

Curriculum Vitae

Dr. Tarik Smani Hajami



PERSONAL DATA

Family name: **Smani Hajami**

Forename: **Tarik**

Date of birth: 28/07/1971

Gender: M

Researcher ID: D-5372-2016

Código Orcid: 0000-0002-1877-7438

PRESENT PROFESIONAL POSITION

Professional Status: Associate Professor of Physiology at the University of Seville.

Center: Faculty of Medicine. Institute of Biomedicine of Sevilla (IBiS).

Department: Medical Physiology and Biophysics, Group of Cardiovascular Pathophysiology.

Address: Avda Manuel Siurot s/n. Hospital Virgen del Rocío. 41013. Sevilla. Spain.

E-mail: tasmani@us.es

Tel: +34-955923057

ACADEMIC AND PROFESSIONAL HONORS

2016-	Associate professor; University of Seville (Spain).
2011-2016	Assistant professor; University of Seville (Spain).
2010-2011	Research associate; Institute of Biomedicine of Seville.
2005-2010	Awardee as Researcher in "Ramon y Cajal" program (Tenure-Track Spanish ministry program).
2001-2005	Research Associate in Vascular Biology Unit, Whitaker Cardiovascular Institute, Boston University School of Medicine, Boston (USA).
2000	Ph.D from University of Seville. Thesis title: "Homeostasis of calcium in myocytes from pulmonary arterial tree". Supervisors: Juan Urena López & José López-Barneo.
1995-2000	PhD Student in <i>Departamento de Fisiología Médica y Biofísica</i> , University of Seville (Spain).
1993	Degree in Biology, Faculté des Sciences, Université de M ^u Ismail, Meknes (Morocco).

PRESENT RESEARCH AREA

- Mechanism of cardiac adverse remodeling. Role of Intracellular Ca²⁺ concentration mishandling and inflammation.
- Cardiovascular protection by Urocortin-2 from ischemia and reperfusion injuries.
- Pathophysiology of vascular wall. Post-transcriptional mechanisms of vascular smooth muscle regulation.
- Calcium signaling in angiogenesis.

PUBLISHED PEER REVIEW JOURNAL ARTICLES

Key: FI: Impact Factor; D = decil, Q = quartil

1. Del Toro R*, Galeano-Otero I*, Bevilacqua E*, Guerrero-Márquez F, Falcon D, Guisado-Rasco A, Díaz-de la Llera L, Barón-Esquivias G, **Smani T\$,** Ordóñez-Fernández A\$. Predicted value of microRNAs, pro-inflammatory cytokines, and intermediate monocytes levels in the adverse left ventricular remodelling in revascularized STEMI patients. *Front. Cardiovasc. Med.* In press. FI: 6,050; Q1. **\$ Corresponding authors**
2. Calderon-Sanchez E, Falon-Boyano D, Martin-Bornez M, Ordoñez A, **Smani T.** Urocortin role in ischemia cardioprotection and the adverse cardiac remodelling. *Int. J. Mol. Sci.* 2021, 22(22), 12115; <https://doi.org/10.3390/ijms222212115> - FI: 5,923; Q1.
3. Jardín I, Nieto-Felipe J, Alvarado S, Diez-Bello R, Lopez JJ, Salido GM, **Smani T,** Rosado JA (8/7). SARAF and EFHB Modulate Store-Operated Ca²⁺ Entry and Are Required for Cell Proliferation, Migration and Viability in Breast Cancer Cells. *Cancers* 2021, 13(16), 4160; <https://doi.org/10.3390/cancers13164160>. FI: 6,639; Q1.
4. Val-Blasco A*, Marta Gil-Fernández M*, Rueda A, Pereira L, Delgado C, **Smani T,** Ruiz Hurtado G, Fernández-Velasco M (8/6). Ca²⁺ mishandling in heart failure, potential targets. *Acta Physiol.* 2021:e13691. doi: 10.1111/apha.13691. FI: 6,311; D1.
5. López JJ, Siegfried G, Cantonero C, Soulet F, Descarpentrie J, **Smani T,** Badiola I, Pernot S, Evrard S, Rosado JA, Khatib AM (11/6). Furin prodomain pparin enhances Ca²⁺ entry through orai and trpc6 channels' activation in breast cancer cells. *Cancers*, 2021,13(7),1670. <https://doi.org/10.3390/cancers13071670>. FI: 6,639; Q1.
6. Gutierrez-Carretero E, Mayoral-Gonzalez I, Jesus Moron F, Fernandez-Quero M, Dominguez-Rodriguez A, Ordoñez A, **Smani T** (7/7). miR-30b-5p Downregulation as a Predictive Biomarker of Coronary In-Stent Restenosis. *Biomedicines.* 2021;9(4):354. doi: 10.3390/biomedicines9040354. FI: 6,081; Q1.
7. Galeano-Otero I, Del Toro R, Khatib AM, Rosado JA, Ordóñez A, **Smani T** (6/6). SARAF and Orai1 contribute to endothelial cell activation and angiogenesis. *Front. Cell Dev. Biol.* 2021;9:639952. doi: 10.3389/fcell.2021.639952. FI: 6,684; Q1.
8. Jardín I*, Diez-Bello R*, Falcon D*, Alvarado S, Regodon, Salido G, **Smani T,** Rosado JA (8/7). Melatonin downregulates TRPC6, impairing store-operated calcium entry in triple negative breast cancer cells. *J Biol Chem.* 2021, 296, 100254. doi: 10.1074/jbc.RA120.015769. FI: 5,157; Q2.
9. Martín-Bórnez M, Galeano-Otero I, Del Toro R, **Smani T** (4/4) TRPC and TRPV Channels Role in Vascular Remodeling and Disease. *Int J Mol Sci.* 2020;21(17):E6125. doi: 10.3390/ijms21176125. FI: 5,923; Q1.
10. Jaén RI, Val-Blasco A, Prieto P, Marta Gil-Fernandez, **Smani T,** Lopez-Sendón JL, Delgado C, Bosca L, Fernández-Velasco (9/5). Innate immune receptors, key actors in cardiovascular disease. *JACC Basic To translational Science.* 2020; 5(7).735–49. doi: 10.1016/j.jacbts.2020.03.015. FI: 8,648; Q1.
11. Galeano-Otero I, Del Toro R, Guisado A, Díaz I, Mayoral-González I, Guerrero-Márquez F, Gutiérrez-Carretero E, Casquero-Domínguez S, Díaz-de la Llera L, Barón-Esquivias G, Jiménez-Navarro M, **Smani T*,** Ordóñez-Fernández A*. (13/12) Circulating miR-320a as a Predictive Biomarker for Left Ventricular Remodelling in STEMI Patients Undergoing Primary Percutaneous Coronary Intervention. *J Clin Med.* 2020; 9(4).1051. doi: 10.3390/jcm9041051. FI: 4,241; Q1. ***corresponding author**
12. Falcon D; Galeano-Otero I; Martin-Bornez M; Fernández-Velasco M; Gallardo-Castillo I; Rosado JA; Ordoñez A; **Smani T.** (8/8) Dysregulation and Ca²⁺ Mishandling In Ischemic Heart Disease. *Cells* 2020, 9(1), 173. doi: 10.3390/cells9010173. FI: 6,600; Q2.

13. Calderón-Sánchez E, Ávila-Medina J, Callejo-García P, Fernández-Velasco M, Ordóñez A, **Smani T**. (6/6) Role of Orai1 and L-type CaV1.2 channels in Endothelin-1 mediated coronary contraction under ischemia and reperfusion. *Cell Calcium*. 2020. 86:102157. doi: 10.1016/j.ceca.2019.102157. FI: 6,817; Q1.
14. Cicvaric A, Sachernegg HM, Stojanovic T, Symmank D, **Smani T**, Moeslinger T, Uhrin P, Monje FJ.(8/5) Podoplanin gene disruption in mice promotes in vivo neural progenitor cells proliferation, selectively impairs dentate gyrus synaptic depression and induces anxiety-like behaviors. *Front Cell Neurosci*. 2020;13:561. doi: 10.3389/fncel.2019.00561. FI: 5,505; Q1.
15. Lopez JJ, Jardin I, Sanchez-Collado J, Salido GM, **Smani T**, Rosado JA. (6/5) TRPC Channels in the SOCE Scenario. *Cells* 9 (1), 126. FI: 5,656; Q1.
16. **Smani T**, Gallardo-Castillo I, Avila-Medina J, Jimenez-Navarro MF, Ordoñez A, Hmadcha A. (6/1). 2019. Impact of diabetes on cardiac and vascular disease: Role of calcium signaling. *Curr Med Chem*. 26(22):1-11. IF: 3.89; Q1.
17. Lopez E, Frischauf I, Jardin I, Derler I, Muik M, Cantonero C, Salido GM, **Smani T**, Rosado JA, Redondo PC. (10/7). 2019. STIM1 phosphorylation at Y316 modulates its interaction with SARAF and the activation of SOCE and ICRAC. *J Cell Sci*. 132(10). pii: jcs226019. IF: 4.517. Q1
18. Falcon D, Galeano-Otero I, Calderon-Sanchez E, Del Toro R, Martin-Bornez M, Rosado JA, Abdelkrim Hmadcha A, **Smani T**. TRP channels: Current perspectives in the adverse cardiac remodeling. *Front Physiol* 2019. ;10:159. doi: 10.3389/fphys.2019.00159. FI: 3,394; Q1.
19. **Smani T**, Gómez-Gordo L, Regodón S, Woodard GE, Siegfried G, Khatib AM, Rosado JA. TRP channels in angiogenesis and other endothelial functions. *Front Physiol* 2018; 9:1731. doi: 10.3389/fphys.2018.01731. FI: 3,394; Q1.
20. Albarran A, Lopez JJ, Jardin I, Berna-Erro A, **Smani T**, Camello PJ, Salido GM, Rosado JA. EFHB is a novel cytosolic Ca²⁺ sensor that modulates STIM1-SARAF interaction. *Cell Physiol Biochem* 2018;51(3):1164-1178. FI: 5,5; D1.
21. Jardin I, Diez-Bello R, Lopez JJ, Redondo PC, Salido GM, **Smani T**, Rosado JA. TRPC6 channels are required for proliferation, migration and invasion of breast cancer cell lines by modulation of Orai1 and Orai3 surface expression. *Cancers* 2018;10(9), pii: E331. FI: 5,326; Q1.
22. Domínguez-Rodríguez A, Mayoral-Gonzalez I, Avila-Medina J, de Rojas-de Pedro ES, Calderón-Sánchez E, Díaz I, Hmadcha A, Castellano A, Rosado JA, Benitah J-P, Gomez AM, Ordoñez A and **Smani**. Urocortin-2 Prevents Dysregulation of Ca²⁺ Homeostasis and Improves Early Cardiac Remodeling After Ischemia and Reperfusion. *Front. Physiol*. 2018; 9:813. doi: 10.3389/fphys.2018.00813. FI: 3,394; Q1.
23. López-Beas J, Capilla-González V, Aguilera Y, Mellado N, Lachaud CC, Martín F, **Smani T**, Soria B, Hmadcha A. miR-7 modulates human embryonic stem cell differentiation into insulin-producing beta-like cells and contributes to cell maturation. *Mol Ther Nucleic Acids*. 2018: 12:463-477. <https://doi.org/10.1016/j.omtn.2018.06.002>. Aceptado. FI: 6,39; D1.
24. Avila-Medina J, Mayoral-Gonzalez I, Dominguez-Rodriguez A, Gallardo-Castillo I, Ribas J, Ordoñez A, Rosado JA, **Smani T**. The complex role of store operated calcium entry pathways and related proteins in the function of cardiac, skeletal and vascular smooth muscle cells. *Front Physiol*. 2018; 9:257. FI: 4.13; Q1.
25. López JJ, Albarrán L, Jardín I, Sánchez-Collado J, Redondo PC, Bermejo N, Bobe R **Smani T**, Rosado JA. Filamin A modulates store-operated Ca²⁺ entry by regulating STIM1-Orai1

- association in human platelets. *Arterioscler Thromb Vasc Biol.* 2018 Feb;38(2):386-397. FI: 6.607; 1D
26. Díaz I, Calderón-Sánchez E, Toro RD, Ávila-Médina J, de Rojas-de Pedro ES, Domínguez-Rodríguez A, Rosado JA, Hmadcha A, Ordóñez A, **Smani T**. miR-125a, miR-139 and miR-324 contribute to Urocortin protection against myocardial ischemia-reperfusion injury. *Sci Rep.* 2017;7(1):8898. doi: 10.1038/s41598-017-09198-x. FI: 5,6; Q1.
 27. Jardín I, López JJ, Diez R, Sánchez-Collado J, Cantonero C, Albarrán L, Woodard GE, Redondo PC, Salido GM, **Smani T**, Rosado JA. TRPs in Pain Sensation. *Front Physiol.* 2017;8:392. doi: 10.3389/fphys.2017.00392. eCollection FI: 4,13; Q1.
 28. Ávila-Medina J, Calderón-Sánchez E, González-Rodríguez P, Monje-Quiroga F, Rosado JA, Castellano A, Ordóñez A, **Smani T**. Orai1 and TRPC1 colocalize with CaV1.2 channels to form a signal complex in vascular smooth muscle cells. *J Biol Chem.* 2016;291(40):21148-21159. DOI: 10.1074/jbc.M116.742171. FI: 4.258; Q1.
 29. Cicvaric A, Yang J, Krieger S, Khan D, Kim EJ, Dominguez-Rodriguez M, Cabatic M, Molz B, Acevedo Aguilar JP, Milicevic R, **Smani T**, Breuss JM, Kerjaschki D, Pollak DD, Uhrin P, Monje FJ. brain-tumor related protein podoplanin regulates synaptic plasticity and hippocampus-dependent learning and memory. *Ann Med.* 2016:1-17. DOI: 10.1080/07853890.2016.1219455. FI: 3,76; Q1
 30. Albarran L, Lopez JJ, Ben Amor N, Martin-Cano FE, Berna-Erro A, **Smani T**, Gines M. Salido G, Rosado JA. Dynamic interaction of SARAF with STIM1 and Orai1 to modulate store operated calcium entry. *Scientific Rep.* 2016; 6:24452. DOI: 10.1038/srep24452. FI: 5,6; D1.
 31. **Smani T**, Domínguez-Rodríguez A, Callejo-García P, Rosado JA, Avila-Medina J. Phospholipase A2 as a Molecular Determinant of Store-Operated Calcium Entry. *Adv Exp Med Biol.* 2016;898:111-31. DOI: 10.1007/978-3-319-26974-0_6. FI: 2, Q2
 32. Lopez JJ, Albarran L, Gómez LJ, **Smani T**, Salido GM, Rosado JA. Molecular modulators of store-operated calcium entry. *Biochim Biophys Acta.* 2016;1863(8):2037-43. doi: 10.1016/j.bbamcr.2016.04.024. FI: 5,126; Q1.
 33. Berna-Erro A, Jardín I, **Smani T**, Rosado JA. Regulation of Platelet Function by Orai, STIM and TRP. *Adv Exp Med Biol.* 2016;898:157-81. DOI: 10.1007/978-3-319-26974-0_8. FI: 2, Q2
 34. Rosado JA, Diez R, **Smani T**, Jardín I. STIM and Orai1 Variants in Store-Operated Calcium Entry. *Front Pharmacol.* 2016;6:325. doi: 10.3389/fphar.2015.00325. FI: 3,8, Q1.
 35. Calderón-Sánchez E, Díaz I, Ordóñez A, **Smani T**. Urocortin-1 mediated cardioprotection involves XIAP and CD40-Ligand recovery: Role of EPAC2 and ERK1/2. *PLoS One.* 2016;11(2):e0147375. doi: 10.1371/journal.pone.0147375. FI: 3,74; Q1.
 36. Calderón-Sánchez E, Domínguez-Rodríguez A, López-Haldón J, Jiménez-Navarro MF, Gómez AM, **Smani T**, Ordóñez A. Cardioprotective effect of ranolazine in the process of ischemia-reperfusion in adult rat cardiomyocytes. *Rev Esp Cardiol (Engl Ed).* 2016;69(1):45-53. doi: 10.1016/j.rec.2015.02.027. FI: 3,342; Q2.
 37. **Smani T**, Shapovalov G, Skryma R, Prevarskaya N, Rosado JA. Functional and pathophysiological implications of TRP channels. *Biochim Biophys Acta.* 2015;1853(8):1772-1782. doi: 10.1016/j.bbamcr.2015.04.016. FI: 5,126; Q1.
 38. Pezzolla D, Lachaud CC, Lopez-Beas J, Domínguez-Rodríguez A, **Smani T**, Soria B, Hmadcha A. Resveratrol ameliorates the maturation process of β -cell-like cells obtained from

- an optimized differentiation protocol of human embryonic stem cells. *Plos One*. 2015;10(3):e0119904. doi: 10.1371/journal.pone.0119904. FI: 4.092; Q1.
39. Dionisio N, **Smani T**, Woodard GE, Castellano A, Salido GM, Rosado JA. Homer proteins mediate the interaction between STIM1 and Cav1.2 channels. *Biochim Biophys Acta Mol Cell Res*. 2015;1853(5):1145-1153. doi: 10.1016/j.bbamcr.2015.02.014. FI: 5,126 ; Q1.
 40. **Smani T**, Dionisio N, López JJ, Berna-Erro A, Rosado JA. Cytoskeletal and scaffolding proteins as structural and functional determinants of TRP channels. *Biochim Biophys Acta Mol Cell Res*. 2014;1838(2):658-64. doi: 10.1016/j.bbamem.2013.01.009. FI: 3,99; Q1.
 41. Albarrán L, Lopez JJ, Dionisio N, **Smani T**, Salido GM, Rosado JA. Transient receptor potential ankyrin-1 (TRPA1) modulates store-operated Ca(2+) entry by regulation of STIM1-Orai1 association. *Biochim Biophys Acta-Mol Cell Res*. 2013;1833(12):3025-34. doi: 10.1016/j.bbamcr.2013.08.014. FI: 4,899 ; D1
 42. Rodríguez-Moyano M, Díaz I, Dionisio N, Zhang X, Avila-Medina J, Calderón-Sánchez E, Trebak M, Rosado JA, Ordóñez A, **Smani T**. Urotensin-II promotes vascular smooth muscle cell proliferation through store-operated calcium entry and EGFR transactivation. *Cardiovasc Res*. 2013;100(2):297-306. doi: 10.1093/cvr/cvt196. FI: 6.064; Q1.
 43. Diaz I, **Smani T**. New insights into the mechanisms underlying the vascular and cardiac effects of urocortin. *Curr Vasc Pharmacol*. 2013;11(4):457-64. FI: 2,896; Q2.
 44. Acosta J; Haldon J; Gutierrez-Carretero E; Diaz I; **Smani T**; Ordonez A. Strain radial y circunferencial como marcadores de fibrosis en un modelo experimental de infarto de miocardio. *Revista Española de Cardiología*. 2013;66(6):508-9. doi: 10.1016/j.rec.2013.01.009. FI: 3,342; Q1.
 45. Lachaud CC, Pezzolla D, Domínguez-Rodríguez A, **Smani T**, Soria B, Hmadcha A. Functional Vascular Smooth Muscle-like Cells Derived from Adult Mouse Uterine Mesothelial Cells. *Plos One*. 2013;8(2):e55181. doi: 10.1371/journal.pone.0055181. FI: 4.092; Q1.
 46. Domínguez-Rodríguez A, Díaz I, Rodríguez-Moyano M, Calderón-Sánchez E, Rosado JA, Ordóñez A, **Smani T**. Urotensin-II signaling mechanism in rat coronary artery: role of STIM1 and Orai1-dependent store operated calcium influx in vasoconstriction. *Arterioscler Thromb Vasc Biol*. 2012;32(5):1325-32. doi: 10.1161/ATVBAHA.111.243014. FI: 7,21; D1.
 47. Ruiz-Hurtado G, Gómez-Hurtado N, Fernández-Velasco M, Calderón E, **Smani T**, Ordoñez A, Cachafeiro V, Boscá L, Díez J, Gómez AM, Delgado C. Cardiotrophin-1 induces sarcoplasmic reticulum Ca(2+) leak and arrhythmogenesis in adult rat ventricular myocytes. *Cardiovasc Res*. 2012;96(1):81-9. doi: 10.1093/cvr/cvs234. FI: 6,064; Q1
 48. Calderón-Sánchez EM, Ruiz-Hurtado G, **Smani T***, Delgado C, Benitah JP, Gómez AM, Ordóñez A. Cardioprotective action of urocortin in postconditioning involves recovery of intracellular calcium handling. *Cell Calcium*. 2011;50(1):84-90. doi: 10.1016/j.ceca.2011.05.010. FI: 3,55; Q2. *Corresponding author.
 49. Galán C, Dionisio N, **Smani T**, Salido GM, Rosado JA. The cytoskeleton plays a modulatory role in the association between STIM1 and the Ca(2+) channel subunits Orai1 and TRPC1. *Biochem Pharmacol*. 2011;82(4):400-10. doi: 10.1016/j.bcp.2011.05.017. FI: 4,89; D1.
 50. Calderón-Sánchez E, Rodríguez-Moyano M, **Smani T**. Immunophilins and cardiovascular complications. *Curr Med Chem*. 2011;18(35):5408-13. FI: 4,88; D1.
 51. Sáez ME, **Smani T**, Ramírez-Lorca R, Díaz I, Serrano-Ríos M, Ruiz A, Ordoñez A. Association analysis of urotensin II gene (UTS2) and flanking regions with biochemical

- parameters related to insulin resistance. *PLoS One*. 2011;6(4):e19327. doi: 10.1371/journal.pone.0019327. FI: 4,41; Q1.
52. **Smani T**, Calderón-Sánchez E, Rodríguez-Moyano M, Domínguez-Rodríguez A, Díaz I, Ordóñez A. Urocortin-2 induces vasorelaxation of coronary arteries isolated from patients with heart failure. *Clin Exp Pharmacol Physiol*. 2011;38(1):71-6. doi: 10.1111/j.1440-1681.2010.05466.x. FI: 1,96; Q2.
 53. **Smani T**, Calderón-Sánchez E, Gómez-Hurtado N, Fernández-Velasco M, Cachafeiro V, Lahera V, Ordóñez A, Delgado C. Mechanisms underlying the activation of L-type calcium channels by urocortin in rat ventricular myocytes. *Cardiovasc Res*. 2010;87(3):459-66. doi: 10.1093/cvr/cvq063. FI: 6,05; D1.
 54. Calderón-Sánchez E, Delgado C, Ruiz-Hurtado G, Domínguez-Rodríguez A, Cachafeiro V, Rodríguez-Moyano M, Gomez AM, Ordóñez A, **Smani T**. Urocortin induces positive inotropic effect in rat heart. *Cardiovasc Res*. 2009;83(4):717-25. doi: 10.1093/cvr/cvp161. FI: 5,8; D1.
 55. **Smani T**, Patel T, Bolotina VM. Complex regulation of store-operated Ca²⁺ entry pathway by PKC-epsilon in vascular SMCs. *Am J Physiol Cell Physiol*. 2008;294(6):C1499-508. doi: 10.1152/ajpcell.00365.2007. FI: 4,23; Q1.
 56. **Smani T**, Domínguez-Rodríguez A, Hmadcha A, Calderón-Sánchez E, Horrillo-Ledesma A, Ordóñez A. Role of Ca²⁺-independent phospholipase A2 and store-operated pathway in urocortin-induced vasodilatation of rat coronary artery. *Circulation Res*. 2007;101(11):1194-203. doi:10.1161/CIRCRESAHA.107.159053. FI: 9,9; D1.
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 60. **Smani T**, Zakharov SI, Csutora P, Leno E, Trepakova ES, Bolotina VM. Novel mechanism of Store-operated Ca²⁺ pathway. *Nature Cell Biology*. 2004;6(2):113–120. doi: 10.1038/ncb1089. FI: 20,7; D1.
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 62. Zakharov SI, **Smani T**, Leno E, Macianskiene R, Mubagwa K, Bolotina VM. Monovalent cation (MC) current in cardiac and smooth muscle cells: regulation by intracellular Mg²⁺ and inhibition by polycations. *Br J Pharmacol*. 2003; 138(1):234-44. DOI:10.1038/sj.bjp.0705074. FI: 3,61; Q1.
 63. **Smani T**, Hernández A, Ureña J, Castellano AG, Franco-Obregón A, Ordóñez A, López-Barneo J. Reduction of Ca(2+) channel activity by hypoxia in human and porcine coronary myocytes. *Cardiovasc Res*. 2002;53(1):97-104. FI: 4,68; D1.

64. **Smani T**, Iwabuchi S, López-Barneo J, Ureña J. Differential segmental activation of Ca²⁺-dependent Cl⁻ and K⁺ channels in pulmonary arterial myocytes. *Cell Calcium*. 2001;29(6):369-77. DOI: 10.1054/ceca.2001.0199. FI: 3,71; Q2.
65. Lopez-Barneo J, Pardal R, Montoro RJ, **Smani T**, Garcia-Hirschfeld J, Urena J. K⁺ and Ca²⁺ channel activity and cytosolic [Ca²⁺] in oxygen-sensing tissues. *Respir Physiol*. 1999;115(2):215- 27. FI: 2,2; Q2.

Others

1. Gruszczynska-Biegala J*, Martin-Romero FJ*, Smani T*, Secondo A*. Molecular Components of Store-Operated Calcium Entry in Health and Disease. *Front Cell Neurosci*. 2021 Oct 5;15:771138. doi: 10.3389/fncel.2021.771138.
2. Herruzo A, Hinojosa R, Adsuar A, Noval JA, Smani T, Ordoñez A. Clinical Impact of Rotational Thromboelastometry in Cardiac Surgery. *Transfus Clin Biol*. 2021 Apr 8:S1246-7820(21)00041-0. doi: 10.1016/j.traccli.2021.03.003. FI: 1,406.
3. Braidy N, Smani T, Naziroglu M (3/2). Editorial: Involvement of TRP Channels, Oxidative Stress and Apoptosis in Neurodegenerative Diseases. *Front Physiol* 2021. FI: 3,367; Q1.
4. Rosado JA*, Smani T*. (2/2) Recent advances in cardiovascular and circulatory signalling. *Curr Vasc Pharmacol*. 2013 ;11(4):407-8. *editorial de un numero especial de la revista. doi: 10.2174/1570161111311040005. FI: 2,896; Q2.

Book Chapters

1. Autores: **Smani T**, Mayoral-Gonzalez I, Galeano-Otero I, Gallardo-Castillo I, Rosado JA, Ordoñez A, Hmadcha A, Avila-Medina J.
 Título: Non-coding RNAs and ischemic cardiovascular diseases
 Libro: Non-coding RNAs in Cardiovascular Diseases.
 Serie: *Adv Exp Med Biol*. 2020;1229:259-271. doi: 10.1007/978-981-15-1671-9_15.
 Editorial (si libro): Springer Nature.
2. Lopez JJ, Jardin I, Albarran L, Sánchez-Collado J, Cantonero C, Salido GM, **Smani T**, Rosado JA.
 Título: Molecular basis and regulation of store-operated calcium entry.
 Libro: *Calcium Signaling*. 2ª edición. (2020).
 Editor: Shahidul Islam.
 Editorial: Springer.
3. Autores: Avila-Medina J, Mayoral-Sánchez I, Galeano-Otero I, Redondo PC, Rosado JA, **Smani T**.
 Título: Pathophysiological significance of store-operated calcium entry in cardiovascular and skeletal muscle disorders and angiogenesis.
 Libro: *Calcium Signaling*. 2ª edición. (2020).
 Editor: Shahidul Islam.
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4. Autor: **Smani T**.
 Título: Urocortin
 Revista: *Encyclopedia of Signaling Molecules*, 2nd Edition. 2017
 Editorial: Springer. ISBN: 978-1-4614-6438-9 (Print) 978-1-4614-6438-9 (Online).
5. Autores: **Smani T**, Domínguez-Rodríguez A, Callejo-García P, Rosado JA, Avila-Medina J.
 Título: Phospholipase A2 as a Molecular Determinant of Store-Operated Calcium Entry.
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- Páginas: 111-31; Fecha: 2016
 Editorial (si libro): Springer International Publishing. ISBN: 978-3-319-26972-6
 FI: 1.9, Q2.
6. Autores: Berna-Erro A, Jardín I, **Smani T**, Rosado JA.
 Título: Regulation of Platelet Function by Orai, STIM and TRP
 Revista: Calcium Entry Pathways in Non-excitabile Cells. Vol: 898.
 Páginas: 157-81; Fecha: 2016
 Editorial (si libro): Springer International Publishing. ISBN: 978-3-319-26972-6
 FI: 1.9, Q2.
 7. Autores: Younes Smani, **Tarik Smani**.
 Título: Adherens Junctions and Endothelial cytoskeleton.
 Revista: Endothelial Cytoskeleton; Páginas: 74- 90; Fecha: 2013
 Editorial (si libro): CRC Prss; Taylot & Francis Group. ISBN: 978-1-4665-9035-9
 8. Autores: Rodriguez-Moyano M, Dominguez-Rodriguez A, Diaz I, Calderon E, Ordóñez A, **Smani T**.
 Título: La entrada de calcio operada por los reservorios en células excitables de músculo liso
 revista: Fisiología
 Volumen: 12(1); Páginas:12-14; Fecha: 2010
 Boletín Informativo de la sociedad española de ciencias fisiológicas
 9. Autores: Calderon E, Dominguez-Rodriguez A, Rodriguez-Moyano M, Ordóñez A, **Smani T**.
 Título: Urocortin Induces Heart Protection against Ischemia-Reperfusion Injury
 Libro XXVIII European Section Meeting of the International Society for Heart Research
 Páginas: 15- 20; Fecha: 2008
 Editorial (si libro): Medimond S.r.l.
 10. Autores: Franco-Obregón A, Ureña J, **Smani T**, Iwabushi S, López-Barneo J.
 Título: Calcium channels, cytosolic calcium and the vasomotor response to hypoxia
 Libro: "Oxygen regulation of ion channels and gene expression"
 Páginas: 255 – 269; Fecha: 1998
 Editorial (si libro): NY: Futura Publishing Company, Inc

GRANTS AND RESEARCH PROJECTS

As Principal Investigator

- **2021-2023**. Characterization of the role of nestin+ cells in myocardial infarction. Role in inflammation and fibrosis. FEDER funds
- Investigador responsable: Tarik Smani & Raquel Del Toro
- **2019-2023**. Remodeling of STIM and Orai expression and their mechanism of regulation in angiogenesis. PID2019-104084GB-C22
- **2017-2019**. Remodeling of calcium entry in angiogenesis. Ref. BFU2016-74932-C2-2-P. Spanish Ministry of Economy and Competitiveness
- **2014-2017**. Regulation of calcium entry in excitable cells: Role of STIM, Orai and TRP proteins in cellular proliferation and vascular remodeling. Ref. BFU2013-45564-C2-2-P. Spanish Ministry of Economy and Competitiveness
- **2010-2013**. Regulation of calcium entry by STIM, Orai and TRPC proteins in excitable cells. Ref. BFU2010-21043-CO2-2. Spanish Ministry of Economy and Competitiveness.
- **2010-2013**. Predictive value of urocortin as biomarker of heart failure. Ref. P10-CVI-6095. Andalusia Government.

- **2010-2013.** Regulation of coronary vascular tone by Urotensina-II. Ref. P08-CVI-3913. Andalusia Government.
- **2006-2009.** Role of Store operated calcium channels in the human and rabbit coronary vasoconstriction. Ref. PI050396. Spanish Ministry of Health.
- **2006-2007.** Study of store operated calcium channels in coronary artery. Ref. 0182/2005. Andalusia Government.
- **2004-2005.** Role of PKC in store-operated Ca²⁺ influx in vascular smooth muscle cells. American Heart Association Ref. 04252860T. USA
- **2002-2004.** Regulation of store operated channel by calmodulin in vascular smooth muscle cells. American Heart Association. USA

As collaborator

- **2018-2021.** Early detection of cardiotoxicity by anthracyclines: Imagen and circulating markers for heart damages detection. PI-0193-2018. PI: Eva Calderon Sanchez.
- **2016-2019.** Prospective study of the treatment of restenosis and determination of miRNAs as an early biomarker and predictor of neointimal tissue proliferation following primary angioplasty in acute myocardial infarction. PI-0313-2016. Andalusia Government. PI: Alejandro Dominguez Rodríguez
- **2013-2015.** Implication of Urocortin in Coronary Microvasculature Lesion After Primary Angioplasty and Its Influence on Cardiac Remodeling. PI-0108-2012. Andalusia Government. PI: Eva Calderon Sanchez.
- **2007-2008.** Urocortin: new cardioprotector and vasodilator of the human coronary artery and mammary artery. 0174/2006. Andalusia Government. PI: Antonio Ordóñez Fernández
- **2006-2009.** Prognostic value of endothelial dysfunction, oxidative stress and inflammation on the occurrence of cardiovascular events in high risk population. Ref. PI051274. Spanish Ministry of Health. PI: Antonio Ordóñez Fernández
- **2003-2007.** Store operated Ca²⁺ influx and iPLA₂ in vascular smooth muscle. NIH/NHLBI. USA. PI: Victoria M Bolotina
- **2000-2004.** Ion channels, calcium regulation and nitric oxide in vascular smooth muscle. NIH/NHLBI. USA PI: Victoria M Bolotina

SCIENTIFIC CONFERENCES (Invited, Oral and Symposium)

1. Orai1, Adenil Ciclasa 8, AMPc: El eje del mal en el infarto agudo del miocardio. Ciclo de seminarios del programa doctoral de la Universidad de Exremadura. 25 de noviembre 2021
2. Orai1 and Store Operated Ca²⁺ Signaling in Vascular Remodeling. Curso organizado por la Sociedad Mexicana de Bioquímica y el Centro de Investigación y de Estudios Avanzados. 25 al 29 de octubre del 2021
3. El complejo papel de la entrada de Calcio regulado por los reservorios en la fisiopatología vascular. Ciclo de seminarios del Instituto de Biología y Genética Molecular (IBGM). Valladolid. 21/02/2020.
4. Essential role of Orai1 and SARAF in vascular remodeling. VII Congreso de la Red Española de Canales Iónicos (RECI) 16/05/2019. Cáceres. España

5. Urocortin-2 prevents dysregulation of Ca^{2+} homeostasis and improves the early cardiac remodeling after ischemia and reperfusion. XXXVIII Sociedad Española de Ciencias Fisiológicas. 19/09/2018. Cadiz. Spain
6. Essential role of Ca^{2+} homeostasis dysregulation in the adverse cardiac remodeling due to heart. XXXVIII Sociedad Española de Ciencias Fisiológicas. 14/09/2016. Zaragoza. Spain
7. Emerging Role of TRP And Store Operated Channels In The Cardiovascular System. XXXVII Spanish Physiological Society Congress. 24/09/2014. Granada. Spain
8. Regulation of vascular tone by urotensin-II is mediated by STIM1 and Orai1. First international meeting on "Ion Channel Signaling Mechanisms: From Basic Science to Clinical application". 28/11/2011. Marrakech, Morocco.
9. Essential role of store-operated calcium channels in urotensin-II evoked vascular smooth muscle proliferation. RECI-III; 02/02/2011. Tenerife. Spain
10. Urocortin induced positive inotropic effect in rats hearts: Role of PKC, MAPK and L-type Ca^{2+} channel. XXXV Spanish Physiological Society Congress. 17/02/2009. Valencia. Spain
11. Positive inotropic effect of Urocortin on cardiomyocytes: Role of L-type calcium channels. XXVIII European Section Meeting of the International Society for Heart Research. Athens. Greece. 28/05/2008.
12. Urocortin: A new modulator of heart performances and vascular tone. XXXIV Spanish Physiological Society Congress. 03/07/2007. Valladolid. Spain
13. Urocortin induced vasodilatation of coronary artery: role of SOC entry and iPLA2. Focused Meeting of The Physiological Society: Ion Channels and the Microcirculation. 04/04/2007. Belfast, Northern Ireland, UK.
14. A novel mechanism for the store operated calcium influx pathway. XXXIII Spanish Physiological Society Congress. 15/01/2005. Sevilla. Spain
15. A novel mechanism for the store operated calcium influx pathway. Experimental Biology Meeting. 17/04/2004. Washington DC, USA.
16. Ca^{2+} -independent phospholipase A2 is a crucial molecular determinant in store-operated Ca^{2+} influx pathway. 47th annual meeting of the Biophysical Society. 01/03/2003. San Antonio, Tx, USA.

DOCTORAL THESES SUPERVISED

1. PhD student: **ISABEL MAYORAL GONZALEZ**
Title: Remodelado ventricular adverso tras reperusión aguda. Efecto cardioprotector de la urocortina-2.
Universidad de Sevilla Fecha: July 2nd 2021
2. PhD student: **Javier Ávila Médina**
Title: Comunicación funcional entre canales de Ca^{2+} tipo I y canales de Ca^{2+} activados por reservorios, y su regulación del tono vascular
University of Seville Date: July 20th 2017
3. PhD student: **Ignacio Díaz Carrasco**
Title: Estudio molecular de la cardioprotección inducida por Urocortina frente al síndrome de isquemia y reperusión

University of Seville

Date: June 14th 2016

4. PhD student: **Maria Rodriguez Moyano**

Title: Implicación de la entrada de calico regulada por los reservorios en la vasoconstricción y proliferación celular inducida por Urotensina-II en aorta

University of Seville

Date: June 6th 2012

5. PhD student: **Alejandro Domínguez Rodríguez**

Title: Regulación del tono vascular coronario mediado por neuropéptidos

University of Seville

Date: April 1st 2011

6. PhD student: **Eva María Calderón Sánchez**

Title: Potenciación de los mecanismos endógenos de protección miocárdica frente al síndrome de isquemia-reperfusión

University of Seville

Date: October 30th 2009

OTHERS:

2016: Associate Editor of “Frontiers in Membrane Physiology and Membrane Biophysics”

2015: Reviewer-Editor of Frontiers in Pharmacology “Pharmacology of Ion Channels and Channelopathies”

Reviewer in several journal as: ATVB, American J physiology, American J Pathology, Cells, JBC, Cell Calcium, Frontiers in Physiology, Pflugers Archiv,....