

Pierre-Yves BOURILLOT Ph.D.



pierre-yves.bourillot@inserm.fr

Dr. Bourillot is senior researcher at the National Centre for Scientific Research (CNRS), Stem Cell and Brain Research Institute and Principal Investigator at the Stem Cell and Brain Research Institute, Lyon, France. He studies LIF/STAT3 signalling in mouse and human ES cells. In collaboration with Hongwei Chen, he reprogrammed human ES cells to ground-like state of pluripotency. He also studies the role of long non-coding RNAs in ground state pluripotency.

EDUCATION

Dr. Bourillot obtained his B.S. from the University of Dijon, his M.S. from the University of Lyon and his Ph.D. from the Ecole Normale Supérieure de Lyon. Following his academic achievements, he worked at the University of Cambridge (UK) and at the Ecole Normale Supérieure in Lyon, before joining the CNRS.

ACADEMIC APPOINTMENTS

- **2002 - present** : Research Fellow at CNRS, in the "Pluripotency in mammals" team led by Pierre Savatier, INSERM U1208.
- **2002** : Post-Doctoral in the " Embryonic stem cells and totipotency " team directed by Pierre Savatier, Ecole Normale Supérieure de Lyon, ARC scholarship holder.
- **1998 - 2002** : "Research Associate" in the team led by Pr. J.B. Gurdon, Wellcome CRC Institute, University of Cambridge (UK).

EXPERTISE

- Molecular regulation of naive pluripotency in mouse and human pluripotent stem cells
- Reprogrammed of human ES cells to ground-like state of pluripotency and studies role of long non-coding RNAs in ground state pluripotency

SELECTED PUBLICATIONS

1. Aksoy, I., Rognard, C., Moulin, A., Marcy, G., Masfarau, E., Wianny, F., Cortay, V., Bellemin-Ménard, A., Doerflinger, N., Dirheimer, M., Mayère, C., Bourillot, P.Y., Lynch, C., Raineteau, O., Joly, T., Dehay, C., Serrano, M., Afanassieff, M., Savatier, P. 2021. Apoptosis, G1 phase stall and premature differentiation account for low chimeric competence of Human and rhesus monkey naive pluripotent stem cells. *Stem Cell Reports*. 16(1): 56-74.
2. Bourillot, P.Y., Santamaria, C., David, L. Savatier, P. 2020. GP130 signaling and the control of naïve pluripotency in humans, monkeys, and pigs. *Experimental Cell Research*. 386(1): 111712.
3. Gonnot, F., Langer, D., Bourillot, P.Y., Doerflinger, N., Savatier, P. 2019. Regulation of Cyclin E by transcription factors of the naïve pluripotency network in mouse embryonic stem cells. *Cell Cycle*. 18(20): 2697-2712.
4. Wianny, F., Blachère, T., Godet, M., Guillermas, R., Cortay, V., Bourillot, P.Y., Lefèvre, A., Savatier, P., Dehay, C. 2016. Epigenetic status of H19/IGF2 and SNRPN imprinted genes in aborted and successfully derived embryonic stem cell lines in non-human primates. *Stem Cell Research*. 16(3): 557-567.