

Eric Vivier

06/04/1964

Married, 4 children

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Education

- Doctor in Veterinary Medicine (1987, Ecole Nationale Vétérinaire d'Alfort and Paris 12)
- Ph. D. (1991, Paris 11)
- HDR (1992, Paris 11)

Current position

- Professor of Immunology, Marseille Medical School and Assistance-Publique des Hôpitaux de Marseille (PU-PH Classe Exceptionnelle)
- Director of the Centre d'Immunologie de Marseille-Luminy (CIML), Marseille
- Head of the "NK cells and Innate Immunity" lab, CIML
- Head of the NK monitoring lab, Conception Hospital, Marseille
- Co-founder and coordinator of the Federation Hospitalo-Universitaire Marseille-Immunopole (<http://www.marseille-immunopole.org>)

Membership

- 2011: European Academy of Tumor Immunology (associate director)
- 2013: French National Academy of Medicine

Scientific appointments

1989-1993:	Postdoctoral fellow, Harvard Medical School, Boston, MA, USA
1995-present:	Head of the "Natural Killer Cells and Innate Immunity" Lab., CIML, France
1996-2001:	Member of the Institut Universitaire de France (Junior)
2002-2004:	Associate Director of the CIML
Summer 2006	Visiting Professor, Scripps Research Institute, La Jolla, CA, USA
2007-present:	Member of the Institut Universitaire de France (Senior)
2008-present:	Director of the CIML
Summer 2013	Visiting Professor, The Rockefeller University, New York City, NY, USA
2015	Visiting Professor, The Walter and Elisa Hall Institute, Melbourne, VIC, Australia

Industry

- Co-founder and member of the scientific committee of Innate-Pharma (www.innate-pharma.fr)
- Consultant for Bristol-Myers Squibb France and for MSD France
- 14 patents

Publications: total 304, h-Index: 88, > 27000 citations

(see selected publications below)

<http://scholar.google.fr/citations?user=NImFOgMAAAAJ&hl=fr&oi=ao>

Selected Funding

- European Research Council Advanced grants (2011-2016 and 2017-2021)
- Investissements d'Avenir, Coordinator of MI-mAbs (<http://www.mimabs.org>)
- Ligue Nationale contre le Cancer (Equipe Labellisée)
- Agence Nationale de la Recherche

Awards

1987:	Médaille d'Argent, Ecole Nationale Vétérinaire d'Alfort
1996:	National League against Cancer Award
1999:	National Award and Tremplins Rhône-Poulenc Award for Biotech start-ups
1999:	Lucien Tartois Award, Fondation pour la Recherche Médicale
2003:	Jacques Oudin Award, French Society for Immunology
2004:	Joseph Amalric Award, National League against Cancer
2004:	Deutsche Gesellschaft für Immunologie / EFIS Award
2008:	Fondation Del Duca Award– National Academy of Sciences
2009:	Nominee for the EFIS-Schering-Plough European Immunology Prize
2010:	Grand Prix Turpin in Oncology, French National Academy of Science Award
2010:	Grand Prix Charles Oberling in Oncology, Collège de France
2013:	Prix Duquesne, Comité de Paris, National League against Cancer Avec Sophie Ugolini
2014:	François Kourilsky Lecture at French Society of Immunology, Lille, France
2015:	Visiting Speaker Programme Award, Australasian Society for Immunology
2015 & 2016:	Thomson Reuters Highly Cited Researcher (www.highlycited.com)
2015:	Masters of Immunology, Cancer Immunology Essentials (www.canimmessentials.aacrjournals.org/masterscrossroads_archive/#evivier)
2016:	Chevalier de la Légion d'Honneur
2016:	Nominee for the UNSW Eureka Prize for Scientific Research
2016:	Michael Bennett Lecture at UT Southwestern Medical Center, Dallas, TX, USA
2017:	Trophée de l'Attractivité Marseille

Others

2013: Short-listed for the final round of selection for the position of General Director of the Institut Pasteur, Paris

National and international committees

- Expert panel, European Research Council (ERC) Starting grants
- Scientific council, Institut thématique Immunology, Inflammation, Infectiology & Microbiology (I3M), AVIESAN
- Scientific Advisory Board, Ligue Nationale contre le Cancer (2008-2012)
- Scientific council, Institute of Hematology-Immunology-Pneumology – AVIESAN (2010-2015)
- Human Frontier Science Program (HFSP) CDA Review Committee (2012-2014)

- Scientific Advisory Board, Innate Immunity In Cancer, Italian Association for Cancer Research
- Quinquennial Review Committee, Cancer Research UK, Immunology groups
- Administrative board, Bouches-du-Rhône committee, Ligue Nationale contre le Cancer
- Scientific Expertise Committee, Ligue Nationale contre le Cancer IDF
- Parrain for Provence Alpes Côte d'Azur of the Science Tour
http://www.lespetitsdebrouillards.org/Media/prods/prod_6/
- Committee of scientific activities, Mediterranean Institute for Advanced Research (imera.univ-amu.fr)
- Strategic and Scientific Committee, Cryostem (cryostem.org)
- Scientific Advisory Board, BIOASTER (bioaster.org)
- Club M Ambassadeurs (clubm.marseille.fr)
- Scientific committee of the BMS foundation
- GIGA Board of Counselors (giga.ulg.ac.be)
- Scientific Advisory Board of the Shanghai Institute of Immunology (<http://www3.shsmu.edu.cn/default.php?mod=article&do=detail&tid=329083&fid=10468>)
- Scientific Advisory Board of the Institute Pasteur of Shanghai (<http://english.shanghaipasteur.cas.cn>)
- Scientific committee, Biology and Health Dpt, National Research Agency (<http://www.agence-nationale-recherche.fr/en/projects-and-results/2013-and-previous-editions/biology-and-health/>)
- 2017: Ambassadeur M (<http://clubm.marseille.fr>)
- Research Advisory Board, Sanofi-Pasteur

Editorial Boards

- Science Signaling (Board of Reviewing Editors until 2017)
- Nature Reviews Immunology (Highlight advisory panel 2001-2011)
- Immunology & Cell Biology
- Scientific Reports
- Biology Direct
- J. Immunol. (Associate editor, 2001-2005)
- Frontiers in NK cell biology (Speciality chief editor 2010-2014)
- Cancer Immunology Research
- Int. Immunol. (until 2016)
- Oncoimmunology
- Faculty 1000 (until 2015)
- F1000 Research
- PLOS ONE

Referee for

- Nature, Science, Cell, Immunity, Cell Host and Microbes, Science Signaling, Nature Immunol., J. Exp. Med., Immunity, Proc. Natl. Acad. Sci. USA, Eur. J. Immunol., J. Immunol., J. Clin. Invest., Blood and other journals,
- European Union, MRC (UK), Wellcome Trust (UK), Royal Society, Cancer Research UK, Irish National Research Funding Programme, Australian National Health and Medical Research Council, Italian Association for Cancer Research, BSF (Israel) as well as AFM, LNCC, ARC, INSERM, ANRS, ANR & INCa (France).

Invited speakers

- More than 150 international meetings including Nobel Conferences, International Congresses of Immunology, Gordon conferences, Keystone meetings, EMBO Workshops, J. March conferences,
- External lectures in more than 160 institutes.

Organization of 12 international meetings

Selected original publications

1. Vivier E., Morin P., O'Brien C., Druker B., Schlossman S. F., Anderson P. Tyrosine phosphorylation of the FcγRIII(CD16):ζ complex in human natural killer cells. Induction by antibody dependent cytotoxicity but not by natural killing. **J. Immunol.** 1991; 146:206-10.
2. Vivier E., Sorrell J. M., Ackerly M., Robertson M. J., Rasmussen R. A., Levine H., Anderson P. Developmental regulation of a natural killer cell-specific mucin-like glycoprotein. **J. Exp. Med.** 1993; 178:2023-33.
3. Vignaux F., Vivier E., Malissen B., Depraetere V., Nagata S., Golstein P. TCR/CD3 coupling to Fas-based cytotoxicity. **J. Exp. Med.** 1995; 181:781-86.
4. Luesher I. F., Vivier E., Layer A., la Loue A., Godeau F., Malissen B., Romero P. CD8 modulation of T-cell antigen receptor-ligand interactions on living cytotoxic T lymphocytes. **Nature** 1995; 373:353-56.
5. Malissen M., Gillet A., Ardouin L., Bouvier G., Trucy J., Ferrier P., Vivier E., Malissen B. Altered T cell development in mice with a targeted mutation of the CD3ε gene. **EMBO. J.** 1995; 14:4641-4653.
6. Olcese L., Lang P., Vély F., Cambiaggi A., Marguet D., Bléry M., Hippen K. L., Biassoni R., Moretta A., Moretta L., Cambier J. C., Vivier E. Human and mouse natural killer cell inhibitory receptors recruit the PTP1C and PTP1D protein tyrosine phosphatases. **J. Immunol. Cutting Edge** 1996; 156:4531-4534.
7. Bléry M., Delon J., Trautmann A., Cambiaggi A., Olcese L., Biassoni R., Moretta L., Chavrier P., Moretta A., Daëron M., Vivier E. Reconstituted killer-cell inhibitory receptors for MHC class I molecules control mast cell activation induced via immunoreceptor tyrosine-based activation motifs. **J. Biol. Chem.** 1997; 272:8989-8996.
8. Olcese L., Cambiaggi A., Bottino C., Moretta A., Vivier E. Human killer-cell activatory receptors for MHC class I molecules are included in a multimeric complex expressed by natural killer cells. **J. Immunol. Cutting Edge** 1997; 158:5083-5086.
9. Cambiaggi A., Verthuy C., Naquet P., Romagné F., Ferrier P., Biassoni R., Moretta A., Moretta L. and Vivier E. NK-cell acceptance of H-2 mismatch bone-marrow grafts in transgenic mice expressing HLA-Cw3 specific killer-cell inhibitory receptor (CD158b). **Proc. Natl. Acad. Sci. USA.** 1997; 94:8088-8092.
10. Bléry M., Kubagawa H., Chen C-C., Vély F., Cooper M. D., Vivier E. The paired Ig-like receptor PIR-B is an inhibitory receptor that recruits the protein-tyrosine phosphatase SHP-1. **Proc. Natl. Acad. Sci. USA.** 1998; 95: 2446-2451.
11. Cambiaggi A., Darche S., Guia S., Kourilsky P., Abastado J-P., Vivier E. Modulation of T cell functions in KIR2DL3 (CD158b) transgenic mice. **Blood**, 1999, 94: 2396-2402.
12. André P., Spertini O., Guia S., Rihet P., Dignat-George F., Brailly H., Sampol J., Anderson P. J., Vivier E. Modification of PSGL-1 with an NK cell-restricted sulfated lactosamine creates an alternate ligand for L-selectin. **Proc. Natl. Acad. Sci. USA.** 2000, 97: 3400-3405.

13. Tomasello E., Desmoulins P. O., Chemin K., Guia S., Cremer H., Ortaldo J. R., Love P., Kaiserlian D., Vivier E. Combined Natural Killer Cell and Dendritic Cell Functional Deficiency in KARAP/DAP12 Loss-of-Function Mutant Mice. **Immunity** 2000, 13:345-353.
14. Ugolini S., Arpin C., Anfossi N., Walzer T., Cambiaggi A., Förster R., Lipp M., Toes R. E. M., Melief C. J., Marvel J., Vivier E. Involvement of inhibitory NKRs in the survival of a subset of memory-phenotype CD8⁺ T cells. **Nature Immunology**. 2001, 2: 430-435.
15. Uehara T., Bléry M., Kang D-W., Chen C-C., Ho L. H., Gartland G. L., Liu F-T., Vivier E., Cooper M. D., Kubagawa H. Inhibition of IgE-mediated mast cell activation by the paired immunoglobulin-like receptor PIR-B. **J. Clin. Invest.**, 2001, 108: 1041-1050.
16. Sjölin H., Tomasello E., Mousavi-Jazi M., Bartolazzi A., Kärre K., Vivier E., Cerboni C. Pivotal role of KARAP/DAP12 adaptor molecule in the resistance to murine cytomegalovirus. **J. Exp. Med.** 2002, 195:825-834.
17. Colucci F., Schweighoffer E., Tomasello E., Turner M., Ortaldo J. R., Vivier E., Tybulewicz V., Di Santo J. Natural cytotoxicity uncoupled from the Syk and ZAP-70 intracellular kinases. **Nature Immunology** 2002, 3:288-294.
18. Diefenbach A., Tomasello E., Lucas M., Jamieson A. M., Hsia J., Vivier E.*, Raulet DH*. Selective associations with signaling proteins determine stimulatory versus costimulatory activity of NKG2D. **Nature Immunology** 2002, 3:1142-1149.
19. Saulquin X., Gastinel L., Vivier E. Crystal structure of the human natural killer cell activating receptor, KIR2DS2 (CD158j). **J. Exp. Med.** 2003, 197 :933-938.
20. Coudert J., Zimmer J., Tomasello E., Cebecauer M., Colonna M., Vivier E., Held W. Altered NKG2D function in NK cells induced by chronic exposure to NKG2D-ligand expressing tumor cells. **Blood**. 2005. 106: 1711-1717.
21. Stewart C. A., Laugier-Anfossi F., Vély F., Saulquin X., Tisserant A., Gauthier L., Romagné F., Ferracci G., Moretta A., Sun P., Ugolini S., Vivier E. Recognition of peptide-MHC class I complexes by activating Killer Ig-like Receptors. **Proc. Natl. Acad. Sci. USA**. 2005. 102: 13224-13229.
22. Baratin M., Roetyneck S., Lépolard C., Falk C., Sawadogo S., Uematsu S., Akira S., Ryffel B., Tiraby J-G., Alexopoulou L., Kirschning C. J., Gysin J., Vivier E.*, Ugolini S*. Natural Killer cell and Macrophage cooperation in MyD88-dependent innate responses to *Plasmodium falciparum*. **Proc. Natl. Acad. Sci. USA**. 2005, 102: 14747–14752
23. Chiesa S., Mingueneau M., Fuseri N., Malissen B., Raulet D. H., Malissen M., Vivier E.*, Tomasello E*. Multiplicity and plasticity of Natural Killer cell signaling pathways. **Blood**, 2006. 107: 2364-237.
24. Anfossi N., André P., Guia S., Falk C., Stewart C. A., Bresó V., Roetyneck S., Frassati C., Reviron D., Middleton D., Romagné F., Ugolini S., Vivier E. Human NK cell education by inhibitory receptors for MHC class I. **Immunity**, 2006, 25: 331-42.
25. Walzer T., Bléry M., Chaix J., Fuseri N., Chasson C., Robbins S. H., Jaeger S., André P., Gauthier L., Daniel L., Chemin K., Morel Y., Dalod M., Imbert J., Pierres M., Moretta A., Romagné F., Vivier E. Identification, activation and selective *in vivo* ablation of mouse NK cells via Nkp46. **Proc. Natl. Acad. Sci. USA**. 2007, 104: 3384-3389.
26. Crozat K., Hoebe K., Ugolini S., Hong N., Janssen E., Rutschmann S., Mudd S., Sovath S., Vivier E., Beutler B. *Jinx*, an MCMV susceptibility phenotype caused by disruption of *Unc13d*: a mouse model of type 3 familial hemophagocytic lymphohistiocytosis. **J. Exp. Med.** 2007. 204 853-863.
27. Zhang S-Y., Jouanguy E., Ugolini S., Smahi A., Elain G., Romero P., Segal D., Sancho-Shimizu V., Lorenzo L., Puel A., Picard C., Chapgier A., Plancoulaine S., Titeux M., Cogne C., von Bernuth H, Ku CL, Casrouge A, Zhang XX, Barreiro L,

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28. Walzer T., Chiossone L., Chaix L., Calver A., Carozzo C., Garrigue-Antar L., Jacques Y., Baratin M., Tomasello E., Vivier E. Natural killer cell trafficking in vivo requires a dedicated sphingosine 1-phosphate receptor. **Nature Immunology**. 2007. 8: 1337-1344.
 29. Guia S., Cognet C., de Beaucoudrey L., Tessmer M.S., Jouanguy E., Berger C., Filipe-Santos O., Feinberg J., Camcioglu Y., Levy J., Al Jumaah S., Stephan JL., Fieschi C., Abel L., Brossay L., Casanova JL., Vivier E. A role for interleukin-12/-23 in the maturation of human Natural Killer and CD56⁺ T cells *in vivo* **Blood** 2008. 111:5008-16.
 30. Helming L., Tomasello E., Kyriakides T. R., Martinez F.O., Takai T., Gordon S. and Vivier E. Essential Role of DAP12 Signaling in Macrophage Programming into a Fusion-Competent State. **Science Signaling** 2008 **1**, ra11
 31. Luci C., Reynders A., Ivanov I.I., Cognet C., Chiche L., Chasson L., Hardwigsen J., Anguiano E., Banchereau J., Chaussabel D., Dalod M., Littman D.R., Vivier E*, Tomasello E*. Influence of the transcription factor ROR γ t on the development of NKp46⁺ cell populations in gut and skin. **Nature Immunology** 2009 10:75-82.
 32. Brandt CS., Baratin M., Yi EC., Kennedy J., Gao Z., Fox B., Haldeman B., Ostrander CD., Kaifu T., Chabannon C., Moretta A., West R., Xu WF., Vivier E*, Levin SD*. The B7 Family Member B7-H6 is a tumor cell ligand for the activating Natural Killer cell receptor NKp30 in humans. **J. Exp. Med.** 2009. 206:1495-503
 33. Sola C., André P., Lemmers C., Fuseri N., Bonnafous C., Bléry M., Wagtmann N.R., Romagné F., Vivier E*, Ugolini S*. Genetic and antibody-mediated reprogramming of natural killer cell missing-self recognition *in vivo*. **Proc. Natl. Acad. Sci. USA**. 2009. 106: 12879-12884.
 34. Chauveau A., Aucher A., Eissmann P., Vivier E., Davis D.M. Membrane nanotubes facilitate long distance interactions between Natural Killer cells and target cells. **Proc. Natl. Acad. Sci. USA**. 2010. 107: 5545-5550
 35. Guia S., Jaeger B.N., Piatek S., Mailfert S., Trombik T., Fenis A., Chevrier N., Walzer T., Kerdiles Y.M., Marguet D., Vivier E*, Ugolini S*. Activating receptor confinement at the plasma membrane controls Natural Killer cell tolerance. **Science Signaling**, 2011, 4:ra21.
 36. Reynders A., Yessaad N., Vu Manh T.P., Dalod M., Fenis A., Aubry C., Nikitas G., Escalière B., Renaud J.C., Dussurget O., Cossart P., Lecuit M., Vivier E*, Tomasello E*. Differential function of NKp46⁺ROR γ t⁺ and NKp46⁺ROR γ t⁻ gut lymphoid cells. **EMBO J**. 2011, 30:2934-47.
 37. Narni-Mancinelli E., Chaix J., Fenis A., Yessad N., Reynders A., Grégoire C., Ugolini S., Tomasello E., Walzer T., Vivier E. Fate mapping analysis of lymphoid cells expressing the NKp46 cell surface receptor. **Proc. Natl. Acad. Sci. USA**. 2011, 108: 18324–18329.
 38. Narni-Mancinelli E., Jaeger B.N., Bernat C., Fenis A., Kung S., De Gassart A., Mahmood S., Gut M., Heath S., Estellé J., Bertosio E., Vély F., Gastinel L.N., Beutler B., Malissen B., Malissen M., Gut I.G., Vivier E*, Ugolini S*. Tuning of Natural Killer Cell Reactivity by NKp46 and Helios Calibrates T Cell Responses. **Science**, 2012, 335: 344-348.
 39. Jaeger B.N., Donadieu J., Cognet C., Ordoñez-Rueda D., Bernat C., Barlogis V., Malhaoui N., Fenis A., Beaupain B., Bellanné-Chantelot C., Bajénoff M., Malissen B.,

- Malissen M., Vivier E.*, Ugolini S*. Neutrophil depletion impairs natural killer cell maturation, function, and homeostasis. **J. Exp. Med.** 2012, 209: 565-580.
40. Gineau L., Cognet C., Kara N., Lack F., Dunne J., Veturi U., Picard C., Trouillet C., Eidenschenck C., Aoufouchi S., Alcais A., Smith O., Geissmann F., Feighery C., Abel L., Smogorzewska A., Stillman B., Vivier E., Casanova J.L., Jouanguy E. Partial MCM4 deficiency in patients with growth retardation, adrenal insufficiency and natural killer cell deficiency. **J. Clin. Invest.** 2012, 122: 821-32.
 41. Matta J., Baratin M., Chiche L., Forel J-M., Cognet C., Thomas G., Farnarier C., Papazian L., Chaussabel D., Ugolini S., Vély F., Vivier E. Involvement of B7-H6, a ligand for the Natural Killer cell activating receptor NKp30, in inflammatory conditions. **Blood.** 2013, 122: 394-404.
 42. Biroccio A., Cherfils-Vicini J., Augereau A., Pinte S., Bauwens S., Ye J., Simonet T., Horard B., Jamet K., Cervera L., Mendez-Bermudez A., Poncet D., Grataroli R., T'kint de Rodenbeeke C., Salvati E., Rizzo A., Zizza P., Ricoul M., Cognet C., Kuilman T., Duret H., Lépinasse F., Marvel J., Verhoeyen E., Cosset F-L., Peeper D., Smyth M.J., Londoño-Vallejo A., Sabatier L., Picco V., Pages G., Scoazec J-Y., Stoppacciaro A., Leonetti C., Vivier E., and Gilson E.. TRF2 inhibits a cell-extrinsic pathway through which Natural Killer cells eliminate cancer cells. **Nature Cell. Biol.** 2013, 15: 818–828.
 43. Viaud S, Saccheri F, Mignot G, Yamazaki T, Daillère R, Hannani D, Enot DP, Pfirschke C, Engblom C, Pittet MJ, Schlitzer A, Ginhoux F, Apetoh L, Chachaty E, Woerther PL, Eberl G, Bérard M, Ecobichon C, Clermont D, Bizet C, Gaboriau-Routhiau V, Cerf-Bensussan N, Opolon P, Yessaad N, Vivier E. Ryffel B, Elson CO, Doré J, Kroemer G, Lepage P, Boneca IG, Ghiringhelli F, Zitvogel L. The intestinal microbiota modulates the anticancer immune effects of cyclophosphamide. **Science.** 2013, 342:971-6.
 44. Speak A.O., Taylor te Vruchte D., Davis L.C., Morgan A. J., Smith D.A., Yanjanin N.M., Simmons L., Hartung R., Runz H., Mengel E., Beck M., Imrie J., Jacklin E., Wraith J.E., Hendriksz C., Lachman R., Cognet C., Sidhu R., Fujiwara H., Ory D.S., Galione A., Porter F.D., Vivier E., Platt F.M. Altered distribution and function of Natural Killer cells in murine and human Niemann-Pick disease type C1. **Blood**, 2013 123: 51-60.
 45. Firth M.A., Madera S., Beaulieu A.M., Gasteiger G., Castillo E.F., Schluns K.S., Kubo M., Rothman P.B., Vivier E., Sun J.C. Nfil3-independent lineage maintenance of natural killer cells. **J. Exp. Med.** 2013, 210: 2981-2990.
 46. Crouse J., Bedenikovic G., Wiesel M., Ibberson M., Xenarios I., Von Laer D., Kalinke U., Vivier E., Jonjic S., Oxenius A. Type I Interferons Protect T Cells against NK Cell Attack Mediated by the Activating Receptor NCR1. **Immunity**, 2014, 40: 961-973.
 47. Marçais A., Cherfils-Vicini J.⁺, Viant C⁺, Degouve S., Viel S., Fenis A., Rabilloud J., Mayol K., Tavares A., Bienvenu J., Gangloff Y-G., Gilson E., Vivier E., Walzer T. The metabolic checkpoint kinase mTOR is essential for IL-15 signaling during development and activation of NK cells. **Nature Immunology**, 2014, 15:749-57.
 48. Celis-Gutierrez J, Boyron M, Walzer T, Pandolfi PP, Jonjić S, Olive D, Dalod M, Vivier E. Nunès JA. Dok1 and Dok2 proteins regulate natural killer cell development and function. **EMBO J.** 2014, 33:1928-40.
 49. Viant C., Fenis A., Chicanne G., Payrastra B., Ugolini S., Vivier E. SHP-1-mediated inhibitory signals promote responsiveness and anti-tumor functions of Natural Killer cells. **Nature Communications**, 2014 | 5:5108 | DOI: 10.1038/ncomms6108.
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- Caligiuri M. A.* , Vivier E.* , Jianhua Yu* J. Transcription Factor Foxo1 is a negative regulator of NK cell maturation and function. **Immunity**, 2015, 42:457–470.
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 53. Viant C., Rankin L.C., Girard-Madoux M.J.H, Seillet C., Shi W., Smyth M., Bartholin L., Walzer T., Huntington N.D., Vivier E.*, Belz G.T*. Transforming growth factor- β and Notch ligands act as opposing environment cues in the plasticity of type 3 innate lymphoid cells. **Science Signaling**. 9: ra462016, 2016.
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 56. Malbec O., Cassard L., Albanesi M., Jönsson F., Mancardi D., Chicanne G., Payraastre B., Dubreuil P., Vivier E., Daëron M. Trans-inhibition of activation and proliferation signals by Fc receptors in mast cells and basophils. **Science Signaling**, 2016, 9, ra126 (2016)
 57. Viant C., Guia S., Hennessy R.J., Rautela J., Pham K., Bernat C., Goh W., Jiao Y., Delconte R., Roger M., Simon V., Guimaraes F., Grabow S., Belz G.T, Kile B., Strasser A., Gray D., Hodgkin P.D., Beutler B., Vivier E., Ugolini S., Huntington N.D. Cell cycle progression dictates the requirement for BCL2 in Natural Killer cell survival. **J. Exp. Med.**, 2017 214:491-510
 58. Cottineau J., Kettermann M., Lach F.P., Kang Y.H., Vely F., Wang Y., Farina A., Lazarov T., Ma C., Chansel M., Eidschenk C., Gineau L., Lorenzo L., Pipérogrou C., Nitschke P., Belkadi A., Itan Y., Boisson B., Jabot-Hanin F., Picard C., Aladjidi N., Qasim W., Hurst J., Uhlig H., Fieschi C., Bermudez V., Abel L., de Villartay J-P., Geissmann F., Tangye S., Hurwitz J., Vivier E., Casanova J-L., Smogorzewska A., Jouanguy E. Human inherited GINS1/PSF1 deficiency: impaired DNA replication, growth retardation, neutropenia, and NK cell deficiency. **J. Clin. Invest.** In press, 2017.

*: co-senior authors

Selected Reviews, Essays & News and Views

1. Trautmann A., Vivier E. Agrin: a bridge between the nervous and the immune systems. **Science** 2001, 292: 1667-1668.

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Books

Natural Killer Cells

Vivier, Eric, Di Santo, James, Moretta, Alessandro (Eds.)
ISBN 978-3-319-23916-3, © 2016

Innate Immunity

Ewbank, Jonathan, Vivier, Eric (Eds.)
ISBN 978-1-59745-570-1, © 2008

Immunobiology of Natural Killer Cell Receptors

Vivier, Eric, Colonna, Marco (Eds.)
ISBN 978-3-540-27743-9, © 2006

Immunoreceptor Tyrosine-based Inhibition Motifs

Daeron, Marc, Vivier, Eric (Eds.)
ISBN 978-3-642-58537-1, © 1999

Summary of the main scientific achievements

- (1) Characterization of the family of ITIM-bearing receptors; mode of action of activating and inhibitory receptors expressed on NK cells,
- (2) Generation of original animal models to analyze NK cell fate and functions in vivo,
- (3) Analysis of NK cell development and dissection of the process of NK cell “education”,
- (4) Participation to the identification of Innate Lymphoid Cells,
- (5) Co-development of a therapeutic antibody to KIRs (LIRILUMAB), a direct result of collaboration with Innate-Pharma, presently in phase I/II clinical trials in various cancers
- (6) Co-generation of the Discontinuity Theory of Immunity