



*Unit Director*  
Sebastian Amigorena

## **Teams in this unit work to better understand the immunological responses to tumours, and to learn how to use the immune system to fight cancer.**

Research projects range from analysis of the most fundamental aspects of intracellular transport in cells of the immune system to functional aspects of immune responses to tumours in animal models and to clinical immunotherapy in cancer patients. Approaches include, on one hand molecular biology, biochemistry and imaging techniques, based on both in vitro and in vivo experimental models, and on the other hand, immunomonitoring, diagnosis, prognosis and immunotherapeutic studies in cancer patients.



## **Key publications**

### **Year of publication 2018**

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Li Wang, Abdel Saci, Peter M Szabo, Scott D Chasalow, Mireia Castillo-Martin, Josep Domingo-Domenech, Arlene Siefker-Radtke, Padmanee Sharma, John P Sfakianos, Yixuan Gong, Ana

Dominguez-Andres, William K Oh, David Mulholland, Alex Azrilevich, Liangyuan Hu, Carlos Cordon-Cardo, Hélène Salmon, Nina Bhardwaj, Jun Zhu, Matthew D Galsky (2018 Aug 31)  
**EMT- and stroma-related gene expression and resistance to PD-1 blockade in urothelial cancer.**

*Nature communications* : 3503 : [DOI : 10.1038/s41467-018-05992-x](https://doi.org/10.1038/s41467-018-05992-x)

Paula Michea, Floriane Noël, Eve Zakine, Urszula Czerwinska, Philémon Sirven, Omar Abouzid, Christel Goudot, Alix Scholer-Dahirel, Anne Vincent-Salomon, Fabien Reyat, Sebastian Amigorena, Maude Guillot-Delost, Elodie Segura, Vassili Soumelis (2018 Jul 18)  
**Adjustment of dendritic cells to the breast-cancer microenvironment is subset specific.**

*Nature immunology* : 885-897 : [DOI : 10.1038/s41590-018-0145-8](https://doi.org/10.1038/s41590-018-0145-8)

Jean-Marie Carpiert, Andres E Zucchetti, Laurence Bataille, Stéphanie Dogniaux, Massiullah Shafaq-Zadah, Sabine Bardin, Marco Lucchino, Mathieu Maurin, Leonel D Joannas, Joao Gamelas Magalhaes, Ludger Johannes, Thierry Galli, Bruno Goud, Claire Hivroz (2018 Feb 15)  
**Rab6-dependent retrograde traffic of LAT controls immune synapse formation and T cell activation.**

*The Journal of experimental medicine* : 1245-1265 : [DOI : 10.1084/jem.20162042](https://doi.org/10.1084/jem.20162042)

SAEZ-CIRION Asier, MANEL Nicolas (2018 Jan 12)

**Immune Responses to Retroviruses**

*Annual Review of Immunology* : [DOI : 10.1146/annurev-immunol-051116-052155](https://doi.org/10.1146/annurev-immunol-051116-052155)

Luigia Pace, Christel Goudot, Elina Zueva, Paul Gueguen, Nina Burgdorf, Joshua J. Waterfall, Jean-Pierre Quivy, Geneviève Almouzni, Sebastian Amigorena (2018 Jan 12)

**The epigenetic control of stemness in CD8+ T cell fate commitment**

*Science* : 359 : 177-186 : [DOI : 10.1126/science.aah6499](https://doi.org/10.1126/science.aah6499)

Alcumbre SG, Saint-André V, Di Domizio J, Vargas P, Sirven P, Bost P, Maurin M, Maiuri P, Wery M, Roman MS, Savey L, Touzot M, Terrier B, Saadoun D, Conrad C, Gilliet M, Morillon A, Soumelis V (2018 Jan 1)

**Diversification of human plasmacytoid predendritic cells in response to a single stimulus**

*Nature Immunology* : 19(1) : 63-75 : [DOI : 10.1038/s41590-017-0012-z](https://doi.org/10.1038/s41590-017-0012-z)