PAUL Catherine
Née le 9 novembre 1972 à Autun (Saône et Loire)
Mariée, 2 enfants (4 et 2 ans)
Maître de conférences de l'Ecole Pratique des Hautes Etudes (Section de CNU 65),
Titulaire de la PES (2012-)
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Titres et Diplômes universitaires

2001 **Doctorat de différenciation, génétique et apoptose**, Université Claude Bernard, Lyon I.
1997 **D.E.A. de Différenciation, Génétique et Immunologie,** Université Claude Bernard, Lyon I.
1996 **Maîtrise de Génie Biologique** (Biotechnologies). Université Claude Bernard, Lyon I.
1995 **Licence de Biochimie**, Université Claude Bernard, Lyon I.
1994 **Année de spécialisation en biotechnologies**, Faculté Catholique de Lyon.
1993 **DUT d'Analyses Biologiques et Biochimiques**, IUT de Dijon.

Fonctions

2007-	**Maître de Conférences EPHE.**
2003-2006	**Assistant Hospitalo Universitaire** en Biologie cellulaire, Université Claude Bernard, Lyon I.
2002-2003	**Chercheur post-doctorant** (Région Rhône-Alpes).
2001-2002	**Chef de projet** dans la société TPSc.
2000-2001	**Attaché Temporaire d'Enseignement et de Recherche (50%)** - Université Claude Bernard, Lyon I.
1997-2000	**Doctorante** - Bourse ministérielle
1993-1996	**Technicienne** – Temps plein aux laboratoires d'analyses médicales Coquard-Perrut (2 mois) et Lacomme (6 mois) à Autun

Laboratoires de recherche fréquentés

2011-	EA7269 EPHE-Université de Bourgogne, équipe rattachée à l'unité Inserm U866. Laboratoire d'immunologie et immunothérapie des cancers. Directeur du laboratoire : Pr. Ali Bettaieb
2007-2010	CRI Inserm U866 « Lipides, Nutrition, Cancer ». Equipe 3 : NO et Cancer. Laboratoire d'immunologie et immunothérapie des cancers. Directeur du laboratoire : Pr. Jean-François Jeannin
2003-2006	DTAMB, Université Claude Bernard, Lyon I. Directeur de la structure : Pr. Jean-Jacques Madjar
2002-2003	Institut de Biologie et Chimie des protéines (IBCP), CNRS-UMR5086, Lyon. Directeur de l'équipe : Dr. Patricia Rousselle
1996-2001	Centre de Génétique Moléculaire et Cellulaire (CGMC), CNRS-UMR 5534. Université Claude Bernard, LYON I. Directeur de l'équipe : Pr. André-Patrick Arrigo
1995	Hôpital neurologique (Bron), service du Pr. Later. Directeur de l'équipe : Dr Christiane Claudie

Publications

1. Bettaieb A, Plenchette S, **Paul C**, Laurens V, Romagny S and Jeannin JF. 2015. S-nitrosylation of cancer cells. In Nitric Oxide and Cancer. Pathogenesis and Therapy (Benjamin Bonnavida). Springer

2. Cortier M, Boina-Ali R, Racoeur C, **Paul C**, Solary E, Jeannin JF and Bettaieb A. 2015. H89 enhances the sensitivity of cancer cells to glyceryl trinitrate through a purinergic receptor-dependent pathway. Oncotarget. Feb 4. [Epub ahead of print]

3. Doulain PE, Decréau R, Racoeur C, Goncalves V, Dubrez L, Bettaieb A, Le Gendre P, Denat F, **Paul C***, Goze C* and Bodio E*. 2014. Towards the elaboration of new gold-based optical theranostics. Dalton Transactions. **44**: 4874-83 * co-corresponding authors

4. Tasan S, Licona C, Doulain PE, Michelin C, Gros C, Le GendreP, Harvey P, **Paul C**, Gaiddon C, Bodio E. 2014.Gold-phosphine porphyrin as potential metal-based theranostics. J. Biol. Inorg. Chem. **20**:143-54

5. Seignez C, Martin A, Rollet CE, Racoeur C, Scagliarini A, Jeannin JF, Bettaieb A and **Paul C**. 2014. Senescence of tumor cells induced by oxaliplatin increases the efficiency of a lipid A immunotherapy via the recruitment of neutrophils. Oncotarget. **5**:11442-51

6. Ali-Boina R, Cortier M, Decologne N, Racoeur-Godard C, Seignez C, Lamrani M, Jeannin JF, **Paul C** and Bettaieb A. 2013. Activation of Akt by the mammalian target of rapamycin complex 2 renders colon cancer cells sensitive to apoptosis induced by nitric oxide and akt inhibitor. Carcinogenesis & Mutagenesis. **S8**: 004

7. Marivin A, Berthelet J, Cartier J, **Paul C**, Gemble S, Morizot A, Boireau W, Saleh M, Bertoglio J, Solary E, Dubrez L. 2013. cIAP1 regulates TNF-mediated cdc42 activation and filopodia formation. Oncogene. 33(48):5534-45.

8. Mirjolet C, Papa AL, Créhange G, Raguin O, Seignez C, **Paul C**, Truc G, Maingon P and Millot N. 2013. The radiosensitization effect of titanate nanotubes as a new tool in radiation therapy for glioblastoma: a proof-of-concept. Radiother Oncol. 108(1):136-42.

9. Isambert N, Fumoleau P, **Paul C**, Ferrand C, Zanetta S, Bauer J, Ragot K, Lizard G, Jeannin JF, Bardou M. 2013. Phase I study of OM-174, a lipid A analogue, with assessment of immunological response, in patients with refractory solid tumors. BMC Cancer. **13**(1):172.

10. Garrido C, **Paul C**, Seigneuric R, Kampinga HH. 2012.The small heat shock proteins family: the long forgetten chaperones. Int. J. Biochem. Cell. Biol. **44**:1588-92

11. Guery L, Benikhlef N, Gautier T, **Paul C**, Jego G, Dufour E, Jacquel A, Cally R, Manoury B, Vanden Berghe T, Vandenabeele P, Droin N and Solary E. 2011. Fine-tuning nucleophosmin in macrophage differentiation and activation. Blood **118**: 4694-704.

12. Leon L, Subramaniam S, Cauvard O, Plenchette-Colas S, **Paul C**, Godard C, Martinez-Ruiz A, Legembre P, Jeannin JF and Bettaieb A. 2011. S-Nitrosylation of the Death Receptor Fas Promotes Fas Ligand-Mediated Apoptosis in Cancer Cells. Gastroenterology **140**: 2009-18.

13. Cortier M, Leon L, Sassi N, **Paul C**, Jeannin JF, Bettaïeb A. NO is a promising enhancer for cancer therapy. 2010: Nitric Oxide and Cancer. Editor: Benjamin Bonavida.

14. Martin A, Seignez C, **Paul C**, Bettaieb A and Jeannin JF. 2010. Toll Like Receptor 2 and 4 in cancer immunotherapy, is Nitric Oxide mediator? Forum on Immunopathological Diseases and Therapeutics **1**: 307-315

15. Gautier T *, **Paul C** *, Deckert V, Desrumaux C, Klein A, Labbé J, Le Guern N, Athias A., Monier S, Hammann A, Bettaieb A, Jeannin JF and Lagrost L. 2010. Innate immune response triggered by triacyl lipid A is dependent on phospholipid transfer protein (PLTP) gene expression. Faseb J. **29**: 3544-54 * Contributed equally to the present work

16. **Paul C** [*], Simon S[*], Gibert B[*], Virot S, Manero F and Arrigo AP. 2010. Dynamic processes that reflect anti-apoptotic strategies set up by HspB1 (Hsp27). Exp. Cell. Research **316**:1535-1552 * Contributed equally to the present work

17. Sassi N, **Paul C**, Martin A, Bettaieb A and Jeannin JF. 2009. Lipid A-induced responses in vivo. In Lipid A in cancer therapy. Landes Bioscience, Springer 69-80

18. Gautier T, Klein A, Deckert V, Desrumaux C, Ogier N, Sberna A-L, **Paul C**, Le Guern N, Montange T,Monier S, Piard F, Jiang XC, Masson D and Lagrost L. 2008. Effect of plasma phospholipid transfer protein deficiency on lethal endotoxemia in mice. J. Biol. Chem. **283**:18702-18710.

19. Jeannin JF, Leon L, Cortier M, Sassi N, **Paul C** and Bettaieb A. 2008. Nitric oxide induced-resistance or sensitization to death in tumor cells. Nitric Oxide, **19**:158-163

20. Poyau A, Vincent L, Berthommé H, **Paul C**, Nicolas B, Pujol JF and Madjar JJ. 2007. Identification and relative quantification of adenosine to inosine editing in serotonin 2c receptor mRNA by CE. Electrophoresis **28**:2843-2852

21. Arrigo AP, Firdaus WJJ, Mellier G, Moulin M, **Paul C**, Diaz-Latoud C and Kretz-Remy C. 2005. Cytotoxic effects induced by oxidative stress in cultured mammalian cells and protection provided by Hsp27 expression. Methods **35**:126-138

22. Merendino AM, **Paul C**, Costa MA, Melis M, Chiappara G, Izzo V, Vignola AM and Arrigo AP. 2002 Heat Shock protein 27 protects human bronchial epithelial cells against apoptosis. Cell Stress & Chaperones **7**:269-280

23. **Paul C**, Manero F, Gonin S, Kretz-Remy C, Virot S and Arrigo AP. 2002. Hsp27 as a negative regulator of cytochrome c release. Mol Cell Biol. **22**:816-834

24. Arrigo AP, **Paul C**, Ducasse C, Manero F, Kretz-Remy C, Javouhey E, Virot S, Mounier N and Diaz-Latoud C. 2001. Small stress proteins: novel regulators of apoptosis induced independently of reactive oxygen species. In: Small stress proteins. Progress in Molecular and Subcellular Biology. (A.-P. Arrigo and W. E.G. Muller, Eds). Springer Verlag, Berlin, Heidelberg, New-York, Tokyo

25. Arrigo AP, **Paul C**, Ducasse C, Sauvageot O and Kretz-Remy C. 2001. Small stress proteins : modulation of intracellular redox state and protection against oxidative stress induced cytotoxicity. In: Small stress proteins. Progress in Molecular and Subcellular Biology. (A.-P. Arrigo and W. E.G. Muller, Eds). Springer Verlag, Berlin, Heidelberg, New-York, Tokyo.

26. Samali A, Robertson JD, Peterson E, Manero F, van Zeijl L, **Paul C**, Cotgreave IA, Arrigo AP and Orrenius S. 2001. Hsp27 protects mitochondria of thermotolerant cells against apoptotic stimuli. Cell Stress & Chaperones **6**:49-58

27. Bruey JM*, **Paul C***, Fromentin A, Hilpert S, Arrigo AP, Solary E and Garrido C. 2000. Differential regulation of HSP27 oligomerization in tumor cell grown in vitro and in vivo. Oncogene **19**:4855-63 ***Co-premiers auteurs

28. **Paul C** and Arrigo AP. 2000. Comparison of the protective activities generated by two survival proteins : Bcl-2 and Hsp27 in L929 murine fibroblasts exposed to menadione or staurosporine. Exp. Gerontol. **35**(6-7):757-766

29. Rogalla TH, Ehrnsperger M, Préville X, Kotlyarov A, Lutsch G, Ducasse C, **Paul C**, Wieskel M, Arrigo AP, Buchner, J and Gaestel M. 1999. Regulation of Hsp27 oligomerisation, chaperone function and protective activity against oxidative stress/TNFα by phosphorylation. J. Biol. Chem. **274**:18947-18956

30. Préville X, Salemini F, Giraud S, Chaufour S, **Paul C,** Stepien G, Ursini MV and Arrigo AP. 1999. Mammalian small stress proteins protect against oxidative stress through their ability to increase glucose-6-phosphate dehydrogenase activity and by maintaining optimal cellular detoxifying machinery. Exp. Cell. Res. **247**:61-78