):

We present a model of vertebrate tissue cultures on a chorioallantoic membrane of a chicken fertilized egg. This shell less model, makes it possible to graft dissociated cells or fragment tissues without risk of immune rejection. The implants, vascularized by the egg, find a complex environment (ex ovo) and are able to recover their initial functional properties. This model allows intra-vital observation of grafts and non-invasive physical and biological measurements throughout the experiment. Examples of beating vertebrate heart tissue are presented.

## **ILLUSTRATION :**



**Ex-ovo conditions**



**Beating heart  
72 h after grafting**

## **KEYWORDS :**

your keywords

Xenografting  
Human tissue

personalized treatment  
heart

tumor  
functional tissue

oncology

## **REFERENCES**

Nirdé Ph.; Richard S.; Marchi A. – FR Patent 1555364