

## Curriculum vitae

Flavien CHARPENTIER

Current position: - Inserm Research Director (since 2007)  
"Cardiac arrhythmias" team leader since 2008  
- Scientific director of THERASSAY-IBISA core facility (Functional investigations of rodent models) since 2012  
L'institut du thorax, Inserm UMR1087, CNRS UMR6291, Nantes, France

### University degrees

2003 Authorization to lead researches, University of Nantes  
1991 PhD of the University of Nantes, section "Health and life sciences"

### Previous positions

2003-2008 Co-leader of team Ilc, Inserm UMR 533, Nantes  
1996-2008 Inserm Research Scientist, Inserm CJF96-01 and UMR533, Nantes  
1994-1996 Post-doctoral research scientist, CNRS URA 1340, Nantes  
1991-1994 Post-doctoral research scientist, Columbia University, New York

### Expertise, evaluation (2012-2017)

- Member of the Scientific Council of the *Fondation de l'Avenir* (2009-2017)
- Member of the Scientific Council of the *Fondation GenaVie* (2012-2014)
- Evaluations for the ANR, the E-Rare program (European Research Projects on Rare Diseases), the CNRS, the *Association Française contre les Myopathies* (AFM), the Dutch Heart Foundation, the Israel Science Foundation, Research Foundation Flanders...
- Scientific advisor of the "Molecular and Cellular Mechanisms of Electrical Excitability in the Heart and Central Nervous System" network, Interuniversity Attraction Poles 7, Belgium (2013-2016)

### Editorial activity (2012-2017)

- Member of the editorial boards of the *Journal of Molecular and Cellular Cardiology* (since 2008), *Frontiers in Cardiac Electrophysiology* (since 2010) and *Europace* (since 2012)
- Referee for *Circulation*, *Circulation Research*, *Cardiovascular Research*, *Journal of Molecular and Cellular Cardiology*, *British Journal of Pharmacology*, *Trends in Cardiovascular Medicine*...

### Five selected publications (2012-2017, out of 69)

Laurent G, Saal S, Amarouch MY, Béziau DS, Marsman RF, Faivre L, Barc J, Dina C, Bertaux G, Barthez O, Thauvin-Robinet C, Charron P, Fressart V, Maltret A, Villain E, Baron E, Mérot J, Turpault R, Coudière Y, Charpentier F, Schott JJ, Loussouarn G, Wilde AAM, Wolf JE, Baró I, Kyndt F, Probst V. Multifocal Ectopic Purkinje-related Premature Contractions: a new SCN5A-related cardiac channelopathy. *J Am Coll Cardiol* 2012; 60:144-56.

Jouni M, Si-Tayeb K, Es-Salah-Lamoureux Z, Latypova X, Champon B, Caillaud A, Run goat A, Charpentier F, Loussouarn G, Baró I, Zibara K, Lemarchand P, Gaborit N. Toward Personalized Medicine: Using Cardiomyocytes differentiated from urine-derived pluripotent stem cells to recapitulate electrophysiological characteristics of type 2 long QT syndrome. *J Am Heart Assoc* 2015;4(9):e002159.

Mesirca P, Bidaud I, Briec F, Evain S, Torrente AG, Le Quang K, Leoni AL, Baudot M, Marger L, Chung You Chong A, Nargeot J, Striessnig J, Wickman K, Charpentier F\*, Mangoni ME\*. G protein-gated  $I_{KACH}$  channels as therapeutic targets for treatment of sick sinus syndrome and heart block. *Proc Natl Acad Sci USA* 2016;113(7):E932-41. (\*equal contribution as senior author)

Portero V, Le Scouarnec S, Es-Salah-Lamoureux Z, Burel S, Gourraud JB, Bonnaud S, Lindenbaum P, Simonet F, Violleau J, Baron E, Moreau E, Scott C, Chatel S, Loussouarn G, O'Hara T, Mabo P, Dina C, Le Marec H, Schott JJ, Probst V, Baró I, Marionneau C, Charpentier F\*, Richard Redon\*. Dysfunction of the voltage-gated  $K^+$  channel beta-2 subunit in a familial case of Brugada syndrome. *J Am Heart Assoc* 2016; 5(6). pii: e003122. (\*equal contribution as senior author)

Derangeon M, Montnach J, Cerpa CO, Jagu B, Patin J, Toumaniantz G, Girardeau A, Huang CLH, Colledge WH, Grace AA, Baró I, Charpentier F. Transforming growth factor  $\beta$  receptor inhibition prevents ventricular fibrosis in a mouse model of progressive cardiac conduction disease. *Cardiovasc Res* 2017;113(5):464-474.