Ministry of Science and Innovation

Higher Scientific Research Council (CSIC)

Curriculum vitae

F. Xavier Gomis-Rüth

PERSONAL DETAILS

Name: **F. Xavier Gomis-Rüth**
Date and place of birth: 4 December 1964 in Barcelona

CURRENT POSITION

Organization: Consejo Superior de Investigaciones Científicas (**CSIC**)
(Higher Scientific Research Council)
Centre: Molecular Biology Institute of Barcelona (**IBMB**)
Department: Dept. of Structural Biology (**DSB**)
Position Held: Principal Investigator (**PI**) of the Proteolysis Lab
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Lines of Research: Structural and functional biochemistry of proteolysis
Structural and functional biochemistry of host-microbiome interactions

EDUCATION

B.Sc. in Chemical Sciences 4.1994
"Ramon Llull" University, Barcelona
Ph.D. (Dr. rer. nat.) **in Protein Crystallography** 7.1992
Faculty of Chemistry and Pharmacy, Ludwig – Maximilian University, Munich, Germany
(Accredited by the Spanish Ministry of Education and Science on 14.10.1994)
M.Sc. in Organic Stereochemistry 7.1989
Chemical Institute of Sarrià, Barcelona
B.Sc. in Chemical Engineering 6.1988
IQS, Barcelona

CAREER HISTORY

Full Professor *(Profesor de Investigación CSIC)*, DSB, IBMB since 7.2008
Director of DSB, IBMB 11.2014 – 7.2022
Vice-Director of IBMB 9.2010 – 7.2014
Director of DSB, IBMB 2.2008 – 9.2010
Tenured Associate Professor *(Investigador Científico CSIC)*, DSB, IBMB 11.2004 – 7.2008
Tenured Assistant Professor *(Científico Titular CSIC)*, DSB, IBMB 9.2000 – 11.2004
Interim Assistant Professor *(Científico Titular Interino CSIC)*, DSB, IBMB 12.1999 – 8.2000
Postdoctoral Researcher DSB, IBMB (PI: M. Coll) 1.1997 – 12.1999
Postdoctoral Researcher, 4.1995 – 12.1996
Max-Planck Institute of Biochemistry, Munich, Germany
(PIs: R. Huber [Nobel Prize in Chemistry 1988] and W. Bode)
Postdoctoral Researcher, 11.1992 – 3.1995
Institute of Fundamental Biology, Autonomous University of Barcelona (PI: F.X. Avilés)
Postdoctoral Researcher, 8.1992 – 10.1992
Max-Planck Institute of Biochemistry, Munich, Germany (PIs: R. Huber and W. Bode)
Graduate student, 8.1989 – 7.1992
Max-Planck Institute of Biochemistry, Munich, Germany (PIs: R. Huber and W. Bode)

COMPLETE LIST OF PEER-REVIEWED SCIENTIFIC ARTICLES

(authorships of [co-]correspondence of F.X. Gomis-Rüth (in bold) with asterisks; the most relevant articles are highlighted)

SUMMARY (only accepted/published peer-reviewed publications indexed by Clarivate)

Total nº of publications (1992-2023)	**151**
Publications in D1 / Q1 (without D1) **/ Q2 ***	**40 / 82 / 21**
Nº of first-author publications	**30**
Nº of publications as last/corresponding author	**94 (81 of last 100)**
Total nº of citations (Scholar Google) as of 9.2.2023/ since 2018	**13,943 / 3028**
Cumulative Impact Factor (Clarivate) *	**1021**
Average citations per year 2018-2022 (Scholar Google)	**590**
H-Index / i10-index as of 9.2.2023 (Scholar Google)	**59 / 132**

(see http://scholar.google.com/citations?user=w-SQWtIAAAAJ)

* Clarivate issue of respective year, except 1992–1997: 1997 issue; 2022–2023: 2021 issue. Clarivate was previously Thomson Reuters.

1) J. Irurre, F. Marquillas, E. Narbón, C. Puig & **X. Gomis** (1992). Atropoisomería en la serie 11*H* -dibenzo[b,e]azepínica. Parte III. 11-oxo derivados N-aril sustituidos. ***An. Quim.***, **88**, 601-606.
2) W. Bode, **F.X. Gomis-Rüth**, R. Huber, R. Zwilling & W. Stöcker (1992). Structure of astacin and implications for activation of astacins and zinc-ligation of collagenases. ***Nature***, **358**, 164-167.
3) M.J. Romão, D. Turk, **F.X. Gomis-Rüth**, R. Huber, G. Schumacher, H. Möllering & L. Rüssmann (1992). Crystal structure analysis, refinement and enzymatic reaction mechanism of *N*-carbamoylsarcosine amidohydrolase from *Arthrobacter sp.* at 2.0 Å resolution. ***J. Mol. Biol.***, **226**, 1111-1130.
4) B. Laber, **F.X. Gomis-Rüth**, M.J. Romão & R. Huber (1992). *Escherichia coli* dihydrodipicolinate synthase. Identification of the active site and crystallization. ***Biochem. J.***, **288**, 691-695.
5) **F.X. Gomis-Rüth**, W. Stöcker, R. Huber, R. Zwilling & W. Bode (1993). Refined 1.8 Å X-ray crystal structure of astacin, a zinc-endopeptidase from the crayfish *Astacus astacus* L. Structure determination, refinement, molecular structure, and comparison with thermolysin. ***J. Mol. Biol.***, **229**, 945-968.
6) W. Stöcker, **F.X. Gomis-Rüth**, W. Bode & R. Zwilling (1993). Implications of the three-dimensional structure of astacin for the structure and function of the astacin family of zinc-endopeptidases. ***Eur. J. Biochem.***, **214**, 215-231.
7) W. Bode, **F.X. Gomis-Rüth** & W. Stöcker (1993). Astacins, serralysins, snake venom and matrix metalloproteinases exhibit identical zinc-binding environments (HEXXHXXGXXH and Met-turn) and topologies and should be grouped into a common family, the ´metzincins´. ***FEBS Lett.***, **331**, 134-140.
8) **F.X. Gomis-Rüth**, L.F. Kress & W. Bode (1993). First structure of a snake venom metalloproteinase: a prototype for matrix metalloproteinases/collagenases. ***EMBO J.***, **12**, 4151-4157.
9) **F.X. Gomis-Rüth**, F. Grams, I. Yallouros, H. Nar, U. Küsthardt, R. Zwilling, W. Bode & W. Stöcker (1994). Crystal structures, spectroscopic features and catalytic properties of cobalt(II), copper(II), nickel(II), and mercury(II) derivatives of the zinc endopeptidase astacin. A correlation of structure and proteolytic function. ***J. Biol. Chem.***, **269**, 17111-17117.
10) **F.X. Gomis-Rüth**, L.F. Kress, J. Kellermann, I. Mayr, X. Lee, R. Huber & W. Bode (1994). Refined 2.0 Å X-ray crystal structure of the snake venom zinc-endopeptidase adamalysin II. Primary and tertiary structure determination, refinement, molecular structure and comparison with astacin, collagenase and thermolysin. ***J. Mol. Biol.***, **239**, 513-544.
11) D. Zhang, I. Bothos, **F.X. Gomis-Rüth**, R. Doll, C. Blood, F.G. Njoroge, J.W. Fox, W. Bode & E.F. Meyer (1994). Structural interaction of natural and synthetic inhibitors with the venom metalloproteinase, atrolysin C (form d). ***Proc. Natl. Acad. Sci. USA***, **91**, 8447-8451.
12) W. Stöcker, F. Grams, U. Baumann, P. Reinemer, **F.X. Gomis-Rüth**, D.B. McKay & W. Bode (1995). The metzincins - Topological and sequential relations between the astacins, adamalysins, serralysins, and matrixins (collagenases) define a superfamily of zinc-peptidases. ***Prot. Sci.***, **4**, 823-840.
13) **F. X. Gomis-Rüth**, M. Gómez, S. Ventura, J. Vendrell & F. X. Avilés (1995). Crystallization and preliminary X-ray analysis of the ternary complex of procarboxypeptidase A from bovine pancreas. ***FEBS Lett.***, **367**, 211-213.
14) **F.X. Gomis-Rüth**, I. Fita, R. Kiefersauer, R. Huber, F.X. Avilés & J. Navaza (1995). Determination of hemihedral twinning and initial structural analysis of crystals of the procarboxypeptidase A ternary complex. ***Acta Cryst.***, **D51**, 819-823.
15) **F. X. Gomis-Rüth**, M. Gómez, W. Bode, R. Huber & F. X. Avilés (1995). The three-dimensional structure of the native ternary complex of bovine pancreatic procarboxypeptidase A with proproteinase E and chymotrypsinogen C. ***EMBO J.***, **14**, 4387-4394.
16) U. Gohlke, **F.X. Gomis-Rüth**, T. Crabbe, G. Murphy, A.J.P. Docherty & W. Bode (1996). The C-terminal (haemopexin-like) domain structure of human gelatinase A (MMP2): structural implications for its function. ***FEBS Lett.***, **378**, 126 -130.
17) R. Kiefersauer, J. Stetefeld, **F.X. Gomis-Rüth**, M.J. Romão, F. Lottspeich & R. Huber (1996). Protein crystal density by volume measurement and amino acid analysis. ***J. Appl. Crystallogr.***, **29**, 311-317.
18) **F.X. Gomis-Rüth ***, U. Gohlke, M. Betz, V. Knäuper, G. Murphy, C. López-Otín & W. Bode (1996). The helping hand of collagenase 3 (MMP-13): 2.7Å crystal structure of its C-terminal haemopexin-like domain. ***J. Mol. Biol.***, **264**, 556-566.
19) F.J. Medrano, J. Alonso, J.L. García, W. Bode & **F.X. Gomis-Rüth** (1997). Crystallization and preliminary X-ray diffraction analysis of proline-iminopeptidase from *Xanthomonas campestris* pv. *citri*. ***FEBS Lett.***, **400**, 91-93.
20) M. Gómez-Ortiz, **F.X. Gomis-Rüth**, R. Huber & F.X. Avilés (1997). The inhibition of carboxypeptidase A by excess zinc: analysis of the structural determinants by X-ray crystallography. ***FEBS Lett.***, **400**, 336-340.

21) C. Hammann, G. van Pouderoyen, H. Nar, **F.X. Gomis-Rüth**, A. Messerschmidt, R. Huber, T. den Blaauwen & G.W. Canters (1997). Crystal structures of modified apo-His117Gly and apo-His46Gly mutants of *Pseudomonas aeruginosa* azurin. ***J. Mol. Biol.***, **266**, 357-366.
22) S. Ventura, **F.X. Gomis-Rüth**, A. Puigserver, F.X. Avilés & J. Vendrell (1997). Pancreatic procarboxypeptidases: oligomeric structures and activation processes revisited. ***Biol. Chem.***, **378**, 161-165.
23) **F.X. Gomis-Rüth ***, M. Gómez-Ortiz, J. Vendrell, S. Ventura, W. Bode, R. Huber & F.X. Avilés (1997). Crystal structure of an oligomer of proteolytic zymogens: detailed conformational analysis of the bovine ternary complex and implications for their activation. ***J. Mol. Biol.***, **269**, 861-880
24) S. Strobl, **F.X. Gomis-Rüth**, K. Maskos, G. Frank, R. Huber & R. Glockshuber (1997). The α-amylase from the yellow meal worm: complete primary structure, crystallization and preliminary X-ray analysis. ***FEBS Lett.***, **409**, 109-114.
25) M. Betz, P. Huxley, S.J. Davies, Y. Mushtaq, M. Pieper, H. Tschesche, W. Bode & **F.X. Gomis-Rüth *** (1997). The 1.8-Å crystal structure of the catalytic domain of human neutrophil collagenase (matrix metalloproteinase-8) complexed with a peptidomimetic hydroxamate primed-side inhibitor with a distinct selectivity profile. ***Eur. J. Biochem.***, **247**, 356-363.
26) **F.X. Gomis-Rüth**, K. Maskos, M. Betz, A. Bergner, R. Huber, K. Suzuki, N. Yoshida, H. Nagase, K. Brew, G.P. Bourenkov, H. Bartunik & W. Bode (1997). Mechanism of inhibition of the human matrix metalloproteinase stromelysin-1 by TIMP-1. ***Nature***, **389**, 77-81.
27) M. Pieper, M. Betz, N. Budisa, **F.X. Gomis-Rüth**, W. Bode & H. Tschesche (1997). Expression, purification, characterization and X-ray analysis of selenomethionine 215 variant of leukocyte collagenase. ***J. Prot. Chem.***, **16**, 637-650.
28) M. Cirilli, C. Gallina, E. Gavuzzo, C. Giordano, **F.X. Gomis-Rüth**, B. Gorini, L.F. Kress, F. Mazza, M. Paglialunga Paradisi, G. Pochetti & V. Politi (1997). 2Å X-ray structure of adamalysin II complexed with a peptide phosphonate inhibitor adopting a retro-binding mode. ***FEBS Lett.***, **418**, 319-322.
29) F.J. Medrano, J. Alonso, J.L. García, A. Romero, W. Bode & **F.X. Gomis-Rüth *** (1998). Structure of proline iminopeptidase from *Xanthomonas campestris* pv. *citri*: a prototype for the prolyl oligopeptidase family. ***EMBO J.***, **17**, 1-9.
30) **F.X. Gomis-Rüth ***, E.F. Meyer, L.F. Kress & V. Politi (1998). Structures of adamalysin II with peptidic inhibitors. Implications for the design of tumour necrosis factor α convertase inhibitors. ***Prot. Sci.***, **7**, 283-292.
31) **F.X. Gomis-Rüth ***, M. Gómez-Ortiz, J. Vendrell, S. Ventura, W. Bode, R. Huber & F.X. Avilés (1998). Cutting at the right place. The importance of selective limited proteolysis in the activation of proproteinase E. ***Eur. J. Biochem.***, **251**, 839-844.
32) S. Strobl, K. Maskos, M. Betz, G. Wiegand, R. Huber, **F.X. Gomis-Rüth *** & R. Glockshuber (1998). Crystal structure of the yellow meal worm α-amylase at 1.64 Å resolution. ***J. Mol. Biol.***, **278**, 617-628.
33) **F.X. Gomis-Rüth ***, M. Solà, R. Pérez-Luque, P. Acebo, M.T. Alda, A. González, M. Espinosa, G. del Solar & M. Coll (1998). Overexpression, purification, crystallization, and preliminary X-ray diffraction analysis of the pMV158-encoded plasmid transcriptional repressor protein CopG. ***FEBS Lett.***, **425**, 161-165.
34) S. Strobl, K. Maskos, G. Wiegand, R. Huber, **F.X. Gomis-Rüth *** & R. Glockshuber (1998). A novel strategy for inhibition of α-amylases: yellow meal worm α-amylase in complex with the *Ragi* bifunctional inhibitor at 2.5 Å resolution. ***Structure***, **6**, 911-921.
35) M. Solà, **F.X. Gomis-Rüth**, A. Guasch, L. Serrano & M. Coll (1998). Overexpression, purification, crystallization, and preliminary X-ray diffraction analysis of the receiver domain of PhoB. ***Acta Cryst.***, **D54**, 1460-1463.
36) **F.X. Gomis-Rüth**, M. Solà, P. Acebo, A. Párraga, A. Guasch, R. Eritja, A. González, M. Espinosa, G. del Solar & M. Coll (1998). The structure of plasmid-encoded transcriptional repressor CopG, unliganded and bound to its operator. ***EMBO J.***, **17**, 7404-7415.
37) S.S. Terzyan, R. Peracaula, R. de Llorens, Y. Tsushima, H. Yamada, M. Seno, **F.X. Gomis-Rüth *** & M. Coll (1999). The three-dimensional structure of human RNase 4, unliganded and complexed with d(Up), reveals the basis for its uridine selectivity. ***J. Mol. Biol.***, **285**, 205-214.
38) M. Solà, **F.X. Gomis-Rüth**, L. Serrano, A. González & M. Coll (1999). Three-dimensional crystal structure of the transcription factor PhoB receiver domain. ***J. Mol. Biol.***, **285**, 675-687.
39) A. González, J.-D. Pédelacq, M. Solà, **F.X. Gomis-Rüth**, M. Coll, J.P. Samama & S. Benini (1999). Two wavelength MAD phasing: in search of the optimal wavelengths. ***Acta Cryst.***, **D55**, 1449-1458.
40) **F.X. Gomis-Rüth**, V. Companys, Y. Qian, L.D. Fricker, J. Vendrell, F.X. Avilés & M. Coll (1999). Crystal structure of avian carboxypeptidase D domain II: a prototype for the regulatory metallocarboxypeptidase family. ***EMBO J.***, **18**, 5817-5826.
41) G. Mallorquí-Fernández, J. Pous, R. Peracaula, T. Maeda, H. Tada, H. Yamada, M. Seno, R. de Llorens, **F.X. Gomis-Rüth *** & M. Coll (2000). Three-dimensional structure of human eosinophil cationic protein (RNase 3) at 1.75 Å resolution. ***J. Mol. Biol.***, **300**, 1297-1309.
42) **F.X. Gomis-Rüth**, G. Moncalián, R. Pérez-Luque, A. González, E. Cabezón, F. de la Cruz & M. Coll (2001). Structure of a membrane DNA transfer protein essential for bacterial conjugation. ***Nature***, **409**, 637-641.
43) J. Pous, G. Mallorquí-Fernández, R. Peracaula, S.S. Terzyan, J. Futami, H. Tada, H. Yamada, M. Seno, R. de Llorens, **F.X. Gomis-Rüth *** & M. Coll (2001). Three-dimensional crystal structure of human RNase 1ΔN7 at 1.9 Å. ***Acta Cryst.***, **D57**, 498-505.
44) V. Knäuper, M.L. Stewart, **F.X. Gomis-Rüth**, B. Smith, A. Lyons, A.J.P. Docherty & G. Murphy (2001). The role of Exon 5 in fibroblast collagenase (MMP-1) substrate specificity and inhibitor selectivity. ***Eur. J. Biochem.***, **268**, 1888-1896.
45) P. Aloy, V. Companys, J. Vendrell, F.X. Avilés, L.D. Fricker, M. Coll & **F.X. Gomis-Rüth** (2001). The crystal structure of the inhibitor-complexed carboxypeptidase D domain II as a basis for the modelling of regulatory carboxypeptidases. ***J. Biol. Chem.***, **276**, 16177-16184.
46) **F.X. Gomis-Rüth *** & M. Coll (2001). Solving a 300kDa multimeric protein by low-resolution MAD phasing and averaging/phase extension. ***Acta Cryst.***, **D57**, 800-805.

47) M. Costa, M. Solà, G. Del Solar, R. Eritja, A.M. Hernández-Arriaga, M. Espinosa, **F.X. Gomis-Rüth *** & M. Coll (2001). Plasmid transcriptional repressor CopG oligomerises to render helical superstructures unbound and in complexes with oligonucleotides. ***J. Mol. Biol.***, **310**, 403-417.
48) **F.X. Gomis-Rüth** & M. Coll (2001). The structure of TrwB, a gatekeeper in bacterial conjugation. ***Int. J. Biochem. Cell Biol.***, **33**, 839-843.
49) P.J.B. Pereira, M.C. Vega, E. González-Rey, R. Fernández-Carazo, S. Macedo-Ribeiro, **F. X. Gomis-Rüth**, A. González & M. Coll (2002). *Trypanosoma cruzi* macrophage infectivity potentiator has a rotamase core and a highly exposed α-helix. ***EMBO Rep.***, **3**, 88-94.
50) A. Guasch, J. Pous, B. Ibarra, **F.X. Gomis-Rüth**, J.M. Valpuesta, N. Sousa, J.L. Carrascosa & M. Coll (2002). Detailed architecture of a DNA translocation machine: the high-resolution structure of bacteriophage Φ29 connector particle. ***J. Mol. Biol.***, **315**, 663-676.
51) **F.X. Gomis-Rüth ***, G. Moncalián, F. de la Cruz & M. Coll (2002). Conjugative plasmid protein TrwB, an integral membrane type IV secretion system coupling protein: detailed structural features and mapping of the active site cleft. ***J. Biol. Chem.***, **277**, 7556-7566.
52) A.G. Blanco, M. Solà, **F.X. Gomis-Rüth** & M. Coll (2002). Tandem DNA recognition by PhoB, a two-component signal transduction transcriptional activator. ***Structure***, **10**, 701-713.
53) **F.X. Gomis-Rüth ***, F. de la Cruz & M. Coll (2002). Structure and role of coupling proteins in conjugal DNA transfer. ***Res. Microbiol.***, **153**, 199-204.
54) M. Llosa, **F.X. Gomis-Rüth**, M. Coll & F. de la Cruz (2002). Bacterial conjugation: a two-step mechanism for DNA transport. ***Mol. Microbiol.***, **45**, 1-8.
55) **F.X. Gomis-Rüth ***, A. Bayés, G. Sotiropoulou, G. Pampalakis, T. Tsetsenis, V. Villegas, F.X. Avilés & M. Coll (2002). The structure of human prokallikrein 6 reveals a novel activation mechanism for the kallikrein family. ***J. Biol. Chem.***, **277**, 27273-27281.
56) P.J.B. Pereira, S. Segura-Martín, B. Oliva, C. Ferrer-Orta, F.X. Avilés, M. Coll, **F.X. Gomis-Rüth *** & J. Vendrell. (2002). Human procarboxypeptidase B: three-dimensional structure and implications for thrombin-activatable fibrinolysis inhibitor (TAFI). ***J. Mol. Biol.***, **321**, 537-547.
57) G. del Solar, A.M. Hernández-Arriaga, **F.X. Gomis-Rüth**, M. Coll & M. Espinosa (2002). A genetically economical family of plasmid-encoded transcriptional repressors involved in the control of plasmid copy number. ***J. Bacteriol.***, **184**, 4943-4951.
58) **F. X. Gomis-Rüth**, A. Dessen, J. Timmins, A. Bracher, L. Kolesnikowa, S. Becker, H.-D. Klenk & W. Weissenhorn (2003). The matrix protein VP40 from Ebola virus octamerizes into pore-like structures with specific RNA-binding properties. ***Structure***, **11**, 423-433.
59) **F. X. Gomis-Rüth *** (2003). Structural aspects of the *metzincin* clan of metalloendopeptidases. ***Mol. Biotech.***, **24**, 157-202.
60) A. Canals, M.C. Vega, **F.X. Gomis-Rüth**, M. Díaz, R.I. Santamaría & M. Coll (2003). Structure of xylanase Xys1Δ from *Streptomyces halstedii*. ***Acta Cryst.***, **D59**, 1447-1453.
61) R. García-Castellanos, A. Marrero, G. Mallorquí-Fernández, J. Potempa, M. Coll & **F.X. Gomis-Rüth *** (2003). Three-dimensional structure of MecI: molecular basis for transcriptional regulation of staphylococcal methicillin resistance. ***J. Biol. Chem.***, **278**, 39897-39905.
62) A. Guasch, M. Lucas, M. Cabezas, R. Pérez-Luque, **F.X. Gomis-Rüth**, F. de la Cruz & M. Coll (2003). Recognition and processing of the origin of transfer DNA by conjugative relaxase TrwC. ***Nat. Struct. Biol.***, **10**, 1002-1010.
63) R. García-Castellanos, G. Mallorquí-Fernández, A. Marrero, J. Potempa, M. Coll & **F.X. Gomis-Rüth *** (2004). On the transcriptional regulation of methicillin resistance: MecI repressor in complex with its operator. ***J. Biol. Chem.***, **279**, 17888-17896.
64) **F.X. Gomis-Rüth ***, M. Solà, F. de la Cruz & M. Coll (2004). Coupling factors in macromolecular type IV secretion machineries. ***Curr. Pharm. Des.***, **10**, 1551-1565.
65) G. Mallorquí-Fernández, A. Marrero, S. García-Piquè, R. García-Castellanos & **F.X. Gomis-Rüth *** (2004). Staphylococcal methicillin resistance: fine focus on folds and functions. ***FEMS Microbiol. Lett.***, **235**, 1-8.
66) M. José-Estanyol, **F.X. Gomis-Rüth** & P. Puigdomènech (2004). The eight-cysteine motif, a versatile structure in plant proteins. ***Plant Physiol. Biochem.***, **42**, 355-365.
67) I. Pallarés, R. Bonet, R. García-Castellanos, S. Ventura, F.X. Avilés, J. Vendrell & **F.X. Gomis-Rüth *** (2005). Structure of human carboxypeptidase A4 with its endogenous protein inhibitor, latexin. ***Proc. Natl. Acad. Sci. USA***, **102**, 3978-3983.
68) R. García-Castellanos, R. Bonet-Figueredo, I. Pallarés, S. Ventura, F.X. Avilés, J. Vendrell & **F.X. Gomis-Rüth *** (2005). Detailed molecular comparison between the inhibition mode of A/B-type carboxypeptidases in the zymogen state and by the endogenous inhibitor latexin. ***Cell. Mol. Life Sci.***, **62**, 1996-2014.
69) D. Mouradov, A. Craven, J.K. Forwood, J.U. Flanagan, R. García-Castellanos, **F.X. Gomis-Rüth**, J.L. Martin, B. Kobe & T. Huber (2006). Modelling the structure of latexin-carboxypeptidase A complex based on chemical cross-linking and molecular docking. ***Protein Eng. Des. Sel. (PEDS)***, **19**, 9-16.
70) C. Tallant, R. García-Castellanos, J. Seco, U. Baumann & **F.X. Gomis-Rüth *** (2006). Molecular analysis of ulilysin, the structural prototype of a new family of metzincin metalloproteases. ***J. Biol. Chem.***, **281**, 17920-17928.
71) A. Marrero, G. Mallorquí-Fernández, T. Guevara, R. García-Castellanos & **F.X. Gomis-Rüth *** (2006). Unbound and acylated structures of the MecR1 extracellular antibiotic-sensor domain provide insights into the signal-transduction systems that triggers methicillin resistance. ***J. Mol. Biol.***, **361**, 506-521.
72) M. Solà, D.L. Drew, A.G. Blanco, **F.X. Gomis-Rüth** & M. Coll (2006). The cofactor-induced pre-active conformation in PhoB. ***Acta Cryst.***, **D62**, 1046-1057.
73) T. Guevara, N. Mallorquí-Fernández, R. García-Castellanos, S. García-Piqué, G.E. Petersen, C. Lauritzen, J. Pedersen, J. Arnau, **F. X. Gomis-Rüth *** & M. Solà (2006). Papaya glutamine cyclotransferase shows a singular fivefold β-propeller architecture that suggests a novel reaction mechanism. ***Biol. Chem.***, **387**, 1479-1486.

74) **F. X. Gomis-Rüth** & M. Coll (2006). Cut and move: Protein machinery for DNA processing in bacterial conjugation. ***Curr. Op. Struct. Biol***., **16**, 744-752.
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2) **F.X. Gomis-Rüth** (1992). Biochemische und kristallographische Arbeiten an zwei Enzymen: Dihydrodipicolinat-Synthase und Astacin. Faculty of Chemistry and Pharmacy, Ludwig-Maximilian University, Munich (Germany) (**Ph.D.-thesis**).
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4) W. Stöcker, **F.X. Gomis-Rüth**, R. Huber, R. Zwilling & W. Bode (1992). The three-dimensional structure of astacin and its implications for the structure and function of a new family of zinc-endopeptidases. ***Biol. Chem. Hoppe-Seyler***, **373**, 654-654 (**Conference abstract**).

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16) **F. X. Gomis-Rüth** (2004). Hemopexin Domains. In *Handbook of Metalloproteins – Volume III* (W. Bode, M. Cygler & A. Messerschmidt, eds.), John Wiley & Sons, Chichester, pp. 631-646 (**Book chapter**).
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34) **F.X. Gomis-Rüth** (2017). Third time lucky? Getting a grip on matrix metalloproteinases. ***J. Biol. Chem.***, **292**, 17975-17976 (**JBC Editors' Pick Highlight**).
35) A. Cuppari, H. Körschgen, D. Fahrenkamp, C. Schmitz, W. Jahnen-Dechent, W. Stöcker, L. Jovine & **F.X. Gomis-Rüth *** (2019). Selective inhibition of astacin metallopeptidases by mammalian fetuin-B. ***Acta Cryst.,*** **A75,** e135. DOI:10.1107/S2053273319094221 (**Conference abstract**; poster MS07-P20).
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COMPETITIVE FUNDING

(Current grants are highlighted)

- **PhD grant** (Max-Planck-Gesellschaft), Dept. of Structural Analysis, Max-Planck Institute of Biochemistry (Martinsried, Munich, Germany). 8.1989 – 7.1992
- **Postdoctoral research grant** (Max-Planck-Gesellschaft). Max-Planck Institute of Biochemistry. 8.1992 – 10.1992.
- **CIRIT Grant**, General Management of Research, Generalitat of Catalunya (**Travel expenses grant**). Ref. EE92-392. 11.1992 – 12.1992**.**
- **EMBO long-term fellowship**. Ref. ALTF 371-1992. 1.1993 – 7.1993**.**
- **CIRIT grant**, General Management of Research, Generalitat of Catalunya (**Travel expenses grant**). Ref. EE93-121. 5.1993 – 8.1993**.**
- **Marie-Curie Training Fellowship** financed by the European Commission's Human Capital and Mobility Programme (category 30). Ref.: ERBCHBICT920053. 7.1993 – 3.1995.
- **Postdoctoral Fellowship**, Research Personnel Training within the General Overseas Sub-programme of the Spanish Ministry of Education and Science. Ref. EX94 46121143. 4.1995 – 12.1996.
- **Research project** for the promotion of scientific-technical bilateral collaborations. Department of International Relations, Forschungsanstalt für Luft- und Raumfahrt (Germany) and CSIC. Trips and short stays between laboratories. Role: PI with R. Huber (Max-Planck Institute of Biochemistry). 1.1997 – 12.1998.
- **Special funding for incorporation into CSIC**, Vice-presidency of Scientific and Technical Research, CSIC. Ref. 999/00/070. Grant awarded: €1,803. Role: PI. 7.2000.
- **R&D project, State Plan of Biotechnology**. Ministry of Science and Technology. "Structural biology of hydrolases of therapeutic interest (I)". Ref. BIO2000-1659. Total awarded (incl. Indirect costs): €124,194. Role: PI. 1.2001 – 12.2003.
- **Grants for Consolidated Research Groups of Catalonia**, Generalitat of Catalunya. Ref. 2001SGR 00346. Grant: €48,081. Awardee: Crystallography Group, IBMB. Principal Investigator: M. Coll (CSIC; Barcelona). Role: Co-PI. 2001 – 2004.
- **"Marina Bueno" Programme** to finance **short stays** in overseas research centres between CSIC and Max-Planck-Gesellschaft. Three stays for lab members at the Max-Planck Institute of Biochemistry. Role: PI with K. Zeth. 2003.
- **Research project** from the **State Programme for the Mobility of Researchers**. Ministry of Education, Culture and Sport. Five-month stay by Prof. Ulrich Baumann at IBMB. Title: "Towards the structure determination of archaeal metzincins". Ref. SAB2002-0102. Role: PI with U. Baumann (University of Bern). 2003.
- **CSIC "Intramural Frontier" Project.** "Chemical chaperones: functional recovery of proteins with folding defects through interaction with small organic molecules. A therapeutic approach to Gaucher's disease". Ref. 200420F0263. Total awarded: €51,215. Main awardee: A. Llebaria (CSIC; Barcelona). Role: Co-PI. Amount awarded to subgroup: €23,500. 1.10.2004 – 30.9.2005
- **Project for the Scientific-Technical Cooperation with Poland**. Ministry for Overseas Affairs and Cooperation. "Cloning, overexpression, crystallisation, and structural analysis by X-ray crystallography of *P. gingivalis* metzincin". **Trips and short stays**. Role: PI with J. Potempa (University of Krakow, Poland). 2004 – 2006.
- **R&D project, State Plan of Biotechnology**, Ministry of Science and Technology. "Structural biology of hydrolases of therapeutic interest (II)". Ref. BIO2003-00132. Total awarded (incl. Indirect costs): €230,350. Role: PI. 1.12.2003 – 30.11.2006.
- **"La Caixa Foundation" Research Project on Cancer**. "Structural basis for the design of secretase inhibitors (MDC9/ADAM-9) of heparin-binding growth factor resembling epidermal growth factor". Ref. ON03-7-0 (€123,000 awarded). Role: PI. 4.11.2003 – 3.11.2006.
- **State Programme of Service Technologies of the Information Society** (**PROFIT** programme), Strategic Action for e-Inclusion. Ministry of Industry, Tourism and Commerce. Ref. FIT-350300-2006-40. "Evaluation of population risk by means of microarray analysis and artificial intelligence". Main awardee: Infociencia, S.L. Total awarded: €166,100. Amount awarded to subgroup: €28,798. Role: Co-PI. 2006.

- **State Programme of Service Technologies of the Information Society** (**PROFIT** programme), Strategic Action for e-Inclusion. Ministry of Industry, Tourism and Commerce. Ref. FIT-350300-2006-41. "Telemedicine prototype to follow cardiac alterations and suspicious skin blemishes via commercial 3G terminals and UMTS connection. A prediagnostic system using artificial intelligence and GRID technology". Main awardee: Infociencia Clinical Research, S.L. Total awarded: €205,892. Amount awarded to subgroup: €5,000. Role: Co-PI. 2006.
- Integrated project for the **Strategic Action of Genomics and Proteomics**, Ministry of Science and Technology. "Structural genomics: application to proteins and proteinacieous complexes associated with cancer". Ref. GEN2003-20642. Total awarded: €1,232,000. Subproject: €261,00. Main and subgroup awardee: M. Coll (CSIC; Barcelona). Role: Co-PI of subgroup. 9.2004 – 8.2007.
- **FIS Project** ("Carlos III" Health Institute). "Gaucher's disease: new therapies and their impact on clinical physiopathology. An answer to treatment and patient disease perception" (**PERSEO Project**; general coordinator: P. Giraldo). Subproject "Chemical chaperones and glucocerebrosidase. Design, synthesis and molecular and structural basis of its mode of action". Ref. PI040767. Subproject awardee: A. Llebaria. Amount awarded to subgroup: €103,500. Role: Co-PI of subproject. 1.1.2005 – 31.12.2007.
- **Complementary Grant** (*Acción complementaria*)**,** State Programme for International Cooperation for Science and Technology, BIO Programme. "Molecular analysis of metalloproteases of oncological interest", Ministry of Education and Science. Ref. BIO2004-20369-E. Total awarded €21,000. Role: PI. 5.4.2005 – 31.12.2007.
- **State Programme of Service Technologies of the Information Society** (**PROFIT** programme), Strategic Action for e-Inclusion. Ministry of Industry, Tourism and Commerce. Ref. FIT-350300-2007-67. "Evaluation of population risk by means of microarray analysis and artificial intelligence". Main awardee: Infociencia, S.L. Total awarded: €168,355. Amount awarded to subgroup: €42,574. Role: Co-PI. 2007.
- **State Programme of Service Technologies of the Information Society** (**PROFIT** programme), Strategic Action for e-Inclusion. Ministry of Industry, Tourism and Commerce. Ref. FIT-350300-2007-72. "Telemedicine prototype to follow cardiac alterations and suspicious skin blemishes via commercial 3G terminals and UMTS connection. A prediagnostic system using artificial intelligence and GRID technology". Main awardee: Infociencia Clinical Research, S.L. Total awarded: €98,371. Amount awarded to subgroup: €9,849. Role: Co-PI. 2007.
- **AVON Cancer Research Project** from the **Spanish Association Against Cancer** (AECC). "Functional and structural characterization of a novel product of the protooncogene HER2. Therapeutic implications for breast cancer". Main awardee: J. Arribas (IR-HUVH; Barcelona). Total awarded: €300,000. Role: Co-PI. Amount awarded to subgroup: €82,000. 4.2005 – 3.2008.
- **European Integrated Project FP6** "Extracellular proteases and the cancer degradome: innovative diagnostic markers, therapeutic targets and tumour imaging agents (**CANCERDEGRADOME**)". Ref. LSHC-CT-2003-503297. Consortium of 35 groups. General coordinator: D. Edwards, University of East Anglia (UK). Role: Subproject awardee nº 28 (€10.4M awarded in total; €214,857 allocated to subproject). 1.1.2004 – 30.6.2008.
- **Scientific/Technical and Special Projects** by the **State Plan of Biotechnology**, Ministry of Education and Science. "Identification of secondary targets and design of drugs for diseases associated with aging through structural and functional analysis of biological routes". Ref. PSE-010000-2007-1. Coordinator: INFOCIENCIA, S.L. Total fundable budget: €3,348,260. Amount awarded to subgroup: €459,463. Role: Co-PI. 1.1.2007 – 31.12.2008.
- **Grants for Consolidated Research Groups of Catalonia**, Generalitat of Catalunya. Ref. 2005SGR-00280. Total awarded: €50,600. Awardee: Crystallography Group, IBMB. Coordinator: M. Coll (CSIC; Barcelona). Role: Co-PI. 2005 – 2008.
- **European STREP FP6 Project** "Chemical genomics by activity monitoring of proteases (**CAMP**)". Ref. LSHG-CT-2006-018830. Coordinator: F. Xavier Avilés (UAB, Barcelona). Role: Subproject awardee (€70,385 allocated to subproject). 1.10.2007 – 30.06.2009.
- **R&D project, State Plan of Biotechnology**, Ministry of Education and Science. "Structural biology of hydrolases of therapeutic interest (III)". Ref. BIO2006-02668. Total awarded (direct costs): €295,000. Role: PI. 1.10.2006 – 30.9.2009.
- **Scientific/Technical and Special Project** by the **State Plan of Biotechnology**, Ministry of Science and Innovation. "Identification of secondary targets and drug design for diseases associated with aging through structural and functional analysis of biological routes". Ref. PSE-010000-2009-8. Coordinator: INFOCIENCIA, S.L. Total fundable budget: €1,770,315. Amount awarded to subgroup: €536,200. Role: Co-PI. 1.10.2009 – 30.6.2011.
- **Complementary Grant** (*Acción complementaria*) of the European Project "Extracellular proteases and the cancer degradome: innovative diagnostic markers, therapeutic targets and tumour imaging agents (CANCERDEGRADOME)". Ref. BIO2008-04080-E. Total awarded: €32,000. Role: PI. 1.4.2009 – 30.9.2011.
- **R&D project, State Plan of Biotechnology**, Ministry of Science and Technology. "Structural biology of hydrolases of therapeutic interest (IV)". Ref. BIO2009-10334. Total awarded (direct costs only): €295,000. Role: PI. 1.1.2010 – 31.12.2012.
- **European STREP FP7 Project** "Identification and validation of novel drug targets in Gram-negative bacteria by global search: a trans-system approach". Ref. FP7-HEALTH-F3-2009-223101 "AntiPathoGN". Coordinator: Xavier Daura (UAB, Barcelona). Role: Co-PI, Responsible for the Third Part of Subproject nº 2 (€300,000 in total allocated to group). 1.2.2009 – 30.6.2013 (after extension).
- **Programme for the Development of Science and Technology in Latin-American (CYTED)**. Ref. 210RT0390. "Multidisciplinary network for the study of disorders of movement: Parkinson's disease and spinocerebellar ataxias". Total awarded: €128,000 (for trips and network activities). Role: Co-PI. 2009 – 2013.
- **Consolidated Research Groups of Catalunya Grant**, Generalitat of Catalunya. Ref. 2009SGR1036. "Structural biology: computational methods and structure-function analysis of proteins of biomedical and biotechnological interest (MEBIO)". Total awarded: €42,640. Role: Coordinator and co-PI. 2009 – 2013 (extended till 31.3.2014).
- **"Fundació La Marató de TV3" Research Project**, Edition 2009 – Biomedical Research Projects in Minority Diseases. "Clinical, genetic, epidemiological, pathophysiological and translational studies of spinocerebellar ataxias". Ref. 100732. Coordinator: Antoni

Matilla Dueñas (IICSGTP, Badalona). Grant awarded to subproject: €176,500. Role: Co-PI. 1.1.2011 – 30.6.2014 (after 6-month extension).

- **European Union STREP FP7 Project** "Protein citrullination as a link between periodontal diseases and rheumatoid arthritis (RA) and target for development of novel drugs to treat RA". Ref. FP7-HEALTH-2010-261460 "Gums&Joints". Coordinator: Peter Mydel (Bergen, Norway). Total awarded to subgroup: €504,510. Role: Co-PI and Coordinator of Subproject (WP) nº 3. 1.11.2010 – 31.10.2014.
- **"Consolider-Ingenio" Project 2010** (2006), "The Crystallization Factory", Ministry of Education and Science. Ref. CSD2006-00015. Total awarded: €5,000,000. Grant awarded to subgroup: €171,308. Coordinator: J.M. García Ruiz. Role: Co-PI. 6.12.2006 – 6.12.2014.
- **R&D project**, **State Plan of Molecular and Cellular Biology**, Ministry of Economy and Competitivity. "Biochemistry of proteolysis: function, regulation and structure of peptidases and their inhibitors". Ref. BFU2012-32862. Total awarded (direct costs): €280,000. Role: PI. 1.1.2013 – 31.12.2015.
- **European Union Marie Curie Initial Training Network (ITN) Project** "RAPID-Rheumatoid arthritis and periodontal inflammatory disease". Ref. FP7-PEOPLE-2011-290246 "RAPID". Coordinator: Thomas Dietrich (Birmingham, UK). Total grant awarded to subgroup: €380,367 (incl. Indirect costs). Role: Co-PI and Coordinator of Subproject (WP) nº 3. 1.4.2012 – 31.3.2016.
- **Consolidated Research Groups of Catalunya Grant**, Generalitat of Catalunya. Ref. 2014SGR9. "Proteolysis Lab". Total awarded: €15,000. Role: Coordinator. 1.1.2014 – 31.12.2016.
- **R&D project of the EXPLORA program**, **State Plan of Biotechnology**, Ministry of Economy and Competitivity. "Redesign of therapeutic proteins with enhanced stability through incorporation of non-natural amino acids". Ref. BIO2013-49320-EXP. Total awarded (direct costs): €60,000 (direct costs). Role: PI. 1.9.2014 – 31.8.2016 (extended to 31.1.2017).
- **European Union STREP FP7 Project** "King of hearts, joints and lungs; periodontal pathogens as etiologic factor in RA, CVD and COPD and their impact on treatment strategies". Ref. FP7-HEALTH-2012-306029-2 "TRIGGER". Coordinator: Peter Mydel (Bergen, Norway). Total awarded to subgroup: €519,041 (incl. indirect costs). Role: Co-PI and Coordinator of Subproject (WP) nº 6. 1.4.2013 – 31.3.2017.
- Program "Centers of Excellence" from the Ministry of Economy and Competitiveness. Appointment of the Department of Structural Biology of IBMB as a **"María de Maeztu Unit of Excellence".** Ref. MDM-2014-0435. Total funding awarded (incl. indirect costs): €2,000,000. Role: co-PI (out of 7 PIs). 1.7.2015 – 31.12.2019.
- **R&D project**, **State Plan of Molecular and Cellular Biology**, Ministry of Economy and Competitivity. "Biochemistry of proteolysis: function, regulation and structure of peptidases of biomedical relevance and their inhibitors". Ref. BFU2015-64487-R. Total awarded (direct costs): €340,000. Role: PI. 1.1.2016 – 31.12.2019.
- **CSIC Extraordinary Grant** for project proposals. "Biochemistry of proteolysis: function, regulation and structure of peptidases of biomedical relevance and their inhibitors". Ref. 2019AEP009. Total funding: €43,691. Role: PI. 1.1.2020 – 31.12.2020.
- **Consolidated Research Groups of Catalunya Grant**, Generalitat of Catalunya. Ref. 2017SGR3. "Proteolysis Lab". Total awarded: €19,750. Role: Coordinator. 1.1.2017 – 30.9.2021.
- **"Fundació La Marató de TV3" Research Project**, Edition 2017 – Biomedical Research Projects in Infectious Diseases. "Tackling periodontal pathogen Porphyromonas gingivalis through its type-IX secretion system sortase". Ref. 201815. Total amount (incl. indirect costs): €195,500. Role: PI. 30.5.2019 – 29.5.2022.
- **R&D project**, **State Plan of Molecular and Cellular Biology**, Ministry of Science and Innovation. "Biochemistry of proteolysis: function, regulation and structure of biomedically and biotechnologically relevant peptidases and their inhibitors". Ref. PID2019-107725RB-I00. Total (incl. indirect costs): €242,000. Role: PI. 1.6.2020 – 31.5.2023.
- **R&D Proof-of-concept project, State Agency of Research (AEI),** Ministry of Science and Innovation. "Validation and further development of a glutenase for the treatment of coeliac disease (CELIASTOP)". Ref. PDC2022-133344-I00. Total (incl. indirect costs): €133,400. Role: PI. 1.12.2022 – 30.11.2024.
- **Consolidated Research Groups of Catalunya Grant**, Generalitat of Catalunya. Ref. 2021SGR423. "Structural and Computational Protein Biochemistry (BIOSTROMP)". Total awarded: €40,000. Role: Coordinator. 1.1.2023 – 31.12.2025.

R&D CONTRACTS AND RELATIONSHIP WITH COMPANIES

- **Research contract** with Infociencia, S.L. (Pharmaquest Group), Barcelona. 2005. Title: Biological localization and function of genes or proteins related to pathologies of diagnostic interest. Responsible rearchers: José Manuel Mas (Infociencia) / F. Xavier Gomis-Rüth (IBMB-CSIC). Total: €15,000.
- **Research contract** with BIOKIT, S.A., Lliça de Munt (Barcelona). 2004. Title: Crystallization of lysozyme complexed with a *Treponema pallidum* antigen. Responsible rearchers: Xavier Berthet and Pau Bruguera (BIOKIT) / F. Xavier Gomis-Rüth (IBMB-CSIC). Total: €6,000.
- **Laboratory management agreement** with CLASADO BIOSCIENCES LTD., UK. 24.7.2016 – 23.7.2018. Investigators in charge: George Tzortzis (CLASADO) / T. Goulas and F. Xavier Gomis-Rüth (IBMB-CSIC). Total: €126,000.
- **Technical Support Contract** within the Research Project "Validation of the γ-glutamylpolyamine synthetase GlnA3 as a promising target for the development of novel anti-tubercular drugs (GPS-TBT)", awarded by the German Ministry of Education and Research to W. Wohlleben (University of Tübingen, Germany). Ref. 16GW0183K. Total for CSIC: €30,000. Role: Subcontractor. 1.2.2018 – 31.1.2020.

- **Research contract** with the Fraunhofer Institute of Molecular Biology and Applied Ecology, Gießen, Germany. 31.10.2019 – 30.9.2022 Title: Structure and function analysis of variants of the inducible metalloproteinase inhibitor (IMPI) from *Galleria mellonella* to target pathogenic M4 metallopeptidases. Responsible researchers: Andreas Vilcinskas (Fraunhofer) / F. Xavier Gomis-Rüth (IBMB-CSIC). Total: €100,000.
- **License agreement** with EMD MILLIPORE CORP. (USA) and University of British Columbia (Canada). 2.6.2017 – 31.12.2027. Non-exclusive license agreement to market the metallopeptidase lysargiNase for proteomics approaches. Responsible researchers: Patrick Schneider (EMD MILLIPORE) / Chris Overall (UBC) / F. Xavier Gomis-Rüth (IBMB-CSIC).
- Honorary **Member of the Scientific Advisory Board** of Anaxomics, a biotech company committed to the discovery and development of drugs to improve human health (https://www.anaxomics.com/the-team.php).

ACADEMIC ACTIVITY

External reviewer of Ph.D. theses

- Christian Pichlo, University of Cologne (Germany), 2017
- Marcin Wegrecki, Technical University of València, 2015
- R. Rathi Suganya, SRM University (Kattankulathur, India), 2014
- Emilie Poudevigne, University of Grenoble (France), 2013
- Claudia Broder, Univerity of Kiel (Germany), 2013
- Michael Schöpfel, University of Halle-Wittenberg (Germany), 2013
- Roopa Kothapalli, National University of Singapore (Singapore), 2013
- Ulrich Eckhard, University of Salzburg (Austria), 2011
- Nan Li, University of Sydney (Australia), 2011
- Sandro Waltersperger, University of Bern (Switzerland), 2010
- Renato Baumgartner, University of Bern (Switzerland), 2010
- Marina Vostrukhina, University of Bern (Switzerland), 2009
- Patrick Schütz, University of Bern (Switzerland), 2008
- Claus Gyrup Nielsen, University of Aarhus (Denmark), 2007
- Christoph Bieniossek, University of Bern (Switzerland), 2006
- Santina Russo, University of Bern (Switzerland), 2005

External reviewer of M.Sc. theses

- Iñaki Martínez de Ilarduya Muñoz. "Pompeu Fabra" University (Barcelona), 2008

Teaching, courses and workshops

- **Co-organizer or participant** of the Macromolecular Crystallography Schools MCS2010-MCS2017, Institute of Physical Chemistry "Rocasolano", Madrid (Spain).
- **B.Sc.-Lecture** "Structural insights into metallopeptidases and their protein inhibitors", within the Biochemistry degree's Design and Evaluation of Bioactive Molecules course. Organized by E. Estébanez-Perpiñá, University of Barcelona, 22.10.2013.
- **M.Sc.-level Lecturer,** School of Macromolecule Crystallography MCS2010 and MCS2011, part of the Master in Crystallography and Crystallization, "Menéndez Pelayo" International University of Santander (Spain), 2010-2011 and 2009-2010 (6 ECTS credits).
- **M.Sc.-level Lecturer,** Practicals in Macromolecule Crystallography, part of the Master in Crystallography and Crystallization, "Menéndez Pelayo" International University, 2009-2010 and 2010-2011 (10 ECTS credits).
- **B.Sc.-level Lectures** "(Principles of) Protein Crystallography", part of the 4th year Human Biology degree's Structural Biology course (2009-2010, 2006-2007, 2003-2004, 2002-2003 and 2001-2002). Organized by B. Oliva, "Pompeu Fabra" University, 27.5.2010, 20.4.2007, 12.5.2004, 28.4.2003 and 26.4.2002.
- **M.Sc.-level Lecture** "Protein Crystallography", part of the "Principles of Protein Structure" Unit (sub-coordinator B. Oliva), "Master in Bioinformatics for Health Sciences" (BIOINFO; 2006-2007; coordinator: J. Villà), "Pompeu Fabra" University, 17.1.2007.
- **Lectures in the Inter-University PhD Programme** "Structure and Function of Proteins" (2005-2006). Course title: "Techniques in the Structural Characterisation of Proteins", Organized by J.A. Hermoso/M. Bruix, Institute of Physical Chemistry "Rocasolano", Madrid (Spain), 2.2.2006.
- **Lectures in the PhD Course** "Methods in Molecular Biology", part of the International Doctoral Programme in Health and Life Sciences (2004-2005 and 2003-2004). Organized by E. Hidalgo, "Pompeu Fabra" University, 24.1.2005 and 23.1.2004.
- **M.Sc.-level Lecture** "Protein Crystallography", part of Unit H33: "Principles of Protein Structure" (sub-coordinator B. Oliva), "Master in Bioinformatics for Health Sciences" (2004-2005; coordinator: J. Villà), "Pompeu Fabra" University. 2.12.2004.
- **Lecture in the PhD Course** in experimental biology and biomedicine "Advanced course on structural biology" (2004-2005). Organized by S. Macedo Ribeiro, University of Coimbra (Portugal), 4-8.10.2004.

- **Lecture in the PhD Course** "Structure of Biomolecules" (2003-2004). Organized by M. Pons/E. Giralt, Dept. of Organic Chemistry, University of Barcelona, 24-25.2.2004.
- **B.Sc.-level Lecture** "Principles of Protein Crystallography", part of the 3rd/4th year Chemistry and 3rd year Biochemistry degrees' "Protein Chemistry and Engineering". Organized by F. Xavier Avilés, Autonomous University of Barcelona, 9.12.2003.
- **Lecture in the PhD Course** "Crystallography of Macromolecules". Organized by M. Pons, Department of Organic Chemistry, University of Barcelona, 6-9.5.2003.
- **Lecture in the PhD Course** "Spectroscopic Techniques in Biology and Medicine". Organized by J. Vendrell, Dept. of Biochemistry and Molecular Biology, Autonomous University of Barcelona, 14.3.2002.
- **Lecture in the PhD Course** "Molecular Biology in Prokaryotes – 1". Organized by M. Espinosa and A. Tormo, Complutense University of Madrid (Spain), 21.5. - 1.6.2001.
- **Lecture in the PhD Course** "Protein Structure". Organized by F. de la Cruz, Faculty of Medicine, University of Cantabria, Santander (Spain), 15-19.6.1998.
- **Lecturer,** Practicals in Inorganic Chemistry, part of undergraduate studies in Chemical Engineering, Chemical Institute of Sarrià, 1988-1989 (whole Winter semester).

M.Sc./DEA/TFG-thesis (co-)supervision

- **Laura Garzon Flores**. "Recombinant expression, purification, and optimization of a plant endopeptidase for biomedicine and food industry". "Pompeu Fabra" University, 30.06.2022.
- **Marina Moliner Culubret**. "Modulating the substrate specificity of ulilysin". "Pompeu Fabra" University, 3.7.2019.
- **Tània Arellano Lacasta**. "Work with proteins: purification, stabilization and crystallization". University of Barcelona, 23.1.2019.
- **Selen Tiryaki.** "Generating an orthogonal tRNA suppressor of *Pyrococcus horikoshii* in *Escherichia coli*". "Pompeu Fabra" University, 3.7.2018.
- **Irene Garcia Ferrer**. "Biophysical and biochemical characterization of synmetzin, a *de novo* designed minimal protease". University of Barcelona, 9.9.2011.
- **Mar López Pelegrín**. "Production and crystallization of putative metalloproteases from hyperthermophilic archaea". University of Barcelona, 22.7.2011.
- **Sergio Trillo Muyo**. "Cloning, overexpression, purification and crystallization of a human archaemetzincin: AMZ-2". Autonomous University of Barcelona, 22.5.2008.
- **Tiago Oliveira Botelho**. "Functional and structural studies on the HmrA protein from *Staphylococcus aureus*". University of Barcelona, 8.10.2007.
- **Sònia García Piqué**. "*Clostridium histolyticum* collogenases: 78-kDa collagenase type I". University of Barcelona, 9.10.2006.
- **Cynthia Tallant Blanco**. "Expression, purification and characterization of metalloproteases of *Bacillus anthracis*". University of Barcelona, 9.10.2006.
- **Anna Cintas Pedrola**. "Cloning, overexpression and purification of a *BlaR1*-like protease from *Methanococcus jannaschi*: Q58610". University of Barcelona, 24.7.2006.
- **Aniebrys Marrero Nodarse**. "Cloning and overexpression of the regulator/transducer proteins BlaR1 and MecR1, and their PBD and trans-membrane regions". University of Barcelona, 8.10.2003.
- **Raquel García Castellanos**. "Preparation and crystallization of *Aquifex aeolicus* RecG helicase". University of Barcelona, 16.7.2002.
- **Goretti Mallorquí Fernández**. "Determination of the three-dimensional structure of the eosinophil cationic protein. Functional Implications". University of Girona, 14.7.2000.
- **Mariola Gómez Ortiz**. "Crystallization of the ternary complex of bovine procarboxypeptidase A and *Termus aquaticus* carboxypeptidase". Autonomous University of Barcelona, 9.1994.

Ph.D.-thesis (co-)supervision

- Since 1.10.2021: **Juan Sebastián Ramírez Larrota**.
- **Soraia Inês dos Reis Mendes**. "Structural and functional analyses of natural protein-based inhibitors and their protease targets", University of Barcelona, 28.10.2022.
- **Laura del Amo Maestro**. "Functional interplay of proteins and proteases: AD13-VWF, TGFβ2-α_2M, and the proteolysis of gliadin by neprosin", University of Barcelona, 11.6.2021.
- **Laura Mariño Puertas.** "Development of efficient eukaryotic and bacterial expression systems for functional studies of recombinant proteins of biomedical interest", Autonomous University of Barcelona, 14.2.2020.
- **Irene Garcia Ferrer**. "Structural and functional studies on *Escherichia coli* α_2-macroglobulin: a snap-trap peptidase inhibitor", University of Barcelona, 1.12.2015.
- **Mar López Pelegrín**. "Mechanisms of proteolytic activity regulation exerted via a unique propeptide in matrix metalloproteinases and intra/intermolecular interactions in a novel family of minimal gluzincins", University of Barcelona, 13.11.2015.
- **Sergio Trillo Muyo**. "Functional and structural study of a single-domain double-faced protein inhibitor, sermetstatin, in complex with two peptidases from distinct classes, subtlisin and snapalysin", Autonomous University of Barcelona, 31.5.2013.
- **Tiago Oliveira Botelho**. "Structural and functional studies on HmrA", University of Barcelona, 4.3.2011.

- **Anna Cintas Pedrola**. "Characterization of *Methanococcus jannaschii* MJ1213, a hyperthermophilic metalloprotease potentially similar to *Staphylococcus aureus* BlaR1", University of Barcelona, 2.11.2010.
- **Cynthia Tallant Blanco**. "Structural and functional analysis of ulilysin, the prototype of the catalytic domain of the human IGFBP protease PAPP-A", University of Barcelona, 28.6.2010.
- **Aniebrys Marrero Nodarse**. "Molecular study of the sensor/transducer protein MecR1 involved in bacterial resistance to β-lactam antibiotics", University of Barcelona, 19.6.2007.
- **Raquel García Castellanos**. "Structural and functional study of the transcriptional regulator of methicillin resistance in *Staphylococcus aureus*, MecI", University of Barcelona, 18.4.2006 (XII UB Faculty Award).
- **Goretti Mallorquí Fernández**. "Structural characterization of human ribonucleases", University of Girona, 22.5.2003.
- **Marta Costa Estrader**. "Expression and purification of signal-transduction proteins. Structure of CopG-DNA22 and GST-C47A", University of Barcelona, 26.2.2001.
- **Mariola Gómez Ortiz**. "Crystallographic analysis bovine pancreatic carboxypeptidase-A complexed with zinc, PCI and protease zymogens", Autonomous University of Barcelona, 13.1.1997.

Ad hoc Ph.D. thesis examination panels

- Ying Li, Autonomous University of Barcelona, 30.9.2022.
- Alba Jiménez Panizo, University of Barcelona, 14.12.2021.
- Irene Davó Siguero, Complutense University of Madrid (Spain), 14.11.2019.
- Aleix Gimeno Vives, University of Tarragona, 17.1.2019.
- Bing Liu, Autonomous University of Barcelona, 31.10.2018.
- Jofre Güell Bosch, Autonomous University of Barcelona, 14.9.2017.
- Laia Montoliu Gaya, Autonomous University of Barcelona, 17.7.2017.
- Arka Chakraborti, University of Barcelona, 8.7.2016.
- Raquel Sanz Soler, University of València, 21.6.2016.
- Iñaki Martínez de Ilarduya Muñoz, University of Barcelona, 23.6.2015.
- Massimo Sammito, University of Barcelona, 22.6.2015.
- Jordi Durban Sànchez, University of València, 6.3.2015.
- Pablo Fernández Millán, University of Barcelona, 4.7.2014.
- Laia Vives Adrián, University of Barcelona, 4.4.2014.
- Geovanny Rivera Hernández, Autonomous University of Barcelona, 28.2.2014.
- Dayté Dayana Rodríguez Martínez, "Ramón Llull" University, 17.12.2013.
- Mariana Castillo Briceño, Autonomous University of Madrid (Spain), 8.11.2013.
- Emilie Poudevigne, Univerity of Grenoble (France), 24.9.2013.
- Erick Adolfo Hernández Carvajal, University of Barcelona, 18.9.2013.
- Michael Schöpfel, University of Halle/Wittenberg (Germany), 18.3.2013.
- Fabiola Rodríguez Calviño, Complutense University of Madrid (Spain), 27.6.2012.
- Núria Cerdà Costa, Autonomous University of Barcelona, 16.12.2008.
- Claus Gyrup Nielsen, Aarhus University (Denmark), 21.6.2007.
- María Teresa Villanueva de la Torre, Autonomous University of Barcelona, 26.1.2006.
- María Llamazares Prada, University of Oviedo (Spain), 7.9.2005.
- Àlex Bayés Puig, Autonomous University of Barcelona, 20.7.2005.
- María Iluminada Fernández López-Lucendo, Complutense University of Madrid (Spain), 15.6.2005.
- Marta Garrido Franco, Autonomous University of Barcelona, 28.5.2002.
- Eva Estébanez Perpiñá, Autonomous University of Barcelona, 28.5.2002.
- Carlos Fernández Tornero, Autonomous University of Madrid (Spain), 23.5.2002.
- Patrick Aloy Calaf, Autonomous University of Barcelona, 15.12.2000.
- Marc Antoni Martí Renom, Autonomous University of Barcelona, 21.1.1999.
- Alba Guarné Cabello, University of Barcelona, 14.1.1999.
- David Reverter Cendrós, Autonomous University of Barcelona, 24.4.1998.

CONGRESSES, INVITED CONFERENCES, TALKS AND COURSES

1988 – 2011 (selection of the most prominent out of 110 contributions)

- **Gordon Research Conference** on Matrix Metalloproteinases, Ist Edition, Plymouth State College, New Hampshire (USA). Attendance and invited talk: "The first X-ray structure of a snake venom metalloproteinase, adamalysin II". 15.8.1993 – 20.8.1993.
- **Gordon Research Conference** on Proteolytic Enzymes and their Inhibitors, VIIIth Edition, Colby-Sawyer College, New London, New Hampshire (USA). Attendance and (co)presentation of 4 posters: (i) **F.X. Gomis-Rüth**, L. Kress, E.Meyer, W. Stöcker & W. Bode. "The three-dimensional structure of adamalysin II: a prototype for a subfamily of the *metzincin* - family of metalloendopeptidases" (poster 6/25.7), (ii) W. Stöcker, F. Grams, P. Reinemer, F.X. Gomis-Rüth & W. Bode. "Topological and sequential relation between

the astacins, adamalysins, serralysins, and matrixins (collagenases) define the metzincin-family of zinc-peptidases" (poster 7a/27.7), (iii) W. Stöcker, I. Yallouros, F. Grams, V. Dive, F.X. Gomis-Rüth, R. Zwilling & W. Bode. "Structure-function relationship in the zinc-endopeptidase astacin" (poster 7b/27.7) and (iv) F. Grams, P. Reinemer, F.X. Gomis-Rüth, W. Stöcker, J.C. Powers, V. Dive, T. Kleine, H. Tschesche, R. Huber & W. Bode. "Crystallographic studies of inhibitor binding to collagenase and related proteases" (poster 11/27.7). 24.7.1994 – 29.7.1994.

- **EMBO Annual Symposium** 1995. Structure and function of proteins. EMBL Heidelberg (Germany). Attendance and poster presentation (106): **F.X. Gomis-Rüth**, M. Gómez, W. Bode, R. Huber & F.X. Avilés. "The three-dimensional structure of the native ternary complex of bovine pancreatic procarboxypeptidase A with proproteinase E and chymotrypsinogen C". 25.9.1995 – 28.9.1995.
- **Gordon Research Conference** on Proteolytic Enzymes and Their Inhibitors, IX, Colby-Sawyer College, New Hampshire (USA). Attendance and invited talk: "The three-dimensional structure of the native ternary complex of bovine pancreatic procarboxypeptidase A with proproteinase E and chymotrypsinogen C". 21.7.1996 – 26.7.1996.
- **Gordon Research Conference** on Matrix Metalloproteinases, III, Proctor Academy, Andover, New Hampshire (USA). Poster: K. Maskos, F.X. Gomis-Rüth, C. Fernández-Catalán, M. Betz, A. Bergner, R. Huber, K. Suzuki, N. Yoshida, H. Nagase, K. Brew, A. Lichte, H. Tschesche, F.H. Büttner, J.J. Calvete, E. Bartnik, G.B. Bourenkow, H. Bartunik & W. Bode. "The interaction of matrix metalloproteinases and their tissue inhibitors (TIMPs) comes to light: crystal structure of the stromelysin-1/TIMP-1 complex and preliminary crystal structure of the MT1-MMP/TIMP-2 complex". 13.7.1997 – 18.7.1997.
- **Gordon Research Conference** on Nucleic Acids, Salve Regina University, Newport, Rhode Island (USA). Poster: F.X. Gomis-Rüth, M. Costa, M. Solà, A. González, R. Eritja, P. Acebo, G. del Solar, M. Espinosa & M. Coll. "Structure of transcriptional repressor CopG unliganded and in complexes with DNA". 4.7.1999 – 9.7.1999.
- **Gordon Research Conference** on Plasmid and Chromosome Dynamics, Colby-Sawyer College, New London, New Hampshire (USA). Poster: G. del Solar, F.X. Gomis-Rüth, A.M. Hernández-Arriega, P. Acebo, M. Solà, R. Eritja, M. Coll & M. Espinosa. "Features of the CopG regulatory protein encoded by plasmid pMV158". 1.8.1999 – 6.8.1999.
- **Gordon Research Conference** on Proteolytic Enzymes and their Inhibitors, XI, Colby-Sawyer-College, New London, New Hampshire (USA). Attendance and poster presentation (PSII/15): **F.X. Gomis-Rüth**, V. Companys, Y. Qian, L.D. Fricker, J. Vendrell, F.X. Avilés & M. Coll. "The structure of gp180 regulatory carboxypeptidase D domain II". 09.7.2000 – 14.7.2000.
- **Gordon Research Conference** on Matrix Metalloproteinases, VI, Big Sky Resort, Montana (USA). Attendance and poster presentation: **F.X. Gomis-Rüth**: "The *metzincin* clan of metalloendopeptidases: Structural aspects and new family members". 17.8.2003 – 22.8.2003.
- **30th FEBS Congress & 9th IUBMB Conference**, Budapest (Hungary). Co-presentation of poster: I. Pallarés, R. Bonet, R. García-Castellanos, S. Ventura, F.X. Avilés, J. Vendrell & F.X. Gomis-Rüth: "Biochemical and structural characterization of human ECI and its complex with human carboxypeptidase A4". 2.7.2005 – 7.7.2005.
- **Gordon Research Conference** on Matrix Metalloproteinases, VII, Big Sky Resort, Montana (USA). Attendance and poster presentation: R. García-Castellanos, R. Bonet-Figueredo, I. Pallarés, S. Ventura, F.X. Avilés, J. Vendrell & **F.X. Gomis-Rüth**: "Molecular comparison between the inhibition mode of A/B-type carboxypeptidases in the zymogen state and by the endogenous inhibitor latexin". 28.8.2005 – 2.9.2005.
- **Conference** "Metzincins metalloproteases in health and disease", Centro Stefano Franscini, Monte Verità, Ascona (Switzerland). Attendance, session chairman, co-presentation of poster and invited talk: R. García-Castellanos, C. Tallant, W. Stöcker, W. Bode, U. Baumann & **F.X. Gomis-Rüth**: "Structural overview on metzincins". Poster: A. Díaz-Perales, V. Quesada, J.R. Peinado, A. P. Ugalde, J. Álvarez, M.F. Suárez, S. Trillo, G. Mallorquí-Fernández, F.X. Gomis-Rüth & C. López-Otín: "Identification, overexpression and characterization of two novel human metalloproteases". 24.9.2006 – 29.9.2006.
- **Gordon Research Conference** on Matrix Metalloproteinases, VIII, Il Ciocco, Lucca (Barga) (Italy). Attendance, session chairman and invited talk (in substitution of Wolfram Bode): "Metzincin structures: past, present and future". 3.6.2007 – 8.6.2007.
- **5th General Meeting of the International Proteolysis Society**, Patras (Greece). Attendance and session co-chairman: "Insights into Protease Specificity, Mechanisms and Regulation". 20.10.2007 – 24.10.2007.
- **Gordon Research Conference** on Proteolytic Enzymes and their Inhibitors, XV, Colby-Sawyer-College, New London, New Hampshire (USA). Attendance and (co-)presentation of 2 posters: (i) N. Mallorquí-Fernández, S.P. Manandhar, G. Mallorquí-Fernández, I. Usón, M. Solà, J. Potempa & **F.X. Gomis-Rüth**: "A novel activation mechanism for cysteine proteases revealed by structural analyses of *P. intermedia* interpain A" (poster #24) and (ii) M. Solà, G. Niemirowicz, D. Fernández, J.J. Cazzulo, F.X. Avilés & F.X. Gomis-Rüth. "The molecular analysis of *Trypanosoma cruzi* metallocarboxypeptidase 1 (*Tc*MCP-1) provides insight into fold and substrate specificity" (poster #74). 6.7.2008 –11.7.2008.
- **Gordon Research Conference** on Matrix Metalloproteinases, IX, Les Diablerets (Switzerland). Attendance, poster co-presentation: M. Gómez-Chiarri, D. Preston, S. Salger, C.F. Vaughn & F.X. Gomis-Rüth: "Genomic and functional characterization of an oyster MMP", and invited talk: "Recent advances into metallocarboxypeptidase structures". 30.8.2009 – 4.9.2009.
- **XXXIIth SEBBM Congress**, Oviedo, Spain. Attendance, session co-chairman and invited talk at Symposium 3.1: "Biomedically relevant metallocarboxypeptidases: a structural view point". 23.9.2009 – 26.9.2009.
- **Gordon Research Conference** on Proteolytic Enzymes and their Inhibitors, XVI, Il Ciocco, Lucca (Barga) (Italy). Attendance, session co-chairman and invited talk: "Structural Insights into biomedically relevant metallocarboxypeptidases". 2.5.2010 – 7.5.2010.
- **Gordon Research Conference** on Matrix Metalloproteinases, X, Bryant University, Smithfield, Rhode Island (USA). Attendance, session chairman, and invited talk: "Recent advances in the structural characterization of metallopeptidases". 7.8.2011 – 12.8.2011.
- **XXIIth Congress** and General Assembly of the International Union of Crystallography, Madrid (Spain). Attendance and co-chairman of the micro-symposium "Dissecting enzyme mechanisms". 22.8.2011 – 30.8.2011.

2012 – present (complete list)
(Most prominent are highlighted)

- **Alumni Symposium** - Protein Crystallography in Martinsried, its Beginnings, Maturation, Dissemination, and no End; Max-Planck Institute of Biochemistry (Martinsried, Germany). Attendance and invited talk: "Recent advances in the structural biology of proteolysis and its regulation". 18.2.2012 – 19.2.2012.
- **Seminar** within the joint IRB/IBMB Structural and Computational Biology Programme, Barcelona Science Park: "Structure of human α_2-macroglobulin". 21.3.2012.
- **ASMS Conference on Mass Spectrometry and Allied Topics**, Vancouver Convention Centre (Vancouver, Canada). Co-presentation of poster (#2937): P.F. Huesgen, F.X. Gomis-Rüth, & C.M. Overall: "Ulilysin as novel digestive enzyme for proteomics". 20.5.2012 – 24.5.2012.
- **Gordon Research Conference** on Proteolytic Enzymes and their Inhibitors, XVII, Il Ciocco, Lucca (Barga, Italy). Attendance, poster presentation and two invited (co-)talks: (i) **F.X.Gomis-Rüth:** "Insight into a molecular Venus flytrap: the structure of human methylamine-treated α_2-macroglobulin", and (ii) T. Jefferson, J.L. Arolas, T. Goulas, J. Bien, M. Caušević, U. auf dem Keller, O. Schilling, J.S. Bond, W. Bode, W. Stöcker, C.M. Overall, C.U. Pietrzik, T. Guevara, F.X. Gomis-Rüth & C. Becker-Pauly: "Structure and function of dimeric transmembrane meprin β: a sheddase of APP with possible functions in neurodegenerative disorders". Poster presentation (#73): J.L. Arolas, S. Trillo-Muyo, T.O. Botelho, A. Vilcinskas & F.X. Gomis-Rüth: "The structure of insect metalloproteinase inhibitor in complex with thermolysin reveals standard-mechanism inhibition in metallopeptidase". 17.6.2012 – 22.6.2012.
- **Centennial Meeting of the Catalan Biological Society** I CIBICAT "Global questions on advanced biology", Institute for Catalan Studies, Barcelona. Attendance. 9.7.2012 – 12.7.2012.
- **Invited Talk**: "Structural biochemistry of proteolysis". Institute of Biotechnology, University of Helsinki, Helsinki (Finnland). 03.09.2012.
- **Invited Talk**: "Structural biochemistry of proteolysis in microbial virulence". Institute of Biochemistry, University of Gießen, Gießen (Germany). 11.10.2012.
- **Invited Talk**: "Structural insight into the inhibitory mechanism of α_2-macroglobulin". University of Halle/Wittenberg, Halle (Germany), 18.3.2013.
- **Invited Talk**: "Proteolysis in cancer associated processes: a structural approach". Department of Molecular Biology, University of Salzburg, Salzburg (Austria), 8.4.2013.
- **Invited Talk**: "Structural insight into the Venus fly-trap iinhibitory mechanism of the 720-KDa pan-proteinase α_2-macroglobulin tetramer". National Center of Biotechnology, Madrid (Spain). 12.4.2013.
- **Gordon Research Conference** on Matrix Metalloproteinases, XI, Il Ciocco, Lucca (Barga) (Italy). Attendance, session chair, and invited talk: "Structure of α_2-macroglobulin, a Venus flytrap pan-protease inhibitor". 19.5.2013 – 24.5.2013.
- **FASEB Science Research Conference** on Proteases in Hemostasis and Vascular Biology, Sheraton Resort, Nassau (Bahamas). Attendance and invited talk: "Structural studies of human α_2-macroglobulin, a pan-protease inhibitor from blood". 2.6.2013 – 7.6.2013.
- **XIIIth Congress of the Spanish Biophysical Society**, València. Plenary Lecture of the Congress: "Structural insights into the Venus flytrap inhibitory mechanism of a 0,7MDa multimeric proteinase inhibitor". 19.6.2013 – 21.6.2013.
- **Symposium de Biologie Structurale - Institut de Biologie Structurale (IBS)**, Grenoble, France. Attendance and invited talk: "Structural biochemistry of metalloprotease regulation". 10.7.2013 – 12.7.2013.
- **XXXVIth SEBBM Congress**, Madrid, Spain. Poster copresentation: M. López-Pelegrín, N. Cerdà-Costa, Tibisay Guevera, F.X. Gomis-Rüth & J.L. Arolas: "A novel family of minimal gluzincins as soluble scaffolds for integral-membrane metallopeptidases". 3.9.2013 – 6.9.2013.
- **International Symposium on the Frontier between Cryo-EM and Protein Crystallography**, Getxo (Bilbao). Attendance and invited talk: "At the interface of EM and MX: Structural insight into the Venus flytrap inhibitory mechanism of a 0,7MDa multimeric proteinase inhibitor". 3.10.2013 – 4.10.2013.
- **Invited Talk**: "Implications of protein crystallography in biology/biomedicine". Research Institute of the Hospital of the Holy Cross and Saint Paul, Barcelona. 13.2.2014.
- **Conference Arthritis, Infections and Autoimmunity: Infections as an Ethiological Factor in Chronic Inflammatory Disease**, Ustroń (Poland). Attendance and invited talk: "A 0,7MDa multimeric proteinase inhibitor exhibits a unique Venus flytrap endopeptidase inhibitory mechanism". 4.3.2014 – 9.3.2014.
- **Invited Talk:** "Infection and proteolysis: a molecular approach". University of Hamburg (Germany). 13.3.2014.
- **Invited Talk:** "Function regulation in a minimal metamorphic metallopeptidase". Barcelona Supercomputing Center, Barcelona. 9.5.2014.
- **Conference The Protein Multiverse**, Madrid (Spain). Attendance and invited talk: "Reversible concentration-dependent oligomerization produces autoinhibition of a metamorphic metallopeptidase". 16.6.2014 – 17.6.2014.
- **Gordon Research Conference** on Proteolytic Enzymes and their Inhibitors, XVIII, Il Ciocco, Lucca (Barga; Italy). Attendance and invited talk: "Reversible concentration-dependent oligomerisation regulates activity in a minimal metallopeptidase". 22.6.2014 – 27.6.2014.
- **XIVth International Symposium on Proteinases, Inhibitors and Biological Control**, Portorož (Slovenia). Attendance and invited talk: "Insight into structure and function of a metamorphic transformer metallopeptidase". 6.9.2014 – 10.9.2014.

- B-Debate Conference "**The Human Microbiome - Present Status and Future Prospects**", CosmoCaixa, Barcelona. Attendance. 2.7.2015 – 3.7.2015.
- **29th Annual Symposium of the Protein Society**, Barcelona. Attendance and chair of the session Current Morning Symposium 1 "Enzyme and Pathway Engineering". 22.7.2015 – 25.7.2015.
- **XXXVIIIth SEBBM Congress**, València. Attendance and invited talk at Symposium 1.3: I. Garcia-Ferrer, P. Arêde, J. Gómez-Blanco, D. Luque, S. Duquerroy, J.R. Castón, T. Goulas & **F.X. Gomis-Rüth**: "Structural and functional insights into *Escherichia coli* α_2-macroglobulin endopeptidase snap-trap inhibition". 7.9.2015 – 10.9.2015.
- **Invited Talk:** "Structural insights into the inhibitory trap mechanisms of α_2-macroglobulins". Centro de Investigaciones Biológicas, Madrid. 15.12.2015.
- **33rd Winter School on Proteinases and Inhibitors**, Tiers (Südtirol). Attendance and chair of the session "Extracellular Matrix and Metalloproteases". 24.2.2016 – 28.2.2016.
- **XXIII Workshop on Molecular Biology** of the **Catalan Biological Society**, Institute for Catalan Studies, Barcelona. Attendance and coorganization. 14.6.2016.
- **5th International Biophysics Congress**, Oporto (Portugal). Attendance and Manuel Rico/Bruker Award Lecture: **F.X. Gomis-Rüth:** "Molecular mechanisms of broad-spectrum endopeptidase inhibition by α_2-macroglobulins". 15.06.2016 – 17.06.2016.
- B-Debate Conference "**The Barcelona Debates on the Human Microbiome — From Microbes to Therapeutics**", CosmoCaixa, Barcelona. Attendance. 30.6.2015 – 1.7.2016.
- **XVth International Symposium on Proteinases, Inhibitors and Biological Control**, Portorož (Slovenia). Attendance and invited lecture: "Endopeptidase inhibition by α_2-macroglobulins: Venus-flytrap or snap-trap mechanisms". 17.9.2016 – 21.9.2016.
- **BBVA Foundation - IRB Barcelona Barcelona BioMed Conference "From genomes to structures: looking at big data with an atomic perspective",** Institut d'Estudis Catalans, Barcelona. Attendance. 28.11.2016 – 30.11.2016.
- **First Zing Conference on Protein Secretion in Bacteria**, Sirata Beach Resort, Tampa (Florida, USA). Poster co-presentation (#48): **A.M. Lasica**, T. Goulas, D. Mizgalska, M. Madej, K.-A. Nguyen, F.X. Gomis-Rüth & J. Potempa: "PorZ – a novel component of type IX secretion system of oral pathogen *Porphyromonas gingivalis*". 9.11.2016 – 12.11.2016.
- **61st Annual Meeting of the Biophysical Society**, New Orleans (Lousiana, USA). Attendance. 11.2.2017 – 15.2.2017.
- **34th Winter School on Proteinases and Inhibitors**, Tiers (Südtirol). Attendance and Laudatio on occasion of the 75. Birthday of Wolfram Bode. 8.3.2017 – 12.3.2017.
- **XXIV Workshop on Molecular Biology** of the **Catalan Biological Society**, Institute for Catalan Studies, Barcelona. Coorganization, attendance and session chair. 13.6.2017.
- **Gordon Research Conference** on Matrix Metalloproteinases, XIII, University of New England, Biddeford, ME (EEUU). Attendance, presentation of 2 posters and invited talk on the first one: (i) T. Goulas, M. Ksiazek, I. Garcia-Ferrer, A.M. Sochaj-Gregorczyk, I. Waligorska, M. Wasylewski, J. Potempa & **F.X. Gomis-Rüth**: "A structure-derived snap-trap mechanism of a multispecific serpin from the dysbiotic oral microorganism *Tannerella forsythia*". (ii) L. Marino-Puertas, T. Goulas & **F.X. Gomis-Rüth**: "Matrix metalloproteinases (MMPs) beyond vertebrates". 9.7.2017 – 14.7.2017.
- **XLth SEBBM Congress**, Barcelona. Attendance and poster presentation (P10-33): T. Goulas, M. Ksiazek, I. Garcia-Ferrer, A.M. Sochaj-Gregorczyk, I. Waligorska, M. Wasylewski, J. Potempa & **F.X. Gomis-Rüth**: "A structure-derived snap-trap mechanism of a multispecific serpin from the dysbiotic oral microorganism *Tannerella forsythia*". 23.10.2017 – 26.10.2017.
- 10th General **Meeting of the International Proteolysis Society**, Banff (Canada). Session co-chair, poster presentation and invited talk on poster 93: T. Goulas, M. Ksiazek, I. Garcia-Ferrer, A.M. Sochaj-Gregorczyk, I. Waligorska, M. Wasylewski, J. Potempa & **F.X. Gomis-Rüth**: "A structure-derived snap-trap mechanism of a multispecific serpin from the dysbiotic oral microorganism *Tannerella forsythia*". Further co-presentation of poster 67: M. Ksiazek, T. Goulas, A.M. Sochaj-Gregorczyk, F.X. Gomis-Rüth & J. Potempa: "Serpin from the dysbiotic oral microbiome is a multispecific protease inhibitor employing at least three reactive sites within an extended reactive center loop". 28.10.2017 – 2.11.2017.
- **Invited Talk:** "Proteolytic host-microbiome interactions: a molecular approach". University of British Columbia, Vancouver (Canada). 3.11.2017.
- **CEM3DIP 2018 EMBO Practical Course of Macromolecular assemblies and Cellular Tomography**, New Delhi (India). Poster co-presentation: **T. Goulas**, I. Garcia-Ferrer, A. Marrero, D. Luque-Buzo, J.R. Castón & F. X. Gomis-Rüth: "Structural and functional insights into the pan-endopeptidase inhibitor α_2-macroglobulin". 18.3.2018 – 29.3.2018.
- **Joint Workshop on Molecular and Developmental Biology** of the **Catalan Biological Society**, Institute for Catalan Studies, Barcelona. Attendance. 4.5.2018.
- **Gordon Research Conference** on Proteolytic Enzymes and their Inhibitors, XX, Il Ciocco, Lucca (Barga; Italy). Attendance and invited talk: T. Goulas, L. Marino-Puertas, M. Ksiazek, A.M. Sochaj-Gregorczyk, I. Waligorska, T. Guevara, I. Garcia-Ferrer, V. Dive, J. Potempa and **F.X. Gomis-Rüth**: "Structural basis for disparate inhibitory mechanisms of the potempins from the odontopathogen *Tannerella forsythia* against serine- and metallopeptidases". 3.6.2018 – 8.6.2018.
- **FEBS 2018 Advanced Course on Proteinases, Inhibitors and Biological Control**, Portorož (Slovenia). Lecture co-presentation: **J. Potempa**, M. Benedyk-Machaczka, A. Sochaj-Grzegorczyk, I. Waligorska, F.X. Gomis-Rüth & M. Ksiazek**:** "*Tannerella forsythia*-derived protease inhibitors – Foes or allies in the pathobiology of periodontitis?" 8.9.2018 – 12.9.2018.
- **Invited talk:** "Structural insight into astacin metallopeptidase inhibition by mammalian fetuin-B". Institute of Molecular Physiology, University of Mainz, Mainz (Germany). 12.9.2018 – 13.9.2018.
- **Gordon Research Conference** on Matrix Metalloproteinases, XIV, Il Ciocco, Lucca (Barga; Italy). Session co-chair *plus* co-presentation of poster and an associated talk: A. Cuppari, H. Körschgen, D. Fahrenkamp, C. Schmitz, T. Guevara, K. Karmilin, M.

Kuske, M. Olf, E. Dietzel, I. Yiallouros, D. de sanctis, T. Goulas, R. Weiskirchen, W. Jahnen-Dechent, J. Floehr, **W. Stöcker**, L. Jovine & F.X. Gomis-Rüth: "Structural basis for selective inhibition of ovastacin and meprin proteinases by mammalian plasma fetuin-B – a selective control element in fertilization and pericellular proteolysis". 12.5.2019 – 17.5.2019.

- **XXVI Workshop on Molecular Biology** of the **Catalan Biological Society**, Institute for Catalan Studies, Barcelona. Attendance and poster co-presentation: **L. Marino-Puertas**, L. del Amo-Maestro, T. Goulas & F.X. Gomis-Rüth: "Interaction studies between human α_2-macroglobulin (α_2M) and G-related α_2-macroglobulin binding protein (GRAB) and human latent transforming growth factor-β2 (pro-TGF-β_2) and structure analysis of mature TGF-β2 in a new conformation". 11.6.2018.
- B-Debate Conference "**Synthetic Biology. Engineering life for the medicine of the future**", CosmoCaixa, Barcelona. Attendance. 13.6.2019 – 14.6.2019.
- **IADR/AADR/CADR General Session & Exhibition**, Vancouver Convention Centre West, Vancouver (Canada). Poster co-presentation: **R.H. McIntyre**, I. Waligórska, D. Mizgalska, T. Goulas, T. Guevara, L. Marino-Puertas, M. Benedyk-Machaczka, F.X. Gomis-Rüth, A. Sochaj-Gregorczyk & J. Potempa: "Unique protease inhibitors as a novel pathogenic mechanism in periodontitis" (Abstract 3176491). 19.6.2019 – 22.6.2019.
- **32nd European Crystallographic Meeting**, University of Vienna (Vienna, Austria). Attendance, Chair of the Selection Committee of the IUCr Journals Poster Prize in Structural Biology, and poster presentation: A. Cuppari, H. Körschgen, D. Fahrenkamp, C. Schmitz, W. Jahnen-Dechent, W. Stöcker, L. Jovine & **F.X. Gomis-Rüth**: "Selective inhibition of astacin metallopeptidases by mammalian fetuin-B" (MS07: Structural Enzymology; #27831). 18.8.2019 – 23.8.2019.
- **SERPIN2019 Conference**, Meliã Seville Hotel (Seville, Spain). Attendance and two invited talks: T. Goulas, M. Książek, I. Garcia-Ferrer, A.M. Sochaj-Gregorczyk, I. Waligorska, M. Wasylewski, J. Potempa & **F. Xavier Gomis-Rüth**: "Structural basis for inhibition by miropin, a bacterial serpin from the periodontopathogen Tannerella forsythia"; and **J. Potempa**, M. Benedyk-Machaczka, A. Sochaj-Grzegorczyk, D. Mizgalska, I. Waligórska, F.X. Gomis-Rüth & M. Książek: "Miropin: The Yin and Yang of *Tannerella forsythia* pathogenicity". 19.9.2019 – 22.9.2019.
- **50-year Jubilee Conference of the Faculty of Biochemistry, Biophysics, and Biotechnology**, Jagiellonian University (Kraków, Poland). Attendance and invited talk: "Structural insight into pathogenic potential of periodontal pathogens". 23.9.2021 – 24.9.2021.
- **XXVII Workshop on Molecular Biology** of the **Catalan Biological Society**, Institute for Catalan Studies, Barcelona. Attendance. 26.11.2021.
- **Gordon Research Conference** on Proteolytic Enzymes and their Inhibitors, XXI, Il Ciocco, Lucca (Barga; Italia). Invited talk: "Mechanism of broad-spectrum endopeptidase inhibition by human α_2-macroglobulin unveiled by cryoelectron microscopy" and poster co-presentation: M. Książek, K. Zak, I. Waligorska, **F.X. Gomis-Rüth** & J. Potempa: „Molecular mechanism of latency and substrate specificity of proteases of the human periodontopathogen *Tannerella forsythia*". 5.6.2022 – 10.6.2022.
- **44th SEBBM Congress**, Málaga (Spain). Attendance and invited talk at the Group Meeting – Function and Structure of Proteins: "The molecular mechanism of pan-peptidase inhibition by human α_2-macroglobulin". 6.9.2022 – 9.9.2022.

PATENTS

- Cerdà-Costa N., López-Pelegrín M., Cintas-Pedrola A., López-Arolas J., **Gomis-Rüth F.X.** "Novel proteolytic enzyme for specific cleavage and use thereof", European Patent Application No. EP13382350.0. Submission number 300102450, reference P26977EP00. Date of receipt: September 10, 2013.
- Coma M., Aloy P., Pujol A., **Gomis X**., Oliva B., Lleó A., Mas J.M. "New combination therapies for treating neurological disorders", U.S. Patent Application No. 13/660,205. Filing date: October 25, 2012. PCT/US12/61908.
- Baker D., Chidyausiku T., Klima J., dos Reis-Mendes S., Eckard U., **Gomis-Rüth F.X.**, Marcos-Benteo M. "De novo designed immunoglobulin-like domains", US Patent Application No. 63/316,733. Filing date: March 4,2022. UW 49413.01US1.

OTHER ACTIVITIES AND MERITS

- **Editorial Board Member** (Executive Editor), *Scientific Reports* (since 20.9.2016).
- **Editorial Board Member** (Reviewer), *Journal of Biological Chemistry* (1.7.2005 - 30.9.2010 and 1.7.2012 - 30.9.2017).
- **Member of the Referee Panel**, *Acta Crystallographica section F* (2009 - 2010).
- **Ad hoc Referee for Scientific Publications (71):** *Acta Crystallographica section D* and *section F, ACS Chemical Biology, Angewandte Chemie Int. Ed., Applied and Environmental Microbiology, Archives of Oral Biology, Biochemistry, Biochimie, Biochimica et Biophysica Acta, Bioinformatics, Biologia, Biological Chemistry, Biopolymers, Blood, BMC Bioinformatics, BMC Biology, BMC Infectious Diseases, Cell Reports, Cellular and Molecular Life Sciences, ChemBioChem, Computational Biology and Chemistry, Crystals, Drug Discovery Today, EMBO Journal, European Journal of Biochemistry/FEBS Journal, European Journal of Medicinal Chemistry, FEBS Letters, FEBS Open Bio, FEMS Microbiology Reviews, Frontiers in Immunology, Frontiers in Molecular Biosciences, Inorganic Chemistry, International Journal of Molecular Sciences, Journal of Bacteriology, Journal of Biochemistry, Journal of Biological Chemistry, Journal of Biological Inorganic Chemistry, Journal of Clinical Microbiology, Journal of Computer-Aided Molecular Design, Journal of Molecular Biology, Journal of Periodontology, Journal of Proteome Research, Journal of Proteomics, Journal of*

Structural Biology, Journal of Thrombosis and Haemostasis, Metallomics, Molecules, Molecular Microbiology, Nature Chemical Biology, Nature Communications, Nature Medicine, Nature Reviews in Molecular and Cell Biology, Nucleic Acids Research, Plasmid, PeerJ, PLoS Biology, PLoS ONE, PLoS Pathogens, Proceedings of the National Academy of Sciences USA, Protein & Peptide Letters, Protein Expression and Purification, Protein Science, Proteomics Clinical Applications, Science Advances, Science Immunology, Scientific Reports, Structure, Trends in Cell Biology, Trends in Pharmacological Sciences, Wiley Encyclopedia of Industrial Biotechnology (book chapter) and Springer Basel AG (book).

- **Manuel Rico / Bruker Prize** (Career Award) of the **Spanish Biophysical Society**, 2016.
- **Nominated** by the Spanish Society for Biophysics for the **EBSA 2000 Biophysical Award** for young European scientists.
- **Roche Diagnostics Prize** (<36-y Career Award) of the **Spanish Society for Biochemistry and Molecular Biology,** 1999.
- Ranked within the **World's Top 2% of Scientists** with largest influence in the field through the **Ranking of the World Scientists** 2021 (see https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000918 and https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3) by Stanford University (USA).
- Ranked **1219**/**101,121** (**2022**) and **1268**/**112,000** (**2023**) researchers across all disciplines in the Spanish state (https://www.webometrics.info/en/GoogleScholar/Spain).

- **Member of Scientific Societies (past and present):**
  Gesellschaft Deutscher Chemiker (GDCh)
  American Society for Biochemistry and Molecular Biology (ASBMB)
  Federation of European Biochemical Societies (FEBS)
  International Union of Biochemistry and Molecular Biology (IUBMB)
  Federation of American Societies for Experimental Biology (FASEB)
  Catalan Biological Society (SCB)
  Spanish Biophysical Society (SBE)
  Spanish Society for Biochemistry and Molecular Biology (SEBBM)
  Marie-Curie Alumni Association
  EMBL Alumni Association

- **Participation in Collaborative Networks:**
  RIBERMOV (www.ribermov.org). A multidisciplinary consortium of more than 65 scientists from the Iberian Peninsula and South America to study neurodegeneration in Parkinson's disease and spinocerebellar ataxias (2010 – 2014).
  NEURODEGNET (www.neurodeg.net/NEURODEGNET/Welcome.html). A multidisciplinary consortium to study neuro-degeneration in humans (2009 – 2014).
  CONSOLIDER NETWORK from the Ministry of Economy and Competitiveness entitled "Network of Crystallography and Crystallization - The Crystallization Factory". Ref. FIS2015-71928-REDC (2016 – 2017).
  STRATEGIC NETWORK OF EXCELLENCE from the Ministry of Economy, Innovation and Competitiveness entitled "Severo Ochoa and María de Maeztu Alliance: Spanish Centers and Units of Excellence". Ref. BFU2016-81721-REDE (2017 – 2018).

- **Ad hoc Assessor of Promotions to Associate and Full Professorships** for US, EU, Israeli, Australian and Chinese universities and research institutions.
- **Ad hoc Member** of a **Board of Examiners for Full Professorship**, Autonomous University of Barcelona, 2018.
- **Ad hoc Reviewer of Research Projects and Scientific Candidacies:**
  German Research Foundation (DFG)
  The Wellcome Trust (Intermediate Wellcome Research Fellowships and Research Projects; Great Britain)
  Biomedical and Therapeutic Research Committee (Scotland)
  Scottish Association for International Cancer Research
  The Royal Society (Great Britain)
  Austrian Science Fund (FWF)
  INSERM (France)
  Israel Science Foundation (Israel)
  US-Israel Binational Science Foundation (Israel)
  Research Foundation (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO) (Flanders)
  Netherlands Organisation for Scientific Research (Council of Chemical Studies)
  National Science Centre (Narodowe Centrum Nauki) of Poland
  European Science Foundation
  National Health and Medical Research Council, Australian Government
  Killam Career Award, Canada Council for the Arts
  State Plans of Biotechnology (BIO) and Molecular and Cellular Biology (BMC/BFU) of Spanish Ministries and the State Agency of Research (AEI) as referee, member of evaluation panel, and member of the commission, both for research grants and "Ramón y Cajal" researcher positions.
  EXPLORA Programme, Spanish Ministry of Economy and Competitivity
  Subdirectorate-General of Health Research, Spanish Ministry of Health (FIS projects)

Ikerbasque (The Basque Foundation for Science; Basque Country)
Evaluation Agency and Knowledge Agency of Andalusia (Spain)

- Member (president, vocal or substitute) of several **Boards of Examiners for CSIC Civil Servant Positions** of Advanced Specialist Technicians, Assistant Professors, Associate Professors and Full Professors.
- Member of the **Selection Panel** for the **"José Tormo" Award** on Structural Biology (2005).

- **Co-organizer of the VIth Joint Seminar of the Catalan Society of Biology,** Sitges. June 1998.

- **Six *quinquenios*** (five-year reviews of teaching and dissemination accomplishments) and **five *sexenios científicos*** as well as **one *sexenio tecnológico*** (six-year reviews of scientific or technological performance) approved (all of those applied for).
- 15 entries in the Electron Microscopy Database (EMD; www.emdatabank.org), access codes: 3016, 3017, 3018, 12747, 12748, 12750, 12751, 12752, 12753, 12754, 12755, 12941, 12942, 12943 and 12944.
- 165 entries in the Protein Data Bank (PDB; www.pdb.org), access codes:
  1pyt, 1ast, 1atl, 1iaa, 1iab, 1iac, 1iae, 1iag, 1nba, 1iaf, 1pex, 1kbc, 1rtg, 2aig, 3aig, 4aig, 1uea, 1azw, 1jae, 1tmq, 1rnf, 2rnf, 2cpg, 1b01, 1b00, 1qmu, 1dyt, 1e9r, 1e9s, 1ea4, 1e21, 1h8l, 1gki, 1gl6, 1gl7, 1jvw, 1gvl, 1gxp, 1gxq, 1kwm, 1h2c, 1h2d, 1omh, 1osb, 1nq6, 1htd, 1h5w, 1okr, 1qx0, 1sax, 2bo9, 2boa, 1s6m, 2cki, 2iwa, 2iwb, 2iwc, 2iwd, 2j83, 2jb9, 2jba, 2pcu, 2iyn, 3bb7, 3bba, 3d4u, 3dwc, 3fju, 3h8t, 3dkx, 3dky, 3lms, 3lq0, 3lum, 3lun, 3mn8, 3osl, 2xs3, 2xs4, 3p24, 3ram, 3ssb, 4gwm, 4gwn, 4he5, 4he6, 4hwx, 4hx2, 4hx3, 4ief, 4ija, 4in9, 4jiu, 4jix, 4qhf, 4qhg, 4qhh, 4qhi, 4qhj, 4r3v, 4rbm, 4yt9, 4ytb, 4ytg, 4yu5, 4yu6, 4ziq, 4ziu, 4zjg, 4zjh, 5a24, 5a42, 5ag8, 5ag9, 5cx8, 5m11, 5mun, 5ncs, 5nct, 5ncu, 5ncw, 5nv6, 6ht9, 6i0x, 6i9a, 6i9j, 6r7u, 6r7v, 6r7w, 6saz, 6tav (supersedes 4acq), 6za2, 7auw, 7o7l, 7o7m, 7o7n, 7o7o, 7o7p, 7o7q, 7o7r, 7o7s, 7pnd, 7pol, 7poo, 7poq, 7pou, 7skl, 7skm, 7skn, 7sko, 7skp, 7t8i, 7zu8, 7zva, 7zvb, 7zvc, 8a28, 8b2m, 8b2n, 8b2q, 8ehb, 8ehc, 8ehd, 8ehe, 8cd8 and 8cdb.
- **User of large installations**. Analysis of protein crystals by synchrotron radiation. Deutsches Elektronensynchrotron (DESY), Hamburg, 1995 - 2001; Sincrotrone Elettra, Trieste, 1996 and 1999; European Synchrotron Radiation Facility (ESRF), Grenoble, since 1998; Sincrotró ALBA, Cerdanyola, since 2012; Diamond Light Source, Harwell, since 2019.

STAYS IN RESEARCH CENTRES

- **Chemical Institute of Sarrià** (Barcelona). Organic synthesis, separation of atropisomers, and conformational analysis of dibenzoazepinones. Master studies, 1988 – 1989 (9 months).
- **Max-Planck Institute of Biochemistry** (Martinsried/Munich, Germany). Biochemical and crystallographic studies of two enzymes: Dihydrodipicolinate synthase and astacin. Ph.D. studies. 1989 – 1992 (35 months).
- **Max-Planck Institute of Biochemistry** (Martinsried/Munich, Germany). Structural analysis by X-ray crystallography of the snake venom enzyme adamalysin II. Postdoctoral research. 1992 (3 months).
- **Max-Planck Institute of Biochemistry** (Martinsried/Munich, Germany). Crystallization of the ternary complex of bovine procarboxypeptidase A. Postdoctoral research. 1992 (2 months).
- **Institute of Fundamental Biology (Autonomous University of Barcelona)** (Bellaterra). Structural analysis by X-ray crystallography of the ternary complex of bovine procarboxypeptidase A. Postdoctoral research. 1992 – 1995 (29 months).
- **Max-Planck Institute of Biochemistry** (Martinsried/Munich, Germany). Structural analysis by X-ray crystallography of the ternary complex of bovine procarboxypeptidase A. Guest. 1993 (9 months).
- **Max-Planck Institute of Biochemistry** (Martinsried/Munich, Germany). Structural analysis of proteolytic enzymes and their inhibitors by X-ray crystallography. Postdoctoral research associate. 1995 – 1996 (21 months).
- **Istituto di Strutturistica Chimica** (Monterotondo, Rome, Italy). Structural analysis of adamalysin II with peptidomimetic inhibitors by synchrotron radiation. Guest. 1997 (10 days).
- **DSB, IBMB** (Barcelona). Structural analyses of DNA-binding proteins and of proteolytic enzymes. Postdoctoral research associate. 1997 – 1999 (36 months).
- **DSB, IBMB** (Barcelona). Structure-function analyses of proteolytic enzymes and their inhibitors, and of microbial virulence and antibiotic resistance factors. PI at (Interim) Assistant, Associate, and Full Professor level. Since 2000.
- Visiting Scientist (several short stays) at the **European Molecular Biology Laboratory (EMBL)**, Grenoble (France). 2000 – 2003.