



1-2 February 2010
KORANET PARTNERING EVENT


Research for life-long health

Bruno Clément
INSERM, France
FZC18 an antitumoral polypeptide
for colon and liver cancers



RESEARCH CENTRE

partnering, partnering, partnering, partnering, partnering

 **InsERM** is the main national research
agency devoted to biomedical research
in France

www.inserm.fr

- Close relationships with universities,
hospitals, and health companies through
its subsidiary **InsERM Transfert**

www.inserm-transfert.fr





RESEARCH CENTRE

partnering, partnering, partnering, partnering, partnering

Unit #991 "Liver, Metabolisms and Cancer"

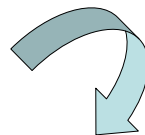
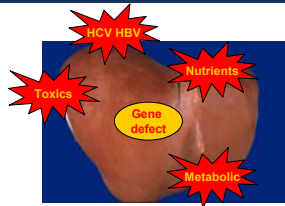
- ♪ Rennes Hospital University
- ♪ 80 staff members
- ♪ 4 teams

- ❖ Iron and liver
- ❖ Liver regeneration and differentiation
- ❖ Hepatotoxicology, drugs and obesity
- ❖ Liver cancer

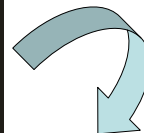
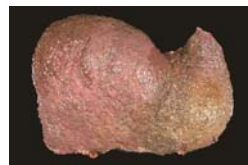


PROJECT IDEA

partnering, partnering, partnering, partnering, partnering



Fibrosis => Cirrhosis



Hepatocellular carcinoma

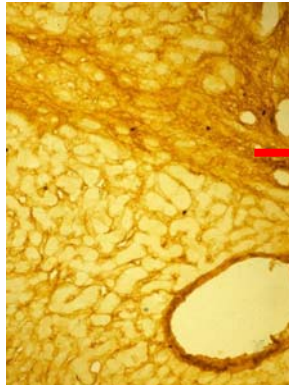




PROJECT IDEA

partnering, partnering, partnering, partnering, partnering

From fibrosis to cancer



Remodeling of the microenvironment



PROJECT IDEA

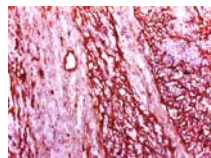
partnering, partnering, partnering, partnering, partnering

Plasma Proteins



**Fibronectin
Plasminogen**

TISSUE LESION



Extracellular matrix components



**Collagens
Glycoproteins
Proteoglycans**



**Activation by the
Microenvironment**



Bioactive modules

Adhesion

Proliferation

Apoptosis

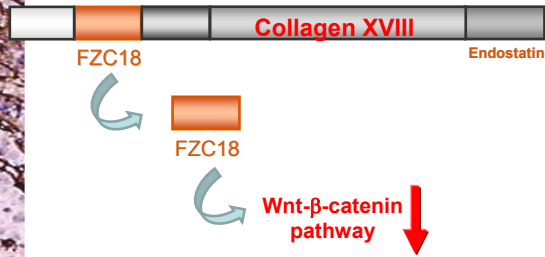
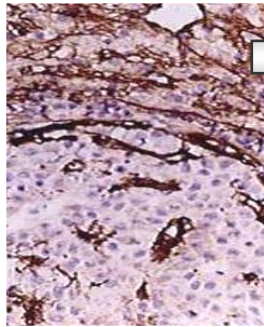
Angiogenesis





PROJECT IDEA

partnering, partnering, partnering, partnering, partnering



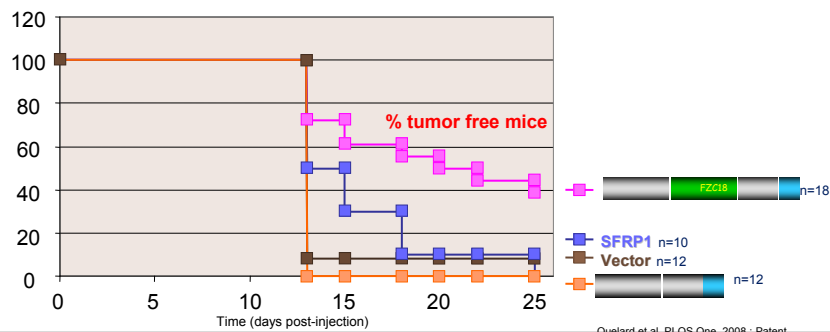
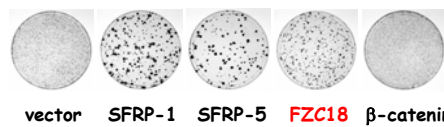
Signaling pathways modulated by extracellular matrix remodelling in hepatocellular carcinoma
Cancer Res. 2001 ; J.Biol Chem 2003 ; Hepatology 2001, 2001, 2003 ; J.Cell Biol. 2007 ; J. Hepatol 2005 ; PLOS 2008 ; Patent 2008



PROJECT IDEA

partnering, partnering, partnering, partnering, partnering

HCT116 CRC



Quillard et al. PLOS One. 2008 - Patent



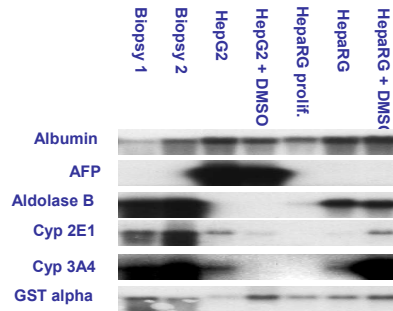
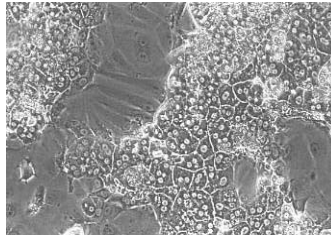


EXPERTISE

partnering, partnering, partnering, partnering, partnering

➤ Hepatoma cells

HepaRG



- Hepatic bipotential progenitor cell features
- Expression of a large spectrum of liver specific functions at high levels
- Useful in pharmacotoxicology studies
- Susceptibility to HBV infection PNAS, 2001



EXPERTISE

partnering, partnering, partnering, partnering, partnering

➤ Molecular and cell biology, cancer, metabolism

➤ Translational research

- Predictive pharmacotoxicology
- Biobank, animal/cell model systems
- Clinical investigation center

➤ Biotechnologies

- Tumour targeting
- Imaging
- Cell chip





PARTNER SOUGHT

partnering, partnering, partnering, partnering, partnering

➤ Basic

- Cancer : microenvironment, angiogenesis
- Liver metabolism
- Biotransformation of drugs, toxicology
- Cell differentiation

➤ Translational

- Experience in anti-cancer drug production and validation (POC)
- Candidate molecules to be tested *in cellulo*
 - Predictive toxicology
 - Metabolism
 - Pharmacodynamics



CONTACT DETAILS

partnering, partnering, partnering, partnering, partnering

Bruno Clément

Inserm Unit 991

Liver, Metabolisms and Cancer

University Hospital of Rennes

F-35033 RENNES, France

bruno.clement@inserm.fr

