

SCIENTIFIC COORDINATOR CV



GERBY Bastien, PhD, CRCN CNRS, HDR

Born on October 15th 1982 (France), 39 years-old, 1 child

Cancer Research Center of Toulouse - CRCT, Inserm UMR1037, CNRS UMR5071

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EDUCATION

2020: **Habilitation à Diriger des Recherches (HDR)** - University Paul Sabatier, Toulouse, France.

2010: **Ph.D** in Blood Cell Biology - University Denis-Diderot, Paris, France.

2008: **Degree Level I** - Animal experimentation in medical research - University Paris 7, France.

2006: **Degree of Ecole Pratique des Hautes Etudes (EPHE)** - Paris, France. **Degree Inter University (DIU)** of Cytometry in Research - EPHE - Paris, France.

2004: **Degree of Technician in Biomedical Analysis (DETAB)**, Catholic University, Lyon, France.

POSITION

2017-actual: **Researcher (CRCN - CNRS)** - Cancer Research Center of Toulouse (CRCT), Inserm U1037, CNRS U5071.

2011-2017: **PostDoc** - Supervisor: T, Hoang - IRIC - University of Montreal, Canada.

2006-2010: **Ph.D** - Supervisor: F, Pflumio - CEA, INSERM U967 - Fontenay-Aux-Roses, France.

2004-2006: **EPHE student** - Supervisor: X, Ronot - UMR CNRS 5525 - La Tronche, France.

RESEARCH FUNDINGS

2020: **INCa (Institut National du Cancer)** - Project leader of PLBIO program.

2018: **Ligue Contre le Cancer** - Fundamental and translational research program. **ARC foundation** - Consolidator grant.

ANR (Agence Nationale de la Recherche) young investigator - Program JCJC.

FELLOWSHIPS

2016: **Postdoctoral fellowship** (2 years): ARC Foundation, Paris, France (declined). **Postdoctoral fellowship** (2 years): Ligue Nationale Contre le Cancer, Paris, France.

2013: **Postdoctoral fellowship** (2 years): Fond de Recherche en Santé du Québec, Canada. **Postdoctoral fellowship** (2 years): Cole Foundation, Montreal, Canada.

2011: **Post-doctoral fellowship** (2 years): Cole Foundation, Montreal, Canada.

2010: **Doctoral fellowship** (1 year): Société Française d'Hématologie, Paris, France.

2007: **Doctoral fellowship** (3 years): Ligue National Contre le Cancer, Paris, France.

AWARDS AND DISTINCTIONS

2018: **Prize young investigator**. FONROGA - Roland Garrigou Foundation.

2017: **First Prize for poster presentation**. T-ALL workshop, Leuven, Belgium.

2016: **Abstract Achievement Award**. American Society of Hematology (ASH), San Diego, USA.

2015: **First prize of oral presentation**. IRIC 6th scientific day, IRIC, Montreal, Canada.

First prize of oral presentation. New Investigator Postdoctoral Fellow "Eugene Cronkite" Award, ISEH meeting, Kyoto, Japan. **Travel award** from Canadian Cancer Society for the 2015 ISEH meeting (Kyoto, Japan).

2012-2015: **3 First prizes for poster presentations**. Cole Fellowship Exhibition. Montreal, Canada.

2012: **Abstract Achievement Award**. American Society of Hematology (ASH), Atlanta, USA.

PEOPLE MANAGEMENT

2017-actual: **Supervision** of 2 PhD students - Cancer Research Center of Toulouse (CRCT), UMR1037, France.

(1 PhD fellow and 1 PhD supported by ANR grant – Doctoral School BSB – UPS – Toulouse). **Supervision** of 3 Master 2 and 1 Master 1 students - CRCT, UMR1037, France. **Supervision** of 1 Engineer.

2011-2016: **Supervision** of 9 Master students - IRIC - University of Montreal, Canada.

SCIENTIFIC COMMITTEES

2020-actual: Member of **2 PhD follow-up committees**. Steering committee **member of the CRCT research program** entitled "Axis 1: Oncogenic pathways in cancer: From modelling towards targeted therapy".

TEACHING ACTIVITIES

2019-actual: **Theoretical classes** in Master 1 - Faculty of Pharmacology - UE Differentiation and Oncogenesis (3 hours/year) - Paul Sabatier University, Toulouse. **Theoretical classes** in Master 2 Recherche - UE Oncogenes and tumor suppressor genes (3hours/year) - Paul Sabatier University, Toulouse.

2014-2016: **Theoretical classes** in Cancer Pharmacology to Master students (3 hours/year) - University of Montreal.

2011-2016: **Practical works** in flow cytometry to Master students (10 hours/year) - IRIC - University of Montreal.

2009: **Theoretical classes** to Ph.D students - Doctoral School B2T, Saint Louis Hospital, Paris, France.

PRESENTATIONS AND CONFERENCES

2015-2021: **9 conferences as invited speaker.**

2005-2018: **19 selected short talks** (including **8** in international meetings).

2005-2018: **14 poster presentations** (including **6** in international meetings).

MANUSCRIPT AND GRANT EVALUATIONS

2021: Member of a scientific committee for the funding competition "**Ligue Contre le Cancer 31**".

2012-actual: Reviewer or co-reviewer of manuscripts submitted for publication in *Blood*, *Molecular Biology Reports*, *Experimental Cell Research*, *Molecular Cell Biology*, *Stem Cell*, *World Journal of Gastroenterology*, *Hematologica*, *Frontiers*.

2018: Member of a scientific review panel for the funding competition - "**Fonds d'innovation thérapeutiques**"- **CHU - Sainte Justine, Montreal, Canada**. Reviewer of a grant applied to **Research Foundation Flanders-FWO**.

2014: Co-reviewer of a grant applied to **Canadian Cancer Society Research Institute**.

PUBLICATIONS

1- Fregona V, Bayet M and **Gerby B**. Oncogene-Induced Reprogramming in Acute Lymphoblastic Leukemia: Towards Targeted Therapy of Leukemia Initiating Cells. **Cancers (Basel) Review**, **2021 Nov 2**, 13(21):5511. (IF: **6.64**)

2- Lafage-Pochitaloff M*, **Gerby B***, Baccini V, Largeaud L, Fregona V, Prade N, Lagarde S, Mansat-De Mas V, Dovey O, Yusa K, Vassiliou G, Jansen J, Tekath T, Rombaut D, Ameye G, Barin C, Bidet A, Boudjarane J, Collonge MA, Gervais C, Ittel A, Lefebvre C, Luquet I, Michaux L, Nadal N, Antoine-Poirel H, Radford-Weiss I, Ribourtout B, Richebourg S, Struski S, Terré C, Tigaud I, Penther D, Eclache V, Fontenay M, Broccardo C, Delabesse E. The CADM1 tumor suppressor gene is a major candidate gene in MDS with deletion of the long arm of chromosome 11. **Blood Advance**, **2021 Oct 12**. (IF: **4.6**). ***Equal contribution.**

3- Duployez N, Jamrog LA, Fregona V, Hamelle C, Fenwarth L, Lejeune S, Helevaut N, Geffroy S, Caillault Venet A, Marceau-Renaut A, Poulain S, Roche-Lestienne C, Largeaud L, Prade N, Dufrechou S, Hébrard S, Berthon C, Nelken B, Fernandes J, Villenet C, Figeac M, **Gerby B**, Delabesse E, Preudhomme C, Broccardo C. Germline PAX5 mutation predisposes to familial B acute lymphoblastic leukemia. **Blood**, **2021 Mar 11**;137(10):1424-1428. (IF: **17.54**).

4- **Gerby B** and Hoang T. A targetable cue in T-cell malignancy. **Blood commentary**. **2020, May 7**;135(19):1616-1617. (*Commentary of the article from De Smedt R et al., Targeting cytokine and therapy-induced PIM1 activation in T-cell acute lymphoblastic leukemia and lymphoma. Blood, 2020, May 7*;135(19):1685-1695).

5- Jamrog L, Chemin G, Fregona V, Oudinet C, Rouquie N, Prade N, Lagarde S, Cresson C¹, Hebrard S, Nguyen Huu N, Bousquet M, Quelen C, Brousset P, Mancini S, Delabesse E, Khamlichi A.A, **Gerby B*** and Broccardo C*. PAX5-ELN oncoprotein promotes multistep B-cell acute lymphoblastic leukemia in mice. **Proc Natl Acad Sci USA**. **2018 Oct 9**;115(41):10357-62. (IF: **9.5**). ***equal contribution and co-corresponding authors.**

6- Cresson C, Peron S, Jamrog L, Rouquie N, Prade N, Dubois M, Hebrard S, Lagarde S, **Gerby B**, Mancini S, Cogné M, Delabesse E, Delpy L and Broccardo C. PAX5A and PAX5B isoforms are both efficient to drive B-cell differentiation. **Oncotarget**. **2018 Aug 28**;9(67):32841-54 (IF: **5.17**).

7- **Gerby B**, Veiga D.F, Kros J, Nourreddine S, Ouellette J, Haman A, Lavoie G, Fares I, Tremblay M, Litalien V, Ottoni E, Kasic M, Geoffrion D, Ryan J, Maddox P, Chagraoui J, Marinier A, Hébert J, Sauvageau G, Kwok B.H, Roux PP, and Hoang T. High-throughput screening in niche-based assay identifies compounds to target pre-leukemic stem cells. **J Clin Invest**. **2016 Dec 1**;126(12):4569-84 (IF: **12.57**).

8- **Gerby B**, Tremblay C.S, Tremblay M, Veiga D.F, Rojas-Sutterlin S, Ryan J, Maddox P.S, Hébert J, Sauvageau G, Lécuyer E and Hoang T. The SCL, LMO1 and Notch1 oncogenes reprogram T-lymphocyte progenitors into self-renewing cells.

PloS Genetics. 2014 Dec 18;10(12). (IF: **8.52**).

See perspective: Goossens S and Van Vlierberghe P. Controlling Pre-leukemic Thymocyte Self-Renewal. PlosGenetics, 2014, Dec 18;10.

9- Uzan B, Poglio S, **Gerby B**, Wu CL, Armstrong F, Calvo J, Cahu X, Deswarte C, Dumont F, Leblanc T, Baruchel A, Balerini P, Baleyrier F, Porteu F and Pflumio F. The pro-inflammatory IL-18 cytokine produced by bone marrow derived stromal cells participates into T acute leukemia progression. **EMBO Molecular Medicine. 2014, Apr 28;6(6):821-34.** (IF: **8.8**).

10- Lacombe J, Krosi G*, Tremblay M*, **Gerby B***, Martin R, Aplan P, Lemieux S, Hoang T. Genetic interaction between Kit and Scl. **Blood. 2013 Aug 15;122(7):1150-61.** (IF: **9.90**). ***Equal contribution.**

11- Gerby B and Hoang T. *Modelling acute leukemias in mice: clonal evolution and the emergence of leukemic stem cells.* **BMC Proceedings, 2013 (Keynote Lecture Presentation), 7(Suppl 2):K1.**

12- Thiollier C, Lopez CK, **Gerby B**, Ignacimoutou C, Poglio S, Duffourd S, Guégan J, Rivera-Munoz P, Bluteau O, Mabialah V, Diop M, Wen Q, Petit A, Bauchet AL, Bornhauser B, Gautheret D, Lecluse Y, Landman-Parker J, Radford I, Vainchenker W, Dastugue N, De Botton S, Dessen P, Bourquin JP, Crispino JD, Ballerini P, Bernard OA, Pflumio F and Mercher T. Xenograft models of pediatric acute megakaryoblastic leukemia contribute to identification of novel recurrent fusion genes. **J Exp Med. 2012 Oct 22;209(11):2017-31.** (IF: **13.85**).

13- Wen Q, Goldenson B, Silver SJ, Schenone M, Dancik V, Huang Z, Wang LZ, Lewis TA, An WF, Li X, Bray MA, Thiollier C, Diebold L, Gilles L, Vokes MS, Moore CB, Bliss-Moreau M, Verplank L, Tolliday NJ, Mishra R, Vemula S, Shi J, Wei L, Kapur R, Lopez CK, **Gerby B**, Ballerini P, Pflumio F, Gilliland DG, Goldberg L, Birger Y, Israeli S, Gamis AS, Smith FO, Woods WG, Taub J, Scherer CA, Bradner JE, Goh BC, Mercher T, Carpenter AE, Gould RJ, Clemons PA, Carr SA, Root DE, Schreiber SL, Stern AM, Crispino JD. Identification of Regulators of Polyploidization Presents Therapeutic Targets for Treatment of AMKL. **Cell. 2012 Aug 3;150(3):575-89.** (IF: **32.40**).

14- Gerby B, Clappier E, Armstrong F, Deswarte C, Calvo J, Poglio S, Soulier J, Boissel N, Leblanc T, Baruchel A, Landman-Parker J, Roméo PH, Ballerini P, Pflumio F. Expression of CD34 and CD7 on human T-cell acute lymphoblastic leukemia discriminates functionally heterogeneous cell populations. **Leukemia. 2011 Aug 25(8):1249-58.** (IF: **9.56**).

15- Clappier E, **Gerby B**, Delord M, Touzri M, Hernandez L, Ballerini P, Sigaux F, Baruchel A, Pflumio F, Soulier J. Clonal selection in xenografted human T-cell acute lymphoblastic leukemia recapitulates gain of malignancy at relapse. **J Exp Med. 2011 Apr 11;208(4):653-61.** (IF: **13.85**).

16- Pflumio F, Kusy S, **Gerby B**, Roméo PH. How a suppressor of tumor gets hooked of the leukaemic proliferation in man. **Med Sci (Paris). 2011 Feb;27(2):142-3.** Epub 2011 Mar 8. (IF: **0.52**).

17- Kusy S, **Gerby B**, Goardon N, Gault N, Ferri F, Gérard D, Armstrong F, Ballerini P, Pflumio F, Roméo PH. *NKX3.1 is a direct TAL1 target gene that mediates proliferation of TAL1-expressing human T-ALL.* **J Exp Med, 2010 Sep 27;207(10):2141-56.** (IF: **14.78**).

18- Barattin R, **Gerby B**, Bourges K, Hardy G, Olivares J, Boutonnat J, Arnoult C, Du Moulinet D'Hardemare A and Ronot X. Iodination increases the activity of verapamil derivatives in reversing PGP multidrug resistance. **Anticancer Research, 2010 Jul 30(7):2553-9.** (IF: **1.66**).

19- Gerby B, Armstrong F, Brunet de la Grange P, Medyouf H, Calvo J, Verhoeven Els, Cosset FL, Bernstein I, Amselem S, Boissel N, Dombret H, Leblanc T, Baruchel A, Landman-Parker J, Ballerini P et Pflumio F. Optimized gene transfer into human primary T cell acute leukemia conserving NOD-SCID /leukemia-Initiating-Cell activity. **Leukemia, 2010 Mar 24(3):646-9.** (IF: **8.97**).

20- Armstrong F, Brunet de la Grange P, **Gerby B**, Rouyez MC, Calvo J, Fontenay M, Boissel N, Dombret H, Baruchel A, Landman-Parker J, Romeo PH, Ballerini P, Pflumio F. NOTCH is a key regulator of human T-cell acute leukaemia initiating cell activity. **Blood, 2009 Feb 19 (113) :1730-1740.** (IF: **10.56**).

21- Gerby B, Armstrong F, Brunet de la Grange P, Calvo J, Balérini P, Pflumio F. Mise en évidence des cellules souches leucémiques dans les LAL-T humaines et étude de l'implication des voies NOTCH, TAL-1 et ERK/MAPK dans la leucémogénèse T humaine. **Annales de pathologie, 2008 Nov;28 Spec No 1(1): S28-9.** (IF: **0.47**).

22- Gerby B, Boumendjel A, Champelovier P, Bringuier PP, Fortuné A, Colle PE, Ronot X, Boutonnat J. 2-Arylidenedihydroindole-3-ones: Design, synthesis and biological activity on Bladder Carcinoma cell lines. **Bioorganic and Medicinal Chemistry, 2007 Jan 1;17(1):208-13.** (IF: **3.08**).

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23- Boumendjel A, Nicolle E, Moraux T, **Gerby B**, Blanc M, Ronot X, and Boutonnat J. Piperazinobenzopyranones and Phenalkylaminobenzopyranones: Potent Inhibitors of Breast Cancer Resistance Protein (ABCG2). **Journal of Medicinal Chemistry**, **2005 Nov** 17;48(23):7275-81. (IF: **5.20**).