

Curriculum Vitae

Carole Desmarquet-Trin-Dinh

Biomedical Engineer

Born on November 12th, 1961

Current position :

College de France

Center for Interdisciplinary Research in Biology (CIRB)

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Training :

1986 : Certificate of specialized studies in industrial microbiology

1995 : Dissertation in application biology of the engineering degree from Conservatoire National des Arts et métiers

2010 : Authorization certificate to level 1 experiment and surgical intervention on vertebrates

Experience :

1986-1988 : Assistant Engineer at the *Rhône Poulenc Research Center*, « Teratology in vitro » laboratory

1988-1989 : Assistant Engineer at the *Institut Alfred Fournier*, « Experimental Syphilis » laboratory

1989-1994 : Research Scientist/Engineer at the *Institut Pasteur*, Gérard Orth's lab, « Human viral oncology » laboratory

1994-2018 : Research Scientist/Engineer at the *Ecole Normale Supérieure (IBENS)*, Patrick Charnay's lab, « Molecular Genetic of Development »

2018-present : Senior Research Scientist at Marie Manceau's lab, ERC starting grant, *College de France (CIRB)*

Membership :

- Member of scientific advisory board INSERM (2015-2017)
- Member of Special committee of hygiene and security and work conditions ADR 612 INSERM (2012- 2022)
- Member of specialized scientific committees neurosciences INSERM (2003-2007)
- Président and expert in several engineering and technicians competition INSERM, CNRS, INRA
- Member of board of the teams at IBENS (2009-2012)
- Member of committee infrastructure animal's users at IBENS (2009-2018)
- Member of network of Functional Studies in Model Organisms (EFOR).
- Member of International Society for Transgenic Technologies (ISTT).

Skills :

Design of experimental tests (skin explant, electroporation, microinjection...)

Laboratory animal science (rodents, fish, lagomorphs, birds)

Development of new transgenic models

Knowledge in cellular, molecular and histological biology

Publications :

- Bailleul, R., Desmarquet-Trin-Dinh, C., Hidalgo, M., Curantz, C., Touboul, J., and Manceau, M. *Symmetry breaking in the embryonic skin triggers a directional and sequential front of competence during plumage patterning.* [PLoS Biology](#) 02/2019. DOI:org/10.1371/journal.pbio.3000448
- Torbey P, Thierion E, Collombet S, de Cian A, Desmarquet-Trin-Dinh C, Dura M, Concordet JP, Charnay P, Gilardi-Hebenstreit P · [PloS Genet](#) 06/2018 *Cooperation, cis-interactions, versatility and evolutionary plasticity of multiple cis-acting elements underlie krox20 hindbrain regulation.* DOI:org/10.1371/journal.pgen.1007581
- Charlotte Labalette, Michel Adam Wassef, Carole Desmarquet-Trin Dinh, Yassine Xavier Bouchoucha, Johan Le Men, Patrick Charnay, Pascale Gilardi-Hebenstreit: *Molecular dissection of segment formation in the developing hindbrain.* [Development](#) 01/2015; 142(1):185-95. DOI:10.1242/dev.109652
- Yassine X Bouchoucha, Jürgen Reingruber, Charlotte Labalette, Michel A Wassef, Elodie Thierion, Carole Desmarquet-Trin Dinh, David Holcman, Pascale Gilardi-Hebenstreit, Patrick Charnay: *Dissection of a Krox20 positive feedback loop driving cell fate choices in hindbrain patterning.* [Molecular Systems Biology](#) 09/2013; 9:690. DOI:10.1038/msb.2013.46
- Michel A Wassef, Diane Chomette, Marie Pouilhe, Aline Stedman, Emmanuelle Havis, Carole Desmarquet-Trin Dinh, Sylvie Schneider-Maunoury, Pascale Gilardi-Hebenstreit, Patrick Charnay, Julien Ghislain: *Rostral hindbrain patterning involves the direct activation of a Krox20 transcriptional enhancer by Hox/Pbx and Meis factors.* [Development](#) 10/2008; 135(20):3369-78. DOI:10.1242/dev.023614
- Marie Pouilhe, Pascale Gilardi-Hebenstreit, Carole Desmarquet-Trin Dinh, Patrick Charnay: *Direct regulation of vHnf1 by retinoic acid signaling and MAF-related factors in the neural tube.* [Developmental Biology](#) 10/2007; 309(2):344-57. DOI:10.1016/j.ydbio.2007.07.003
- Laurence Decker, Carole Desmarquet-Trin-Dinh, Emmanuel Taillebourg, Julien Ghislain, Jean-Michel Vallat, Patrick Charnay: *Peripheral myelin maintenance is a dynamic process requiring constant Krox20 expression.* [The Journal of Neuroscience](#) : The Official Journal of the Society for Neuroscience 10/2006; 26(38):9771-9. DOI:10.1523/JNEUROSCI.0716-06.2006
- Julien Ghislain, Carole Desmarquet-Trin-Dinh, Pascale Gilardi-Hebenstreit, Patrick Charnay, Monique Frain: *Neural crest patterning: autoregulatory and crest-specific elements co-operate for Krox20 transcriptional control.* [Development](#) 04/2003; 130(5):941-53. DOI:10.1242/dev.00318
- Julien Ghislain, Carole Desmarquet-Trin-Dinh, Martine Jaegle, Dies Meijer, Patrick Charnay, Monique Frain: *Characterisation of cis-acting sequences reveals a biphasic, axon-dependent regulation of Krox20 during Schwann cell development..* [Development](#) 02/2002; 129(1):155-66.
- F Helmbacher, C Pujades, C Desmarquet, M Frain, F M Rijli, P Chambon, P Charnay: *Hoxa1 and Krox-20 synergize to control the development of rhombomere 3..* [Development](#) 01/1999; 125(23):4739-48.
- Piotr Topilko, Giovanni Levi, Giorgio Merlo, Stefano Mantero, Carole Desmarquet, Gianluigi Mancardi, Patrick Charnay: *Differential regulation of the zinc finger genes Krox-20 and Krox-24 (Egr-1) suggests antagonistic roles in Schwann cells.* [Journal of Neuroscience Research](#) 12/1997; 50(5):702-12. DOI:10.1002/(SICI)1097-4547(19971201)50:5<702::AID-JNR7>3.0.CO;2-L
- Tania Seitanidou, Sylvie Schneider-Maunoury, Carole Desmarquet, David G. Wilkinson, Patrick Charnay: *Krox-20 is a key regulator of rhombomere-specific gene expression in the developing hindbrain..* [Mechanisms of Development](#) 08/1997; 65(1-2):31-42. DOI:10.1016/S0925-4773(97)00051-8
- F Breitburd, R Kimbaurer, N L Hubbert, B Nonnenmacher, C Trin-Dinh-Desmarquet, G Orth, J T Schiller, D R Lowy: *Immunization with viruslike particles from cottontail rabbit papillomavirus (CRPV) can protect against experimental CRPV infection..* [Journal of Virology](#) 07/1995; 69(6):3959-63.