

## **CURRICULUM VITAE**

### **Personal Information:**

José Manuel Martín García  
Principal Investigator  
Department of Crystallography and Structural Biology  
Institute of Physical Chemistry Rocasolano  
Spanish National Research Council (CSIC)  
Serrano 119  
28006, Madrid, Spain  
E-mail: [jmmartin@iqfr.csic.es](mailto:jmmartin@iqfr.csic.es)

**ORCID:** 0000-0002-4558-3858

**Google Scholar:** <https://scholar.google.com/citations?user=bAKx0RUAAAJ&hl=en>

### **Education:**

**2004:** University of Granada: Diploma Chemistry (Equivalent to 5 years of M.Sc. degree)

**2006:** University of Seville: Advanced Studies Certificate in Structure and Function of Proteins

**2010:** University of Granada: PhD Chemical Sciences. Thesis Title: “Molecular determinants of the binding affinity and specificity in SH3 domains”

### **Professional Experience:**

1. September 2020 – *Present* Principal Investigator (CSIC)
2. July 2019 – August 2020 Associate Research Scientist (Arizona State University)
3. November 2015 – June 2019 Assistant Research Scientist (Arizona State University)
4. September 2011- November 2015 Postdoctoral Research Associate (Arizona State University)
5. February 2010 - August 2011 Postdoctoral Research Associate (University of Almeria)

### **Publications:**

#### **2023**

1. Jernigan RJ, Logeswaran D, Doppler D, Nagaratnam N, Sonker M, Yang JH, Ketawala G, **Martin-Garcia JM**, Shelby ML, Grant TD, Mariani V, Tolstikova A, Sheikh MZ, Yung MC, Coleman MA, Zaare S, Kaschner EK, Rabbani MT, Nazari R, Zacks MA, Hayes B, Sierra RG, Hunter MS, Lisova S, Batyuk A, Kupitz C, Boutet S, Hansen DT, Kirian RA, Schmidt M, Fromme R, Frank M, Ros A, Chen JJ, Botha S, Fromme P. Room-temperature structural studies of SARS-CoV-2 protein NendoU with an X-ray free-electron laser. *Structure*. 2023 Feb 2;31(2):138-151.e5.

#### **2022**

1. Sonker M, Doppler D, Egatz-Gomez A, Zaare S, Rabbani MT, Manna A, Cruz Villarreal J, Nelson G, Ketawala GK, Karpos K, Alvarez RC, Nazari R, Thifault D, Jernigan R, Oberthür D, Han H, Sierra R, Hunter MS, Batyuk A, Kupitz CJ, Sublett RE, Poitevin F, Lisova S, Mariani V, Tolstikova A, Boutet S, Messerschmidt M, Meza-Aguilar JD, Fromme R, **Martin-Garcia JM**, Botha S, Fromme P, Grant TD, Kirian RA, Ros A. Electrically stimulated droplet injector for reduced sample consumption in serial crystallography. *Biophys Rep (N Y)*. 2022 Sep 29;2(4):100081.
2. Nagaratnam N, **Martin-Garcia JM**, Yang JH, Goode MR, Ketawala G, Craciunescu FM, Zook JD, Sonowal M, Williams D, Grant TD, Fromme R, Hansen DT, Fromme P. Structural and biophysical properties of FopA, a major outer membrane protein of *Francisella tularensis*. *PLoS One*. 2022 Aug 1;17(8):e0267370.
3. Zhang S, Hansen DT, **Martin-Garcia JM**, Zook JD, Pan S, Craciunescu FM, Burnett JC Jr, Fromme P. Purification, characterization, and preliminary serial crystallography diffraction advances structure determination of full-length human particulate guanylyl cyclase A receptor. *Sci Rep*. 2022 Jul 12;12(1):11824.
4. **Martin-Garcia JM\***. *Macromolecular Serial Crystallography (Volume II)*. *Crystals*. 2022; 12(6):768.
5. **Martin-Garcia JM\***, Botha S, Hu H, Jernigan R, Castellví A, Lisova S, Gil F, Calisto B, Crespo I, Roy-Chowdhury S, Grieco A, Ketawala G, Weierstall U, Spence J, Fromme P, Zatsepin N, Boer DR, Carpena X.

Serial macromolecular crystallography at ALBA Synchrotron Light Source. *J Synchrotron Radiat.* 2022 May 1;29(Pt 3):896-907.

- Doppler D, Rabbani MT, Letrun R, Cruz Villarreal J, Kim DH, Gandhi S, Egatz-Gomez A, Sonker M, Chen J, Koua FHM, Yang J, Youssef M, Mazalova V, Bajt S, Shelby ML, Coleman MA, Wiedorn MO, Knoska J, Schön S, Sato T, Hunter MS, Hosseinizadeh A, Kuptiz C, Nazari R, Alvarez RC, Karpos K, Zaare S, Dobson Z, Discianno E, Zhang S, Zook JD, Bielecki J, de Wijn R, Round AR, Vagovic P, Kloos M, Vakili M, Ketawala GK, Stander NE, Olson TL, Morin K, Mondal J, Nguyen J, Meza-Aguilar JD, Kodis G, Vaiana S, **Martin-Garcia JM**, Mariani V, Schwander P, Schmidt M, Messerschmidt M, Ourmazd A, Zatsepin N, Weierstall U, Bruce BD, Mancuso AP, Grant T, Barty A, Chapman HN, Frank M, Fromme R, Spence JCH, Botha S, Fromme P, Kirian RA, Ros A. Co-flow injection for serial crystallography at X-ray free-electron lasers. *J Appl Crystallogr.* 2022 Feb 1;55(Pt 1):1-13.

## 2021

- Pandey S, Calvey G, Katz AM, Malla TN, Koua, FHM, **Martin-Garcia, JM**, Poudyal I, Yang J-H, Vakili M, Yefanov O, Zielinski KA, Bajt S, Awel S, Doerner K, Frank M, Gelisio L, Jernigan R, Kirkwood H, Kloos M, Koliyadu J, Mariani V, Miller MD, Mills G, Nelson G, Olmos JL, Sadri A, Sato T, Tolstikova A, Xu W, Ourmazd A, Spence JCH, Schwander P, Barty A, Chapman HN, Fromme P, Mancuso AP, Phillips GN, Bean R, Pollack L, Schmidt M, Observation of substrate diffusion and ligand binding in enzyme crystals using high-repetition-rate mix-and-inject serial crystallography. *IUCrJ*, 8, 6, 2021.
- Martin-Garcia JM\***. Protein Dynamics and Time Resolved Protein Crystallography at Synchrotron Radiation Sources: Past, Present, and Future. *Crystals.* 2021 11(5), 521.
- Nagaratnam N, Delker SL, Jernigan R, Edwards TE, Snider J, Thifault D, Williams D, Nannenga BL, Stofega M, Sambucetti L, Hsieh JJ, Flint AJ, Fromme P, and **Martin-Garcia JM\***. Structural Insights into the Function of the Catalytically Active Human Taspase1. *Structure.* 2021 25: S0969-2126(21)00081-2.
- Gisriel C, Fromme P, **Martin-Garcia JM\***. Methods for Crystallization and Structural Determination of M-T7 Protein from Myxoma Virus. In: Lucas A.R. (eds) Viruses as Therapeutics. *Methods in Molecular Biology.* 2021, vol 2225. Humana, New York, NY.

## 2020

- Echelmeier A, Cruz Villarreal J, Messerschmidt M, Kim D, Coe JD, Thifault D, Botha S, Egatz-Gomez A, Gandhi S, Brehm G, Conrad CE, Hansen DT, Madsen C, Bajt S, Meza-Aguilar JD, Oberthür D, Wiedorn MO, Fleckenstein H, Mendez D, Knoška J, **Martin-Garcia JM**, Hu H, Lisova S, Allahgholi A, Gevorkov Y, Ayyer K, Aplin S, Ginn HM, Graafsma H, Morgan AJ, Greiffenberg D, Klujev A, Laurus T, Poehlsen J, Trunk U, Mezza D, Schmidt B, Kuhn M, Fromme R, Sztuk-Dambietz J, Raab N, Hauf S, Silenzi A, Michelat T, Xu C, Danilevski C, Parenti A, Mekinda L, Weinhausen B, Mills G, Vagovic P, Kim Y, Kirkwood H, Bean R, Bielecki J, Stern S, Giewekemeyer K, Round AR, Schulz J, Dörner K, Grant TD, Mariani V, Barty A, Mancuso AP, Weierstall U, Spence JCH, Chapman HN, Zatsepin N, Fromme P, Kirian RA, Ros A. Segmented flow generator for serial crystallography at the European X-ray free electron laser. *Nat Commun.* 2020 Sep 9;11(1):4511.
- Martin-Garcia JM\***, Basu S. Macromolecular Serial Crystallography. *Crystals.* 2020; 10(12):1079.
- Tang, Y, Saul, J, Nagaratnam, N, **Martin-Garcia, J M**, Fromme, P, Qiu, J, & LaBaer, J. Construction of gateway-compatible baculovirus expression vectors for high-throughput protein expression and in vivo microcrystal screening. *Scientific reports.* 2020, 10(1), 13323.
- Nagaratnam N, Tang Y, Botha S, Saul J, Li C, Hu H, Zaare S, Hunter M, Lowry D, Weierstall U, Zatsepin N, Spence JCH, Qiu J, LaBaer J, Fromme P, **Martin-Garcia JM\***. Enhanced X-ray diffraction of in vivo grown  $\mu$ NS crystals by viscous jets at XFELs. *Acta Crystallographica section F Struct Biol Communications.* 2020 Jun 1;76(Pt 6):278-289.
- Nass K, Redecke L, Perbandt M, Yefanov O, Klinge M, Koopmann R, Stellato F, Gabdulkhakov A, Schönherr R, Rehders D, Lahey-Rudolph JM, Aquila A, Barty A, Basu S, Doak RB, Duden R, Frank M, Fromme R, Kassemeyer S, Katona G, Kirian R, Liu H, Majoul I, **Martin-Garcia JM**, Messerschmidt M, Shoeman RL, Weierstall U, Westenhoff S, White TA, Williams GJ, Yoon CH, Zatsepin N, Fromme P, Duszenko M, Chapman HN, Betzel C. In cellulose crystallization of *Trypanosoma brucei* IMP dehydrogenase enables the identification of genuine co-factors. *Nat Commun.* 2020 Jan 30;11(1):620.
- Fromme P, Graves W, **Martin-Garcia JM\***. Serial Femtosecond Crystallography: A decade at the forefront of Structural Biology. *Encyclopedia of Life Sciences.* John Wiley & Sons Ltd, Chichester. 2020 May.

## 2019

1. Gisriel C, Coe J, Letrun R, Yefanov OM, Luna-Chavez C, Stander NE, Lisova S, Mariani V, Kuhn M, Aplin S, Grant TD, Dörner K, Sato T, Echelmeier A, Cruz Villarreal J, Hunter MS, Wiedorn MO, Knoska J, Mazalova V, Roy-Chowdhury S, Yang JH, Jones A, Bean R, Bielecki J, Kim Y, Mills G, Weinhausen B, Meza JD, Al-Qudami N, Bajt S, Brehm G, Botha S, Boukhelef D, Brockhauser S, Bruce BD, Coleman MA, Danilevski C, Discianno E, Dobson Z, Fangohr H, **Martin-Garcia JM**, Gevorkov Y, Hauf S, Hosseinizadeh A, Januschek F, Ketawala GK, Kupitz C, Maia L, Manetti M, Messerschmidt M, Michelat T, Mondal J, Ourmazd A, Previtali G, Sarrou I, Schön S, Schwander P, Shelby ML, Silenzi A, Sztuk-Dambietz J, Szuba J, Turcato M, White TA, Wrona K, Xu C, Abdellatif MH, Zook JD, Spence JCH, Chapman HN, Barty A, Kirian RA, Frank M, Ros A, Schmidt M, Fromme R, Mancuso AP, Fromme P, Zatsepin NA. Membrane protein megahertz crystallography at the European XFEL. *Nat Commun.* 2019 Nov 4;10(1):5021.
2. **Martin-Garcia JM**, Zhu L, Mendez D, Lee MY, Chun E, Li C, Hu H, Subramanian G, Kissick D, Ogata C, Henning R, Ishchenko A, Dobson Z, Zhang S, Weierstall U, Spence JCH, Fromme P, Zatsepin NA, Fischetti RF, Cherezov V, Liu W. High-viscosity injector-based pink-beam serial crystallography of microcrystals at a synchrotron radiation source. *IUCrJ.* 2019 Apr 5;6(Pt 3):412-425.
3. Jensen S, Sullivan BT, Hartzler DA, Meza Aguilar J, Awel S, Bajt S, Basu S, Bean R, Chapman H, Conrad C, Frank M, Fromme R, **Martin-Garcia JM**, Grant TD, Heymann M, Hunter MS, Ketawala G, Kirian RA, Knoska J, Kupitz C, Li X, Liang M, Lisova S, Mariani V, Mazalova VL, Messerschmidt M, Moran M, Nelson G, Oberthuer D, Schaffer A, Sierra RG, Vaughn N, Weierstall U, Wiedorn MO, Xavier PL, Yang JH, Yefanov O, Zatsepin N, Aquila AL, Fromme P, Boutet S, Seidler GT, Pushkar YN. X-ray Emission Spectroscopy at X-ray Free Electron Lasers: Limits to Observation of the Classical Spectroscopic Response for Electronic Structure Analysis. *J Phys Chem Lett.* 2019 Jan 16.

## 2018

1. Olmos JL Jr<sup>#</sup>, Pandey S<sup>#</sup>, **Martin-Garcia JM**<sup>#</sup>, Calvey G, Katz A, Knoska J, Kupitz C, Hunter MS, Liang M, Oberthuer D, Yefanov O, Wiedorn M, Heyman M, Holl M, Pande K, Barty A, Miller MD, Stern S, Roy-Chowdhury S, Coe J, Nagaratnam N, Zook J, Verburgt J, Norwood T, Poudyal I, Xu D, Koglin J, Seaberg M, Zhao Y, Bajt S, Grant T, Mariani V, Nelson G, Subramanian G, Bae E, Fromme R, Fung R, Schwander P, Frank M, White TA, Weierstall U, Zatsepin N, Spence J, Fromme P, Chapman HN, Pollack L, Tremblay L, Ourmazd A, Phillips GN, Schmidt M. Enzyme Intermediates Captured “on-the-fly” by Mix-and-Inject Serial Crystallography. *BMC Biology.* 2018;16:59. <sup>#</sup>These authors contributed equally.
2. Lan TY, Wierman JL, Tate, Philipp HT, **Martin-Garcia JM**, Zhu L, Kissick D, Fromme P, Fischetti RF, Liu W, Elser V, Gruner SM. Solving protein structure from sparse serial microcrystal diffraction data at a storage ring synchrotron source. *IUCrJ.* 2018 Jul 20;5(Pt 5):548-558.

## 2017

1. **Martin-Garcia JM**<sup>#</sup>, Conrad CE<sup>#</sup>, Nelson G<sup>#</sup>, Stander N, Zatsepin NA, Zook J, Zhu L, Geiger J, Chun E, Kissick D, Hilgart MC, Ogata C, Ishchenko A, Nagaratnam N, Roy-Chowdhury S, Coe J, Subramanian G, Schaffer A, James D, Ketwala G, Venugopalan N, Xu S, Corcoran S, Ferguson D, Weierstall U, Spence JCH, Cherezov V, Fromme P, Fischetti RF, Liu W. Serial millisecond crystallography of membrane and soluble protein microcrystals using synchrotron radiation. *IUCrJ.* 2017 May 24;4(Pt 4):439-454. <sup>#</sup>These authors contributed equally.
2. Deb A, Johnson WA, Kline AP, Scott BJ, Meador LR, Srinivas D, **Martin-Garcia JM**, Dorner K, Borges CR, Misra R, Hogue BG, Fromme P, Mor TS. Bacterial expression, correct membrane targeting and functional folding of the HIV-1 membrane protein Vpu using a periplasmic signal peptide. *PLoS One.* 2017 February 22;12(2): e0172529.

## 2016

1. Kupitz C, Olmos JL Jr, Holl M, Tremblay L, Pande K, Pandey S, Oberthuer D, Hunter M, Liang M, Aquila A, Tenboer J, Calvey G, Katz A, Chen Y, Wiedorn MO, Knoska J, Meents A, Majriani V, Norwood T, Poudyal I, Grant T, Miller MD, Xu W, Tolstikova A, Morgan A, Metz M, **Martin-Garcia JM**, Zook JD, Roy-Chowdhury S, Coe J, Nagaratnam N, Meza D, Fromme R, Basu S, Frank M, White T, Barty A, Bajt S, Yefanov O, Chapman HN, Zatsepin N, Nelson G, Weierstall U, Spence J, Schwander P, Pollack L, Fromme P, Ourmazd A, Phillips GN Jr, Schmidt M. Structural enzymology using X-ray free electron lasers. *Struct Dyn.* 2016 Dec 15;4(4):044003.
2. Camara-Artigas A, Ortiz-Salmeron E, Andujar-Sanchez M, Bacarizo J, **Martin-Garcia JM**. The role of water molecules in the binding of class I and II peptides to the SH3 domain of the Fyn tyrosine kinase. *Acta Crystallogr F Struct Biol Commun.* 2016 Sep;72(Pt 9):707-12.

3. Dörner K, **Martin-Garcia JM**, Kupitz C, Gong Z, Mallet TC, Chen L, Wachter RM, Fromme P. Characterization of Protein Nanocrystals Based on the Reversibility of Crystallization. *Cryst Growth Des.* 2016 Jul 6;16(7):3838-3845.
4. **Martin-Garcia JM**, Conrad CE, Coe J, Roy-Chowdhury S, Fromme P. Serial femtosecond crystallography: A revolution in structural biology. *Arch Biochem Biophys.* 2016 July 15;602: 32-47.

## 2015

1. Gong Z, **Martin-Garcia JM**, Daskalova SM, Craciunescu FM, Song L, Dorner K, Hansen DT, Yang JH, LaBaer J, Hogue BG, Mor TS, Fromme P. Biophysical Characterization of a Vaccine Candidate against HIV-1: The Transmembrane and Membrane Proximal Domains of HIV-1 gp41 as a Maltose Binding Protein Fusion. *PLoS One.* 2015 Aug 21;10(8): e0136507.
2. Yang JH, Sarrou I, **Martin-Garcia JM**, Zhang S, Redding KE, Fromme P. Purification and biochemical characterization of the ATP synthase from *Heliobacterium modesticaldum*. *Protein Expr Purif.* 2015 October ;114: 1-8.

## 2014

1. Bacarizo J, Martinez-Rodriguez S, **Martin-Garcia JM**, Andujar-Sanchez M, Ortiz-Salmeron E, Neira JL, Camara-Artigas A. Electrostatic effects in the folding of the SH3 domain of the c-Src tyrosine kinase: pH-dependence in 3D-domain swapping and amyloid formation. *PLoS One.* 2014 Dec 9;9(12): e113224.
2. **Martin-Garcia JM**, Hansen DT, Zook J, Loskutov AV, Robida MD, Craciunescu FM, Sykes KF, Wachter RM, Fromme P, Allen JP. Purification and biophysical characterization of the CapA membrane protein FTT0807 from *Francisella tularensis*. *Biochemistry.* 2014 Apr 1;53(12):1958-70.
3. Camara-Artigas A, Martinez-Rodriguez S, Ortiz-Salmeron E, **Martin-Garcia JM**. 3D domain swapping in a chimeric c-Src SH3 domain takes place through two hinge loops. *J Struct Biol.* 2014 Apr;186(1):195-203.

## 2012

1. **Martin-Garcia JM**, Ruiz-Sanz J, Luque I. Interfacial water molecules in SH3 interactions: a revised paradigm for polyproline recognition. *Biochem J.* 2012 Mar 1;442(2):443-51.
2. Camara-Artigas A, Bacarizo J, Andujar-Sanchez M, Ortiz-Salmeron E, Mesa-Valle C, Cuadri C, **Martin-Garcia JM**, Martinez-Rodriguez S, Mazzuca-Sobczuk T, Ibañez MJ, Allen JP. pH-dependent structural conformations of B-phycoerythrin from *Porphyridium cruentum*. *FEBS J.* 2012 Oct;279(19):3680-91.
3. **Martin-Garcia JM**, Luque I, Ruiz-Sanz J, Camara-Artigas A. The promiscuous binding of the Fyn SH3 domain to a peptide from the NS5A protein. *Acta Crystallogr D Biol Crystallogr.* 2012 Aug;68(Pt 8):1030-40.
4. De Biasio A, Campos-Olivas R, Sanchez R, Lopez-Alonso JP, Pantoja-Uceda D, Merino N, Villate M, **Martin-Garcia JM**, Castillo F, Luque I, Blanco FJ. Proliferating cell nuclear antigen (PCNA) interactions in solution studied by NMR. *PLoS One.* 2012;7(11): e48390.

## 2010

1. Camara-Artigas A, Andujar-Sanchez M, Ortiz-Salmeron E, Cuadri C, Cobos ES, **Martin-Garcia JM**. High-resolution structure of an alpha-spectrin SH3-domain mutant with a redesigned hydrophobic core. *Acta Crystallogr Sect F Struct Biol Cryst Commun.* 2010 Sep 1;66(Pt 9):1023-7.

## 2009

1. Camara-Artigas A, **Martin-Garcia JM**, Morel B, Ruiz-Sanz J, Luque I. Intertwined dimeric structure for the SH3 domain of the c-Src tyrosine kinase induced by polyethylene glycol binding. *FEBS Lett.* 2009 February 18;583(4):749-53.

## 2008

1. Palacios A, Munoz IG, Pantoja-Uceda D, Marcaida MJ, Torres D, **Martin-Garcia JM**, Luque I, Montoya G, Blanco FJ. Molecular basis of histone H3K4me3 recognition by ING4. *J Biol Chem.* 2008 June 6;283(23):15956-64.

## 2007

1. **Martin-Garcia JM**, Luque I, Mateo PL, Ruiz-Sanz J, Camara-Artigas A. Crystallographic structure of the SH3 domain of the human c-Yes tyrosine kinase: loop flexibility and amyloid aggregation. *FEBS Lett.* 2007 May 1;581(9):1701-6.

## Conference Publications:

**2017**

1. S. M.D.C. Perera, X. Xu, A.V. Struts, U. Chawla, S. Boutet, S. Carbajo, M.D. Seaberg, M.S. Hunter, **Martin-Garcia JM**, J.D. Coe, M.O. Wiedorn, G. Nelson, S. Chamberlain, D.P. Deponte, R. Fromme, T.D. Grant, R.A. Kirian, P. Fromme, M.F. Brown. Time-Resolved Wide-Angle X-Ray Scattering Reveals Protein Quake in Rhodopsin Activation. *Biophysical Journal*. Volume 11, Issue 3, Supplement 1, p506a-507a, February 3, 2017.
2. Fischetti, R. F., **Martin-Garcia, J.M.**, Zatsepin, N., Stander, N., Zhu, L., Subramanian, G., Nelson, G., Coe, J., Nagaratnam, N., Roy-Chowdury, S., Kissick, D., Ishchenko, A., Conrad, C., Ketawala, G., James, D., Zook, J., Ogata, C., Venugopalan, N., Xu, S., Meents, A., Srajer, V., Henning, R., Chapman, H., Spence, J., Weierstall, U., Cherezov, V., Fromme, P. & Liu, W. Monochromatic and polychromatic serial crystallography at the Advance Photon Source. (2017). *Acta Cryst. A73*, a368-a369.

**2014**

1. **Martin-Garcia JM**, Debra T. Hansen, Andrey V. Loskutov, Mark D. Robida, Felicia M. Craciunescu, Kathryn Sykes, Rebekka M. Wachter, Petra Fromme, James P. Allen (2014). Sequence analysis and biophysical characterization reveal the presence of a long-disordered region in the CapA membrane protein from *F. tularensis*. *Biophysical Journal Abstracts* Issue, Vol. 106 (2), 3485-Pos, Board-213.
2. Dörner, K., **Martin-Garcia, JM.**, Kupitz, C., Gong, Z., Mallet, T. C., Chen, L., Wachter, R., Fromme, P. Characterization of Protein Nanocrystals Based on the Reversibility of Crystallization. *Biophysical Journal*. Volume 106, Issue 2, p458a, January 28, 2014

**Projects:**

1. PI: Víctor de la Peña O’Shea. Title of the project: “Towards Digital Transition in Solar Chemistry (SolarChem 5.0)”. Agencia Estatal de Investigación (TED2021-130173B-C41), 01/02/2023 – 12/31/2024, 203.550 €
2. PI: **José Manuel Martín García**. Title of the project: “Unraveling the resistance mechanism of the enzyme penicillin binding protein of *Staphylococcus aureus* by serial femtosecond crystallography at X-ray free electron lasers”. Atracción y Retención de Talento de la Comunidad de Madrid (2019-T1/BMD-15552), 09/01/2020 – 08/31/2024, 200.000 €
3. PI: **José Manuel Martín García**. Title of the project: “Improving the Quality of Taspase1 Crystals by Microgravity”. The Center for the Advancement of Science in Space (CASIS) / The National Aeronautics and Space Administration (NASA), 10/01/2019 – 08/31/2019, \$69,295
4. PIs: Po-Lin Chiu and Petra Fromme. Title of the project: “High-resolution structure determination of p97 protein with allosteric inhibitors”. Agreement #: 16X118, Leidos Biomed (NIH-NCI), 08/31/2019 - 03/31/2020, \$80,000
5. PI: Petra Fromme. Title of the project: “High-resolution structure determination of the full-length enzymatically active Taspase1 and Taspase1 substrate/inhibitor complexes”. Agreement #: 16X118, Leidos Biomed (NIH-NCI), 04/01/2016 - 06/30/2020, \$74,398.
6. PIs: Joshua LaBaer, Petra Fromme and John Spence. Title of the project: “Establishment of a High Throughput Protein Production Center to Empower Translational Research in Arizona”. ASU Foundation (Flinn Foundation) 1991, 10/01/2014- 09/30/2018, \$175,641.
7. PI: Petra Fromme. Title of the project: “Femtosecond nano-crystallography of membrane proteins”. 2R01GM095583-06 NIH/NIGMS, 06/01/2015 - 5/31/2019, \$202,590.
8. Petra Fromme, J. P. Allen, and 10 co-PIs “Center for Membrane Proteins and Infectious Diseases”. NIH, 09/01/11-08/30/16 (<http://mpid.asu.edu/>).
9. PI: Ana Camara Artigas. Title of the project: “Structural Determination of Proline-rich Sequences of Recognition Modules and their Complexes”. BIO2009-13261-C02-02. MCYT (Spain), 209,330€, 01/01/2010-12/31/2012.
10. PI: Irene Luque Fernandez. Title of the project: “Molecular Basis of the Binding Affinity and Specificity in the Recognizing of Proline-Rich Sequences. Design and Development of Inhibitors of Biotechnological Interest”. BIO2009-13261-C02-01. MCYT (Spain), 340,010€, 01/01/2010-12/31/2012.
11. PI: Irene Luque-Fernandez. Title of the project: “Molecular Basis of the Binding Affinity and Specificity in the Recognizing of Proline-Rich Sequences. Design and Development of Inhibitors of Biotechnological Interest”. BIO2006-15517-C02-01. MCYT (Spain), 342,793€, 01/10/2006-12/31/2009.

12. PI: Pedro Luis Mateo Alarcon. Title of the project: “Development of a Thermodynamic, Structural and Dynamic Methodology for the Design of Peptidic Ligands of SH3 Domains of Biotechnological Interest”. MICYT (Spain), 12/01/2003-11/30/2006

### **Invited speaker:**

1. **Jose M. Martín-García.** Talk Title: “Time-resolved structural biology: an overview and latest breakthroughs”. Symposium Towards Molecular Movies of Enzymatic Reactions with Time-resolved Crystallography. 44<sup>th</sup> National Congress of the Spanish Society of Biochemistry and Molecular Biology (SEBBM), Malaga, September 6-9, 2022.
2. **Jose M. Martín-García.** Talk Title: “Room-temperature Macromolecular Serial crystallography at XFELs and synchrotrons”. Micro-Symposium. New high-resolution structural techniques: advances and possibilities. Grupo Especializado de Cristalografía y Crecimiento Cristalino (GE3C), Granada, July 1, 2022
3. **Jose M. Martín-García.** Talk Title: “Monochromatic and Pink X-ray Beam Serial Synchrotron Crystallography with Viscous Jets”. Workshop on Dynamic X-ray Crystallography. APS/CNM Users´ Meeting 2021. VIRTUAL. May 3-14<sup>th</sup>, 2021.
4. **Jose M. Martín-García.** Talk Title: “Perspectives for Macromolecular Crystallography at X-ray Free Electron Lasers”. First meeting of the European XFEL Spanish user community at the 2020 European XFEL users´ meeting. Hamburg, Germany. January 27-30, 2020.
5. **Jose M. Martín-García.** Talk Title: “Latest Advances on Serial Crystallography at XFELs and Synchrotron Sources”. Annual Meeting American Crystallographic Association (ACA). Cincinnati, USA. July 20-24, 2019.
6. **Jose M. Martín-García.** Talk Title: “Using Microgravity at the International Space Station to Lead to New Therapeutics for Taspase1: A Novel Cancer Target”. Annual Meeting American Crystallographic Association (ACA). Cincinnati, USA. July 20-24, 2019.
7. **Jose M. Martín-García.** Talk Title: “Manipulation of Tiny Crystals for Serial Crystallography”. International School on Biological Crystallization (ISBC). Granada, Spain. May 26<sup>th</sup> to June 3<sup>rd</sup>, 2019.
8. **Jose M. Martín-García.** Talk Title: “Preparation and characterization of micro-crystals for Serial Crystallography”. 2019 NSLS-II & CFN Users' Meeting. Upton, NY, USA. May 20<sup>th</sup>, 2019.
9. **Jose M. Martín-García.** Talk Title: “Monochromatic and Polychromatic Serial Crystallography at Synchrotron Sources”. 6th BioXFEL International Conference. San Diego, CA, United States of America. February 2-4, 2019.
10. **Jose M. Martín-García.** Talk Title: “ASU CXLS/CXFEL: Breaking Frontiers in Structure Determination and Drug Discovery Science”. Workshop on Dynamics, Structure, and Function in Biological Systems, Scientific opportunities at ASU Compact X-ray Free Electron Laser. Biodesign Institute, Center for Applied Structural Discovery. Arizona State University, Tempe, AZ, USA, April 6-8, 2018.
11. **Jose M. Martín-García.** Talk Title: “Serial Femtosecond Crystallography: Dealing with the tiny”. Mini-workshop on Perspectives of Bio-crystallography on Free Electron Lasers. Instituto de Química-Física Rocasolano, CSIC, Madrid (Spain), June 5, 2017.
12. **Jose M. Martín-García.** Talk Title: “Manipulation of Tiny Crystals for Serial Crystallography”. International School on Biological Crystallization (ISBC), Laboratorio de Estudios Cristalograficos, Granada (Spain), May 29-June 2, 2017.
13. **Jose M. Martín-García.** Talk Title: “Introduction to data collection at XFELs and serial femtosecond crystallography data analysis”. Macromolecular Crystallography School (MCS2017). Instituto de Química-Física Rocasolano, CSIC, Madrid (Spain), May 5-10, 2017.
14. **Jose M. Martín-García.** Talk Title: “New structural finding in CapA membrane protein from Francisella Tularensis” (Colloquium). School of Cellular and Molecular Biology, Astbury Centre for Structural Molecular Biology, University of Leeds, UK, March 27, 2014.
15. **Jose M. Martín-García.** Talk Title: “Structure and function of the M2-1 protein of human respiratory syncytial virus” (Colloquium). School of Cellular and Molecular Biology, Astbury Centre for Structural Molecular Biology, University of Leeds, UK, March 28, 2014.

### **Contributions to conferences, meetings and workshops:**

#### **2023**

1. Title: “Towards deciphering Catalytic Mechanisms by Time-Resolved Serial Femtosecond Crystallography at XFELs”. Alice Grieco, Miguel A. Ruiz-Fresneda, Juan Luis Pacheco, Rebecca Jernigan, Diandra Doppler, Mukul Sonker, Shahriar Mobashery, Mayland Chang, Petra Fromme, Juan A. Hermoso, Alexandra Ros, Angel L. Pey, **Jose M. Martín-García**. XXX Symposium of the Crystallography and Crystal Growth Specialty Group (GE3C). Benidorm, Alicante. January 17-19, 202 (**Oral communication**)

#### **2022**

1. Title: “Towards deciphering Catalytic Mechanisms by Time-Resolved Serial Femtosecond Crystallography at XFELs”. Alice Grieco, Miguel A. Ruiz-Fresneda, Juan Luis Pacheco, Rebecca Jernigan, Diandra Doppler, Mukul Sonker, Shahriar Mobashery, Mayland Chang, Petra Fromme, Juan A. Hermoso, Alexandra Ros, Angel L. Pey, **Jose M. Martin-Garcia**. X AUSE Conference & V ALBA User’s Meeting. ALBA Synchrotron, Barcelona. Septiembre 5-8, 2022. VIRTUAL (**Poster presentation**)
2. Title: “Towards revealing the unique allosteric resistance mechanism of PBP2a of Staphylococcus aureus at X-ray free electron lasers”. Alice Grieco, Mayland Chang, Shahriar Mobashery, Juan A. Hermoso, **Jose M. Martin-Garcia**. European XFEL Users’ Meeting, Hamburg, Germany. January 21-27, 2022. VIRTUAL (**Poster presentation**)

## 2021

1. Title: “Small is Beautiful”. **Jose M. Martin-Garcia**. 43rd Annual Meeting of the Spanish Society of Biochemistry & Molecular Biology (SEBBM), Barcelona, Spain. July 19-22, 2021 (**Poster presentation**)
2. Title: “New Structural Insights into the Function of the Catalytically Active Human Taspase1”. **Jose M. Martin-Garcia**, Nirupa Nagaratnam, Silvia Delker, Rebecca Jernigan, Thomas Edwards, Janey Sneider, Darren Thifault, Dewight Williams, Brent Nannenga, Mary Stofega, Lidia Sambucetti, James J. Hsieh, Andrew Flint, Petra Fromme. 71st ACA Annual Meeting. July 30, 2021 to August 4, 2021. VIRTUAL (**Poster presentation**)
3. Title: “Serial Femtosecond Crystallography: A decade at the Forefront of Structural Biology”. **Jose M. Martin-Garcia**. GE3C Symposium. Department of Crystallography and Structural Biology, Institute of Physical Chemistry Rocasolano, CSIC, Madrid, Spain. January 19-22, 2021 (**Oral communication**)
4. Title: “Manipulation of Tiny Crystals for Serial Crystallography”. **Jose M. Martin-Garcia**. GE3C Symposium. Department of Crystallography and Structural Biology, Institute of Physical Chemistry Rocasolano, CSIC, Madrid, Spain. January 19-22, 2021 (**Oral communication**)

## 2019

1. Title: “Watching the Inactivation of an Antibiotic by an Enzyme at an X-ray Free Electron Laser”. **Jose M. Martin-Garcia**, J.L. Olmos, S. Pandey, P. Fromme, M. Schmidt. Nature Conference. Arizona State University, Tempe, AZ, November 5-7, 2019. (**Poster presentation**)
2. Title: “New Structural Insights into the Function of the Active Full Length Human Taspase1: A Novel Anticancer Therapeutic Target”. R. Jernigan, N. Nagaratnam, D. Thifault, S. Delker, M. Zacks, T. Edwards, L. Sambucetti, L. Tong, R. Fromme, J. Schneider, J. Hsieh, B. Mroczkowski, A. Flint, P. Fromme, **Jose M. Martin-Garcia**. Nature Conference. Arizona State University, Tempe, AZ, November 5-7, 2019. (**Poster presentation**)

## 2018

1. Title: “Structure Determination of Inhibitor Complexes with Full Length Human Taspase1: Towards Rational Drug Design Against a New Cancer Target”. **Jose M. Martin-Garcia**, N. Nagaratnam, R. Jernigan, M. Holl, L. Tong, J. Schneider, J. Hsieh, A. Flint, P. Fromme. Inaugural Chemical Biology Consortium: Bridging the Gaps of Drug Discovery. University of California San Francisco. San Francisco, CA, November 16<sup>th</sup>, 2018. (**Poster presentation**)
2. Title: “Applied Structural Discovery: Innovating in Drug Discovery Science”. **Jose M. Martin Garcia**, Michele Zacks, Justin Flory, Petra Fromme. Inaugural Chemical Biology Consortium: Bridging the Gaps of Drug Discovery. University of California San Francisco. San Francisco, CA, November 16<sup>th</sup>, 2018. (**Poster presentation**)
3. Title: “Applied Structural Discovery: Innovating in Drug Discovery Science”. **Jose M. Martin Garcia**, Michele Zacks, Justin Flory, Petra Fromme. Joint Symposium on Cancer Biology and Therapeutic Development. The University of Arizona Cancer Center, Tucson, AZ, USA, October 18<sup>th</sup>, 2018. (**Poster presentation**)
4. Title: “Structure Determination of Inhibitor Complexes with Full Length Human Taspase1: Towards Rational Drug Design Against a New Cancer Target”. **Jose M. Martin-Garcia**, N. Nagaratnam, R. Jernigan, M. Holl, L. Tong, J. Schneider, J. Hsieh, A. Flint, P. Fromme. 5<sup>TH</sup> BioXFEL Annual International Conference, New Orleans, LA, USA, February 13-15, 2018. (**Poster presentation**)

## 2017

1. Title: “Monochromatic and Pink Beam Serial Millisecond Crystallography at the Advanced Photon Source”. **Jose M. Martin-Garcia**, R. Fischetti, N. Zatsopin, N. Stander, L. Zhu, G. Subramanian, G. Nelson, J. Coe, N. Nagaratnam, S. Roy-Chowdhury, D. Kissick, A. Ishchenko, C. Conrad, G. Ketawala, D. James, J. Zook, C. Ogata, N. Venugopalan, S. Xu, A. Meents, V. Srajer, R. Henning, H. Chapman, J. Spence, U. Weierstall, V.

Cherezov, P. Fromme, W. Liu. West Coast Protein Crystallography Workshop, Asilomar, Pacific Grove, CA, USA, March 19-22, 2017. (**Oral presentation**)

- Title: "In vivo Crystallization and Initial Diffraction Patterns using the SFX-LCP technique of the  $\mu$ NS Protein of Avian Reovirus". **Jose M. Martin-Garcia**, Nirupa Nagaratnam, Justin Saul, Ji Qiu, John Spence, Petra Fromme, Joshua LaBaer. 2nd Annual ABRC Research Conference, The University of Arizona College of Medicine, Phoenix, USA, March 9<sup>th</sup>, 2017. (**Oral presentation**)
- Title: "Monochromatic and Pink Beam Serial Millisecond Crystallography at the Advanced Photon Source". **Jose M. Martin-Garcia**, R. Fischetti, N. Zatsepin, N. Stander, L. Zhu, G. Subramanian, G. Nelson, J. Coe, N. Nagaratnam, S. Roy-Chowdhury, D. Kissick, A. Ishchenko, C. Conrad, G. Ketawala, D. James, J. Zook, C. Ogata, N. Venugopalan, S. Xu, A. Meents, V. Srajer, R. Henning, H. Chapman, V. Cherezov, U. Weierstall, W. Liu, J. Spence, P. Fromme. 4th Annual International BioXFEL Conference, Las Vegas, NV, USA, January 10-12, 2017. (**Poster presentation**)
- Title: "Monochromatic and Polychromatic Serial Crystallography at the Advanced Photon Source". R.F. Fischetti, **Jose M. Martin-Garcia**, N. Zatsepin, N. Stander, L. Zhu, G. Subramanian, G. Nelson, J. Coe, N. Nagaratnam, S. Roy-Chowdhury, D. Kissick, A. Ishchenko, C. Conrad, G. Ketawala, D. James, J. Zook, C. Ogata, N. Venugopalan, S. Xu, A. Meents, V. Srajer, R. Henning, H. Chapman, J. Spence, U. Weierstall, V. Cherezov, P. Fromme, W. Liu. American Crystallographic Association, 67th Annual Meeting, New Orleans, LA, USA, May 26-30, 2017. (**Poster presentation**)

## 2016

- SwissFEL Kick-off meeting, Villigen, Switzerland, December 6, 2016. (ATTENDANCE)
- SPB/SFX Early User Workshop, European XFEL, Schenefeld, November 28-29, 2016. (ATTENDANCE)
- Title: "Serial Millisecond Crystallography at the Advanced Photon Source". **Jose M. Martin-Garcia**, Nadia Zatsepin, Gihan Ketawala, Lan Zhu, Ganesh Subramanian, Garret Nelson, Daniel James, Alexander Schaffer, Andrii Ishchenko, Craig Ogata, Naga Venugopalan, David Kissick, Vadim Cherezov, Uwe Weierstall, Wei Liu, John Spence, Petra Fromme, Robert Fischetti. American Crystallographic Association, 66th Annual Meeting, Dever, CO, USA, July 22-26, 2016. (**Oral presentation**)
- Title: "Serial Millisecond Crystallography at the Advanced Photon Source". **Jose M. Martin-Garcia**, R. Fischetti, N. Zatsepin, N. Stander, L. Zhu, G. Subramanian, G. Nelson, J. Coe, N. Nagaratnam, S. Roy-Chowdhury, D. Kissick, A. Ishchenko, C. Conrad, D. James, J. Zook, C. Ogata, N. Venugopalan, S. Xu, V. Cherezov, U. Weierstall, W. Liu, J. Spence, P. Fromme. LCLS-SSRL Annual Users' Meeting and Workshops, SLAC National Accelerator Laboratory, Menlo Park, CA, USA, October 5-8, 2016. (**Poster presentation**)

## 2015

- Title: "Femtosecond crystallography of the CapA inner membrane protein of *Francisella tularensis*". **Jose M. Martin-Garcia**, Rebekka M. Wachter, Shibom Basu, Ingo Grotjohann, Christopher Kupitz, Katerina DÖrner, Zhen Gong, Liqing Chen, John Spence, Henry Chapman, Nadia Zatsepin, Uwe Weierstall, Anton Barty, Sebastien Boulet, Thomas White, Richard Kirian, Andrew Aquila, Dingjie Wang, Daniel James, Garth Williams, Marvin Seibert, Mike Bogan, Raimund Fromme, Mark S. Hunter, William A. Cramer, Thomas Tomasiak, Robert M. Stroud, Michele H. Corzett, Brent W. Segelke, Amy Rasley, Matthias Frank, Conn Mallett, James P. Allen, Petra Fromme. 65<sup>th</sup> Annual Meeting of the American Crystallographic Association, Philadelphia, PA, USA, July 25-29, 2015. (**Poster presentation**)

## 2014

- Title: "Sequence analysis and biophysical characterization reveal the presence of a long-disordered region in the CapA membrane protein from *F. tularensis*". **Jose M. Martin-Garcia**, Debra T. Hansen, Andrey V. Loskutov, Mark D. Robida, Felicia M. Craciunescu, Kathryn Sykes, Rebekka M. Wachter, Petra Fromme, James P. Allen. Center for Membrane Proteins in Infectious Diseases. 3rd Annual Meeting, Arizona State University, TEMPE, AZ, USA, March 6-7, 2014. (**Poster presentation**)
- Title: "Sequence analysis and biophysical characterization reveal the presence of a long disordered region in the CapA membrane protein from *F. tularensis*". **Jose M. Martin-Garcia**, Debra T. Hansen, Andrey V. Loskutov, Mark D. Robida, Felicia M. Craciunescu, Kathryn Sykes, Rebekka M. Wachter, Petra Fromme, James P. Allen. 58th Biophysical Society Annual Meeting, San Francisco, CA, USA, February 15-19, 2014. (**Poster presentation**)

## 2013



1. Title: “Proliferating Cell Nuclear Antigen (PCNA) Interactions in Solution Studied by NMR”. Alfredo De Biasio, Ramón Campos-Olivas, Ricardo Sánchez, Jorge P López Alonso, David Pantoja-Uceda, Nekane Merino, Mainer Villate, **Jose M. Martin Garcia**, Francisco Castillo, Irene Luque, Francisco J Blanco. XXXVI Conference of the Spanish Society of Biochemistry and Molecular Biology, Madrid, Spain, September 3-6, 2013. (**Poster presentation**)
2. Title: “Purification, Biophysical Characterization, and Initial Crystallization Screening of the CapA membrane protein from Francisella tularensis”. **Jose M. Martin Garcia**, James Paul Allen, Rebekka Wachter, Petra Fromme. West Coast Protein Crystallography Workshop XXI (WCPCW), Monterey, CA, USA, March 17-20, 2013. (**Poster presentation**)
3. Title: “Biophysical Characterization, and Initial Crystallization Experiments of the CapA membrane protein from Francisella tularensis”. **Jose M. Martin Garcia**. Center for Membrane Proteins in Infectious Diseases 2<sup>nd</sup> Annual Meeting, Arizona State University, Tempe, AZ, USA, March 14-15, 2013. (**Oral presentation**)

## 2012

1. Title: “Purification, Biophysical Characterization, and Initial Crystallization Screening of the CapA membrane protein from Francisella tularensis”. **Jose M. Martin Garcia**, Katerina Dorner, James Paul Allen, Rebekka Wachter, Petra Fromme. NIH Roadmap to Membrane Protein Structures and Complexes. The 4<sup>th</sup> Membrane Protein Technologies Meeting, San Francisco, CA, USA, Nov. 28 - 30, 2012. (**Poster presentation**)
2. Title: “Biophysical characterization and initial crystallization screening of the CapA membrane protein from Francisella Tularensis”. **Jose M. Martin Garcia**, Srinivas N. Makam, James P. Allen, Petra Fromme. Workshop on Membrane Proteins, Tempe, Arizona, USA, March 13-15, 2012. (**Poster presentation**)

## 2007

1. Title: “Binding specificity in SH3 domains: Structural and thermodynamic analysis of the interaction of type I and type II proline-rich ligands with c-Src, c-Yes and Fyn-SH3 domains”. **Jose M. Martin Garcia**, Jose Cristobal Martinez, Javier Ruiz Sanz, Irene Luque. FEBS Workshop: Trends in Transient Interactions between Biological Macromolecules. Seville, Spain, 2007. (**Poster presentation**)

## 2006

2. Title: “Binding specificity in SH3 domains: Structural and thermodynamic analysis of the interaction of type I and type II proline-rich ligands with c-Src, c-Yes and Fyn-SH3 domains”. **Jose M. Martin Garcia**, Jose Cristobal Martinez, Javier Ruiz Sanz, Irene Luque. VI Ibero-American Conference of Biophysics (IACB 06), Madrid, Spain, 2006. (**Poster presentation**)
3. Title: “Determinants of binding specificity within SH3 domains from Src family: A thermodynamic study”. **Jose M. Martin Garcia**, Jose Cristobal Martinez, Javier Ruiz Sanz, Irene Luque. BIFI 2006, Zaragoza, Spain, 2006. (**Poster presentation**)

## 2005

1. Title: “Binding specificity within SH3 domains from Src family: a calorimetric study”. **Jose M. Martin Garcia**, Jose Cristobal Martinez, Javier Ruiz Sanz, Irene Luque. FEBS Workshop on Modular Protein Domains. From Functional Plasticity to Protein Linguistics, Seefeld, Austria, 2005. (**Poster presentation**)
2. Title: “A thermodynamic analysis of the specificity determinants on proline-rich ligand recognition by SH3 domains”. **Jose M. Martin Garcia**, Jose Cristobal Martinez, Javier Ruiz Sanz, Irene Luque. VI European Symposium of the Protein Society, Barcelona, Spain, 2005. (**Poster presentation**)

## Teaching Experience:

### PhD thesis as Co-supervisor

- Student name: Nirupa Nagaratham. Thesis supervisors: Petra Fromme (Supervisor), **Jose M. Martin Garcia** (co-supervisor), Debra T. Hansen (co-supervisor). Thesis Title: “Structure determination of a soluble (Taspase 1) and a membrane (FopA) protein towards rational drug design against cancer and infectious disease”. Arizona State University.

### Undergraduate thesis as Co-supervisor

- Student name: Rebecca Jernigan. Thesis supervisors: Petra Fromme (Supervisor), **Jose M. Martin Garcia** (co-supervisor), Debra T. Hansen (co-supervisor). Thesis Title: “Steps in Crystallography Towards Solving Protein Structures of Medically Relevant Proteins”. Arizona State University.

### Supervisor of a Final year project of a High School Student

- Student name: Rebecca Jernigan. Project supervisors: Petra Fromme, and **Jose M. Martin Garcia**. Project Title: “The Innovative Use of Proteolytic Enzymes as Specific Targeting Antivirals against GP9”. Arizona State University. Date of reading: 2015.

### **Organization of R&D events and activities:**

1. Title: “Towards Molecular Movies of Enzymatic Reactions with Time-resolved Crystallography”  
Type of activity: Symposium  
Organizing entity: IQFR-CSIC, Spain XFEL Hub  
Type of participation: Organizer  
Lugar de celebración: 44<sup>th</sup> National Congress of the Spanish Society of Biochemistry and Molecular Biology (SEBBM), Málaga, Spain.  
Date: September 6-9<sup>th</sup>, 2022  
Link: <https://congresos.sebbm.es/malaga2022/simposios/>
2. Title: “X AUSE Conference & V ALBA User’s Meeting”  
Type of activity: Conference  
Organizing entity: AUSE, ALBA and Spain XFEL Hub  
Type of participation: Organizer  
Date: September 5-8<sup>th</sup>, 2022  
Venue: ALBA Synchrotron, Barcelona, Spain  
Link: <https://ause.es/congreso10/>
3. Title: “High-resolution molecular structure determination: Methods development and applications”  
Type of activity: Seminar on Microelectron Diffraction (Micro-ED)  
Organizing entity: IQFR-CSIC  
Type of participation: Organizer  
Date: April 6<sup>th</sup>, 2022  
Venue: Auditorium of the IQFR-CSIC  
Link:  
<https://www.youtube.com/watch?v=3OOy10paYkw&list=PLnTdWBB0KOtcI3ZmP06uw6sXpw3CYNVNw&index=19>
4. Title: “The ID29 project, a new tool for time-resolved serial crystallography experiments at room temperature”  
Type of activity: Seminar  
Organizing entity: IQFR-CSIC  
Type of participation: Co-organizer  
Date: March 17<sup>th</sup>, 2022  
Venue: VIRTUAL  
Link: <https://lifehub.csic.es/evento/the-id29-project-a-new-tool-for-time-resolved-serial-crystallography-experiments-at-room-temperature/>
5. Title: “Scientific opportunities for the Spanish Community at XFELs”  
Type of activity: Workshop  
Organizing entity: IMDEA, CSIC, UAM  
Type of participation: Organizer  
Date: June 10-11<sup>th</sup>, 2021  
Venue: VIRTUAL  
Link: <https://nanociencia.imdea.org/xfel-workshop-2021/>
6. Title: “Macromolecular Serial Crystallography using the LCP Injector”  
Type of activity: Workshop  
Organizing entity: National Synchrotron Light Source, Brookhaven National Laboratory, Upton, NY, USA  
Type of participation: Organizer  
Date: May 20<sup>th</sup>, 2019  
Venue: VIRTUAL  
Link: [https://d.docs.live.net/0facb204bbf8e356/Documentos/CASD-ASU\\_2015-2020/Miscellaneous/Conferences-workshops-meetings/Workshop\\_NSLs-II\\_SX-LCP\\_ORGANIZER\\_May\\_2019/Certificate/Martin-Garcia%20Letter.pdf](https://d.docs.live.net/0facb204bbf8e356/Documentos/CASD-ASU_2015-2020/Miscellaneous/Conferences-workshops-meetings/Workshop_NSLs-II_SX-LCP_ORGANIZER_May_2019/Certificate/Martin-Garcia%20Letter.pdf)

### **Other Scientific Activities of Interest:**

1. Editor of three special issues of the journal Crystals from MDPI Publisher:
  - New structural studies of coronavirus proteins:  
[https://www.mdpi.com/journal/crystals/special\\_issues/structural\\_studies\\_of\\_coronavirus\\_proteins](https://www.mdpi.com/journal/crystals/special_issues/structural_studies_of_coronavirus_proteins)
  - Serial macromolecular crystallography (Volume I):  
[https://www.mdpi.com/journal/crystals/special\\_issues/Macromolecular\\_Serial\\_Crystallography](https://www.mdpi.com/journal/crystals/special_issues/Macromolecular_Serial_Crystallography)
  - Serial macromolecular crystallography (Volume II):  
[https://www.mdpi.com/journal/crystals/special\\_issues/Macromolecular\\_Serial\\_Crystallography2](https://www.mdpi.com/journal/crystals/special_issues/Macromolecular_Serial_Crystallography2)
2. Topical Advisory Panel Member of the journal Crystals of MDPI Publisher
3. Outreach activities:
  - I have created the website of my own research group:  
<https://jmmartin46.wixsite.com/josemartin-group>
  - Together with my colleague Wojciech Gawelda, from IMDEA Nanoscience (Madrid, Spain), we have created the "Spain XFEL Hub" (<https://xfel-hub.es/>), an international platform to integrate approaches from multiple research areas with the aim of bringing XFEL technology closer to scientists working in Spain and beyond.
  - Created the chapter on XFELs "The XFEL revolution" in the web page of the Crystallography and Structural Biology (CBE) group:  
<https://www.xtal.iqfr.csic.es/Cristalografia/index-en.html>
  - Video on protein structural dynamics with X-ray free electron lasers posted on Twitter by the CBE-IQFR:  
[https://twitter.com/CBE\\_IQFR/status/1435545312324632578](https://twitter.com/CBE_IQFR/status/1435545312324632578)
  - Interview for La Voz de Almería:  
<https://www.lavozdealmeria.com/noticia/12/almeria/177346/un-virgitano-que-llega-a-la-nasa>
  - Article for Arizona State University:  
<https://asunow.asu.edu/20190426-discoveries-finding-answers-cancer-cosmos>
  - Interview for Europa Press:  
<https://www.europapress.es/andalucia/almeria-00350/noticia-investigador-universidad-almeria-lidera-estudio-nasa-proteina-relacionada-cancer-20190520184511.html>
  - Interview for Fundación Descubre:  
<https://fundaciondescubre.es/noticias/investigador-la-universidad-almeria-lidera-proyecto-la-nasa-mejorar-la-salud-humana/>
  - Article for the University of Almería:  
<https://news.ual.es/ciencia/un-investigador-de-la-ual-lidera-un-proyecto-de-la-nasa-para-mejorar-la-salud-humana/>
  - Interview for NYCT:  
<https://noticiasdelaciencia.com/art/32870/un-investigador-de-la-universidad-de-almeria-lidera-un-proyecto-de-la-nasa-para-mejorar-la-salud-humana>
  - Interview for Innova España  
<https://www.innovaspain.com/el-espanol-que-lidera-un-proyecto-de-la-nasa-para-desarrollar-una-medicina-contra-el-cancer/>
  - Interview for the program CONCIENCIA of Canal Sur TV:  
<http://www.canalsur.es/television/programas/conciencia/detalle/285.html?video=1443894&sec>  
<https://www.youtube.com/watch?v=Z5xVCJibJgU&t=15s>
  - Interview for Arizona PBS Horizon TV channel:  
<https://azpbs.org/horizon/2019/07/cancer-fighting-research-in-space/>
  - Interview for ABC 15 News TV channel:  
<https://www.abc15.com/news/asu-chemists-send-protein-to-space-in-hopes-of-developing-cancer-cure>
3. Awards:
  - Awarded the CrystEngComm Best Poster Award at the 2021 American Crystallographic Association 71st Annual Meeting Virtual Conference. Poster title "New Structural Insights into the Function of the Catalytically Active Human Taspase1".
  - Awarded in 2017 the *Knowledge Enterprise Development and Biodesign Institute Leadership Award* by Joshua LaBaer, Director of the Biodesign Institute at Arizona State University, for my five **outstanding** years of service to ASU.
  - Awarded in 2019 the catalysis award for the best poser in catalysis "Watching the Inactivation of an Antibiotic by an Enzyme at an X-ray Free Electron Laser" by Nature conference held at Arizona State University on November 6-8, 2019.

4. Stays in private or public institutions:  
Laboratory of Dr. Martin Caffrey  
Entity: Trinity College, Dublin, Ireland  
Dates: March 4-8, 2013  
Funding entity: Arizona State University, USA  
Task: Crystallization of membrane proteins by using the *in meso* method  
Acquired skills: Membrane protein crystallization by using the "*in meso*" or lipidic cubic phase (LCP) method.
5. Member of scientific organizations:
  - Grupo Especializado de Cristalografía y Crecimiento Cristalino (GE3C); Start date: 2020; End date: to date; Country: Spain
  - Sociedad Española de Biofísica y Biología Molecular (SEBBM); Start date: 2021; End date: To date; Country: Spain
  - Real Sociedad Española de Química (RSEQ); Start date: 2020; End date: To date; Country: Spain
  - Asociación de Usuarios de Sincrotrones de España (AUSE); Start date: 2020; End date: To date; Country: Spain
  - American Crystallographic Association (ACA); Start date: 2015; End date: To date; Country: USA
  - American Chemical Society (ACS); Start date: 2015; End date: 2021; Country: USA.
  - National Cancer Institute (NCI), Experimental Therapeutics Program (NExT), National Institutes of Health (NIH); Start date: 2016; End date: 2020; Country: U.S.A.
6. Committee member of doctoral thesis:
  - Thesis title: CHIMERA PROTEINS OF THE SH3 DOMAINS OF C-SRC AND FYN TYROSIN KINASE: A STUDY OF THE MOLECULAR BASIS OF THREE-DIMENSIONAL DOMAIN CONTRACTING.  
Doctoral candidate: Marina Plaza Garrido  
Doctoral Program: Doctorate in Advanced Chemistry (RD99/11) (8911)  
Thesis supervisor: Dr. D<sup>a</sup>. Ana María Cámara Artigas  
Place of defense: University of Almería  
Date of defense: July 16<sup>th</sup>, 2021  
Link: <https://dialnet.unirioja.es/servlet/tesis?codigo=290664>
7. Evaluation of international projects:
  - Human Frontier Science Program (HFSP)
  - Swiss National Science Foundation (SNSF)
8. Review of research papers:
  - Reviewer of articles in the scientific journals: Cells, Biomolecules, Crystals, International Journal of Molecular Sciences, Processes, EBiomedicine, Acta Crystallographica section D, Journal of Applied Crystallography, and Molecules.
9. Positive evaluation by ANECA for research and teaching activity for the purpose of being hired as "**Profesor Ayudante Doctor**" (2018).
10. Obtained the **I3 certificate** with a score of **9.5 points**.