

CURRICULUM VITAE

JOSEFINA RAMOS-FRANCO, MD, PhD.

BIOGRAPHICAL SKETCH.

Current Appointments	Assistant Professor.
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DEGREES.

1978	B.S. in Biological Chemistry Granted by the Universidad Autónoma de Puebla. Puebla, Pue., Mexico.
1986	M.D. Granted by the School of Medicine. Universidad Autónoma de Puebla. Puebla, Pue., Mexico.
1997	Ph.D. in Physiology, Granted by Dept. Physiology, Institute of Biomedical Research. Universidad Nacional Autónoma de México. Mexico City, Mexico. Carried out in the Department of Physiology. The Johns Hopkins University. Baltimore, MD.

POSITIONS AND APPOINTMENTS.

1985-1988	M.S. student in Physiology. Dept. of Physiology. Institute of Sciences. Universidad Autónoma de Puebla. Puebla, Pue., Mexico. Dr. E. Salinas, advisor.
1988-1990	Research Associate. Dept. of Molecular Physiology and Biophysics. Baylor College of Medicine. Houston, TX.
1990-1992	Postdoctoral Research Fellow. Department of Physiology. School of Medicine. Johns Hopkins University. Baltimore, MD.
1991-1996	Ph.D. student in Physiology. Dept. of Physiology. Institute of Biomedical Research. Universidad Nacional Autónoma de México. Mexico City, Mexico. Dr. G. Breitwieser, advisor. Dept. of Physiology. School of Medicine. The Johns Hopkins University. Baltimore, MD.
1993-1997	Assistant Professor. Dept. of Physiology. National Institute of Cardiology "Ignacio Chávez". Mexico City. Mexico.
1996-1997	Visiting Professor. Department of Physiology. Stritch School of Medicine. Loyola University Chicago. Maywood, IL.
1998-2005	Research Assistant Professor. Department of Physiology. Stritch School of Medicine. Loyola University Chicago. Maywood, IL.
2005-present	Assistant Professor. Department of Molecular Biophysics and Physiology. Rush University, Medical Center. Chicago, IL.

TEACHING EXPERIENCE.

- 1993-1995 Medical School Lecturer (24 lecture block). "Cardiovascular, Pulmonary and Renal Physiology" courses for second-year medical students. Universidad Nacional Autónoma de México. Mexico City. Mexico.
- 1999 Small-Group Discussion Facilitator. "Function of the Human Body" course, second-year medical students. School of Medicine. Loyola University Chicago. Maywood, IL.
- 2003-2004 Intracellular Ion Channels "Membrane Excitability Course" second year Physiology graduate students. Loyola University Chicago. Maywood, IL.
- 2005 Intracellular Signaling "Cellular and Molecular Neurobiology Course" first year graduate students. Loyola University Chicago. Maywood, IL.
- 2005- Small-Group Discussion Facilitator. "Physiology 512" course, first-year medical students. School of Medicine. Rush University. Chicago, IL.
- 2006- "Physiology 512" Lecturer. "Muscle Physiology", first-year medical students. School of Medicine. Rush University. Chicago, IL.

SCIENTIFIC SOCIETIES.

- 1988- Biophysical Society.
 1988- Latin-American Biophysical Society (SOBLA).
 1996- American Association for the Advancement of Science

AWARDS AND DISTINTIONS.

- 1980 Physiology honor student. School of Medicine, Universidad Autónoma de Puebla. Puebla, Pue. Mexico.
- 1984-1985 Internship with honors. Hospital Universitario. Puebla, Pue. Mexico.
- 1993-96 & 1996-97 National Investigator
 National System of Investigators (Mexico)

PEER-REVIEWED GRANT SUPPORT.

- 1993-1996 Consejo Nacional de Ciencia y Tecnología (CONACYT, Mexico)
 Associate Investigator. Research grant M9311-3547.
 Project title: "Genetic expression of Ca²⁺channel during cardio genesis".
- 1996-1997 Consejo Nacional de Ciencia y Tecnología (CONACYT, Mexico)
 Principal Investigator. Research grant 0815P-M9506.
 Consejo Nacional de Ciencia y Tecnología (Mexico)
 Project title: "Genetic expression of cardiac I_{K1} channel during prenatal development".
- 1997-2001 NIH. Co Investigator. Research Grant R01-HL 58851 (PI: G. Mignery)
 Project title: "Isoform specific function of IP3 receptor channels".

- 2000-2004 NIH. Co Investigator. Research Grant R01-HL 64210 (PI: M. Fill) Heart, Lung and Blood Institute, National Institutes of Health
Project title: "Regulation of Single Calcium Release Channels in Heart".
- 2003-2009 NIH. Pricipal Investigator. Research Grant R01- HL071741-01, Heart, Lung and Blood Institute, National Institutes of Health
Project title: "Local Intracellular Calcium Release in Neonate Heart".
- 2001-2011 NIH. Co Investigator. Research Grant R01- HL57832 (PI:M. Fill) Heart, Lung and Blood Institute, National Institutes of Health
Project title: "Control Mechanisms of Ca²⁺ induced Ca²⁺ release".
- 2011-2013 AHA. Pricipal Investigator. Grant-in-Aid-
The American Heart Association, Midwest Affiliate
Project title: "The Inositol Trisphosphate Receptor Quantal Ca²⁺ Release Mechanism".

PEER-REVIEW ACTIVITIES.

- 1997- Manuscripts Reviewer for the following Journals
 - Biophysical Journal
 - Pharmacological Reviews
 - Journal of Molecular Pharmacology
 - American Journal of Physiology
 - Journal of General Physiology
 - Journal of Biological Chemistry
 - Journal of Physiology
- 2004 Grant reviewer for NIH: ZRG1 MOSS-D (Muscle) Study Section
- 2007 Grant reviewer for NIH: NTRC Study Section
- 2007 Grant reviewer for The U.S. Civilian Research & Development Foundation (CRDF)
- 2009 Grant reviewer for AHA: Region 2, Basic Cell & Mol Biology 2 Study Section.
- 2010 Grant reviewer for AHA: Cell Transport Basic Science 1 Study Section.

Grant reviewer for AHA: Cell Transport, Physiology and Metabolism Study Section.
- 2012 Grant reviewer for AHA: Cell Transport Basic Science 1 Study Section.

PUBLICATIONS.

1. Soto, U.L., Amador, S.M., **Ramos, F.J.** and Baca, B.E. (1987). Resistance of *Pseudomonas aeruginosa* to β lactam antibiotics. *Folia Microbiologica. Czechoslovak Academy of Sciences* **32**:290-296.
2. Toro, L., **Ramos-Franco, J.** and Stefani, E. (1990). GTP-dependent regulation of myometrial K_{Ca} channels incorporated into lipid bilayers. *Journal of General Physiology* **96**:373-394.
3. **Ramos-Franco, J.**, Lo, C.F., and Breitwieser, G.E. (1993). Platelet activating factor receptor-dependent activation of the muscarinic K^+ current in bullfrog atrial myocytes. *Circulation Research* **72-4**:786-794.
4. Perez P., **Ramos-Franco, J.**, M. Fill and G. A. Mignery (1997). Identification and functional reconstitution of the type 2 inositol 1,4,5-trisphosphate receptor from ventricular cardiac myocytes. *Journal of Biological Chemistry* **272-38**:23961-23969.
5. **Ramos-Franco J.**, M. Fill and G.A. Mignery. (1998). Isoform-specific function of single inositol 1,4,5-trisphosphate receptor channels. *Biophysical Journal* **75**:834-839.
6. **Ramos-Franco J.**, S. Caenepeel, M. Fill and G.A. Mignery. (1998). Single channel function of recombinant type-1 inositol 1,4,5-trisphosphate receptor ligand binding domain splice variants. *Biophysical Journal* **75**:2783-2793.
7. **Ramos-Franco J.**, D. Galvan, G.A. Mignery, and M. Fill. (1999). Location of the permeation pathway in the recombinant type-1 inositol 1,4,5-trisphosphate receptor. *Journal of General Physiology* **114**:243-250.
8. **Ramos-Franco J.**, D. Bare, S. Caenepeel, A. Nani, M. Fill and G. Mignery. (2000). Single channel function of recombinant type-2 inositol 1,4,5-trisphosphate. *Biophysical Journal* **79**:1388-1399.
9. Fill, M., **J. Ramos-Franco** and G.A. Mignery. (2001) Inositol Trisphosphate Receptor Type-2: The Other Calcium Release Channel in Heart. *Calcium Signaling, Series I: Life & Behavioral Sciences – Eds. Morad & Kostyuk, ISO Press, Washington DC.* **331**:53-61.
10. Ramos J., W. Jung, **J. Ramos-Franco**, G. Mignery and M. Fill (2003). Single channel function of inositol 1,4,5-trisphosphate receptor type-1 and type-2 isoform domain-swap chimeras. *Journal of General Physiology* **121**:399-411.
11. **J. Ramos-Franco**, and M Fill. C. Cytosolic calcium regulation of single ryanodine receptors channels. In “Ryanodine receptors: Structure, function and dysfunction in clinical disease”. Kluwer Academic Publishers.
12. Pérez, C.G., J.A. Copello, Y. Li, K.L. Karko, L. Gómez, **J. Ramos-Franco**, M. Fill, A.L. Escobar, and R. Mejía-Alvarez (2005) Ryanodine receptor function in newborn rat heart. *American Journal of Physiology* **288**(5):H2527-40.
13. Snopko, R.M., A.S. Aromolaran, K.L. Karko, **J. Ramos-Franco**, L.A. Blatter and R. Mejía-Alvarez (2007) Cell culture as a model to study Ca^{2+} signaling in excitation-contraction coupling during development. *Cell Calcium* **41**(1): 13-25.
14. Snopko RM, **Ramos-Franco J**, Di Maio A, Karko KL, Manley C, Piedras-Rentería E, Mejía-Alvarez R. (2008) Ca^{2+} sparks and cellular distribution of ryanodine receptors in developing cardiomyocytes from rat. *Journal of Molecular and Cellular Cardiology* **44**(6):1032-44.
15. Porta M, Diaz-Sylvester PL, Nani A, **Ramos-Franco J**, Copello JA. (2008) Ryanoids and imperatoxin affect the modulation of cardiac ryanodine receptors by dihydropyridine receptor Peptide A. *Biochimica and Biophysica Acta* **1778**(11):2469-2479.

16. Qin J, Valle G, Nani A, Chen H, Ramos-Franco J, Nori A, Volpe P, Fill M. (2009) Ryanodine receptor luminal Ca^{2+} regulation: swapping calsequestrin and channel isoforms. *Biophysical Journal* 97(7):1961-1970.
17. Ramos-Franco J, Gomez AM, Nani A, Liu Y, Copello JA, Fill M. (2010) Ryanodol action on calcium sparks in ventricular myocytes, *Pflugers Archives* 460(4):767-776.
18. Porta M, Zima AV, Nani A, Diaz-Sylvester PL, Copello JA, **Ramos-Franco J**, Blatter LA, Fill M. (2011) Single ryanodine receptor channel basis of caffeine's action on Ca^{2+} sparks. *Biophysical Journal* 100(4):931-938.
19. Escobar AL, Perez CG, Reyes ME, Lucero SG, Kornyejeva D, Mejía-Alvarez R, **Ramos-Franco J**. (2012) Role of Inositol 1,4,5-Trisphosphate in the Regulation of Ventricular Ca^{2+} Signaling in Intact Mouse Heart. *Journal of Molecular and Cellular Cardiology*. *Accepted*.