Fiche mise à jour le 22/08/2023
201420747V : CellCh UMR3666-U1143 - Cellular and Chemical Biology - Unité de recherche Fermée

Responsables

Le responsable ne souhaite pas publier ses coordonnées. **DIR.** - Ludger JOHANNES à partir du 01/01/2014
Ludger.Johannes@curie.fr
Le responsable ne souhaite pas publier ses coordonnées.

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Site : https://curie.fr/unite/umr3666-u1143
Descriptif : Wider than pharmacology or medicinal chemistry, chemical biology consists in designing and developing chemical tools, and using them to better unravel the functioning of biological systems, should it be an organism, a cell, or a biochemical reaction, and without the need or the aim of an immediate medical application. In the case of this unit, chemical biology has been used to study various processes that occur in biological membranes, including signal transduction, cell response to mechanical stress, and membrane traffic. The arrival of the Rodriguez team has expanded the expertise of the unit to the field of cancer biology. To better acknowledge this change, the previous unit's name 'chemical biology of membranes' will change to 'cellular and chemical biology'. A more detailed list of the research lines is as follows: ¿ glycosphingolipid functions in endocytosis and intracellular sorting; ¿ caveolae in mechanoprotection, signaling and transduction; ¿ intracellular signalling from endosomes; ¿ small molecule lead discovery in membrane trafficking, signal transduction and epigenetics; ¿ targeted delivery of therapeutic compounds to tumors and to dendritic cells for immunotherapy; ¿ identification of chromatin binding sites of chemical compounds (click-seq) and therapeutic principles for personalized medicine.
Ecole(s) doctorale(s) de rattachement : non renseignée
Rattachée au(x) thème(s) de recherche suivant(s):

- Keywords: Clathrin; clathrin-independent; raft; glycosphingolipid; lectin; galectin; glycosylation; endocytosis; endosome; intracellular trafficking; retrograde transport; retromer; syntaxin
- endoplasmic reticulum; Shiga toxin; intoxication; integrin; CD44; small molecule inhibitor; chemical genetics; therapeutic delivery; linker arm chemistry; prodrug; ADC; immunotherapy; breast cancer
- Medicinal Chemistry; Chemical Biology; self-immolative spacers; drug targeting; immunology; breast cancer; muscular dystrophies; athrosclerosis
- Caveolae, cavins, EHD2, mechanotransduction, lipid rafts, nanodomains, endocytosis, intracellular trafficking, endosome; JAK/STAT signaling; interferon receptors; mechanical stress; 3D spheroids
- Small molecules; iron; endocytosis; traffic; chromatin; epigenetics; cancer

Liens avec d'autres structures :
Aucun
Contact: ludger.johannes@curie.fr
Année de création :2014

Site ESR : Aucun
Classement scientifique ERC :

- LS1 : Molecules of Life: Biological Mechanisms, Structures and Functions : Molecular biology, biochemistry, structural biology, molecular biophysics, synthetic and chemical biology, drug design, innovative methods and modelling
- LS3 : Cell Biology, Development, Stem Cells and Regeneration : Structure and function of the cell, cell-cell communication, embryogenesis, tissue differentiation, organogenesis, growth, development, evolution of development, organoids, stem cells, regeneration, therapeutic approaches
- LS9 : Biotechnology and Biosystems Engineering : Biotechnology using all organisms, biotechnology for environment and food applications, applied plant and animal sciences, bioengineering and synthetic biology, biomass and biofuels, biohazards

Domaine scientifique :

- 5 : Biologie, médecine et santé 2014

Etablissements

test Image not found or type unknown	INS.CURIE - Institut Curie Paris (UMR 3666) (établissement tutelle à partir de 2014)	**Etablissement référent**
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test Image not found or type unknown	PSL - Université Paris sciences et lettres (UMR 3666) (établissement tutelle à partir de 2020)
test Image not found or type unknown	U PARIS Cité - Université Paris Cité (UMR 3666) (établissement participant à partir de 2020)

Historique

- Filiation
  Structure(s) fille(s) :
  - Chimie Biologie des Cancers - UMR3666 / U1339
- Libelle(s) de structure

- 25/02/2019 : Cellular and Chemical Biology, UMR3666-U1143 (CellChemBi)
- 12/04/2017 : Chimie Biologique des Membranes et Ciblage Thérapeutique, UMR3666-U1143
- 26/03/2015 : CBMCT
- 17/09/2014 : Chimie Biologique des Membranes et Ciblage Thérapeutique

- Label et Numéro d'établissement
  - 13/05/2020 : **UMR 3666**
    PSL - Université Paris sciences et lettres (UMR 3666)
  - 07/01/2020 : **UMR 3666**
    U PARIS Cité - Université Paris Cité (UMR 3666)
  - 18/09/2015 : **UMR 3666**
    INSERM - Institut national de la sante et de la recherche medicale (U 1143)
  - 17/09/2014 : **UMR 3666**
    INS.CURIE - Institut Curie Paris (UMR 3666)
  - 17/09/2014 : **UMR 3666**
    CNRS - Centre national de la recherche scientifique (UMR 3666)
  - 17/09/2014 : **U 1143**
    INSERM - Institut national de la sante et de la recherche medicale (U 1143)
- Etablissements
  - 2014 - 2019 : PARIS 5- Université Paris Descartes Paris 5