The Cell and Tissue Imaging Platform (PICT) provides services, training and technological innovation in cellular imaging to academic and private scientific communities, in life science and health.

The platform is labelled “Infrastructure in Biology, Health and Agronomy” (IBiSA) and is a member of the France-BioImaging & Euro-Bioimaging infrastructures.

Our expertise covers multi-scale imaging from the molecule to the organism in the field of cancer research. The imaging center is composed of 3 poles: photonic microscopy, electron microscopy & CryoEM and high-content screening (HCS, Biophenics).

Mission

- Provide state-of-the-art technologies and expertise in photonic, electron & CryoEM microscopy, HCS (Biophenics) and image analysis,
- Provide training, assistance and advice to users,
- Carry out technical, methodological and software developments,
- Collaborate on science and technology projects,
- Participate in the dissemination of knowledge (training courses, congresses, open lab, etc.) at national and international level.

The platform is open to all researchers, both internal and external to the Institut Curie.

Newsletter
Two recent publications:

  **Two HIRA-dependent pathways mediate H3.3 de novo deposition and recycling during transcription**
  *Nature Structural & molecular biology*: [https://doi.org/10.1038/s41594-020-0492-7](https://doi.org/10.1038/s41594-020-0492-7)

- Aurélie Bertin, Nicola de Franceschi, Eugenio de la Mora, Sourav Maiti, Maryam Alqabandi, Nolwen Miguet, Aurélie di Cicco, Wouter H. Roos, Stéphanie Mangenot, Winfried Weissenhorn, Patricia Bassereau
  **Human ESCRT-III polymers assemble on positively curved membranes and induce helical membrane tube formation**
  *Nature Communications*: 11 : 2663 : [DOI: 10.1038/s41467-020-16368-5](https://doi.org/10.1038/s41467-020-16368-5)

---

**A little about the facility history…**

PICT-IBiSA at Institut Curie won official recognition as an operational platform in life sciences (“Cell Imaging” Platforms coordination RIO) in 2003. This recognition has been renewed by the labeling of the PICT by the GIS IBiSA (Infrastructure in biology, health and agronomy – [https://www.ibisa.net/](https://www.ibisa.net/)) in 2008. PICT-IBiSA is a member of the consortium France BioImaging (https://france-bioimaging.org/) since 2011.

Since 2007, in close collaboration with Nikon France, Nikon BV and other industrial partners, PICT-IBiSA also hosts and administers the Nikon Imaging Centre @ Institut Curie-CNRS ([http://nimce.curie.fr/](http://nimce.curie.fr/)), one of three centers of this kind in Europe, one of the nine, worldwide.

---

**Key publications**

**Year of publication 2019**

**An intrinsically disordered region in OSBP acts as an entropic barrier to control protein dynamics and orientation at membrane contact sites**

**Membrane reshaping by micrometric curvature sensitive septin filaments**
*Nature communications*: [DOI: 10.1038/s41467-019-08344-5](https://doi.org/10.1038/s41467-019-08344-5)
Year of publication 2018

Anna M Lilja, Veronica Rodilla, Mathilde Huyghe, Edouard Hannezo, Camille Landragin, Olivier Renaud, Olivier Leroy, Steffen Rulands, Benjamin D Simons, Silvia Fre (2018 May 23)

**Clonal analysis of Notch1-expressing cells reveals the existence of unipotent stem cells that retain long-term plasticity in the embryonic mammary gland.**

*Nature cell biology* : [DOI : 10.1038/s41556-018-0108-1](https://doi.org/10.1038/s41556-018-0108-1)

Year of publication 2016


**Epithelial tricellular junctions act as interphase cell shape sensors to orient mitosis.**

*Nature* : 495-8 : [DOI : 10.1038/nature16970](https://doi.org/10.1038/nature16970)

Cédric Delevoye, Xavier Heiligenstein, Léa Ripoll, Floriane Gilles-Marsens, Megan K Dennis, Ricardo A Linares, Laura Derman, Avanti Gokhale, Etienne Morel, Víctor Faundez, Michael S Marks, Graça Raposo (2016 Jan 4)

**BLOC-1 Brings Together the Actin and Microtubule Cytoskeletons to Generate Recycling Endosomes.**


**Design of an amphiphilic porphyrin exhibiting high in vitro photocytotoxicity**