

CURRICULUM VITAE

(October 2004)

Armando J. Parodi

Born in Buenos Aires, Argentina, on March 16th., 1942

A. EDUCATION

Ph.D. (Biochemistry)

School of Sciences, University of Buenos Aires, 1970

Master (Organic Chemistry)

School of Sciences, University of Buenos Aires, 1965

B. POSITIONS

- 1) Career Investigator, National Research Council (Argentina) (1970-present)
- 2) Professor of Cell Biology, Institute for Biotechnological Research, University of San Martin (1999-2003)
- 3) Professor of Biochemistry, School of Sciences, University of Buenos Aires (1982-1999).
- 4) Visiting Scientist, Department of Microbiology, The Wellcome Research Laboratories, Research Triangle Park, N.C. (U.S.A. (1978-1980).
- 5) Research Associate, Department of Microbiology and Immunology, Duke University Medical Center, Durham, N.C. (U.S.A.) (1978-1980).
- 6) Assistant Professor of Biochemistry, School of Sciences, University of Buenos Aires (1976-1978)
- 7) Post-Doctoral Fellow, Département de Biologie Moléculaire, Institut Pasteur, Paris (1972-1974)
- 8) Instructor of Biochemistry, School of Sciences, University of Buenos Aires, (1967-1972; 1975-1976)

C. FELLOWSHIPS, AWARDS AND HONORS

- 1) Eleanor Roosevelt-International Union Against Cancer Fellowship (1972-1973).

- 2) John S. Guggenheim Memorial Foundation Fellowship (1973-1974).
- 3) 1994 Award in Biology (Third World Academy of Sciences, Trieste, Italy)
- 4) Member, Third World Academy of Sciences, 1997
- 5) Howard Hughes Medical Institute International Research Scholar (1997-2006)
- 6) Member, Latin-American Academy of Sciences, (1999).
- 7) Foreign Associate, National Academy of Sciences (USA) (2000)
- 8) Foreign Member, Brazilian Academy of Sciences (2000)
- 9) Member, American Academy of Microbiology (2001)
- 10) Honorary Member, Spanish Society for Biochemistry and Molecular Biology (2001)
- 11) Member, National Academy of Exact, Physical and Natural Sciences (Argentina) (2003)
- 12) Member, National Academy of Sciences (Argentina) (2003)

D. PUBLICATIONS

a) Review papers

1. El Glucógeno Particulado. Metabolismo-Estructura-Síntesis.
Armando J. Parodi.
Anales Sociedad Científica Argentina, Número Especial, 121-129 (1971).
2. Lipid Intermediates in Protein Glycosylation.
Armando J. Parodi and Luis F. Leloir.
Trends in Biochemical Sciences, 1, 58-59 (1976).
3. Recent Advances in the Study of Membrane-Bound Saccharides.
Armando J. Parodi and Luis F. Leloir.
Biomedicine 28, 9-13 (1978).
4. The Role of Lipid Intermediates in the Glycosylation of Proteins in the Eucaryotic Cell.
Armando J. Parodi and Luis F. Leloir
Biochimica et Biophysica Acta 559, 1-37 (1979).

5. N-linked Oligosaccharide Synthesis and Cellular Sociology
Armando J. Parodi
En "Breast Epithelial Antigens. Molecular Biology to Clinical Applications" (R. L. Ceriani, ed.), pp. 131-140, (Plenum Press, New York & London, 1991).
- 6.- Protein *N*-glycosylation in Trypanosomatids. A Pathway with Odd Enzymes at Both Ends
Armando J. Parodi
Biological Research , 26, 69-75 (1993)
- 7.- *N*-glycosylation in Trypanosomatid Protozoa
Armando J. Parodi
Glycobiology, 3, 193-199 (1993)
- 8.- Biosynthesis of Protein-linked Oligosaccharides in Trypanosomatid Flagellates
Armando J. Parodi
Parasitology Today , 9, 373-377 (1993)
- 9.- Serendipity, or How Working with Glycoproteins from Trypanosomatids Changed my Life (With a Little Help from my Friends)
Armando J. Parodi
Ciência e Cultura, 46, 249-254 (1994)
- 10.- The UDP-Glc:glycoprotein Glucosyltransferase and the Quality Control of Glycoprotein Folding in the Endoplasmic Reticulum
Armando J. Parodi
Trends in Glycoscience and Glycotechnology, 8, 1-12 (1996)
- 11.- The Quality Control of Glycoprotein Folding in the Endoplasmic Reticulum: a Trip from Trypanosomes to Mammals
Armando J. Parodi
Brazilian Journal of Medical and Biological Research, 31, 601-604 (1998)
- 12.- Reglucosylation of Glycoproteins and Quality Control of Glycoprotein Folding in the Endoplasmic Reticulum of Yeast Cells
Armando J. Parodi
Biochimica et Biophysica Acta, 1426, 287-295 (1999)
- 13.- Protein Glucosylation and its Role in Protein Folding
Armando J. Parodi
Annual Review of Biochemistry, 69, 69-93 (2000)
- 14.- The Role of Oligosaccharide ER Processing Reactions in Glycoprotein Folding and Degradation
Armando J. Parodi
Biochemical Journal, 348, 1-13 (2000)

- 15.- *N*-glycan Processing and Glycoprotein Folding
E. Sergio Trombetta and Armando J. Parodi
Advances in Protein Chemistry, 59, 303-344 (2002)
16. Quality control and protein folding in the secretory pathway.
Eduardo S. Trombetta, and A. J. Parodi
Annual Review in Cell and Developmental Biology, 19, 649-676 (2003).

b) Chapters in books

1. Biosynthetic Mechanisms for Cell Envelope Polysaccharides.
Armando J. Parodi.
In "*Yeast Cell Envelopes-Biochemistry, Biophysics and Ultrastructure*", (W.N. Arnold, ed.), Vol. II, pp. 47-64, (CRC. Press, Boca Raton, Florida, USA, 1981).
2. Estructura de la Pared Celular de Microorganismos.
Armando J. Parodi.
In "*Bioquímica General*" (H.Torres, H. Carminatti y C.E. Cardini, eds.) pp. 230-237 (El Ateneo, Buenos Aires, Argentina, 1983).
3. Biosíntesis de Polisacáridos Estructurales y Glicoproteínas.
Armando J. Parodi.
In "*Bioquímica General*" (H. Torres, H. Carminatti y C.E. Cardini, Eds.) pp. 636-650 (El Ateneo, Buenos Aires, Argentina, 1983).
4. Glucosilación de Proteínas.
Armando J. Parodi.
In "*Bioquímica y Biología Molecular*" (S. Ochoa, L.F. Leloir, J. Oro y A. Sols, eds.), pp. 159-166 (Salvat, Barcelona, España, 1986).
5. Reacciones de Glucosilación de Proteínas en el Lumen del Retículo Endoplásmico. Su Posible Papel en el Plegamiento Proteico
Sergio Trombetta, Miguel A. Ferrero-García, Marcelo Sousa y Armando J. Parodi
En "Nuevos Conceptos Sobre el Desarrollo Estructural y Funcional de los Seres Vivos" (J. J. García- Marín, M. A. Serrano y A. Tabernero, eds.) pp. 107-118 (Ediciones Universidad de Salamanca, España, 1995)
6. The Role of the UDP-Glc:glycoprotein Glucosyltransferase as a Sensor of Glycoprotein Conformations
Armando J. Parodi
In "Oligosaccharides in Chemistry and Biology. A Comprehensive Handbook" (B. Ernst, P Sinaÿ and G. Hart, eds.). Vol. 3, pp.119-127 (2000). Wiley-VCH, Weinheim, Germany.

7. Glycoprotein Folding and Processing Reactions
Armando J. Parodi
In "Encyclopedia of Biological Chemistry" (W. Lennarz and M. D. Lane, eds.)
Vol. 2, pp. 272-276, (2004) Elsevier, Oxford, UK.
8. Quality Control in Glycoprotein Folding
E. Sergio Trombetta and Armando J. Parodi
In "Handbook of Protein Folding", (Johannes Buchner and Thomas Kiefhaber,
eds.) Vol. II (en prensa) Wiley-VCH, Weinheim, Germany,

c) Original research papers

1. Factors Affecting the Molecular Weight Distribution of Liver Glycogen.
Armando J. Parodi.
Archives of Biochemistry and Biophysics, 120, 547-552, (1967).
2. Properties of Synthetic and Native Liver Glycogen.
Armando J. Parodi, Clara R. Krisman, Luis F. Leloir and Jose Mordoh.
Archives of Biochemistry and Biophysics, 121, 769-778, (1967).
3. Some Properties of Rat Liver Amylase.
Jose Mordoh, Clara R. Krisman, Armando J. Parodi and Luis F. Leloir.
Archives of Biochemistry and Biophysics, 127, 193-199, (1968).
4. In Vitro Synthesis of Particulate Glycogen from Uridine Diphosphate Glucose.
Armando J. Parodi, Jose Mordoh, Clara R. Krisman and Luis F. Leloir.
Archives of Biochemistry and Biophysics, 132, 111-117, (1969).
5. In Vitro Synthesis of Particulate Glycogen from Uridine Diphosphate Glucose
II. Some Studies on the Growth Process.
Armando J. Parodi, Clara R. Krisman and Jose Mordoh.
Archives of Biochemistry and Biophysics, 141, 219-227 (1970).
6. In Vitro Synthesis of Particulate Glycogen from Uridine Diphosphate Glucose.
III. Some Properties of the Product Synthesized by Muscle Glycogen Synthetase.
Clara R. Krisman and Armando J. Parodi.
Archives of Biochemistry and Biophysics, 141, 228-235 (1970).
7. Estudios sobre el Metabolismo, la Estructura y el Mecanismo de Biosíntesis del
Glucógeno de Alto Peso Molecular.
Armando J. Parodi.
Ph.D. Thesis, School of Sciences, University of Buenos Aires (1970)
8. Action Patterns of Phosphorylase and Glycogen Synthetase on Glycogen.

Armando J. Parodi, Jose Mordoh Clara R. Krisman and Luis F. Leloir.
European Journal of Biochemistry, 16, 499-507 (1970).

9. The Role of Dolichol Monophosphate in Sugar Transfer.

Nicolás H. Behrens, Armando J. Parodi, Luis F. Leloir and Clara R. Krisman.
Archives of Biochemistry and Biophysics, 143, 375-383 (1971).

10. Glucose Transfer from Dolichol Monophosphate Glucose. The Product Formed with Endogenous Microsomal Acceptor.

Nicolás H. Behrens, Armando J. Parodi and Luis F. Leloir.
Proceedings of the National Academy of Sciences, U.S.A., 68, 2857-2860 (1971).

11. Subcellular Distribution of Dolichol Phosphate.

Gustav Dallner, Nicolás H. Behrens, Armando J. Parodi and Luis F. Leloir.
FEBS Letters , 24, 315-317 (1972).

12. A Study of Conditions for Dolichol Intermediates Formation.

Plácido R. Pucci, Armando J. Parodi and Nicolás H. Behrens.
Anales Asociación Química Argentina, 60, 203-211 (1972).

13. Cromatografía de los Restos Hidrofílicos de Algunos Derivados del Dolicol.

Luis F. Leloir, Armando J. Parodi and Nicolás H. Behrens.
Revista de la Sociedad Argentina de Biología , 48, 108-112 (1971).

14. Glucose Transfer from Dolichol Monophosphate Glucose. The Lipid Moiety of the Endogenous Microsomal Acceptor.

Armando J. Parodi, Nicolás H. Behrens, Luis F. Leloir and Marcelo A. Dankert.
Biochimica et Biophysica Acta, 270, 529-536 (1972).

15. The Mechanism of Glucose Transfer by Phosphorylase and Glycogen Synthetase.

Armando J. Parodi, Jose Mordoh, Clara R. Krisman and Luis F. Leloir.
In "The Biochemistry of the Glycosidic Linkage" (R. Piras and H. Pontis, eds.), pp. 409-411 (Academic Press, New York and London, 1972).

16. The Structure of the Compound Formed by Glucose Transfer from Dolichol Monophosphate Glucose to a Microsomal Acceptor.

Nicolás H. Behrens, Armando J. Parodi, and Luis F. Leloir.
In "The Biochemistry of the Glycosidic Linkage", (R. Piras and H. Pontis, eds.), pp. 189-193 (Academic Press, New York and London, 1971).

17. Further Studies on the Structure of the Compound that Receives Glucose from Dolichol Monophosphate Glucose.

Armando J. Parodi, Nicolás H. Behrens and Luis F. Leloir.
In "Biochemistry of the Glycosidic Linkage", (R. Piras and H. Pontis, eds.), pp. 195-198 (Academic Press, New York and London, 1972).

18. The Role of Polyprenol-Bound Saccharides as Intermediates in Glycoprotein Synthesis in Liver.
Armando J. Parodi, Nicolás H. Behrens, Luis F. Leloir and Hector Carminatti.
Proceedings of the National Academy of Sciences, U.S.A. 69, 3268-3272 (1972).
19. Further Studies on a Glycolipid Formed from Dolichyl-D-Glucosyl Monophosphate.
Armando J. Parodi, Roberto J. Staneloni, Ana I. Cantarella, Luis F. Leloir, Nicolás H. Behrens, Hector Carminatti and Jose Levy.
Carbohydrate Research, 26, 393-400 (1973).
20. Endonucleolytic Cleavage of Polyoma Virus DNA: General Properties and Site Specificity of the Virion Associated Endonuclease.
Armando J. Parodi, Pierre Rouget, Odille Croissant, Daniel Blangy and Francois Cuzin.
Cold Spring Harbor Symposium in Quantitative Biology , 39, 247-254 (1974).
21. Origin of the Polyoma Virus-Associated Endonuclease.
Pierre Rouget, Armando J. Parodi, Daniel Blangy and Francois Cuzin.
Journal of Virology, 20, 9-13 (1976).
22. Synthesis of Dolichol Derivatives in Human Erythrocyte Membranes.
Josefina Martín-Barrientos and Armando J. Parodi.
Molecular and Cellular Biochemistry, 16, 111-117 (1977).
23. Protein Glycosylation through Dolichol Derivatives in Bakers Yeast.
Armando J. Parodi.
FEBS Letters , 71, 282-286 (1976).
24. Synthesis of Steryl Glucoside in Bakers Yeast.
Armando J. Parodi.
Acta Physiologica Latinoamericana , 26, 430-433 (1976).
25. Synthesis of Glucosyl Dolichol Derivatives in Bakers Yeast and Their Role in Protein Glycosylation.
Armando J. Parodi.
European Journal of Biochemistry , 75, 171-180 (1977).
26. Glycosylation of Endogenous Proteins through Dolichol Derivatives in Reticulocyte Plasma Membranes.
Armando J. Parodi and Josefina Martín-Barrientos.
Biochimica et Biophysica Acta , 500, 80-88 (1977).
27. Lipid Intermediates in the Synthesis of the Inner Core of Yeast Mannan.
Armando J. Parodi.

- European Journal of Biochemistry , 83, 253-259 (1978).
28. Biosynthesis of Dolichol Derivatives in Yeast and Their Role in Protein Glycosylation.
Armando J. Parodi.
In "Biochemistry and Genetics of Yeasts", (M. Bacila, B.L. Horecker and A.O.M. Stoppani, eds.), pp. 209-227 (Academic Press, New York, 1978).
 29. Biosynthesis of Yeast Mannoproteins. Synthesis of Mannan Outer Chain and of Dolichol Derivatives.
Armando J. Parodi.
The Journal of Biological Chemistry, 254, 8343-8352 (1979).
 30. Biosynthesis of Yeast Glycoproteins. Processing of the Oligosaccharides Transferred from Dolichol Derivatives.
Armando J. Parodi.
The Journal of Biological Chemistry, 254, 10051-10060 (1979).
 31. The Mechanism of Synthesis of the Polysaccharide Part of Mannan in *Saccharomyces cerevisiae*.
Armando J. Parodi.
Archives of Biochemistry and Biophysics, 210, 372-382 (1981).
 32. Pathway of Protein Glycosylation in the Trypanosomatid *Crithidia fasciculata*.
Armando J. Parodi, Luis A. Quesada-Allue and Juan J. Cazzulo.
Proceedings of the National Academy of Sciences, U.S.A., 78, 6201-6205 (1981).
 33. Protein Glycosylation in *Trypanosoma cruzi*. I. Characterization of Dolichol-bound Monosaccharides and Oligosaccharides Synthesized in vivo.
Armando J. Parodi and Luis A. Quesada-Allue.
The Journal of Biological Chemistry, 257, 7637-7640 (1982).
 34. Protein Glycosylation in *Trypanosoma cruzi*. II. Partial Characterization of Protein-bound Oligosaccharides Labeled in vivo.
Armando J. Parodi and Juan J. Cazzulo.
The Journal of Biological Chemistry , 257, 7641-7645 (1982).
 35. Separation of Dolichol Monophosphate Mannose and Dolichol Monophosphate Glucose by Thin Layer Chromatography.
Gerardo Z. Lederkremer and Armando J. Parodi.
Journal of Chromatography, 262, 299-304 (1983).
 36. Dolichol-bound Oligosaccharides and the Transfer of Distal Monosaccharides in the Synthesis of Glycoproteins by Normal and Tumor Mammary Epithelial Cells.
Armando J. Parodi, Edward W. Blank, Jerry Peterson and Roberto Ceriani.
Breast Cancer Research and Treatment , 2, 227-237 (1982).

37. Novel Mannose Carrier in the Trypanosomatid *Crithidia fasciculata* Behaving as a Short α -Saturated Polyprenyl Phosphate.
Luis A. Quesada-Allue and Armando J. Parodi.
Biochemical Journal, 212, 123-128 (1983).
38. Glycosyl Transferases in Mouse and Human Milk Fat Globule Membranes.
Armando J. Parodi, Edward W. Blank, Jerry Peterson and Roberto Ceriani.
Molecular and Cellular Biochemistry, 58, 157-164 (1984).
39. Protein Glycosylation in *Trypanosoma cruzi*. The Mechanism of Glycosylation and Structure of Protein-bound Oligosaccharides.
Armando J. Parodi, Gerardo Z. Lederkremer and Daniel H. Mendelzon.
The Journal of Biological Chemistry, 258, 5589-5595 (1983).
40. Transient Glucosylation of Protein-Bound Man₉GlcNAc₂, Man₈GlcNAc₂ and Man₇GlcNAc₂ in Calf Thyroid Cells: A Possible Recognition Signal in the Processing of Glycoproteins.
Armando J. Parodi, Daniel H. Mendelzon and Gerardo Z. Lederkremer.
The Journal of Biological Chemistry, 258, 8260-8265 (1983).
41. Glycoprotein Assembly in *Leishmania mexicana*.
Armando J. Parodi, Josefina Martín-Barrientos and Juan C. Engel.
Biochemical and Biophysical Research Communications, 118, 1-7 (1984).
42. Evidence that Transient Glucosylation of Protein-linked Man₉GlcNAc₂, Man₈GlcNAc₂ and Man₇GlcNAc₂ Occurs in Rat Liver and *Phaseolus vulgaris* Cells.
Armando J. Parodi, Daniel H. Mendelzon, Gerardo Z. Lederkremer and Josefina Martín Barrientos.
The Journal of Biological Chemistry, 259, 6351-6357 (1984).
43. 3-O-Methylation of Mannose Residues. A Novel Reaction in the Processing of N-linked Oligosaccharides Occurring in *Mucor rouxii*.
Gerardo Z. Lederkremer and Armando J. Parodi.
The Journal of Biological Chemistry, 259, 12514-12518 (1984).
44. Glycosylation of Proteins in the Protozoan *Euglena gracilis*.
Laura de la Canal and Armando J. Parodi.
Comparative Biochemistry and Physiology, 81 B, 803-805 (1985).
45. *Trypanosoma cruzi* Cells Undergo an Alteration in Protein N-glycosylation upon Differentiation.
Juan C. Engel and Armando J. Parodi.
The Journal of Biological Chemistry, 260, 10105-10110 (1985).

46. Characterization of Dolichol Monophosphate- and Dolichol Diphosphate-linked Saccharides Trypanosomatid Flagellates.
Jose O. Previato, Daniel H. Mendelzon and Armando J. Parodi.
Molecular and Biochemical Parasitology, 18, 343-353 (1986).
47. Characterization of Protein-linked Oligosaccharides in Trypanosomatid Flagellates.
Daniel H. Mendelzon, Jose O. Previato and Armando J. Parodi.
Molecular and Biochemical Parasitology, 18, 355-367 (1986).
48. N-linked, High Mannose-type Oligosaccharides in the Protozoa *Crithidia fasciculata* and *Crithidia hamosa* Contain Galactofuranose Residues.
Daniel H. Mendelzon and Armando J. Parodi.
The Journal of Biological Chemistry, 261, 2129-2133 (1986).
49. Characterization of the Mechanism of Protein Glycosylation and the Structure of Glycoconjugates in Tissue Culture Trypomastigotes and Intracellular Amastigotes of *Trypanosoma cruzi*.
Patricia Doyle, Laura de la Canal, Juan C. Engel and Armando J. Parodi.
Molecular and Biochemical Parasitology, 21, 93-101 (1986).
50. The Structure of the Main Dolichol-P-P-linked Oligosaccharide Present in *Mucor rouxii*.
Gerardo Z. Lederkremer and Armando J. Parodi.
Anales de la Asociacion Química Argentina, 74, 643-653 (1986).
51. Processing of Asparagine-linked Saccharides in *Mucor rouxii*.
Gerardo Z. Lederkremer and Armando J. Parodi.
Biochimica et Biophysica Acta, 884, 363-369 (1986).
52. Synthesis of Dolichol Derivatives in Trypanosomatids. Characterization of Enzymatic Patterns.
Laura de la Canal and Armando J. Parodi.
The Journal of Biological Chemistry, 262, 11128-11133 (1987).
53. *Tetrahymena pyriformis* Cells are Deficient in all Mannose-P-Dolichol-Dependent Mannosyltransferases but not in Mannose-P-Dolichol Synthesis.
Claudia Yagodnik, Laura de la Canal and Armando J. Parodi.
Biochemistry, 26, 5937-5943 (1987).
54. Structural Characterization of Several Galactofuranose-containing, High Mannose-type Oligosaccharides Present in Glycoproteins of the Trypanosomatid *Leptomonas samueli*.
Carlos T. Moraes, Margarita Bosh and Armando J. Parodi.
Biochemistry, 27, 1543-1549 (1988).

55. Synthesis of Dolichol Derivatives and Protein Glycosylation in Trypanosomatids.
Margarita Bosch, Sergio Trombetta and Armando J. Parodi.
Biochemical Society Transactions, 16, 268-271 (1988).
56. Characterization of Dolichol Diphosphate Oligosaccharide:Protein Oligosaccharyl-transferase and of Glycoprotein Processing Glucosidases Occurring in Trypanosomatids.
Margarita Bosch, Sergio Trombetta, Ulla Engstrom and Armando J. Parodi.
The Journal of Biological Chemistry, 263, 17360-17365, (1988).
57. The Specificity of the Oligosaccharyltransferase from a Murine Teratome Cell Line Towards Oligosaccharides.
Margarita Bosch, and Armando J. Parodi.
Anales de la Asociación Química Argentina, 77, 63-69 (1989).
58. Glucosylation of Glycoproteins by Mammalian, Plant, Fungal and Trypanosomatid Protozoa Microsomal Membranes.
Sergio Trombetta, Margarita Bosch, and Armando J. Parodi.
Biochemistry, 28, 8108-8116 (1989).
59. Amino acid and Carbohydrate Composition of a Lysosomal Cysteine Proteinase from *Trypanosoma cruzi*. Absence of Phosphorylated Mannose Residues.
Juan J. Cazzulo, Ulf Hellman, Roberto Couso and Armando J. Parodi.
Molecular and Biochemical Parasitology, 35, 41-48 (1990).
60. The Structure of a Galactofuranose-containing Oligosaccharide Isolated from Glycoproteins of the Trypanosomatid *Herpetomonas samuelpeesoai*.
Maria del C. Gonzalez-Clemente, Miguel Angel Ferrero-García, Juan C. Bossio, Margarita Bosch and Armando J. Parodi.
Molecular and Biochemical Parasitology, 42, 289-292 (1990).
61. The UDP-Glc:glycoprotein Glucosyltransferase is a Soluble Protein of the Endoplasmic Reticulum.
Sergio E. Trombetta, Sandra Gañán and Armando J. Parodi.
Glycobiology, 1, 155-161 (1991)
62. Glucosylation of Glycoproteins in *Crithidia fasciculata*.
Graciela Gotz, Sandra Gañán and Armando J. Parodi.
Molecular and Biochemical Parasitology, 45, 265-274 (1991).
63. A Major Proportion of N-glycoproteins is Transiently Glucosylated in the Endoplasmic Reticulum.
Sandra Gañán, Juan J. Cazzulo and Armando J. Parodi.

- Biochemistry, 30, 3098-3104 (1991).
64. Recognition of the Oligosaccharide and Protein Moieties of Glycoproteins by the UDP- Glc:glycoprotein Glucosyltransferase
Marcelo Sousa, Miguel Angel Ferrero-García and Armando J. Parodi
Biochemistry , 31, 97-105 (1992).
65. Identification of the Gene(s) Coding for the Trans-sialidase of *Trypanosoma cruzi*
Armando J. Parodi, Guido Pollevick, Martín Mautner, Alejandro Buschiazso and Alberto C. Frasch
The EMBO Journal, 11, 1705-1710 (1992)
66. Purification to Apparent Homogeneity and Partial Characterization of Rat Liver UDP-Glc:glycoprotein Glucosyltransferase
Sergio E. Trombetta and Armando J. Parodi
The Journal of Biological Chemistry, 267, 9236-9240 (1992)
67. On the Post-translational Modifications at the C-terminal Domain of the Major Cysteine Proteinase (Cruzipain) from *Trypanosoma cruzi*
Juan J. Cazzulo, Javier Matínez, Armando J. Parodi, Christer Wernstedt and Ulf Hellman
FEMS Microbiology Letters, 100, 411-416 (1992)
68. The Action of *Trypanosoma cruzi* Trans-sialidase on Glycolipids and Glycoproteins
Miguel A. Ferrero-García, Sergio E. Trombetta,, Daniel O. Sánchez, Angel Reglero, Alberto C. C. Frasch and Armando J. Parodi
European Journal of Biochemistry, 213, 765-771 (1993)
69. The Effect of Pyridoxal 5'-phosphate and Related Compounds on *Trypanosoma cruzi* Trans-sialidase
Miguel A. Ferrero-García, Daniel O. Sánchez, Alberto C. Frasch and Armando J. Parodi
Anales de la Asociación Química Argentina, 81, 127-132 (1993)
70. A Recombinant *Trypanosoma cruzi* Trans-sialidase Lacking the Amino Acid Repeats Retains the Enzymatic Activity
Oscar E. Campetella, Antonio D. Uttaro, Armando J. Parodi and Alberto C. C. Frasch
Molecular and Biochemical Parasitology, 64, 337-340 (1994)
71. The Presence in *Trypanosoma cruzi* Microsomes of $\alpha(1,2)$, $\alpha(1,3)$ and $\alpha(1,6)$ Mannosidase Activities not Involved in Protein-linked Man₉GlcNAc₂ Processing
Marcia Tosta Xavier, Silvana Merello and Armando J. Parodi
Cellular and Molecular Biology , 40, 989-997 (1994)

72. Novel (Rhamnosyl and Ribosyl) and Uncommon (Xylosyl) Monosaccharide Residues are Present in Asparagine-linked Oligosaccharides of the Trypanosomatid *Blastocrithidia culicis*
Silvana Merello, Marcia Tosta Xavier and Armando J. Parodi
The Journal of Biological Chemistry, 269, 20294-20298 (1994)
73. N-(4-Nitrophenyl)oxamic Acid and Related N-acylanilines are Non-competitive Inhibitors of *Vibrio cholerae* Sialidase but Do Not Inhibit *Trypanosoma cruzi* or *Trypanosoma brucei* Trans-sialidases
Markus Engstler, Miguel A. Ferrero-García, Armando J. Parodi, Roland Schauer, Thomas Storz-Eckerlin, Andrea Vasella, Christian Witzig and Xiaoying Zhu
Helvetica Chimica Acta, 77, 1166-1174 (1994)
74. Purification to Homogeneity of UDP-Glc:glycoprotein Glucosyltransferase from *Schizosaccharomyces pombe* and Apparent Absence of the Enzyme from *Saccharomyces cerevisiae*.
Fabiana Fernández, Sergio Trombetta, Ulf Hellman and Armando J. Parodi
The Journal of Biological Chemistry, 269, 30701-30706 (1994)
75. The Presence of Galactofuranose and Ribose Units in Asparagine-linked Oligosaccharides of the Digenetic Trypanosomatid *Endotrypanum schaudinni*
Silvana Merello, Marcia T. Xavier and Armando J. Parodi
Molecular and Biochemical Parasitology, 69, 73-79 (1995)
76. The Presence of Complex-type Oligosaccharides at the C-terminal Domain Glycosylation Site of Some Molecules of Cruzipain
Armando J. Parodi, Carlos Labriola and Juan J. Cazzulo
Molecular and Biochemical Parasitology, 69, 247-255 (1995)
77. Characterization and Partial Purification of a Novel Enzymatic Activity: UDP-GlcNAc:Ser-protein N-Acetylglucosamine-1-phosphotransferase from the Cellular Slime Mold *Dictyostelium discoideum*
Silvana Merello, Armando J. Parodi and Roberto O. Couso
The Journal of Biological Chemistry, 270, 7281-7287 (1995)
78. Structural Characterization of the Major Glycosylphosphatidylinositol Membrane Anchored Glycoprotein from Epimastigote Forms of *Trypanosoma cruzi* Y-strain
José O. Previato, Christopher Jones, Marcia T. Xavier, Robin Wait, Luiz R. Travassos, Armando J. Parodi and Lucia Mendonça-Previato
The Journal of Biological Chemistry, 270, 7241-7250 (1995)
79. Characterization of the Mannose 6-Phosphate-Dependent Pathway of Lysosomal Enzyme Routing in an Invertebrate
Vivian Alvarez, Armando J. Parodi and Roberto Couso

Biochemical Journal, 310, 589-595 (1995)

80. Retention of the Glucose Unit Added by the UDP-Glc:glycoprotein Glucosyltransferase Delays Exit of Glycoproteins from the Endoplasmic Reticulum

Carlos Labriola, Juan J. Cazzulo and Armando J. Parodi

The Journal of Cell Biology, 130, 771-779 (1995)

81. The Molecular Basis for the Recognition of Misfolded Glycoproteins by the UDP-Glc:glycoprotein Glucosyltransferase

Marcelo Sousa and Armando J. Parodi

The EMBO Journal, 14, 4196-4203 (1995)

82. A New Stress Protein: Synthesis of *Schizosaccharomyces pombe* UDP-Glc:glycoprotein Glucosyltransferase mRNA is Induced Under Stress Conditions but the Enzyme is not Essential for Cell Viability

Fabiana Fernández, Mehrdad Jannatipour, Ulf Hellman, Luis Rokeach and Armando J. Parodi

The EMBO Journal, 15, 705-713 (1996).

83. The Use of UDP-Glc:glycoprotein Glucosyltransferase for Radiolabeling Protein-linked High Mannose-type Oligosaccharides

Sandra I. Metzner, Marcelo C. Sousa, Ulf Hellman, Juan J. Cazzulo and Armando J. Parodi

Cellular and Molecular Biology, 42, 631-635 (1996)

84. The Interaction of the UDP-Glc:glycoprotein Glucosyltransferase with the Acceptor Glycoprotein

Marcelo C. Sousa and Armando J. Parodi

Cellular and Molecular Biology, 42, 609-616 (1996)

85. A Misfolded Protein Conformation is not a Sufficient Condition for *In Vivo* Glucosylation by the UDP-Glc:glycoprotein Glucosyltransferase

Fabiana Fernández, Cecilia D' Alessio, Sandra Fanchiotti and Armando J. Parodi

The EMBO Journal, 17, 5877-5886 (1998)

86. The UDP-Glc:glycoprotein Glucosyltransferase is Essential for *Schizosaccharomyces pombe* Viability Under Conditions of Extreme Endoplasmic Reticulum Stress

Sandra Fanchiotti, Fabiana Fernández, Cecilia D' Alessio and Armando J. Parodi

The Journal of Cell Biology, 143, 625-635 (1998)

87. Calnexin and BiP Interact with Acid Phosphatase Independently of Glucose Trimming and Reglucosylation in *S. pombe*

Mehrdad Jannatipour, Mario Callejo, Armando J. Parodi, John Armstrong and Luis A. Rokeach

Biochemistry, 37, 17253-17261 (1998)

88. UDP-glucose Transport into the Endoplasmic Reticulum of *S. cerevisiae*: *In Vivo* and *In Vitro* Evidence

Olga Castro, Ling Yun Chen, Armando J. Parodi and Claudia Abeijón
Molecular Biology of the Cell, 10, 1019-1030 (1999)

89. *Trypanosoma cruzi* Calreticulin is a Lectin that Binds Monoglucosylated Oligosaccharides but not Protein Moieties of Glycoproteins

Carlos Labriola, Juan J. Cazzulo and Armando J. Parodi
Molecular Biology of the Cell, 10, 1381-1394 (1999)

90. Molecular and Biochemical Characterization of a Protein Kinase B from *Trypanosoma cruzi*

Verónica Pascuccelli, Carlos Labriola, Ma. Teresa Téllez-Iñón and Armando J. Parodi
Molecular and Biochemical Parasitology, 102, 21-33 (1999)

91. Genetic Evidence for the Heterodimeric Structure of Glucosidase II. The Effect of Disrupting the Subunit-encoding Genes on Glycoprotein Folding

Cecilia D'Alessio, Fabiana Fernández, E. Sergio Trombetta and Armando J. Parodi
The Journal of Biological Chemistry, 274, 25899-25905 (1999)

92. The activity of a Putative Polyisoprenoid-linked Sugar Translocase (Wzx) Involved in *Escherichia coli* O Antigen Assembly is Independent of the Chemical Structure of the O Repeat.

Mario F. Feldman, Cristina L Marolda, Mario A. Monteiro, Malcolm B. Perry, Armando J. Parodi and Miguel A. Valvano.
The Journal of Biological Chemistry, 274, 35129-35138 (1999)

93. Cloning and Characterization of Mammalian UDP-glucose Glycoprotein:

Glucosyltransferase and the Development of a Specific Substrate for the Enzyme
Daniel C. Tessier, Daniel Dignard, André Zapun, Anna Radominska-Pandya, Armando J. Parodi, John. J. M. Bergeron and David Y. Thomas
Glycobiology, 10, 403-412 (2000)

94. Immunolocalization of UDP-Glc:glycoprotein Glucosyltransferase Indicates Involvement of pre-Golgi Intermediates in Protein Quality Control

Christian Zuber, Jing-yu Fan, Bruno Guhl, Armando J. Parodi, John H. Fessler, Carol Parker and Jürgen Roth
Proceedings of the National Academy of Sciences USA, 98, 10710-10715 (2001)

95. UDP-Glc:glycoprotein Glucosyltransferase Recognizes Structured and Solvent Accessible Hydrophobic Patches in Molten Globule-like Folding Intermediates.

Julio J. Caramelo, Olga A. Castro, Leonardo G. Alonso, Gonzalo de Prat-Gay and Armando J. Parodi

Proceedings of the National Academy of Sciences, USA 100, 86-91 (2003)

96. The UDP-Glc:glycoprotein Glucosyltransferase is Organized in at Least Two Tightly Bound Domains from Yeasts to Mammals.

Marcelo Guerin and Armando J. Parodi

The Journal of Biological Chemistry 278, 20540-20546 (2003)

97. Nucleoside Diphosphatase and Glycosyltransferase Activities can Localize to Different Subcellular Compartments in *Schizosaccharomyces pombe*.

Cecilia D' Alessio, Eduardo S. Trombetta and Armando J. Parodi.

The Journal of Biological Chemistry. 278, 22379-22387 (2003)

98. The Interplay Between Folding Facilitating Mechanisms in *Trypanosoma cruzi* Endoplasmic Reticulum.

Ianina Conte, Carlos Labriola, Juan J. Cazzulo, Roberto Docampo and Armando J. Parodi

Molecular Biology of the Cell, 14, 3529-3540 (2003)

99. De novo synthesis of bacterial glycogen: *Agrobacterium tumefaciens* glycogen synthase is involved in glucan initiation and elongation.

Juan E. Ugalde, Armando J. Parodi and Rodolfo A. Ugalde

Proceedings of the National Academy of Sciences, USA, 100, 10659-10663 (2003)

100. The Endoplasmic Reticulum Glucosyltransferase Recognizes Nearly Native Glycoprotein Folding Intermediates

Julio J. Caramelo, Olga A. Castro, Gonzalo de Prat-Gay and Armando J. Parodi

The Journal of Biological Chemistry, 279, 46280-46285 (2004)

D. INTERNATIONAL GRANTS

1- Quality Control of Glycoprotein Folding

Howard Hughes Medical Institute (U.S.A.). January 1997-December 2001 (75197-553502); January 2002-December 2006 (55003687)

2- Transient Glucosylation of Glycoproteins.

National Institutes of Health (U.S.A.). August 1990-May 2008 (RO1 GM 44500/01-16).

3- Protein Glycosylation in *Trypanosoma cruzi*

World Health Organization, January 1984-December 1994 (TDR 830268/860188/890275/920387).

- 4.- N-Glycosylation and Virulence Factors in *Trypanosoma cruzi*
World Health Organization, January 1995-December 1997 and January 2000-December 2001 (TDR 940380/960551/990528)
- 5.-N-glycosylation and Virulence factors in *Trypanosoma cruzi*. World Health Organization, (TDR 990528) 2000-2001.
- 6.- Significance of Galactofuranose Residues in Pathogenic Protozoa Virulence
World Health Organization, January 1998-December 1999 (TDR 970459)
7. Significance of Galactofuranose Residues in Pathogenic Protozoa Virulence
The Mitzutani Foundation for Glycoscience, January 1997-December 1997
- 8.- Biochemistry and Molecular Biology of Parasites
Swedish Agency for Research Cooperation with Developing Countries (SAREC),
January 1990-December 1995.

E. OTHER ACTIVITIES

- 1.- Member of the Editorial Board, Molecular and Biochemical Parasitology (1987-2003)
- 2.- Member of the Editorial Board, Glycobiology (1991-1995; 2001-present)
- 3.- Member of the Editorial Board, The FASEB Journal (1991-1999)
4. Member of the Editorial Board, The Journal of Biological Chemistry (2004-)
5. President of the Argentine Society for Research in Biochemistry and Molecular Biology (1991-1993)
6. Member of the Executive Council, Pan-American Association for Biochemistry and Molecular Biology (1990-1994)
7. Member of the Advisory Committee on Pathogenesis and Functional Genomics, Special Program for Research and Training in Tropical Diseases, World Health Organization (1998-present)

F. SUPERVISION OF Ph.D. THESES (presented to the School of Sciences, University of Buenos Aires)

- 1- Gerardo Z. Lederkremer (1985)

- 2- Daniel H. Mendelzon (1986)
- 3- Laura de la Canal (1987)
- 4- Margarita Bosch (1990)
- 5- E. Sergio Trombetta (1992)
- 6- Vivian Alvarez (1994)
- 7- Marcelo C. Sousa (1995)
- 8- Silvana Merello (1995)
- 9- Fabiana Fernandez (1996)
- 10- Veronica Pascuccelli (1997)
- 11- Sandra Fanchiotti (1998)
- 12- Carlos A. Labriola (1999)
- 13- Mario F. Feldman (2000)
- 14- Cecilia D'Alessio (2001)
- 15- Marcelo Guerin (2002)
- 16- Juan. E. Ugalde (2003)