Olivier Saulnier, Ph.D

Postdoctoral Fellow
olivier.saulnier@sickkids.ca

Developmental & Stem Cell Biology
The Hospital for Sick Children

EDUCATION

Ph.D - Paris-Diderot University, Oncology	2015 - 2018
M.Sc - Paris-Diderot University, Bioinformatics	2013 - 2015
B.Sc - National School of Chemistry, Physics and Biology (ENCPB), Genomics	2012 - 2013
A.Sc - National School of Chemistry, Physics and Biology (ENCPB), Biotechnology	2010 - 2012

RESEARCH AND PROFESSIONAL EXPERIENCE

Postdoctoral Fellow 2019-

Advisor: Michael D. Taylor, The Hospital for Sick Children, Developmental & Stem Cell Biology

Graduate Research Fellow 2015-2018

Advisor: Olivier Delattre, Curie Institute, Diversity and Plasticity of Childhood Tumors

Advisor: Martin Dutertre, Curie Institute, RNA Biology, Signaling and Cancer

Research Interns 2011-2015

Advisors: Olivier Delattre & Franck Tirode, Curie Institute, Diversity and Plasticity of Childhood Tumors

Advisor: Richard Houlston, The Institute of Cancer Research (ICR), Molecular and Population Genetics

Advisors: Jean-Yves Delattre & Marc Sanson & Ahmed Idbaih, Brain and Spinal Cord Institute (ICM), Experimental Neuro-Oncology

Advisor: Philippe Mora, Creteil University, Institute of Ecology and Environmental Sciences

Advisor: Anne Pando, Research Institute for Development (IRD), Institute of Ecology and Environmental Sciences

PUBLICATIONS

Labussière M, Boisselier B, Mokhtari K, Di Stefano AL, Rahimian A, Rossetto M, Ciccarino P, **Saulnier O**, Paterra R, Marie Y, Finocchiaro G, Sanson M. **Combined analysis of TERT, EGFR, and IDH status defines distinct prognostic glioblastoma classes.** *Neurology*, 2014. PMID: 25150284

Labreche K*, Simeonova I*, Kamoun A*, Gleize V*, Chubb D, Letouzé E, Riazalhosseini Y, Dobbins SE, Elarouci N, Ducray F, de Reyniès A, Zelenika D, Wardell CP, Frampton M, **Saulnier O**, Pastinen T, Hallout S, Figarella-Branger D, Dehais C, Idbaih A, Mokhtari K, Delattre JY*, Huillard E*, Lathrop GM*, Sanson M*, Houlston RS*, POLA Network. **TCF12 is mutated in anaplastic oligodendroglioma.** *Nature Communications*, 2015. PMID: 26068201 *Equal contribution

Ocasio J*, Babcock B*, Malawsky D, Weir SJ, Loo L, Simon JM, Zylka MJ, Hwang D, Dismuke T, Sokolsky M, Rosen EP, Vibhakar R, Zhang J, **Saulnier O**, Vladoiu M, El-Hamamy I, Stein LD, Taylor MD, Smith KS, Northcott PA, Colaneri A, Wilhelmsen K*, Gershon TR*. **scRNA-seq in medulloblastoma shows cellular heterogeneity and lineage expansion 2 support resistance to SHH inhibitor therapy**. *Nature Communications*, 2019. PMID: 31863004. *Equal contribution

Tanaka I, Chakraborty A, **Saulnier O**, Benoit-Pilven C, Vacher S, Labiod D, Lam EW, Bièche I, Delattre O, Pouzoulet F, Auboeuf D, Vagner S, Dutertre M. **ZRANB2 and SYF2-mediated splicing programs converging on ECT2 are involved in breast cancer cell resistance to doxorubicin.** *Nucleic Acids Research*, 2020 PMID: 31943118

Aynaud MM*, Mirabeau O*, Gruel N, Grossetête S, Boeva V, Durand S, Surdez D, **Saulnier O**, Zaïdi S, Gribkova S, Kairov U, Raynal V, Tirode F, Grünewald TGP, Bohec M, Baulande S, Janoueix-Lerosey I, Vert JP, Barillot E, Delattre O*, Zinovyev A*. **Transcriptional programs define intratumoral heterogeneity of Ewing sarcoma at single cell resolution**. *Cell Reports*, 2020. *Equal contribution

SUBMITTED, UNDER REVIEW OR IN REVISION

Saulnier O*, Guerdi-Idjouadiene K*, Aynaud MM, Chakraborty A, Bruyr J, Pineau J, O'Grady T, Mirabeau O, Grossetête S, Galvanm B, Al Oula Hassoun Z, Sadacca B, Laud K, Baulande S, Rambout X, Dutertre M, Delattre O*, Dequiedt F*. Antagonistic roles of ERG transcription factors and Ewing-specific fusions in RBFOX2-dependent mRNA splicing. *Nature communications* (In revision) *Equal contribution

Saulnier O, Vigneau J, Delattre O. Identification of tumor-specific neo-antigens in Ewing sarcoma. Patent

Zagozewski J, Shahriary GM, Coudière Morrison L, Stromecki M, Fresnoza A, Palidwor G, Porter CJ, Forget A, Ayrault O, Hawkins C, Chan JA, **Saulnier O**, Vladoiu MC, Taylor MD, Ramaswamy V, Werbowetski-Ogilvie TE. **An OTX2-PAX3 signaling axis regulates Group 3 medulloblastoma cell fate.** *Nature Communications* (In revision)

Michealraj A*, Kim L*, Kumar S*, Cavalli FMG, Przelicki D, Wojcik J, Delaidelli A, Bajic A, **Saulnier O**, McLeod G, Vellanki R, Vladoiu MC, Guilhamon P, Ong W, Lee J, Jiang Y, Lopez B, Juraschka K, Haapasolo J, Rasnitsyn A, Wang E, Richman C, Ly M, Srikanthan D, Luu B, Wu X, Garcia L, Ramaswamy V, Kanshin E, El-Hamamy I, Coutinho F, Prinos P, Singh S, Daniels C, Tyres M, Weiss S, Stein L, Lupien M, Wouters B, Garcia B, Arrowsmith C, Sorensen P, Angers S, Jabado N, Dirks P, Mack SC, Agnihotri S, Rich JN*, Taylor MD*. **Metabolic Regulation of the Epigenome Drives Lethal Infantile Ependymoma**. *Cell* (In revision) *Equal contribution

AWARDS AND FELLOWSHIPS

ICGex grant - Next Generation Sequencing platform of Curie Institute 2017-2019
ANR EQUIPEX 10-EQPX-0003
€25,000 on 2 years

Ph.D scholarship - Ministry of Higher Education Research and Innovation
6th place out of 50
€60,000 on 3 years 2015-2018

Conference awards:
Best poster presentation - RJS, IUH (€100) 2017
Best poster presentation - RJS, IUH (€100) 2016

RELEVANT PRESENTATIONS

Oral presentations

Bermuda Principles - Impact on Transcriptomics - Bermuda 2020
PRISME association - Paris, France 2016
YRLS "Young Researchers in Life Science" - Paris, France 2016

Poster presentations ***received presentation award**

AACR Annual meeting - Chicago, USA 2018
*RJS "Rencontres Jeunes Scientifiques" - Paris, France 2017
Post-transcriptional Gene Regulation - Paris, France 2017
Keystone symposia "mRNA Processing and Human Disease" - New Mexico, USA 2017
EMBL symposia "The Complex Life of mRNA" - Heidelberg, Germany 2016
*RJS "Rencontres Jeunes Scientifiques" - Paris, France 2016
Post-transcriptional Gene Regulation - Orsay, France 2016

MENTORING AND TEACHING

Research mentor: 2017-2018
Undergraduate students: Jérômine Vigneau (Master 2), Joséphine Pineau (Master 2)

Scientific activities:
Organizer of the 3rd ADELIH conference "The origin of cancer: *Once upon a cell*…" 2018
Speakers: S. Baylin, G. Beerx, C. Blanpain, T. Brabletz, P. Campbel, J. Waterfall, P. Dirks, L. Fajas Coll, S. Fre, R. Houlston, L. Laplane, K. Munger, C. Plass, P. Ratcliffe, P. Vineis. 200 attendees, €50,000 budget

Organizer of the 9th annual YRLS conference "Young Researcher in Life Sciences". 2018
Speakers: A. Mudher, D. Odom, V. Vogel. 150 attendees, €40,000 budget

Treasurer of ADELIH association 2016-2018

Journal service:
Reviewer for *Bioinformatics* 2016