

**BIOGRAPHICAL SKETCH**

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|  |                           |  |                |
|--|---------------------------|--|----------------|
| NAME<br>Catalin Filipeanu  |                           | POSITION TITLE<br>Research Assistant Professor |                |
| eRA COMMONS USER NAME<br>cfilip  |                           |  |                |
| EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.) |                           |  |                |
| INSTITUTION AND LOCATION   | DEGREE<br>(if applicable) | YEAR(s)  | FIELD OF STUDY |
| Mathematics Highs School GT Moisil, Iasi, Romania  | Baccalaur.                | 1983-1987                                      | Mathematics    |
| University of Medicine and Pharmacy, Iasi, Romania   | M.D.                      | 1990-1996                                      | Medicine       |
| Rijksuniversiteit Groningen, The Netherlands   | Ph.D.                     | 1997-2001                                      | Pharmacology   |

**A. Positions and Honors.****Positions and Employment**

- 1992 - 1996: Junior scientist at Department of Physiology, University of Medicine and Pharmacy, Gr. T. Popa, Iasi, Romania, (Prof. Dr. D.D. Branisteanu).
- 1993 - 1994: Visiting scientist at Department of Physiology, Katolieck University Leuven, Belgium. (Prof. Dr. B. Himpens).
- 1994 - 1994: Visiting scientist at Department of Physiology and Pharmacology, Section of Molecular Neuropharmacology, Karolinska Institutet, Stockholm, Sweden (Prof. Dr. B. Fredholm)
- 1997 - 2001: Ph.D. student at Department of Clinical Pharmacology, University of Groningen, The Netherlands (Prof. Dr. D. de Zeeuw).
- 2001 - 2003: Postdoctoral fellow at Department of Pharmacology, East Tennessee State University, Johnson City (Prof. Dr. N.J. Dun).
- 2004 - 2007: Postdoctoral fellow at Department of Pharmacology and Experimental Therapeutics, Louisiana State Health Center, New Orleans (Prof. Dr. G. Wu).
- 2007 - : Research Assistant Professor at Department of Pharmacology and Experimental Therapeutics, Louisiana State Health Center, New Orleans

**B. Selected peer-reviewed publications (in chronological order).**

1. Brailoiu E, Saila L, Costuleanu M, Slatineanu S, **Filipeanu CM**, Branisteanu DD. The study of liposomes--rapid methods. Rev Med Chir Soc Med Nat Iasi 1993 Apr-Jun;97(2):332
2. Brailoiu E, Serban DN, Slatineanu S, **Filipeanu CM**, Petrescu BC, Branisteanu DD. Effects of liposome-entrapped adenosine in the isolated rat aorta. Eur J Pharmacol 1993, 250(3):489-92.
3. Brailoiu E, Serban DN, Popescu LM, Slatineanu S, **Filipeanu CM**, Branisteanu DD. Effects of liposome-entrapped D-myo-inositol 1,4,5-trisphosphate and D-myo-inositol 1,3,4,5-tetrakisphosphate in the isolated rat aorta. Eur J Pharmacol 1993, 250(3):493-5
4. Brailoiu E, Saila L, Huhurez G, Costuleanu M, **Filipeanu CM**, Slatineanu S, Cotrutz C, Branisteanu DD. TLC--a rapid method for liposome characterization. Biomed Chromatogr 1994, 8(4):193-5
5. Brailoiu E, Huhurez G, Slatineanu S, **Filipeanu CM**, Costuleanu M, Branisteanu DD. TLC characterization of liposomes containing D-myo-inositol derivatives. Biomed Chromatogr 1995, 9(4):175-8
6. **Filipeanu CM**, Brailoiu E, Huhurez G, Slatineanu S, Baltatu O, Branisteanu DD. Multiple effects of tyrosine kinase inhibitors on vascular smooth muscle contraction. Eur J Pharmacol 1995, 281(1):29-35

7. Costuleanu M, Brailoiu E, **Filipeanu CM**, Baltatu O, Slatineanu S, Saila L, Nechifor M, Branisteanu DD. Effects of liposome-entrapped platelet-activating factor in the isolated rat trachea. *Eur J Pharmacol* 1995, 281(1):89-92
8. Brailoiu E, Baltatu O, Costuleanu M, Slatineanu S, **Filipeanu CM**, Branisteanu DD. Effects of alpha-trinositol administered extra- and intracellularly (using liposomes) on rat aorta rings. *Eur J Pharmacol* 1995, 281(2):209-12
9. Brailoiu E, Beschea C, Brailoiu C, Costuleanu A, **Filipeanu CM**, Costuleanu M, Fallgren B, Branisteanu DD. TLC characterization of small unilamellar liposomes containing D-myo-inositol derivatives. *Biomed Chromatogr* 1996, 10(5):233-6
10. Brailoiu E, Todiras M, Margineanu A, Costuleanu M, Brailoiu C, **Filipeanu C**, Costuleanu A, Rusu V, Petrescu G. TLC characterization of liposomes containing angiotensinogen, angiotensine I, angiotensine II and saralazin. *Biomed Chromatogr* 1997, 11(3):160-3
11. **Filipeanu CM**, Brailoiu E, Costuleanu M, Costuleanu A, Toma CP, Branisteanu DD. Vasorelaxant properties of brefeldin A in rat aorta. *Eur J Pharmacol* 1997, 332(1):71-6
12. Slatineanu S, Petrescu BC, Brailoiu E, Costuleanu M, **Filipeanu CM**, Branisteanu D. A program to perform the Student T test. *Rev Med Chir Soc Med Nat Iasi* 1996 Jan-Jun;100(1-2):187-8
13. **Filipeanu CM**, de Zeeuw D, Nelemans SA. Delta9-tetrahydrocannabinol activates  $[Ca^{2+}]_i$  increases partly sensitive to capacitative store refilling. *Eur J Pharmacol* 1997, 336(1):R1-3
14. Brailoiu E, Margineanu A, Toma CP, Filipeanu CM, Rusu V, Branisteanu DD D-myo-inositol derivatives alter liposomal membrane fluidity. *Biochem Mol Biol Int* 1998, 44(1):195-201
15. Kok JW, Babia T, **Filipeanu CM**, Nelemans A, Egea G, Hoekstra D. PDMP blocks brefeldin A-induced retrograde membrane transport from golgi to ER: evidence for involvement of calcium homeostasis and dissociation from sphingolipid metabolism. *J Cell Biol* 1998, 142(1):25-38
16. **Filipeanu CM**, Brailoiu E, Petrescu G, Nelemans SA. Extracellular and intracellular arachidonic acid-induced contractions in rat aorta. *Eur J Pharmacol* 1998, 349(1):67-73
17. Brailoiu E, **Filipeanu CM**, Tica A, Toma CP, de Zeeuw D, Nelemans SA. Contractile effects by intracellular angiotensin II via receptors with a distinct pharmacological profile in rat aorta. *Br J Pharmacol* 1999, 126(5):1133-8
18. Arslan G, **Filipeanu CM**, Irenius E, Kull B, Clementi E, Allgaier C, Erlinge D, Fredholm BB. P2Y receptors contribute to ATP-induced increases in intracellular calcium in differentiated but not undifferentiated PC12 cells. *Neuropharmacology* 2000, 39(3):482-96
19. **Filipeanu CM**, Nelemans A, Veldman RJ, de Zeeuw D, Kok JW. Regulation of  $[Ca^{2+}]_i$  homeostasis in MRP1 overexpressing cells. *FEBS Lett* 2000, 474(1):107-10.
20. Kok JW, Veldman RJ, Klappe K, Koning H, **Filipeanu CM**, Muller M. Differential expression of sphingolipids in MRP1 overexpressing HT29 cells. *Int J Cancer* 2000, 87(2):172-178.
21. **Filipeanu CM**, Henning RH, de Zeeuw D, Nelemans A. Intracellular angiotensin II modulates cell growth in vascular smooth cells. *Br J Pharmacol*. 2001, 132(7):1590-6.
22. **Filipeanu CM**, Brailoiu E, Kok JW, Henning RH, De Zeeuw D, Nelemans SA. Intracellular angiotensin II elicits  $Ca^{2+}$  increases in A7r5 vascular smooth muscle cells. *Eur J Pharmacol*. 2001, 420(1):9-18.
23. **Filipeanu CM**, Brailoiu E, Henning RH, Deelman LE, de Zeeuw D, Nelemans S.A. Intracellular angiotensin II inhibits heterologous receptor stimulated  $Ca^{2+}$  entry. *Life Sci* 2001, 70(2):171-180.
24. **Filipeanu CM**, Henning RH, Nelemans SA, de Zeeuw D. Intracellular angiotensin II: from myth to reality? *J Renin Angiotensin Aldosterone Syst*. 2001 2(4):219-26.
25. **Filipeanu CM**, Brailoiu E, Le Dun S, Dun NJ. Urotensin-II regulates intracellular calcium in dissociated rat spinal cord neurons. *J Neurochem* 2002; 83(4):879-84.
26. Scruggs P., **Filipeanu C.M.**, Yang J, Chang JK, Dun NJ. Ovokinin(2-7) modulates rat cardio-vascular activity through  $B_2$  bradykinin receptor. *Regul Pept*. 2004; 120(1-3):85-91.
27. **Filipeanu CM**, Zhou F., Claycomb WC, Wu G. Regulation of the cell surface expression and function of angiotensin type 1 receptor by Rab1-mediated ER-to-Golgi transport in cardiac myocytes. *J. Biol. Chem*. 2004; 279(39):41077-41084.
28. Brailoiu E, Hoard JL, **Filipeanu CM**, Brailoiu GC, Dun SL, Patel S, Dun NJ. NAADP potentiates neurite outgrowth. *J. Biol. Chem*. 2005;280(7):5646-5650
29. Zhou F, **Filipeanu CM**, Duvernay MT, Wu G. Cell-surface targeting of alpha2-adrenergic receptors -- inhibition by a transport deficient mutant through dimerization. *Cell Signal*. 2006; 18(3):318-327.

30. Duvernay MT, **Filipeanu CM**, Wu G. The regulatory mechanisms of export trafficking of G protein-coupled receptors. *Cell Signal*. 2005;17(12):1457-1465
31. **Filipeanu CM**, Zhou F, Fugetta EK, Wu G. Differential regulation of the cell-surface targeting and function of beta- and alpha1-adrenergic receptors by Rab1 GTPase in cardiac myocytes. *Mol Pharmacol*. 2006; 69(5):1571-1578.
32. **Filipeanu CM**, Zhou F, Lam ML, Kerut KE, Claycomb WC, Wu G. Enhancement of the recycling and activation of beta-adrenergic receptor by Rab4 GTPase in cardiac myocytes. *J Biol Chem*. 2006; 281(16):11097-103.
33. Dong C, **Filipeanu CM**, Duvernay MT, Wu G. Regulation of G protein-coupled receptor export trafficking. *Biochim Biophys Acta*. 2007; 1768(4):853-870.
34. Feng Y Yue X, Xia H, Bindom SM, Hickman PJ, **Filipeanu CM**, Wu G, Lazartigues E. ACE2 over-expression in the subfornical organ is associated with down-regulation of AT1 receptor and prevention of angiotensin II-mediated pressor response and drinking response. *Circ Res*. 2008; 102(6):729-736.
35. Dong C, Zhou F, Fugetta EK, **Filipeanu CM**, Wu G. Endoplasmic reticulum export of adrenergic and angiotensin II receptors is differentially regulated by Sar1 GTPase. *Cell Signal*. 2008; 20(6):1035-43.
36. **Filipeanu CM**, Zhou F, Wu G. Analysis of Rab1 function in cardiomyocyte growth. *Methods Enzymol*. 2008; 438:217-226.
37. Winsauer PJ, Daniel JM, **Filipeanu CM**, Leonard ST, Hulst JL, Rodgers SP, Lassen-Greene CL, Sutton JL. Long-term behavioral and pharmacodynamic effects of delta-9-tetrahydrocannabinol in female rats depend on ovarian hormone status. accepted, *Behavioral Pharmacology*

### C. Research Support.

#### Ongoing

COBRE Program (Role: PI (60% effort)

7/1/08 – 6/30/10

NIH

Mentoring in Cardiovascular Biology

Role: Junior Investigator

Project title: "Mechanisms involved in the intracellular retention of  $\alpha_{2C}$  adrenergic receptor"