

## Job offer: postdoctoral Fellow

**Project Title:** Tumour resistance and immune activation in cancer virotherapy

**Research Fields:** cancer; virotherapy; immunotherapy

**Work Place:** Nantes (France)

**Research Laboratory(ies):** Center for Research in Cancer and Immunology Nantes-Angers

**UBL Research Department:** Biology and Health

**Head(s) of the Scientific Project:** Catherine Pellat-Deceunynck (team 10); Nicolas Boisgerault (team 4)

**Offer type:** postdoctoral researcher (short term contract – 12 months, possibly renewable)

**Hiring Institution:** Nantes University

**Application deadline:** December 31<sup>st</sup>, 2018

**Job Starting Date:** Before March 1<sup>st</sup>, 2019

### Environment

Nantes University offers programs in most fields of knowledge and academic paths giving access to the majority of degrees in higher education, in short or long programs. Research is a major growth sector for Nantes University, with 44 accredited laboratories. As an innovative force, the University has research agreements with industry and shares its discoveries with the society at large.

The CRCINA is a research centre of excellence that connects basic research, translational research and clinical practice in oncology, immunology and nuclear medicine. The seventeen different teams regroup more than 400 people working in a dynamic scientific environment that includes up-to-date core facilities (flow cytometry, microscopy, proteomics, genomics, animal experimentation...).

### Mission (scientific project)

Oncolytic viruses (OVs) are new players in the field of cancer immunotherapy. These cancer-specific viruses not only target and kill tumour cells but also activate several anti-tumour innate and adaptive immune mechanisms. Our laboratories are interested in characterising the molecular factors that influence resistance and immune activation related to the use of different OVs in solid and haematological human cancer models. Using cancer explants and 3D tumour cell cultures, the project will aim at identifying the cellular pathways that determine tumour sensitivity and resistance to OV infection, replication and spreading. In parallel, the selected candidate will be in charge of analysing the activation of different types of human immune cells interacting with tumour cells infected with common or modified OVs.

### Required Profile

Doctor (PhD) in Cell Biology or a related field, maximum 3 years of experience after thesis defence<sup>1</sup>. An international experience in research is required (during or after Doctorate). Candidates must not have supported their thesis in the hiring institution and not previously worked in the host research unit.

The candidate should have a solid background in cell biology, virology, immunology and molecular biology.

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<sup>1</sup> The thesis defense must have taken place after 31/08/2014, except in rare exceptions. Periods of sickness, maternity or parental leave shall not be counted in this 3 years period.

## Useful References

<http://www.crcina.org>

<http://www.crcina.org/departement-1-incit/team4>

<http://www.crcina.org/nohmad/equipe-10-regulation-of-bcl2-and-p53-networks-in-multiple-myeloma-and-mantle-cell-lymphoma>

Delaunay T et al. Oncolytic viruses sensitize human tumor cells for NY-ESO-1 tumor antigen recognition by CD4+ effector T cells. *Oncoimmunology*. 2017 Dec 26;7(3)

Achard C et al. Sensitivity of human pleural mesothelioma to oncolytic measles virus depends on defects of the type I interferon response. *Oncotarget*. 2015 Dec 29;6(42)

Tessoulin B, Descamps G, Moreau P, Maiga S, Lodé L, Godon C, Marionneau-Lambot S, Oullier T, Le Gouill S, Amiot M, Pellat-Deceunynck C. PRIMA-1Met induces myeloma cell death independent of p53 by impairing the GSH/ROS balance. *Blood* 2014;124:1626-36

Lok A, Descamps G, Tessoulin B, Moreau P, Le Gouill S, Tangy F, Amiot M, Pellat-Deceunynck C. The Oncolytic Measles Virus Preferentially Infects p53 Abnormal Myeloma Cells. *The American Society of Hematology, San Diego*, 9-12 December 2016.

Tessoulin B, Eveillard M, Lok A, Chiron D, Moreau P, Amiot M, Moreau-Aubry A, Le Gouill S, Pellat-Deceunynck C. p53 dysregulation in B-Cell Malignancies: more than a single gene in the pathway to hell. *Blood Reviews* 2017; 31:251-259.

## How to apply?

Please send the following documents by email to: Nicolas Boisgerault ([nicolas.boisgerault@inserm.fr](mailto:nicolas.boisgerault@inserm.fr)), Catherine Pellat-Deceunynck ([catherine.pellat-deceunynck@inserm.fr](mailto:catherine.pellat-deceunynck@inserm.fr)) and UBL ([recherche@u-bretagne Loire.fr](mailto:recherche@u-bretagne Loire.fr)):

- Short Curriculum Vitae and a covering letter showing your interest and especially addressing your professional project
- A list of your major works (2 pages max.) : scientific publications, patents and others scientific productions
- Letters of recommendation (optional)
- A copy of your PhD diploma<sup>2</sup>

The general selection process is described here:

<https://u-bretagne Loire.fr/dossiers/postdoc/candidatures>

## Further information

Annual Gross Salary: to be determined

This Fellowship is cofunded by Université Bretagne Loire and SIRIC ILIAD.

The Université Bretagne Loire federates 7 universities, 15 “grandes écoles” and 5 research organisations in the West of France (Bretagne and Pays de la Loire). This community of universities and institutions aims to develop the scientific and academic potential of this territory at national and international level.

SIRIC ILIAD (Imaging and Longitudinal Investigations to Ameliorate Decision making in multiple myeloma and breast cancer) is a five-year translational research program supported by INCa (2018-2022) dedicated to the functional, global and longitudinal study of the tumour cells and their microenvironment, from the single cell to the whole-body level in Multiple Myeloma and Breast Cancer. The fellowship is related to the program PISTER (Parametrization of Immune Suppression, Tumor Escape and Resistance).

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<sup>2</sup> For doctors graduated from a French establishment, a link to the thesis notice in the [SUDOC Catalogue](#) or the French official portal [Theses.fr](#) is sufficient.