Curriculum vitae

PERSONAL INFORMATION

Family name, First name: COSTE, Bertrand
Date and place of Birth: June 3rd 1979, Manosque, France

PROFESSIONAL ADDRESS

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EDUCATION

2003	Master in Neuroscience, Université Aix-Marseille II, France.
2007	Ph.D. in Neuroscience, Université Aix-Marseille II, France.
2018	HDR (accreditation to supervise research, Neuroscience), Université Aix-Marseille, France.

CURRENT POSITION

2013-present	Research scientist (CNRS CR), Université Aix-Marseille, Marseille, France.

PREVIOUS POSITIONS

2002-2003	Master internship, LNPC laboratory, Université Aix-Marseille II, France (*supervisor: Dr. P. Delmas*).
2003-2007	Ph.D. fellow, LNPC laboratory, Université Aix-Marseille II, France (*supervisor: Dr. P. Delmas*).
2007-2012	Postdoctoral fellow, The Scripps Research Institute, USA (*supervisor: Pr. A. Patapoutian*).

SELECTED PEER-REVIEWED PUBLICATIONS

Cell Reports (**2021**) 37(5):109914.
Parpaite T, Brosse L, Séjourné N, Laur A, Mechioukhi Y, Delmas P, **Coste B**. *Patch-seq of mouse DRG neurons reveals candidate genes for specific mechanosensory functions.*

Cell (**2020**) 183(1):284. (*review article*)
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Neuron (**2017**) 94(2):266-270.e3.
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Current Biology (**2017**) 27(7):R250-R252. (*review article*)
Parpaite T, **Coste B**. *Piezo channels.*

Nature Neuroscience (**2017**) 20(1):24-33.
Wu Z, Grillet N, Zhao B, Cunningham C, Harkins-Perry S, **Coste B**, Ranade S, Zebarjadi N, Beurg M, Fettiplace R, Patapoutian A, Mueller U. *Mechanosensory hair cells express two molecularly distinct mechanotransduction channels.*

Nature Communications (2015) 6:7223.
Coste B, Murthy S, Mathur J, Schmidt M, Mechioukhi Y, Delmas P, Patapoutian A. *Piezo1 ion channel pore properties are dictated by C-terminal region.*

Elife (2015) 4:e07369.
Syeda R, Xu J, Dubin AE, **Coste B**, Mathur J, Huynh T, Matzen J, Lao J, Tully DC, Engels IH, Petrassi HM, Schumacher AM, Montal M, Bandell M, Patapoutian A. *Chemical activation of the mechanotransduction channel Piezo1.*

PNAS (**2014**) 111(28):10347-52.
Ranade SS, Qiu Z, Woo SH, Hur SS, Murthy SE, Cahalan SM, Xu J, Mathur J, Bandell M, **Coste B**, Li YS, Chien S, Patapoutian A. *Piezo1, a mechanically activated ion channel, is required for vascular development in mice.*

Nature (2014) 516(7529):121-5.
Ranade SS, Woo SH, Dubin AE, Moshourab RA, Wetzel C, Petrus M, Mathur J, Bégay V, **Coste B**, Mainquist J, Wilson AJ, Francisco AG, Reddy K, Qiu Z, Wood JN, Lewin GR, Patapoutian A. *Piezo2 is the major transducer of mechanical forces for touch sensation in mice.*

Cell (**2013**) 155(2):278-84. (*review article*)
Delmas P, **Coste B**. *Mechano-gated ion channels in sensory systems*.

PNAS (**2013**) 110(12):4667-72.
Coste B, Houge G, Murray MF, Stitziel N, Bandell M, Giovanni MA, Philippakis A, Hoischen A, Riemer G, Steen U, Steen VM, Mathur J, Cox J, Lebo M, Rehm H, Weiss ST, Wood JN, Maas RL, Sunyaev SR, Patapoutian A. *Gain-of-function mutations in the mechanically activated ion channel PIEZO2 cause a subtype of Distal Arthrogryposis*.

Nature Communications (**2013**) 4:1884.
Albuisson J, Murthy SE, Bandell M, **Coste B**, Louis-Dit-Picard H, Mathur J, Fénéant-Thibault M, Tertian G, de Jaureguiberry JP, Syfuss PY, Cahalan S, Garçon L, Toutain F, Simon Rohrlich P, Delaunay J, Picard V, Jeunemaitre X, Patapoutian A. *Dehydrated hereditary stomatocytosis linked to gain-of-function mutations in mechanically activated PIEZO1 ion channels*.

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Nature (**2012**) 483(7388):209-12.
Kim SE, **Coste B**, Chadha A, Cook B, Patapoutian A. *The role of Drosophila Piezo in mechanical nociception*.

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Journal of General Physiology (**2008**) 131(3):211-25.
Maingret F, **Coste B**, Padilla F, Clerc N, Crest M, Korogod SM, Delmas P. *Inflammatory mediators increase Nav1.9 current and excitability in nociceptors through a coincident detection mechanism.*

Journal of General Physiology (**2007**) 129(1):57-77.
Coste B, Crest M, Delmas P. *Pharmacological dissection and distribution of NaN/Nav1.9, T-type Ca^{2+} currents, and mechanically activated cation currents in different populations of DRG neurons.*