Melanoma is a very aggressive tumor originating from neural-crest derived melanocytes. The transformation of normal melanocytes into melanoma cells is a multistep process. It is crucial to elucidate the molecular and cellular mechanisms of melanocyte development (specially the molecular network that controls the induction of neural crest) and transformation, to improve the prevention, early diagnosis, prognosis and therapy.

Our research combines molecular approaches based on an understanding of the signaling associated with extracellular factors, a cellular approach based on an understanding of the establishment/maintenance and alteration of the melanocyte lineage and an approach based on animal models that will be used to test specific innovative treatments. In fine, we expect that we can ultimately propose new prognostic markers for melanoma and improved therapeutic treatments.
Key publications

Year of publication 2018


A Glial Signature and Wnt7 Signaling Regulate Glioma-Vascular Interactions and Tumor Microenvironment.

Cancer cell : DOI : S1535-6108(18)30125-9


Lymph node metastases can invade local blood vessels, exit the node, and colonize distant organs in mice.

Science (New York, N.Y.) : 1403-1407 : DOI : 10.1126/science.aal3622

Alexandra Garancher, Charles Y Lin, Morgane Morabito, Wilfrid Richer, Nathalie Rocques, Magalie Larcher, Laure Bihannc, Kyle Smith, Catherine Miquel, Sophie Leboucher, Nirmitha I Herath, Fanny Dupuy, Pascale Varlet, Christine Haberler, Christine Walczak, Nadine El Tayara, Andreas Volk, Stéphanie Puget, François Doz, Olivier Delattre, Sabine Druillennec, Olivier Ayrault, Robert J Wechsler-Reya, Alain Eychène, Franck Bourdeaut, Paul A Northcott, Celio Pouponnot (2018 Mar 14)

NRL and CRX Define Photoreceptor Identity and Reveal Subgroup-Specific Dependencies in Medulloblastoma.

Cancer cell : 435-449.e6 : DOI : S1535-6108(18)30059-X

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Targeting the perivascular niche in brain tumors.

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Ana Leonor Figueiredo, Frédérique Maczkowiak, Caroline Borday, Patrick Pla, Meghane Sittewelle, Caterina Pegoraro, Anne H Monsoro-Burq (2017 Oct 18)

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