CURRICULUM VITAE

Personal Data

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Education

1981	Bachelor's Degree in Chemical Sciences (Speciality: Organic Chemistry), University of Barcelona
1982	Master's in Organic Chemistry, University of Barcelona
1988	Ph.D. in Organic Chemistry, University of Barcelona
1988	Bachelor's Degree in Physical Sciences (Speciality: Theoretical Physics), University of Barcelona

Positions

1983-1987	Teaching Assistant, Dept. of Organic Chemistry, University of Barcelona
1987-1989	Teaching Associate, Dept. of Organic Chemistry, University of Barcelona
1989-1990	Research Fellow, Dept. Pharmacology, University of Texas Southwestern Medical Center (UTSWMC)
1990-1991	Assistant Instructor, Dept. Pharmacology, UTSWMC
1991-1993	Instructor, Dept. Pharmacology, UTSWMC
1993-1994	Research Assistant Professor, Dept. Pharmacology, UTSWMC
1995-2001	Assistant Professor, Dept. Pharmacology, UTSWMC
1996-2001	Assistant Professor, Dept. Biochemistry, UTSWMC
2001-2003	Associate Professor, Dept. Pharmacology, UTSWMC
2001-2003	Associate Professor, Dept. Biochemistry, UTSWMC
2003-	Professor, Dept. Pharmacology, UTSWMC
2003-	Professor, Dept. Biochemistry, UTSWMC
2010-2017	Chair, Molecular Biophysics Graduate Program, UTSWMC
2012-	Professor, Dept. Biophysics, UTSWMC
2013-present	Virginia Lazenby O'Hara Chair in Biochemistry

Teaching Experience

1982-1987	Recitation (30 hours/year) and laboratory (200 hours/year) on general chemistry and organic chemistry for first- to fifth-year students in the Faculty of Chemistry, University of Barcelona
1987-1988	Lectures (90 hours) and laboratory (140 hours) on general chemistry for first-year students in the Faculty of Biology, University of Barcelona
1991-	Magnetic resonance course (half semester) and lectures on biophysics and mathematics for graduate students of the Biophysics Program in UTSWMC
1995-	Lectures on NMR spectroscopy, on Protein Folding and Protein Structure, and on membrane fusion in the Core Course of the Division of Cell and Molecular Biology in UTSWMC. Courses on Advanced NMR Spectroscopy, Modern Methods in Structural Biology, Physical Chemistry of Macromolecules and Synaptic Transmission in UTSWMC.

Service and Honors

Grants, fellowships, honorary positions and awards

1980-1981	Fellow, Undergraduate Research Collaborator, INAPE (Spain)
1982-1983	Fellow, Ministry of Education and Science, Spain
1983	Student Award, Catalan Society of Physical, Chemical and Mathematical Sciences (Spain)
1983	IV Sant Albert Award for Graduate Research, School of Chemistry Graduates, Catalan Chemical Association (Spain)
1989-1990	Postdoctoral Fellow, Ministry of Education and Science, Spain; at UTSWMC
1994-1996	Joint Grant United Cerebral Palsy Foundation/Hearst Foundation, "Analysis of the structure and binding properties of synaptotagmin"
1995-1998	Grant Welch Foundation "Analysis of interactions between synaptic proteins by NMR"
1995-2000	Grant NIH (R29) "Structural and Binding Properties of Synaptotagmin"
1997-2016	Grant NIH (RO1) "Structure and Function of Syntaxin 1"
1998-2001	Grant Welch Foundation "Structure and interactions of Vino"
1998-2001	Established Investigator Award from the American Heart Association
2001-2004	Grant Welch Foundation "Rab/SNARE coupling at the synapse"
2001-2016	Grant NIH (RO1) "Synaptotagmin and C2-domains: Structure and Function"
2002	High End Istrumentation Grant NIH "800 MHz NMR spectrometer"
2003-2004	Grant Muscular Dystrophy Association "Structure and function of MUNC13 and RIM"
2004-2007	Grant Welch Foundation "Mechanism of Ca^{2+}-dependent Neurotransmitter Release"
2007-present	Grant Welch Foundation "NMR methods to study membrane proteins in lipid bilayers"
2007-2010	Human Frontiers Science Program grant "Roles of V0 and SNAREs in lipid mixing and pore opening during membrane fusion"
2008-	K. P. Professor, Zhejiang University, Hangzhou, China
2012-2018	CPRIT MIRA Award (co-PI) "Molecular and Structural Basis of Epigenetic Regulation of AR"
2014	S10 Shared Instrumentation Grant NIH "Acquisition of upgrades for 800 MHz NMR console"
2014-present	Guest Professor, Huazhong University of Science and Technology, Wuhan, China
2015	Medalla Narcis Monturiol al Merit Cientific, Generalitat de Catalunya
2015-present	Visiting Professor, Academia Sinica, Taipei, Taiwan
2016-present	Research Program Award NIH (R35) "Mechanisms of neurotransmitter release and its regulation"

Selected invited lectures

2000	Student invited speaker, 'From genes to thoughts' Symposium, EMBL, Heidelberg
2005	University Lecture, UTSWMC, Dallas, Texas
2006	Visiting Lecturer of the Alberta Heritage Foundation for Medical Research
2006	Molecular Biosciences Lecturer, Wichita State University
2009	Graduate Student invited Molecular and Cellular Biology seminar, University of Massachusetts, Amherst
2010	Closing Lecture, 35th Lorne Conference on Protein Structure and Function, Lorne, Australia
2010	Keynote Speaker, Centre for Neurogenomics and Cognition Research, Amsterdam, The Netherlands
2010	Opening Lecture, IV Spanish Portuguese Biophysical Congress, Zaragoza, Spain
2013	Session Chair and Lecturer, Biophysics Society Meeting, Philadelphia
2013	Keynote Lecture, 8th Asian Biophysics Association Symposium, Jeju Island, South Korea
2013	Neuroscience Distinguished Lecture, University of Toronto
2015	Keynote Lecture, 17th International Neuroscience Winter Conference, Soelden, Austria
2016	Session Chair and Lecturer, World Life Science Conference, Beijing, China
2017	Keynote lecture, Collaborative Research Center 665, Developmental disturbances in the nervous system, Final Symposium, Berlin, Germany
2019	University Lecture, Er Yi Innovation Forum, Shanghai Jiao Tong University, Shanghai, China
2019	Opening Lecture, Symposium on Quantitative Synaptology, Gottingen, Germany

2020 Keynote Lecture, Oklahoma Microscopy Society 2020 spring meeting

Service in advisory boards, review panels and Symposium organization

2001-present Member, Faculty of 1000
2002 Member, NIH Shared Instrumentation Study Section
2003-2006 Scientific Advisory Board, DFG-Research Center for Molecular Physiology of the Brain, Gottingen, Germany
2003 Member, NIH Special Emphasis Panel to Review the MIT/Harvard Center for Magnetic Resonance resource grant
2004 Ad hoc member, BBCB study section from NIH
2004 Ad hoc member, MDCNA2 study section from NIH
2004 Member, NIH Shared Instrumentation Study Section
2004 Member, NIH Special Emphasis Panel to Review Program Project Grant from UCSD
2005 Member, NIH Special Emphasis Panel to Review Program Project Grant from Salk-Baylor
2005 Ad hoc member, MSFC study section from NIH
2005 Ad hoc member, SYN study section from NIH
2006-2009 Permanent member, SYN study section from NIH
2012 ZRG1 BCMB-B January Study Section from NIH
2013 MDCN September Special Emphasis Panel from NIH
2014 Co-Organizer, 26th International Conference on Magnetic Resonance in Biological Systems (ICMRBS), Dallas, Texas, USA
2014-2024 Member, ICMRBS Council
2014-2022 International Scientific Advisory Board, Max Planck Institute for Biophysical Chemistry, Gottingen, Germany
2014 ZRG1 F05-R(20)L February Study Section from NIH
2014-present Coordinator of the Polish Visiting Research Graduate Traineeship Program at UTSWMC
2015 BDMA February Study Section from NIH
2016-present American Heart Association - Basic Cell PC1 April Study Section
2016 ZRG1 BCMB-D Program Project Study Section from NIH
2017-2019 Scientific Advisory Board, Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan
2017 ZNS1 SRB-J (16) Special Emphasis Panel for review of R35 applications, NINDS, NIH
2017 Ad hoc member, Biophysics of Neural Systems study section from NIH
2017-present Scientific Advisory Board, STXBP1 Disorders Foundation
2018 ZNS1 SRB-M (07) Special Emphasis Panel for review of R35 applications, NINDS, NIH
2019 External review panel, Dept. of Molecular, Cellular and Developmental Biology, University of Colorado Boulder
2019 ZNS1 SRB-H (12) Special Emphasis Panel for review of R35 applications, NINDS, NIH
2020 American Heart Association - Review committee: Career Development Award Basic Cell Sciences 2
2020-2022 Chair, Academic Advisory Board, Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan
2020 ZRG1 CB-Q (55) Special Emphasis Panel for review of MIRA applications, NIGMS, NIH
2020 ZNS1 SRB-H (15) Special Emphasis Panel for review of R35 applications, NINDS, NIH

Journal service

Editorial boards: Cell Research, Journal of Molecular Cell Biology, FEBS Open Bio.
Adhoc reviewing editor: eLife, Proceedings of the National Academy of Sciences USA.
Reviewer: eLife, Science, Nature, Cell, Proceedings of the National Academy of Sciences USA, Nature Structural and Molecular Biology, EMBO Journal, Nature Communications, Nature Cell Biology, Nature Protocols, Molecular Cell, Neuron, Cell Reports, Science Advances, Journal of the American Chemical Society, Journal of

Neuroscience, Journal of Cell Biology, Developmental Cell, Plant Cell, Structure, Journal of Biological Chemistry, Journal of Molecular Biology, Journal of Biomolecular NMR, Biophysical Journal, Journal of Cell Science, Langmuir, Neuroscience, Biochemistry, Biochimica Biophysica Acta, Molecular Biology of the Cell, Traffic, PLoS Biology, PLoS One, BMC Biology, FEBS Letters, Molecular and Cellular Biology, Frontiers in Neuroscience, Protein Science, ACS Chemical Neuroscience and Journal of Neurochemistry among others.

Society Memberships

American Chemical Society
Sociedad de Biofísica de España
Biophysical Society
American Association for the Advancement of Science

Publications

1. J. Rizo, "Applicació de la RMN de ^{13}C a l'estudi de suports polimèrics emprats en la Síntesi de Pèptids en Fase Sòlida", *Butll. Soc. Cat. Cièn. III*, 35-85 (1984).

2. E. Giralt, J. Rizo, and E. Pedroso, "Application of Gel-Phase ^{13}C-NMR to monitor Solid Phase Peptide Synthesis", *Tetrahedron 40*, 4141-4152 (1984).

3. J. Rizo, F. Albericio, G. Romero, C. Garcia-Echeverria, J. Claret, C. Muller, E. Giralt and E. Pedroso, "Use of Polar Picolyl Protecting Groups in Peptide Synthesis", *J. Org. Chem. 53*, 5386-5389 (1988).

4. F. Albericio, E. Nicolas, J. Rizo, M. Ruiz-Gayo, E. Pedroso and E.Giralt, "Convenient Synthesis of Fluorenylmethyl-Based Side Chain Derivatives of Glutamic and Aspartic acids, Lysine, and Cysteine", *Synthesis*, 119-122 (1990).

5. F. Albericio, J. Rizo, E. Nicolas, M. Ruiz-Gayo, F. Cardenas, C. Carreno, D. Andreu, E. Pedroso, and E. Giralt, "Fluorenylmethyl-based side-chain Protecting Groups: Towards a New Strategy of Peptide Synthesis", in *Peptides: Chemistry, Structure, and Biology. Proceedings of the 11th American Peptide Symposium* (J. E. Rivier & G. R. Marshall, Eds.), Escom, Leiden, The Netherlands, pp. 923-924 (1990).

6. S. Stradley, J. Rizo, M. Bruch, Z.-P. Liu, and L. Gierasch, "Influence of Asparagine on Turn Formation in Cyclic Pentapeptides", in *Peptides: Chemistry, Structure, and Biology. Proceedings of the 11th American Peptide Symposium* (J. E. Rivier & G. R. Marshall, Eds.), Escom, Leiden, The Netherlands, pp. 644-646 (1990).

7. S. Stradley, J. Rizo, M. Bruch, A. Stroup, and L. Gierasch, "Cyclic Pentapeptides as Models for Reverse Turns: Determination of the Equilibrium Distribution Between Type I and Type II Conformations of Pro-Asn and Pro-Ala ß-Turns", *Biopolymers 29*, 263-287 (1990).

8. E. Giralt, F. Albericio, F. Bardella, R. Eritja, M. Feliz, E. Pedroso, M. Pons and J. Rizo, "Gel-phase NMR Spectroscopy as a Useful Tool in Solid Phase Synthesis", in *Solid Phase Synthesis* (R. Epton, Ed.), SPCC (UK), Birmingham, pp. 111-120 (1990).

9. J. Rizo, M. M. Dhingra and L. M. Gierasch, "A Cyclic Hexapeptide Model for Asparagine Side-chain/backbone Interactions in a Protein □ Turn", in *Peptides 1990. Proceedings of the 21st European Peptide Symposium* (E. Giralt & D. Andreu, Eds.), Escom, Leiden, The Netherlands, pp. 468-471 (1991).

10. J. Rizo, M. M. Dhingra and L. M. Gierasch, "Peptide Models for Reverse Turns. The Role of Asparagine in the i Position of a □ turn", in *Molecular Conformations and Biological Interactions*, P. Balaram and S. Ramaseshan, Eds., Indian Academy of Sciences, Bangalore, India, 469-496 (1991).

11. J. Rizo, F. Blanco, B. Kobe, M. D. Bruch, D. W. Hoyt and L. M. Gierasch, "Conformations of Wild-type and Mutant OmpA Signal Sequences in Membrane Mimetic Environments", in *Peptides: Chemistry and Biology. Proceedings of the 12th American Peptide Symposium* (J. A. Smith and J. E. Rivier, Eds.), ESCOM, Leiden, The Netherlands, pp. 265-267 (1992).

12. R. J. Bienstock, S. C. Koerber, J. Rizo, J. Rivier, A. T. Hagler and L. M. Gierasch, "Conformation of a Highly Potent Bicyclic GnRH Antagonist by Combined Molecular Dynamics and Two-Dimensional NMR Analyses", in *Peptides: Chemistry and Biology. Proceedings of the 12th American Peptide Symposium* (J. A. Smith and J. E. Rivier, Eds.), ESCOM, Leiden, The Netherlands, pp. 262-264 (1992).

13. J. Rizo and L. M. Gierasch, "Constrained Peptides: Models of Bioactive Peptides and Protein Substructures", *Annu. Rev. Biochem. 61*, 387-418 (1992).

14. J. Rizo, S. C. Koerber, R. J. Bienstock, J. Rivier, A. T. Hagler and L. M. Gierasch, "Conformational Analysis of a Highly Potent, Constrained Gonadotropin-Releasing Hormone Antagonist I. Nuclear Magnetic Resonance", *J. Am. Chem. Soc. 114*, 2852-2859 (1992).

15. J. Rizo, S. C. Koerber, R. J. Bienstock, J. Rivier, L. M. Gierasch and A. T. Hagler, "Conformational Analysis of a Highly Potent, Constrained Gonadotropin-Releasing Hormone Antagonist II. Molecular Dynamics Simulations", *J. Am. Chem. Soc. 114*, 2860-2871 (1992).

16. J. Rizo, F. Albericio, E. Giralt and E. Pedroso, "Reversible protection of lysine to facilitate the purification of protected peptide segments", *Tetrahedron Lett. 33*, 397-400 (1992).

17. M. Bruch, J. Rizo and L. M. Gierasch "Impact of a Micellar Environment on the Conformations of Two Cyclic Pentapeptides", *Biopolymers 32*, 1741-1754 (1992).

18. J. Rizo, F. Blanco, B. Kobe, M. D. Bruch and L. M. Gierasch, "Conformational Behavior of Escherichia coli OmpA Signal Peptides in Membrane Mimetic Environments", *Biochemistry 32*, 4881-4894 (1993).

19. J. Rivier, L. Gierasch, J. Rizo, S. C. Koerber, A. Hagler, J. Porter, A. Corrigan, W. Vale and C. Rivier, "Probing the GnRH Receptor with Linear and Cyclic Analogs", in *Peptide Chemistry 1992. Proceedings of the 2nd Japan Symposium on Peptide Chemistry*, (N. Yanaihara, Ed.), ESCOM, Leiden, The Netherlands, 313-317 (1993).

20. R. J. Bienstock, J. Rizo, S. C. Koerber, J. E. Rivier, A. T. Hagler and L. M. Gierasch, "Conformational Analysis of a Highly Potent Dicyclic Gonadotropin-Releasing Hormone Antagonist by Nuclear Magnetic Resonance and Molecular Dynamics", *J. Med. Chem. 36*, 3265-3273 (1993).

21. S. J. Stradley, J. Rizo and L. M. Gierasch, "The Conformation of a Hexapeptide Substrate Bound to Protein Farnesyltransferase", *Biochemistry 32*, 12586-12590 (1993).

22. Z. Wang, J. Jones, J. Rizo and L. M. Gierasch, "Membrane-Bound Conformation of a Signal Peptide: a Transferred Nuclear Overhauser Effect Analysis", *Biochemistry 32*, 13991-13999 (1993).

23. Z.-P. Liu, J. Rizo and L. M. Gierasch, "Equilibrium Folding Studies of Cellular Retinoic Acid Binding Protein, a Predominantly □-Sheet Protein", *Biochemistry 33*, 134-142 (1994).

24. J. Rizo, R. B. Sutton, J. Breslau, S. C. Koerber, J. Porter, J. E. Rivier, A. T. Hagler and L. M. Gierasch, "Defining the Active Conformation of Gonadotropin Releasing Hormone (GnRH) through Design and Conformational Analysis of Constrained GnRH Analogs", in *Peptides: Chemistry, Structure and Biology. Proceedings of the 13th American Peptide Symposium* (R. S. Hodges and J. A. Smith, Eds.), ESCOM, Leiden, The Netherlands, pp. 766-768 (1994).

25. J. Rizo, Z.-P. Liu and L. M. Gierasch, "^{1}H and ^{15}N NMR resonance assignments and secondary structure of cellular retinoic acid binding protein with and without bound ligand", *J. Biomol. NMR. 4*, 741-760 (1994).

26. M. Sukumar, J. Rizo, M. Wall, L. A. Dreyfus, Y. M. Kupersztoch and L. M. Gierasch, "The Structure of *Eschericia Coli* Heat-Stable Enterotoxin b by Nuclear Magnetic Resonance and Circular Dichroism", *Protein Sci.4*, 1718-1729 (1995).

27. J. Rivier, G. C. Jiang, S. L. Lahrichi, J. Porter, S. C. Koerber, J. Rizo, A. Corrigan, L. Gierasch, A. Hagler, W. Vale and C. Rivier, "Dose relationship between GnRH antagonists and pituitary suppression", *Hum. Reprod. 11 Suppl. 3*, 133-147 (1996).

28. J. E. Rivier, G.-C. Jiang, S. C. Koerber, S. L. Lahrichi, L. Porter, J. Rizo, L. Gierasch, A. Hagler, W. Vale, M. Karten, and C. L. Rivier, "GnRH antagonists: design, synthesis and side effects", *Proceedings of the Treatment with GnRH Analogs: Controversies and Prospectives* (M. Filicori, C. Flamigni, Eds.), 13-23 (1996).

29. J. Rizo and M. D. Bruch, "Structure Determination of Biological Macromolecules", in *NMR Spectroscopy Techniques*, second ed. (M. D. Bruch, Ed.), Marcel Dekker, New York, pp. 285-415 (1996).

30. J. Rizo, R. B. Sutton, J. Breslau, S. C. Koerber, J. Porter, A. T. Hagler, J. E. Rivier and L. M. Gierasch, "A Novel Conformation in a Highly Potent, Constrained Gonadotropin Releasing Hormone Antagonist", *J. Am. Chem. Soc. 118*, 970-976 (1996).

31. J. Rizo and L. M. Gierasch, "Secondary Structure Elements in Peptides and Proteins: β-turns, α-helices and β-sheets", in *Encyclopedia of NMR* (D. M. Grant and R. K. Harris, Eds.), John Wiley & Sons, pp. 3517-3526 (1996).

32. X. Shao, B. A. Davletov, R. B. Sutton, T. C. Südhof and J. Rizo, "A Bipartite Ca^{2+}-Binding Motif in C_2 Domains of Synaptotagmin and Protein Kinase C", *Science 273*, 248-251 (1996).

33. T. C. Südhof and J. Rizo, "Synaptotagmins: C_2-Domain Containing Proteins that Regulate Membrane Traffic", *Neuron 17*, 379-388 (1996).

34. X. Shao, C. Li, I. Fernandez, X. Zhang, T. C. Südhof and J. Rizo, "Synaptotagmin-Syntaxin Interaction: the C_2-Domain as a Ca^{2+}-Dependent Electrostatic Switch", *Neuron 18*,133-142 (1997).

35. A. L. Osterman, H. Brooks, J. Rizo and M. A. Phillips, "The role of Arg-277 in the binding of pyridoxal-5'-phosphate to *Trypanosoma brucei* ornithine decarboxylase", *Biochemistry 36*, 4558-4567 (1997).

36. C. Von Poser, K. Ichtchenko, X. Shao, J. Rizo and T. C. Südhof, "The Evolutionary Pressure to Inactivate: a Subclass of Synaptotagmins with an Amino Acid Substitution that Abolishes Ca^{2+} Binding", *J. Biol. Chem. 272*, 14314-14319 (1997).

37. K. K. Reddy, J. Rizo and J. R. Falck, "Concise Synthesis of L-α-Phosphatidyl-D-*myo*-Inositol 3,4-Biphosphate, an Intracellular Messenger, *Tetrahedron Letters 38*, 4729-4730 (1997).

38. X. Shao, T. C. Südhof and J. Rizo, "Assignment of the ^{1}H, ^{15}N and ^{13}C resonances of the calcium-free and calcium-bound forms of the first C_2-domain of synaptotagmin I", *J. Biomol. NMR 10*, 307-308 (1997).

39. P. L. Clark, Z.-P. Liu, J. Rizo and L. M. Gierasch, "Cavity formation before stable hydrogen bonding in the folding of a β-clam protein", *Nature Struct. Biol. 4*, 883-886 (1997).

40. J. Rizo, "Peptides", in *The Encyclopedia of Chemistry* (J. J. Lagowski, Ed.), Macmillan, New York, NY, 1145-1151 (1997).

41. Z.-P. Liu, J. Rizo and L. M. Gierasch, "Protein Folding", in *Bioorganic Chemistry: Peptides and Proteins* (S. M. Hecht, Ed.), Oxford University Press, New York, NY, 224-257 and 493-498 (1998).

42. J. Rizo* and T. C. Südhof*, "C_2-domains, structure and function of a universal Ca^{2+}-binding domain", *J. Biol. Chem. 273*, 15879-15882 (1998).

43. J. Ubach, X. Zhang, X. Shao, T. C. Südhof and J. Rizo, "Ca^{2+}-binding to synaptotagmin: how many Ca^{2+} ions bind at the tip of a C_2-domain?, *EMBO J. 17*, 3921-3930 (1998).

44. R. G. Kibbey, J. Rizo, L. M. Gierasch and R. G. W. Anderson, "The LDL receptor clustering motif interacts with the clathrin terminal domain in a reverse turn conformation", *J. Cell. Biol. 142*, 59-67 (1998).

45. X. Zhang, J. Rizo and T. C. Südhof, "Mechanism of phospholipid binding by the C_2A-domain of synaptotagmin I", *Biochemistry 37*, 12395-12403 (1998).

46. X.-M. Yang, W.-F. Yu, J.-H. Li, J. Fuchs, J. Rizo and M. L. Tasayco, "NMR evidence for the reassembly of an α/β domain after cleavage of and α-helix: implications for protein design", *J. Am. Chem. Soc. 120*, 7985-86 (1998).

47. X. Shao, I. Fernandez, T. C. Südhof and J. Rizo, "Solution structures of the Ca^{2+}-free and Ca^{2+}-bound C_2A-domain of synaptotagmin I: does Ca^{2+} induce a conformational change?, *Biochemistry 37*, 16106-16115 (1998).

48. I. Fernandez, J. Ubach, X. Zhang, T. C. Südhof and J. Rizo, "Three-dimensional structure of an evolutionarily conserved N-terminal domain of syntaxin 1A", *Cell 18*, 841-849 (1998).

49. J. Rizo and T. C. Südhof, "Mechanics of membrane fusion", *Nature Struct. Biol. 5*, 839-842 (1998).

50. P. L. Clark, M. Sukumar, Z. P. Liu, J. Rizo, B. F. Weston, K. S. Rotondi and L. M. Gierasch, "Folding of a predominantly β-sheet", in *Peptides. Proceedings of the 15th American Peptide Symposium* (J. P. Tam, P. T. P. Pravin, Eds.), Kluwer, Dordrecht, The Netherlands, pp. 349-351 (1999).

51. R. Baluna, J. Rizo, B. E. Gordon, V. Ghetie and E. S. Vitetta, "Evidence for a structural motif in toxins and interleukin-2 which may be responsible for binding to endothelial cells and initiating vascular leak syndrome", *Proc. Natl. Acad. Sci. USA 96*, 3957-3962 (1999).

52. J. Ubach, J. Garcia, M. P. Nittler, T. C. Südhof and J. Rizo, "Structure of the Janus-faced C_2B-domain of rabphilin", *Nature Cell Biol. 1*, 106-112 (1999).

53. H. Kim, L. Esser, M. B. Hossain, D. Xia, C.-A. Yu, J. Rizo, D. Van der Helm and J. Deisenhofer, "Structure of antimycin A1, a specific electron transfer inhibitor of ubiquitinol-cytochrome c oxidoreductase", *J. Am. Chem. Soc. 121*, 4902-4903 (1999).

54. J. Hazzard, T. C. Südhof and J. Rizo, "NMR analysis of the structure of synaptobrevin and of its interaction with syntaxin", *J. Biomol. NMR 14*, 203-207 (1999).

55. I. Dulubova, S. Sugita, S. Hill, M. Hosaka, I. Fernandez, T. C. Südhof* and J. Rizo*, "A conformational switch in syntaxin during exocytosis", *EMBO J. 18*, 4372-4382 (1999).

56. M. A. Contreras, J. Ubach, O. Millet, J. Rizo* and M. Pons*, "Lanthanide induced orientation of a calcium binding protein", *J. Am. Chem. Soc. 121*, 8947-8948 (1999).

57. S. C. Koerber, J. Rizo, R. S. Struthers and J. E. Rivier, "Consensus bioactive conformation of cyclic GnRH antagonists defined by NMR and molecular modeling", *J. Med. Chem. 43*, 819-828 (2000).

58. T. Matos, J. Rizo and T. C. Südhof, "The relation of protein binding to function: what is the significance of munc18 and synaptotagmin binding to syntaxin 1, and where are the corresponding binding sites?", *Eur. J. Cell Biol* 79, 377-382 (2000).

59. S. Pabst, J. Hazzard, W. Antonin, T. C. Südhof, R. Jahn, J. Rizo and D. Fasshauer, "Selective interaction of complexin with the neuronal SNARE complex: determination of the binding regions", *J. Biol. Chem. 275*, 19808-19818 (2000).

60. R. Fernandez-Chacon, A. Königstorfer, S. H. Gerber, J. Garcia, M. F. Matos, C. F. Stevens, N. Brose, J. Rizo, C. Rosenmund and T. C. Südhof, "Synaptotagmin I functions as a Ca^{2+}-regulator of release probability", *Nature 410*, 41-49 (2001).

61. I. Dulubova, T. Yamaguchi, Y. Wang, T. C. Südhof and J. Rizo, "Vam3p structure reveals conserved and divergent properties of syntaxins", *Nature Struct. Biol. 8*, 258-24 (2001).

62. S. H. Gerber, J. Garcia, J. Rizo and T. C. Südhof, "An unusual C_2-domain in the active-zone protein piccolo: implications for Ca^{2+}-regulation of neurotransmitter release", *EMBO J. 20*, 1605-1619 (2001).

63. J. Ubach, Y. Lao, I. Fernandez, D. Arac, T. C. Südhof and J. Rizo, "The C_2B-domain of synaptotagmin I is a Ca^{2+}-binding module", *Biochemistry 40*, 5854-5860 (2001).

64. Y. Wang, I. Dulubova, J. Rizo and T. C. Südhof, "Functional analysis of conserved structural elements in yeast syntaxin Vam3p", *J. Biol. Chem. 276*, 28598-28605 (2001).

65. S. H. Gerber, J. Rizo and T. C. Südhof, "The top loops of the C_2-domains from synaptotagmin and phospholipase A2 control functional specificity", *J. Biol. Chem. 276*, 32288-32292 (2001).

66. I. Fernandez, D. Arac, J. Ubach, S. H. Gerber, O. Shin, Y. Gao, R. G. W. Anderson, T. C. Südhof and J. Rizo, "Three-dimensional structure of the synaptotagmin 1 C_2B-domain: synaptotagmin 1 as a phospholipid binding machine", *Neuron 32*, 1057-1069 (2001).

67. S. H. Gerber, J. Rizo and T. C. Südhof, "Role of electrostatic and hydrophobic interactions in Ca^{2+}-dependent phospholipid binding by the C_2A-domain from synaptotagmin I", *Diabetes 51 Suppl 1*, S12-18 (2002).

68. X. Chen, D. Tomchick, E. Kovrigin, D. Arac, M. Machius, T. C. Südhof and J. Rizo, "Three-dimensional structure of the complexin/SNARE complex", *Neuron 33*, 397-409 (2002).

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