



**Mechanisms of Tumorigenesis and Targeted Therapies, UMR8161  
Institut de Biologie de Lille**

**Postdoctoral position available in the “Initiation of Epithelial Cancers” group  
at the Institut Pasteur de Lille**

Applications are invited for a two-year postdoctoral position in the “Initiation of Epithelial Cancers” team headed by Corinne Abbadie at the Institut Pasteur de Lille, France (<http://umr8161.cnrs.fr/equipe1/>). The recruited scientist will work on the SENHEAL project which will be conducted in collaboration with the Mathias Chamaillard team at the Institut Pasteur de Lille (<http://www.ciil.fr/research-teams/nods-like-receptors-in-infection-and-immunity/>).

The objective of the SENHEAL project is to investigate the impact and regulation of intestinal epithelial cell senescence during gut wound healing. The role of proteins regulating DNA repair pathways will be specifically addressed. The project will require the implementation of several technologies including culture of primary cells, molecular biology, cell imaging and in vivo experiments in mice.

The applicants of any nationality must hold a PhD in an area related to the project and must have experience in the required techniques. Candidates are encouraged to submit a full detailed CV, a cover letter describing their motivation, and reference letters to [corinne.abbadie@cnrs.ibl.fr](mailto:corinne.abbadie@cnrs.ibl.fr)

Expected employment starting date: 2017-10-01.

**Publications of the teams relevant to the project:**

C. Abbadie, O. Pluquet and A. Pourtier. Epithelial cell senescence : an adaptive response to pre-carcinogenic stresses. *Cellular and Molecular Life Sciences*, 2017 Jul 13. doi: 10.1007/s00018-017-2587-9. [Epub ahead of print] Review.

J. Nassour, S. Martien, E. Deruy, E. Tomellini, N. Malaquin, N. Martin, F. Bouali, L. Sabatier, N. Wernert, S. Pinte, E. Gilson, A. Pourtier, O. Pluquet, C. Abbadie. Defective DNA single-strand break repair is responsible for senescence and neoplastic escape of epithelial cells. *Nature Communications*, 2016, 7:10399 doi: 10.1038/ncomms10399

Aden K, Rehman A, Falk-Paulsen M, Secher T, Kuiper J, Tran F, Pfeuffer S, Sheibani-Tezerji R, Breuer A, Luzius A, Jentzsch M, Häsler R, Billmann-Born S, Will O, Lipinski S, Bharti R, Adolph T, Iovanna JL, Kempster SL, Blumberg RS, Schreiber S, Becher B, Chamaillard M, Kaser A, Rosenstiel P. Epithelial IL-23R Signaling Licenses Protective IL-22 Responses in Intestinal Inflammation. *Cell Rep*. 2016 Aug 23;16(8):2208-18. doi: 10.1016/j.celrep.2016.07.054.



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- De Arcangelis A, Hamade H, Alpy F, Normand S, Bruyère E, Lefebvre O, Méchine-Neuville A, Siebert S, Pfister V, Lepage P, Laquerriere P, Dembele D, Delanoye-Crespin A, Rodius S, Robine S, Keding M, Van Seuning I, Simon-Assmann P, Chamaillard M, Labouesse M, Georges-Labouesse E. Hemidesmosome integrity protects the colon against colitis and colorectal cancer. *Gut*. 2016, 0, 1-13
- E. Deruy, J. Nassour, N. Martin, C. Vercamer, N. Malaquin, J. Bertout, F. Chelli, A. Pourtier, O. Pluquet, C. Abbadie. Level of macroautophagy drives senescent keratinocytes into cell death or neoplastic evasion. *Cell Death and Disease*, 2014, 5, e1577
- N. Martin, C. Salazar-Cardozo, C. Vercamer, L. Ott, G. Marot, P. Slijepcevic, C. Abbadie, O. Pluquet. Identification of a gene signature of a pre-transformation process by senescence evasion in normal human epidermal keratinocytes. *Molecular Cancer*, 2014, 13, 151
- Normand S, Delanoye-Crespin A, Bressenot A, Huot L, Grandjean T, Peyrin-Biroulet L, Lemoine Y, Hot D, Chamaillard M. Nod-like receptor pyrin domain-containing protein 6 (NLRP6) controls epithelial self-renewal and colorectal carcinogenesis upon injury. *Proc Natl Acad Sci U S A*. 2011 Jun 7;108(23):9601-6.
- K. Gosselin, S. Martien, A. Pourtier, C. Vercamer, P. Ostoich, L. Morat, L. Sabatier, L. Duprez, C. T'Kint de Roodenbeke, E. Gilson, N. Malaquin, N. Wernert, P. Slijepcevic, M. Ashtari, F. Chelli, E. Deruy, B. Vandenbunder, Y. de Launoit and C. Abbadie. Senescence-associated oxidative DNA damage promotes the generation of neoplastic cells. *Cancer Research*, 2009, 69, 7917-7925.