

Scientific production by team and categories of publication

Team : TIRC (Transferts Ioniques et Rythmicité Cellulaire)
Team : TIME (Transports Ioniques et Dynamique Membranaire de l'Épithélium,
Mucoviscidose (TIME))

Team : TIRC

Scientific publications in peer reviewed journals

1. EL Chemaly A, Norez C, Magaud C, Bescond J, Chatelier A, Fares N, Findlay I, Jayle C, Becq F, Faivre JF, Bois P. ANO1 contributes to Angiotensin-II-activated Ca²⁺-dependent Cl⁻ current in human atrial fibroblasts. *J Mol Cell Cardiol.* 2014, 68:12-9. (IF: 5.2)
2. Pambrun T, Mercier A, Chatelier A, Patri S, Schott JJ, Le Scouarnec S, Chahine M, Degand B, Bois P. Myotonic dystrophy type 1 mimics and exacerbates Brugada phenotype induced by Nav1.5 sodium channel loss of function mutation. *Heart Rhythm.* 2014, 11(8): 1393-400. (IF: 5.1)
3. Norez C, Vandebrouck C, Noel S, Durieu E, Outama N, Galons H, Antigny A, Chatelier A, Bois P, Meijer L, Becq F. Roscovitine is a proteostasis rescuing the trafficking defect of F508del-CFTR by a CDK-independent mechanism of action. *British J Pharmacol*, 2014 Nov; 171(21): 4831-49. (IF 4.84)
4. Carré G, Carreyre H, Ouedraogo M, Becq F, Bois P, Thibaudeau S, Vandebrouck C, Bescond J. The hypotensive agent dodoneine inhibits L-type Ca²⁺ current with negative inotropic effect on rat heart. *Eur J Pharmacol.* (2014) 728C:119-127. (IF: 2.5)
5. Carreyre H, Coustard JM, Carré G, Vandebrouck C, Bescond J, Ouédraogo M, Marrot J, Vullo D, Supuran CT, Thibaudeau S. Natural product hybrid and its superacid synthesized analogues: dodoneine and its derivatives show selective inhibition of carbonic anhydrase isoforms I, III, XIII and XIV. *Bioorg Med Chem.* 2013, 21(13): 3790-4. (IF: 2.4)
6. Clarhaut J, Fraineau S, Guilhot J, Tranoy-Opalinski I, Thomas M, Renoux B, Peraudeau E, Randriamalala E, Bois P, Chatelier A, Monvoisin A, Cronier L, Papot S, Guilhot F. A Galactosidase-Responsive Doxorubicin-Folate Conjugate for Selective Targeting of Acute Myelogenous Leukemia Blasts. *Leukemia Research* 2013, 37: 948-955. (IF: 2.9)
7. Harisseh R, Chatelier A, Magaud C, Déliot N, Constantin B. Involvement of TRPV2 and SOCE in calcium influx disorder in DMD primary human myotubes with a specific contribution of Alpha1-syntrophin and PLC/PKC in SOCE regulation. *American Journal of Physiology : Cell Physiology*, 2013, 304(9):C881-94. (IF: 3.8)
8. Imbert-Auvray N, Mercier C, Huet V, Bois P. Sarcoplasmic reticulum –rr key factor in cardiac contractility of sea bass *dicentrarchus labrax* and dover sole *solea solea* during thermal acclimations. *Journal of Comparative Physiology* 2013, 183:477-489. (IF: 2.6)
9. Lorin C, Gueffier M, Faivre JF, Bois P, Cognard C, Sebille S. Ultrastructural and functional alterations of EC coupling elements from membrane surface to depth in mdx cardiomyocytes. *Cell Biochem Biophys* 2013, 66(3): 723-736. (IF: 3.7)

10. Ouedraogo M, Da FL, Fabré A, Konaté K, Dibala CI, Carreyre H, Thibaudeau S, Coustard JM, Vandebrouck C, Bescond J, Belemtougri RG. Evaluation of the Bronchorelaxant, Genotoxic, and Antigenotoxic Effects of Cassia alata L. *Evid Based Complement Alternat Med* 2013;162651. (IF: 2).
11. Chatelier A, Mercier A, Tremblier B, Thériault O, Moubarak M, Benamer N, Corbi P, Bois P, Chahine M, Faivre J.F. A distinct de-novo expression of Nav1.5 sodium channel in human atrial fibroblasts differentiated into myofibroblasts. *Journal of Physiology* 2012, 590 (17): 4307-4319. (IF: 5)
12. Ferro F, Ouillé A, Tran TA, Fontanaud F, Bois P, Babuty D, Labarthe F, Le Guennec JY. Effects of long-chain acyl-carnitines on I_{KR} , I_{KS} and I_{K1} . *PLoS One* 2012, 7(7): e41687. (IF: 4.4)
13. Gosselin-Badaroudine P, Keller DI, Huang H, Pouliot V, Chatelier A, Osswald S, Brink M, Chahine M. A proton leak current through the cardiac sodium channel linked to mixed arrhythmia and dilated cardiomyopathy phenotypes. *Plos One* 2012, 7(5): e38331. (IF: 4.4)
14. Mercier A, Clement R, Harnois T, Bourmeyster N, Faivre JF, Findlay I, Chahine M, Bois P, Chatelier A. The $\beta(1)$ -Subunit of Na(v)1.5 Cardiac Sodium Channel Is Required for a Dominant Negative Effect through α - α Interaction. *Plos One* 2012, 7(11):e48690. (IF: 4.4)
15. Sabourin J, Harrisseh R, Harnois T, Magaud C, Bourmeyster N, Déliot N and Constantin B. (2012) Dystrophin/Alpha1-syntrophin scaffold regulated PLC/PKC-dependent store-operated calcium entry in myotubes. *Cell Calcium*. Dec; 52(6):445-56. (IF: 3.8)
16. Ouedraogo M, Ruiz M, Vardelle E, Carreyre H, Potreau D, Coustard JM, Sawadogo L, Cognard C, Becq F, Vandebrouck C, Bescond J. From the vasodilator and hypotensive effects of an extract fraction from *Agelanthus dodoneifolius* (DC) Danser (Loranthaceae) to the active compound dodoneine. *Journal of Ethnopharmacology* 2011, 133: 345–352. (IF: 4.77)
17. Benamer N, Fares N, Bois P, Faivre JF. Electrophysiological and Functional effects of sphingosine-1-phosphate in mouse ventricular fibroblasts. *BBRC* (2011) 408(1):6-11 (IF: 2.3)
18. Rochette L., Tatou E., Maupoil V., Zeller M., Cottin Y., Jazayeri S., Brenot R., Girard C., David M., Vergely C. Atrial and vascular oxidative stress in patients with heart failure. *Cell Physiol Biochem*. (2011) 27(5): 497-502. (IF: 4.65)

Book Chapter

1. Bois P, Chatelier A, Bescond J, Faivre JF Pharmacology of hyperpolarization-activated cyclic nucleotide-gated (HCN) channels. In *Ions channels and their inhibitors* (2011) 52, 33-51. Springer

Invited conferences

1. Bois P (2014). New if-drugs. Servier IRIS.
2. Chatelier A (2014) Trafficking defective mutations modulate Nav1.5 N-glycosylation states. Congrès de physiologie, de pharmacologie et de thérapeutique, Poitiers.
3. Chatelier A (2014) Lumière sur l'électrophysiologie cardiaque via l'optogénétique : combinaison entre acteurs et senseurs optiques. Université Saint Joseph, Beyrouth, Liban.
4. Faivre JF (2014) Excitabilité des fibroblastes cardiaques. Congrès de physiologie, de pharmacologie et de thérapeutique, Poitiers.
5. Bois P (2013) Human cardiac fibroblast and fibrosis process. Bordeaux. Lyric (O.Bernus)
6. Bois P (2013) ANO1 contributes to Angiotensin-II-activated-Calcium dependent Chloride current in human atrial fibroblast. Rencontre Poitiers/Tours.
7. Chatelier A (2013) Bagage génétique et pertes de fonction du canal sodique cardiaque Nav1.5 dans le syndrome de Brugada. Patch Club de Montpellier, Montpellier, France.
8. Bois P (2012) Cellules souches et pacemaker cardiaque Lions Club Niort 3 Avril.

Scientific Production 2011-2014

9. Bois P (2012) Characterization of the action mode of ivabradine and two related compounds on the homomeric hHCN4 current expressed in CHO cells Paris symposium IRIS 11 juin.
10. Bois P (2012) Propriétés du canal proton. Strasbourg UMR 7199 T. Grutter 7 novembre.
11. Bois P (2012) Canaux ioniques et cœur. Mulhouse CellProthera (Dr. Henon) 12 novembre.
12. Chatelier A (2012) Canaux sodiques et fibroblastes cardiaques, vers un changement de paradigme. Université Laval, Québec, Canada.
13. Faivre JF (2012) Excitabilité des fibroblastes cardiaques, EA4650, Université de Caen.
14. Bois P. (2011) Pacemaker Biologique artificiel Invitation Dr Haissaguerre .

Communications with published abstracts

1. Krzesiak A, Delpech N, Kajla S, Sebille S, Cognard C, Lavoie J, Bosquet L. Re-examination of arterial pressure variations in SHR through continuous monitoring at rest and during different types of aerobic exercises. *Acta Physiologica*, 2014, 51-52.
2. El Chemaly A, Norez C, Magaud C, Bescond J, Chatelier A, Fares N, Findlay I, Jayle C, Becq F, Faivre JF, Bois P. ANO1 contributes to Angiotensin-II-activated Ca(2+)-dependent Cl(-) current in human atrial fibroblasts. *Biophysical J*, 106 (S1), 560A, 2014.
3. Mercier A, Clément R, Harnois T, Bourmeyster N, Bois P, Chatelier A. Nav1.5 channels can reach the plasma membrane through distinct N-glycosylation states. *Biophysical J*, 106, 2(S1), 328A, 2014.
4. Pasqualin C*, Malécot CO, Gannier F, Cognard C, Bredeloux P, Maupoil V. Comparison of the organization of tubules, L-type Ca channels and ryanodine receptors in cardiomyocytes of pulmonary vein, left atrium and ventricle of the rat. *IXème Congrès de Physiologie, de Pharmacologie et de Thérapeutique, Poitiers (France), 22-24 avril 2014. Fund Clin Pharmacol, 28(suppl. 1), 31, 2014.*
5. Carré G, Ouedraogo M, C. Magaud C, Carreyre H, Thibaudeau S, Becq F, Bois P, Vandebrouck C, Bescond J. (2014) Identification of two molecular targets of the natural vasorelaxant agent dodoneine: L-type calcium channel and carbonic anhydrase. *Fundamental and Clinical Pharmacology 2014, 28 (Suppl. 1), 79: PM2-115*
6. Lorin C, Aguettaz E, Gueffier M, Bois P, Faivre JFF, Sebille S, Cognard C. Alterations of excitation-calcium release coupling in mdx cardiomyocytes: surface and internal membranes elements disruptions at rest and under stretching. 2014 *Fundamental and Clinical Pharmacology, 28 :77.*
7. Findlay I, Bredeloux P, Hocini M, Bernus O, Maupoil V. Conduction of electrical activity between the atria and the pulmonary veins of the rat. *VIème Journée de la Recherche Tours-Poitiers, Poitiers (France), 29 nov. 2013. Résumé P027-50.*
8. Findlay I, Bredeloux P, Hocini M, Bernus O, Maupoil V. Conduction of electrical activity between the atria and the pulmonary veins of the rat. *International Workshop de l'Institut de Rythmologie et Modélisation Cardiaque, Pessac (France), 24-25 Oct. 2013. Résumé 44.*
9. Malécot CO, Bredeloux P, Findlay I, Maupoil V. Quinidine, ranolazine and TTX modulate norepinephrine-induced automatic activity in rat pulmonary vein cardiomyocytes: role of Na channels. *"Canaux Ioniques: 24th annual meeting", Ile d'Oléron (France), 15-18 sept. 2013 - Résumé P-17, pp.65-66 – 2013.*
10. Mercier A, Clement R, Harnois T, Bourmeyster N, Faivre JF, Findlay I, Chahine M, Bois P, Chatelier A. The beta₁ subunit of Na(V) 1.5 cardiac sodium channel is required for a dominant

- negative effect through alpha-alpha interaction. *58th Annual Meeting of the Biophysical Society, San Francisco (CA, USA), 15-19 Feb. 2014. **Biophysical J**, 104(S1), 133A, 2013.*
11. Mercier A, Clement R, Harnois T, Bourmeyster N, Faivre JF, Findlay I, Chahine M, Bois P, Chatelier A. The beta₁ subunit of Na(V)_{1.5} cardiac sodium channel is required for a dominant negative effect through alpha-alpha interaction. *VIIIème Congrès de Physiologie, de Pharmacologie et de Thérapeutique, Angers (France), 22-24 Avril 2013. **Fund Clin Pharmacol**, 27(S1), 81, 2013.*
 12. Bredeloux P, Aguettaz E, Findlay I, Maupoil V. Contribution of calcium to the catecholaminergic automatic activity of rat pulmonary veins. *Printemps de la Cardiologie, Bordeaux (France), 12-13 avril 2012. **Arch Cardiovasc Dis Suppl**, 4Suppl 1, 42, 2012.*
 13. Malécot CO, Findlay I, Cosnay P, Maupoil V. Na channels contribute to the norepinephrine-induced catecholaminergic activity in rat pulmonary vein cardiomyocytes. *Printemps de la Cardiologie, Bordeaux (France), 12-13 avril 2012. **Arch Cardiovasc Dis Suppl**, 4Suppl 1, 40, 2012.*
 14. Zhang B-L, Freslon J-L, Maupoil V. Role of endothelium on the catecholaminergic automatic activity and on the contractile and relaxant responses of rat isolated pulmonary veins. *Printemps de la Cardiologie, Bordeaux (France), 12-13 avril 2012. **Arch Cardiovasc Dis Suppl**, 4Suppl 1, 44, 2012.*
 15. Bobin P, Ouedraogo M, Carreyre H, Coustard JM, Becq F, Vandebrouck C, Bescond J. (2011). Characterization of the action of a new cardiovascular pharmacological agent: Dodoneine. *Archives of Cardiovascular Diseases sup 2: p65.*
 16. Ouedraogo M, Ruiz M, Carreyre H, Coustard JM, Becq F, Vandebrouck C, Bescond J. (2011). From the vasodilator and hypotensive effects of an extract fraction from *agelanthus dodoneifolius* (dc) danser (loranthaceae) to the active compound dodonéine. *Fundamental & Clinical Pharmacology, Vol 25 sup 1 : p77.*
 17. Sabourin J, Harisseh R, Déliot N, Cognard C, Constanin B. Syntrophin/dystrophin scaffold regulates TRPC/STIM1-dependent cation entry in developing skeletal muscle. *Transport Processes in Neurodegenerative and Neuromuscular Diseases. Third International Workshop, Greifswald, Allemagne, 12-14 Septembre 2011. Abstract P. 15.*
 18. Harisseh R, J. Sabourin, C. Magaud, N. Déliot, B. Constantin. Increased cation entry through TRPC1 is mediated by PLC/PKC pathway in dystrophin-deficient myotubes. *Myology 4th international congress of Myology, Lille, 9-13 May 2011.*

Oral communications without publication

1. Aguettaz E, Cognard C, Sebille S (2014) Effect of axial stretch on calcium regulation in mouse dystrophic cardiomyocytes: involvement of TRPV2 channels? 25^{ème} colloque annuel des Canaux ioniques – 14–17 septembre 2014 – Oléron.
2. Bredeloux P, Findlay I, Hocini M, Bernus O, Maupoil V (2014). Pharmacological isolation of pulmonary veins in the rat. 9^{ème} Congrès annuel de Physiologie, Pharmacologie et Thérapeutique., Poitiers (France). Prix de la Meilleure Communication Orale de la Société de Physiologie

3. Bescond J (2014) De la plante au médicament : identification des cibles moléculaires de la dodonéine dans le système cardiovasculaire, IUT de la Rochelle
4. Cognard C (2013) Présentation de la plate-forme d'imagerie de l'Université de Poitiers "ImageUP" et de la technique de Microscopie de Conductance Ionique par Balayage (SICM). Apport des techniques de microscopie électronique dans l'interprétation des structures cellulaires en biologie et en médecine. 12èmes Journées du RCCM.
5. Carre G, Carreyre H, Thibaudeau S, Ouedraogo M, Becq F, Bois P, Vandebrouck C, Bescond J. (2013). The natural hypotensive agent dodoneine and its analogues inhibits L-Type Ca²⁺ current in the cardiovascular system. Ions Channels 24th Meeting, 15-18 septembre, Ile d'Oleron, France.
6. Lorin C, Aguetz E, Gueffier M, Bois P, Faivre JF, Cognard C, Seville S (2013) Ultrastructural and functional alterations of EC coupling elements in mdx cardiomyocytes: analysis at rest and under stretch. Second International Workshop in Neurophysiology, Greifswald, Allemagne.
7. Lorin C, Aguetz E, Krzesiak A, Bois P, Faivre JF, Cognard C, Seville S (2012) Membrane surface and intracellular ultrastructural differences in control and mdx cardiomyocytes highlighted by SICM and FFT. 8ème Congrès P2T -Angers 2012.
8. Vandebrouck C, Bescond J, Faivre JF (2012) Le cycle de vie du médicament : de la recherche de nouvelles molécules à la mise sur le marché, Espace Mendès France, Poitiers,
9. Bescond J (2012) La dodonéine : un exemple de recherche en ethnopharmacologie, IUT de la Rochelle

Dissemination of scientific culture

1. Chatelier A. Campagne d'exposition urbaine et numérique « Portraits de chercheurs » (Poitiers 2014). Article connexe de La Nouvelle République.
3. Cognard C. ImageUP, une ambition régionale. 2014, Microscop n°69, p8et 9.
4. Malecot CO, Chatelier A, Bois P, Faivre JF (2014) Patch-clamp et Optogénétique. In : Cognard C., Ed. Implications des Transports Ioniques dans la Fonction Cellulaire : Exploration par des Approches Multiples. Atlantique Éditions, Poitiers, ISBN 978-2-911320-49-1, pp. 45-52.
5. Bescond J (2012) De la plante au médicament » Cogito, le mag, Université de Poitiers n°2, 2ème trimestre 2012.
6. Bois P (2012) Vulgarisation le cœur au cœur du cœur Centre médical La Roche Posay 18 Avril.
7. Bois P (depuis 2011) Interventions master nationaux Paris/Tours.

Scientific publications in peer reviewed journals

1. Pinot M, Vanni S, Pagnotta S, Lacas-Gervais S, Payet LA, Ferreira T, Gautier R, Goud B, Antonny B, Barelli H. Lipid cell biology. Polyunsaturated phospholipids facilitate membrane deformation and fission by endocytic proteins. *Science*. 2014 Aug 8; 345(6197):693-7. (IF : 31)
2. Boinot C, Jollivet-Souchet M, Ferru-Clément R, Becq F. Searching for combination of small molecule correctors to restore F508del-CFTR function and processing *J Pharmacol Exp Ther*, 2014 114.214890. (IF: 3.9)
3. Sharma H, Jollivet-Souchet M, Callebaut I, Prasad R, Becq F. Function, pharmacological correction and maturation of new indian CFTR gene mutations. *J Cyst Fibrosis*, 2014 14(1): 34-41. (IF: 3.82)
4. Boucherle B, Bertrand J, Maurin B, Renard B-L, Fortuné A, Tremblier B, Becq F, Norez C, Décout J-L A new 9-alkyladenine-cyclic methylglyoxal diadduct activates wt- and F508del-cystic fibrosis transmembrane conductance regulator (CFTR) in vitro and in vivo. *Eur. J. Med Chem*, 2014 Jun 14; 83C:455-465. (IF 3.44)
5. Désiré J, Mondon M, Fontelle N, Nakagawa S, Hirokami Y, Adachi I, Iwaki R, Fleet GW, Alonzi DS, Twigg G, Butters TD, Bertrand J, Cendret V, Becq F, Norez C, Marrot J, Kato A, Blériot Y. N- and C-alkylation of seven-membered iminosugars generates potent glucocerebrosidase inhibitors and F508del-CFTR correctors. *Org Biomol Chem*. 2014 Nov 28; 12(44):8977-96. (IF 3.56)
6. Norez C, Vandebrouck C, Noel S, Durieu E, Outama N, Galons H, Antigny A, Chatelier A, Bois P, Meijer L, Becq F. Roscovitine is a proteostasis rescuing the trafficking defect of F508del-CFTR by a CDK-independent mechanism of action. *British J Pharmacol*, 2014 Nov; 171(21): 4831-49. (IF 4.84)
7. Chatauret N, Coudroy R, Delpech PO, Vandebrouck C, Hosni S, Scepti M and Hauet T. Mechanistic analysis of machine perfusion protection on warm ischemic kidney uncovers improved eNOS phosphorylation during preservation and vasodilation after reoxygenation. (2014). *American Journal of Transplantation*. 2014 Oct 10. doi: 10.1111/ajt.12904. (IF: 6.192)
8. Carré G, Carreyre H, Ouedraogo M, Becq F, Bois P, Thibaudeau S, Vandebrouck C, Bescond J. The hypotensive agent dodoneine inhibits L-type Ca²⁺ current with negative inotropic effect on rat heart. *Eur J Pharmacol*. (2014) 728C:119-127. (IF: 2.5)
9. Payet LA, Kadri L, Giraud S, Norez C, Berjeaud JM, Jayle C, Mirval S, Becq F, Vandebrouck C, Ferreira T. Cystic fibrosis bronchial epithelial cells are lipointoxicated by membrane palmitate accumulation. *PLoS One*. 2014 Feb 19;9(2):e89044. (IF: 3.23)
10. Benz N, Le Hir S, Norez C, Kerbirou M, Calvez ML, Becq F, Trouvé P, Férec C. Improvement of chloride transport defect by gonadotropin-releasing hormone (GnRH) in cystic fibrosis epithelial cells. *PLoS One*. 2014 Feb 19;9(2):e88964. (IF: 3.23)
11. El Chemaly A, Norez C, Magaud C, Bescond J, Chatelier A, Fares N, Findlay I, Jayle C, Becq F, Faivre JF, Bois P. ANO1 contributes to Angiotensin-II-activated Ca²⁺-dependent Cl⁻ current in human atrial fibroblasts. *J Mol Cell Cardiol*. 2014, 68:12-9. (IF: 5.2)

12. Jourdain P, Becq F, Lengacher S, Boinot C, Magistretti PJ, Marquet P. The human CFTR protein expressed in CHO cells activates aquaporin-3 in a cAMP-dependent pathway: study by digital holographic microscopy. *J Cell Sci.* 2014 Feb 1; 127(Pt 3): 546-56. (IF: 5.43)
13. Norez C, Jayle C, Becq F, Vandebrouck C. Bronchorelaxation of the human bronchi by CFTR activators. *Pulm Pharmacol Ther.* 2014 Feb; 27(1):38-43. (IF 2.93)
14. Dejos C, Voisin P, Bernard M, Régnacq M, Bergès T. Canthin-6-one Displays Antiproliferative Activity and Causes Accumulation of Cancer Cells in the G2/M Phase. *J Nat Prod.* 2014 Nov 26;77(11):2481-7 (IF: 3.798)
15. Bernard M, Dejos C, Bergès T., Regnacq M., Voisin P (2014) Activation of rhodopsin gene transcription in cultured retinal precursors of chicken embryo: role of Ca²⁺ signalling and hyperpolarization-activated cation channels. *J. Neurochem.* 129 : 85-98 (IF: 4.281)
16. Cerveau N, Bouchon D, Bergès T, Grève P. (2014) Molecular evolution of the androgenic hormone in terrestrial isopods. *Gene.* 540:71-7 (IF: 2.138)
17. Barakat R, Goubet I, Manon S, Berges T, Rosenfeld E. (2014) Unsuspected pyocyanin effect in yeast under anaerobiosis. *MicrobiologyOpen.* 3:1-14 (IF: 2.213)
18. Carreyre H, Coustard JM, Carré G, Vandebrouck C, Bescond J, Ouédraogo M, Marrot J, Vullo D, Supuran CT, Thibaudeau S. Natural product hybrid and its superacid synthesized analogues: dodoneine and its derivatives show selective inhibition of carbonic anhydrase isoforms I, III, XIII and XIV. *Bioorg Med Chem.* 2013, 21(13): 3790-4. (IF: 2.4)
19. Ouedraogo M, Da FL, Fabré A, Konaté K, Dibala CI, Carreyre H, Thibaudeau S, Coustard JM, Vandebrouck C, Bescond J, Belemtougri RG. Evaluation of the Bronchorelaxant, Genotoxic, and Antigenotoxic Effects of Cassia alata L. *Evid Based Complement Alternat Med* 2013;162651. (IF: 2).
20. Compain P, Decroocq C, Joosten A, de Sousa J, Rodríguez-Lucena D, Butters TD, Bertrand J, Clément R, Boinot C, Becq F, Norez C. Rescue of functional CFTR channels in cystic fibrosis: a dramatic multivalent effect using iminosugar cluster-based correctors. *ChemBiochem.* 2013 Oct 11; 14(15): 2050-8. (IF: 3.08)
21. Payet LA, Pineau L, Snyder EC, Colas J, Moussa A, Vannier B, Bigay J, Clarhaut J, Becq F, Berjeaud JM, Vandebrouck C, Ferreira T. Saturated fatty acids alter the late secretory pathway by modulating membrane properties. *Traffic.* 2013 Dec; 14(12): 1228-41. (IF: 4.7)
22. Becq F, Chanson M. Strategies to circumvent the CFTR defect in cystic fibrosis. *Front Pharmacol.* 2013 Aug 29;4: 108. (IF: 3.9)
23. Odolczyk N, Fritsch J, Norez C, Serval N, da Cunha MF, Bitam S, Kupniewska A, Wiszniewski L, Colas J, Tarnowski K, Tondelier D, Roldan A, Sausseureau EL, Melin-Heschel P, Wiczorek G, Lukacs GL, Dadlez M, Faure G, Herrmann H, Ollero M, Becq F, Zielenkiewicz P, Edelman A. Discovery of novel potent ΔF508-CFTR correctors that target the nucleotide binding domain. *EMBO Mol Med.* 2013 Oct;5(10):1484-501. (IF: 8.66)
24. Vachel L, Norez C, Becq F, Vandebrouck C. Effect of VX-770 (ivacaftor) and OAG on Ca²⁺ influx and CFTR activity in G551D and F508del-CFTR expressing cells. *J Cyst Fibrosis* 2013 Dec; 12(6):584-91. (IF: 3.47)
25. Jenkinson SF, Best D, Saville AW, Mui J, Martínez RF, Nakagawa S, Kunimatsu T, Alonzi DS, Butters TD, Norez C, Becq F, Blériot Y, Wilson FX, Weymouth-Wilson AC, Kato A, Fleet GW. C-branched iminosugars: α-glucosidase inhibition by enantiomers of isoDMDP, isoDGDP, and isoDAB-L-isoDMDP compared to miglitol and miglustat. *J Org Chem.* 2013 Aug 2; 78(15):7380-97. (IF : 4.72)
26. Dirami T, Rode B, Jollivet M, Da Silva N, Escalier D, Gaitch N, Norez C, Tuffery P, Wolf JP, Becq F, Ray PF, Dulioust E, Gacon G, Bienvenu T, Touré A. Missense mutations in SLC26A8,

- encoding a sperm-specific activator of CFTR, are associated with human asthenozoospermia. *Am J Hum Genet.* 2013 May 2; 92(5): 760-6. (IF: 10.93)
27. Billet A, Mornon JP, Jollivet M, Lehn P, Callebaut I, Becq F. CFTR: effect of ICL2 and ICL4 amino acids in close spatial proximity on the current properties of the channel. *J Cyst Fibrosis* 2013 Dec; 12(6): 737-45. (IF: 3.82)
 28. Voisin P, Bernard M. Cyclic AMP-dependent regulation of tyrosine hydroxylase mRNA and immunofluorescence levels in rat retinal precursor cells. *Cell and Tissue Research* (2013) 352: 207-216 (IF: 3.565)
 29. Dejos C., Régnacq M., Bernard M., Voisin P., Bergès T. The MFS-type efflux pump Flr1 induced by Yap1 promotes canthin-6-one resistance in yeast. *FEBS Letters* (2013) 587: 3045-3051 (IF: 3.169)
 30. El-Seedy A, Girodon E, Norez C, Pajaud J, Pasquet MC, de Becdelièvre A, Bienvenu T, des Georges M, Cabet F, Lalau G, Bieth E, Blayau M, Becq F, Kitzis A, Fanen P, Ladeveze V. CFTR mutation combinations producing frequent complex alleles with different clinical and functional outcomes. *Hum Mutat.* 2012, Nov; 33(11): 1557-65 (IF: 3.34)
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Invited conferences

1. Becq F: Adressage de CFTR et Mucoviscidose. Automnales du GRRC 2014. 7 novembre 2014 Pornichet
2. Becq F : Chloride channels and Cystic Fibrosis. Congrès de Physiologie de Pharmacologie et de Thérapeutique. Poitiers 24 03 2014
3. Becq F: A twenty-year scientific journey through CFTR pharmacology. Opening Key note lecture. 11th ECFS Basic Science Conference 2014, march 26-29, St Julian, Malta.
4. Vandebrouck C : The intracellular calcium hypothesis in Cystic Fibrosis. 11th ECFS Basic Science Conference. 2014, march 26-29, St Julian, Malta.
5. Bergès T (7 juin 2012) L'incapacité à gérer un excès d'acides gras insaturés libres entraine des désordres mitochondriaux sévères et la mort cellulaire chez la levure *Saccharomyces cerevisiae*
6. Voisin Pierre: Activation of rhodopsin gene transcription by cAMP and calcium in embryonic chicken rods. Invitation par Jacky Falcon, Université P et M Curie, Laboratoire Arago, Banyuls sur Mer, 18 avril 2013.
7. Bergès T L'incapacité à gérer un excès d'acides gras insaturés libres entraine des désordres mitochondriaux sévères et la mort cellulaire chez la levure *Saccharomyces cerevisiae*. Invitation par Stephen Manon, CNRS, IBGC, UMR 5095, Bordeaux, 7 juin 2012.

Communications with published publication

1. Bertrand J, Dannhoffer L, Antigny E, Jayle C, Vandebrouck C, Becq F, Norez C. (2014). A functional tandem between transient receptor canonical channel 6 (TRPC6 and calcium-dependent chloride channels in human epithelial cells. *Fundamental & Clinical Pharmacology Vol 28 Suppl 1: 4.*
2. Vachel L, Norez C, Becq F, Vandebrouck C. (2014). TRPV5 and TRPV6 implication in abnormal increase of constitutive Ca²⁺ influx in cystic fibrosis cells. *Fundamental & Clinical Pharmacology Vol 28 Suppl 1: 12.*
3. Payet L, Kadri L, Mirval S, Berjeaud J, Norez C, Mirval S, Becq F, Vandebrouck C, Ferreira T (2014). Palmitate accumulates within phosphatidylcholine of cystic fibrosis human bronchial epithelial cells: impact on ER stress and F508del-CFTR trafficking correction. *Fundamental & Clinical Pharmacology Vol 28 Suppl 1: 74.*
4. Carre G, Carreyre H, Thibaudeau S, Ouedraogo M, Becq F, Bois P, Vandebrouck C, Bescond J. (2014). Identification of two molecular targets of the natural vasorelaxant agent dodoneine: L-type calcium channel and carbonic anhydrase. *Fundamental & Clinical Pharmacology Vol 28 Suppl 1: 79.*
5. Becq F, Jollivet M, Characterisation of novel cystic fibrosis mutations found in classical and infertile CF males in Indian population. Congrès de Physiologie de Pharmacologie et de Thérapeutique. Poitiers. 22-24 avril 2014. *Fundamental & Clinical Pharmacology (2014). Vol 28 Suppl 1: 29.*
6. Vachel L, Becq F, Vandebrouck C. (2013). Implication of TRPV channels in calcium homeostasis in CF cells. *Pediatric Pulmonology Suppl 36: 247.*
7. Bertrand J, Boinot C, Mouzannar K, Flett G, Meyer P, Becq F, Norez C. (2013). Inhibition of HSP90/F508del-CFTR interaction by isoLab leads to the restoration of the mutated protein to the plasma membrane in Cystic Fibrosis epithelial cells. *Pediatric Pulmonology Suppl 36: 219.*
8. Boinot C, Jollivet M, Norez C, Becq F, (2013). Comparative study of F508del-CFTR rescue in response to combination of correctors Vx-809, SAHA, CORR4a, the iminosugar IsoLab and miglustat ant the potentiator VX-770. *Pediatric Pulmonology Suppl 36: 220.*
9. Bertrand J., Boinot C., Cendret V., Fleet G., Désiré J., Blériot Y., Becq F., Norez C. IsoLAB as a new corrector of the defective trafficking of F508del-CFTR. European Cystic Fibrosis Society, new frontiers in basic science of cystic fibrosis. Malaga, avril 2013.

Oral communications without publication

1. Vachel L, Becq F, and Vandebrouck C (2014). TRPV6 is upregulated by PLC-PI(4,5)P₂ pathway in CF cells. ECFS Basic Science Conference 26-29 mars, St Julians, Malta.
2. Clément Boinot Discovery of novel tailored F508del-CFTR binder correctors based on 3D structure models of entire CFTR protein for treating Cystic Fibrosis. (2014). 11th ECFS Basic Science Conference march 26-29, St Julian, Malta.
3. Vachel L, Becq F, and Vandebrouck C. (2014). TRPV6 est impliqué dans la dérégulation de l'homéostasie calcique des cellules mucoviscidiques. 15^{ème} Colloque des Jeunes Chercheurs 18 février, Institut Pasteur Paris, France
4. Carre G, Carreyre H, Thibaudeau S, Ouedraogo M, Becq F, Bois P, Vandebrouck C, Bescond J. (2013). The natural hypotensive agent dodoneine ans its analogues inhibits L-Type Ca²⁺ current in the cardiovascular system. Ions Channels 24th Meeting, 15-18 septembre, Ile d'Oleron, France.
5. Caroline Norez. Mise en d'un test de criblage pour la Mucoviscidose. Colloque Criblage de molécules à visée thérapeutique. 10.07.13. Paris

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6. Payet L, Kadri L, Mirval S, Berjeaud J, Becq F, Vandebrouck C, Ferreira T (2013). Palmitate accumulates within phosphatidylcholine of cystic fibrosis human bronchial epithelial cells : impact on F508del-CFTR. ECFS Basic Science Conference 20-23 mars, Malaga, Spain.
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9. Payet L, Kadri L, Mirval S, Berjeaud J, Becq F, Vandebrouck C, Ferreira T (2013). Accumulation de palmitate dans les phosphatidylcholine des cellules épithéliales bronchiques de patients atteints de mucoviscidose : impact sur la correction du trafic de F508del-CFTR. 14^{ème} Colloque des Jeunes Chercheurs 26 février, Institut Pasteur Paris, France
10. Vachel L, Becq F, Vandebrouck C. (2013) Rôle des canaux TRPV dans l'homéostasie calcique des cellules mucoviscidosiques. 14^{ème} Colloque des Jeunes Chercheurs 26 février, Institut Pasteur Paris, France
11. Virginie Cendret, Jérôme Désiré, Caroline Norez, Frédéric Becq, Johanna Bertrand, Yves Blériot, Synthèse d'iminosucres N-alkylés et N-sulfanylés et évaluation de leurs activité chaperon sur la protéine F508del-CFTR, Glucidoc, Landéda - Centre UCPA des Abers, 8-11 avril 2013
12. C. Dejos, M. Bernard, T. Bergès, M. Régnacq and Pierre Voisin Young Researcher Vision Camp (Wildenstein, Allemagne) (21-23 juin 2013) «Ca²⁺oscillations and Ca²⁺-dependent activation of rhodopsin gene transcription in cultured retinal precursors from chicken embryo» (présentation orale)
13. C. Dejos, M. Bernard, T. Bergès, M. Régnacq and Pierre Voisin 24^{ème} Colloque annuel « canaux ioniques » (Oléron, France) (15-18 septembre 2013) «Ca²⁺oscillations and Ca²⁺-dependent activation of rhodopsin gene transcription in cultured retinal precursors from chicken embryo» (poster)
14. Payet L, Agbomenou L, Giraud S, Berjeaud J, Mirval S, Becq F, Vandebrouck C, Ferreira T (2012). Effets synergiques de l'accumulation d'acides gras saturés, de l'hypoxie et de la rétention dans le reticulum endoplasmique du F508del-CFTR dans la mucoviscidose. 13^{ème} Colloque des Jeunes Chercheurs 24 avril, Institut Pasteur Paris, France
15. Dubois A, Bréa D, Cantereau A, Becq F, Vandebrouck C, Attucci S. (2012). Calcium pathway in neutrophil extracellular traps (NETs) secretion: a new target in cystic fibrosis? 6th European CF Young Investigator Meeting, 24 – 27 April, Paris, France,
16. Vachel L, Norez C, Becq F, Vandebrouck C. (2012) L'influx calcique OAG dépendant augmente l'activité de CFTR à la surface cellulaire. 13^{ème} Colloque des Jeunes Chercheurs 24 avril, Institut Pasteur Paris, France
17. T. Bergès, Y. Séré, M. Régnacq 10^{ème} Rencontre Levures, Modèles et Outils (Toulouse, France) (2-4 avril 2012) «Lipotoxicité entraînée par un excès d'acides gras insaturés: rôle des espèces réactives de l'oxygène» (poster).
18. Vandebrouck C, Bescond J, Faivre JF (2012) Le cycle de vie du médicament : de la recherche de nouvelles molécules à la mise sur le marché, Espace Mendès France, Poitiers,
19. Vachel L, Norez C, Becq F, and Vandebrouck C (2011) Regulation by CFTR activity of OAG activated Ca²⁺ influx in cystic fibrosis cells. ECFS Basic Science Conference 28 march- 1 april, Sainte Maxime, France.
20. Payet L, Agbomenou L, Giraud S, Berjeaud J, Mirval S, Becq F, Vandebrouck C, Ferreira T (2011) F508del-CFTR ER retention, hypoxia and saturated fatty acid accumulation: a cross road to cystic fibrosis pathogenesis. ECFS Basic Science Conference 28 march- 1 april, Sainte Maxime, France.

Dissemination of scientific culture

1. Norez C, Souchet M, Becq F Méthodes d'étude des transporteurs membranaires: apport dans le criblage de molécules pharmacologiques et automatisation, in Cognard C (éd.), Implications des transports ioniques dans la fonction cellulaire: exploration par des approches multiples, Poitiers, Ed. Atlantique Actualités Scientifiques Poitou-Charentes, p37-44, 2014. ISBN: 978-2-911320-49-1.
2. Becq F (2012) Signes cliniques et prise en charge de la mucoviscidose. Pour la Science, n°413 Page 68
3. Becq F, depuis 2011 Intervention annuelle en septembre dans le cadre des virades de l'espoir (association VLM) dans les collèges et lycées de la région.
4. Norez C depuis 2011 Intervention annuelle en septembre dans le cadre des virades de l'espoir (association VLM) dans les collèges et lycées de la région.
5. Vandebrouck C Member of the scientific comitee « ADN School » l'Ecole de l'ADN
6. Norez C Member of the scientific comitee « ADN School » l'Ecole de l'AND
7. Bergès T Member of the scientific comitee « ADN School » l'Ecole de l'ADN
8. Bergès T Conférences grand public sur le thème "Que prédisent nos genes" dans le cadre du programme « La Science se livre 2016 » de l'Espace Mendès France (Poitiers, 24 septembre 2015 & Tercé, 15 mars 2016).

Patents

1. Spanova M, Ferru-Clément R, Dhayal S, Morgan NG, Ferreira T. Composés et compositions comprenant de tels composés pour la prévention ou le traitement de dyslipidémies (FR 13/02334).
2. Vachel L, Vandebrouck C. TRPV6 Inhibitors For The Treatment Of Cystic Fibrosis. Brevet d'application N° P46634US00.
3. Boinot C, Boucherle B, Hoffman B, Fortuné A, Mornon JP, Becq F, Decout JL, Callebaut I. Compounds For Treating Cystic Fibrosis. Dépôt le 5 décembre 2014, sous le numéro EP 14 196 618.4
4. Ferreira T, Romain Ferru-Clément, Vandebrouck C. Réf : R25598WO, N° de demande PCT : PCT/EP2014/071543, Intitulé : « Composés, compositions et utilisations correspondantes, pour la prévention et/ou le traitement des dyslipidémies ».
5. Becq F et al. Brevet USB492420 publication 2013. Use of purine derivatives for the production of medicaments for the treatment of mucoviscidosis and diseases related to protein addressing errors in cells PCT/FR2005/002557
6. Becq F & Norez C Brevet US8242136 publication 2012. Use of glucosidase inhibitors for therapy of mucoviscidosis.