

Curriculum Vitae

September 20, 2005

1.- Personal data

Name: Olga L.A. Zegarra

Birth date and place: Lima (Peru), august 22, 1955

Civil state: Married (two sons, Alvaro, 1981 and Rodrigo, 1985)

Citizenship: Italian

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2.- Academic Activities

- 1973 Premedical Program Studies, Universidad Nacional Mayor de San Marcos (Lima, Peru)
- 1974-1976 Academic Program of Science. Universidad Peruana Cayetano Heredia (Lima, Peru).
- 1976-1981 Academic Program of Medicine. Universidad Peruana Cayetano Heredia (Lima, Peru).
- 1982-1983 Faculty of Medicine. School of Medicine J.M. Vargas. Universidad Central de Venezuela (Caracas, Venezuela) *Degree: Medical Doctor (M.D.)*
- 1984-1985 Obligatory Service of Rural Medicine. (San Antonio de los Altos, Venezuela).
- 1986-1987 General Physician, Ambulatorio San Felipe Neri (Los Teques, Venezuela).
- 1988-1990 Visiting Researcher. Laboratorio di Biofisica. Scuola Internazionale Superiore di Studi Avanzati (Trieste, Italy)
- 1991-1992 Visiting Researcher. Laboratorio di Neurofisiologia Scuola Internazionale Superiore di Studi Avanzati (Trieste, Italy)
- 1992-1993 Researcher. Settore di Biofisica, Unità INFM. Scuola Internazionale Superiore di Studi Avanzati (Trieste, Italy)
- 1993-1994 Research Fellowship. Laboratorio di Genetica Molecolare, Istituto Giannina Gaslini (Genoa, Italy)
- 1994-1997 Research Contract. Laboratorio di Genetica Molecolare, Istituto Giannina Gaslini (Genoa, Italy)

- 1998-1999 Research Contract by the North American Cystic Fibrosis Foundation (Bethesda-U.S.A.) for the project "Role of nitric oxide in airway ion transport regulation". The research took place at the Laboratory of Molecular Genetics, Istituto Giannina Gaslini (Genoa, Italy)
- 1999-2005 Research Contract. Partially supported by FIRB project funds to Dipartimento di Pediatria, Università degli Studi di Genoa. Laboratorio di Genetica Molecolare, Istituto Giannina Gaslini (Genoa, Italy).

3.- Languages

Reads, writes and speaks correctly Spanish, Italian and English. Some knowledge of German and Portuguese.

4.- Societies

Colegio de Medicos del Estado Miranda
 Federacion Medica Venezolana
 Società Italiana di Biofisica Pura ed Applicata

5.- Private financial supports

- 1999-2001 TeleThon, Lit. 56.000.000 for the multicentric project "Functional analysis of the intact human CFTR gene cloned in a human artificial chromosome"
- 2002-2004 Fondazione per la Ricerca sulla Fibrosi Cistica, ₤ 42.000 for the multicentric project "Minichromosomes: a new approach for cystic fibrosis gene therapy"
- 2003-2005 European Community, ₤ 146.000 for the multicentric project "Development and application of chromosome-based gene transfer vectors for cell therapy"
- 2003-2005 Fondazione per la Ricerca sulla Fibrosi Cistica, ₤ 55.000 for the multicentric project "Proteomics of the airway surface liquid: implications for cystic fibrosis"
- 2003-2005 Fondazione per la Ricerca sulla Fibrosi Cistica, ₤ 60.000 for the multicentric project "Activators of the CFTR ionic transport: Identification and molecular modelling of the binding site"
- 2004-2006 European Community, ₤ 200.000 for the multicentric project "Improved precision of nucleic acid based therapy of cystic fibrosis"

6.- Participation to Courses and Congresses

- 1979 International Course: Update in Nephrology. Sociedad Peruana de Nefrologia and Sociedad Latinoamericana de Nefrologia (Lima, Peru)
- 1979 IV Congreso Latinoamericano de Nefrologia (Lima, Peru).
- 1980 Antibiotic Therapeutics. Sociedad Nacional de Medicos Residentes (Lima, Peru)
- 1981 Structural methods for the analysis of the structure-function relations at molecular level. Centro Latinoamericano de Biologia (CLAB/UNESCO) - IVIC (Caracas, Venezuela).
- 1983 Update on Pediatrics. Sociedad Venezolana de Puericultura y Pediatria (Caracas, Venezuela)).
- 1984 Course on Neurosciences. Catedra Santiago Ramon y Cajal. Instituto Internacional de Estudios Avanzados (Caracas, Venezuela)
- 1986 Update Course on Infectious Diseases. Sociedad Venezolana de Puericultura y Pediatria (Caracas, Venezuela)
- 1988 Neurophysics College: Development and Organization of the Brain. International center for Theoretical Physics (Trieste, Italy)
- 1989 Annual Meeting of the European Brain and Behaviour Society (Torino, Italy)
- 1989 Dyslexia and Eye Movement. Rodin Remediation Foundation Satellite Meeting (Pavia, Italy)
- 1990 Neurophysics College: Neural Correlates of Behaviour, Development, Plasticity and Memory. International Center for Theoretical Physics (Trieste, Italy).
- 1991 Seventeenth EMBO Annual Symposium. Molecular Mechanism of Signal Transduction. (Heidelberg, Germany).
- 1991 European Science Foundation Conference on Molecular Neurobiology: Structure and Function of Neurotransmitter Receptors and Ion Channels (Espinho, Portugal).
- 1992 Workshop on electrophysiology of Tissue Slices. Scuola Internazionale Superiore di Studi Avanzati (Trieste, Italy).
- 1993 European School of Medical Genetics: 6th Course (Sestri Levante, Italy).
- 1993 11th International Biophysics Congress (Budapest, Hungary).
- 1996 European School of Medical Genetics: 9th Course (Sestri Levante, Italy).
- 1997 29th meeting of the European Society of Human Genetics (Genova, Italy).
- 1997 Meeting congiunto della Società Italiana di Fisiologia e della Società Italiana di Biofisica Pura e Applicata SIF/SIBPA (Pavia, Italy).
- 1998 XIV congresso della Società di Biofisica Pura ed Applicata SIBPA (Genova, Italy).
- 1999 The Thirteen Annual North American Cystic Fibrosis Conference (Seattle, U.S.A.).

- 2000 First course in Bioinformatics, organized by the European Society of Human Genetics (Sestri Levante, Italy).
- 2000 Fourteenth Annual North American Cystic Fibrosis Conference (Baltimore, U.S.A.).
- 2001 Riunione annuale della Società Italiana di Genetica Umana, SIGU (Orvieto, Italia).
- 2001 XVII congresso della Società di Biofisica Pura ed Applicata SIBPA (Trento, Italy).
- 2002 Fifteenth Annual North American Cystic Fibrosis Conference (Orlando, U.S.A.).
- 2002 25th European Cystic Fibrosis Conference (Genoa, Italy)
- 2002 Sixteenth Annual North American Cystic Fibrosis Conference (New Orleans, USA).
- 2003 Topics avanzados de biofisica: canales ionicos (La Habana, Cuba)
- 2003 Seventeenth Annual North American Cystic Fibrosis Conference (Anaheim, USA).
- 2003 IX congresso gruppo italiano di studio sulla fibrosi cistica. Società Italiana di Pediatria, Roma-Italy.
- 2003 Ia convention d'autunno dei ricercatori italiani per la fibrosi cistica, Verona-Italy.
- 2004 Transporte a traves de membranas: de la estructura a la fisiopatologia (Caracas, Venezuela)
- 2004 ECFS Conference. New Frontiers in Basic Science of Cystic Fibrosis (Tomar, Portugal)
- 2004 X congresso gruppo italiano di studio sulla fibrosi cistica. Società Italiana di Pediatria, Roma-Italy.
- 2004 Eighteenth Annual North American Cystic Fibrosis Conference (St. Louis, USA).
- 2004 IIa convention d'autunno dei ricercatori italiani per la fibrosi cistica, Verona-Italy.
- 2005 ECFS Conference. New Frontiers in Basic Science of Cystic Fibrosis (Evora, Portugal)
- 2005 The Physiology of Anion Transport. A satellite Conference of the Joint International Meeting of the Physiological Society and FEPS (Bristol, UK)

7.- Invited Oral Presentations

- 1990 Course Supervisor. "Problematiche operative particolari nella professionalità del docente di sostegno: dislessia e disgrafia, aspetti clinici e diagnostici". Provveditorato agli Studi di Trieste, Trieste-Italy
- 1996 "Actualizacion sobre los canales anionicos de la membrana plasmatica." Laboratorio de Biofisica de la Universidad Peruana Cayetano Heredia, Lima-Perù

- 1997 "HIV-1 Nef expression inhibits the activity of a Ca²⁺-dependent K⁺ channel involved in the control of the resting potential in CEM lymphocytes". Unité de Recherches en Immunologie Cellulaire et Moléculaire, Institut National de la Santé et de la Recherche Médicale, Unit 364, Nice-France.
- 1999 "La espressione della proteina Nef del virus HIV-1 determina l'alterazione delle caratteristiche elettrofisiologiche di una linea cellulare linfoblastoide." Istituto di Cibernetica e Biofisica, CNR, Genova-Italy
- 2002 "Terapia farmacologica per la Fibrosi Cistica." Dompè Farmaceutici, L'Aquila-Italy.
- 2002 "Identification of novel compounds for the pharmacological correction of Cystic Fibrosis chloride transport defect by high throughput screening" 15th Course in Medical Genetics, Bertinoro di Romagna-Italy.
- 2002 "Metabolism and Transport of Tryptophan in Airway Epithelial Monolayers" 16th Annual North American Cystic Fibrosis Conference, New Orleans-USA.
- 2003 "Identificazione di nuove molecole per la correzione del difetto funzionale nella fibrosi cistica" IX congresso gruppo italiano di studio sulla fibrosi cistica. Società Italiana di Pediatria, Roma-Italy.
- 2003 "Canales ionicos en epitelios " and "Fibrosis Quistica: clinica, genetica, fisiopatologia y estrategias terapeuticas" in the course: Topics avanzados de biofisica, canales ionicos. La Habana-Cuba.
- 2003 Canali Ionici in Epiteli. Lessons for the PhD in Biophysics. Istituto di Cibernetica e Biofisica, Consiglio Nazionale delle Ricerche. Genova, Italia.
- 2003 "Proteomic analysis of the periciliary fluid in cultured human bronchial epithelial cells." 17th Annual North American Cystic Fibrosis Conference, Anaheim-USA.
- 2003 "Proteomics of the airway surface liquid: implications for Cystic Fibrosis" I^a Autumn Convention of Italian Cystic Fibrosis Researchers, Verona-Italy.
- 2004 "Identification of new drugs for the modulation of chloride transport in CF. Advance in the HTS programme." Tomar-Portugal
- 2004 "Proteomica del liquido di superficie delle vie aeree" X Meeting of The Italian Group for the Study of Cystic Fibrosis. Società Italiana di Pediatria, Roma-Italy.
- 2004 "Canales ionicos en epitelios", "Estrategias terapeuticas en la fibrosis quistica " in the course: Transporte a traves de membranas, de la estructura a la fisiopatologia. Caracas-Venezuela.
- 2004 "Proteomics of the airway surface liquid: implications for Cystic Fibrosis" II^a Autumn Convention of Italian Cystic Fibrosis Researchers, Verona-Italy.

2005 "Pharmacologic activation of chloride transport in CF mutants" ECFS Conference. New Frontiers in Basic Science of Cystic Fibrosis (Evora, Portugal)

8.- Acquired Methodological Experience

- Psychophysical experiments; evaluation of the visual field by tachistoscopic presentation of stimuli.
- Electrophysiological techniques; patch clamp and extracellular recording. Experience in perforated-patch experiments. Ussing Chamber measurements for transepithelial ion transport studies. Expression and recording on *Xenopus laevis* oocytes.
- Cell culture: Primary and cell line cultures of neuronal and epithelial origin. Experience with long-term secondary cultures of airway epithelium in plastic dishes and in permeable supports.
- Basic notions of molecular genetics: transfections, RNA extraction, northern blots, etc.
- Fluxes determinations of radiolabelled compounds, measurements with a beta counter.
- Experience with the use of fluorescent dyes such as GFP or YFP. Experience in the use of fluorescence microscope and in data acquisition with CCD camera. Experience with the use of fluorescence plate reader
- Familiarity with computer techniques for data acquisition and processing.
- Statistical analysis of data.

9.- Presentations to Meeting and Congresses

1. Geiger G. and Zegarra-Moran O. Dyslexia and reading: alternative strategies. Presented at the Rodin Remediation Foundation Satellite Meeting and Fifth European Conference on Eye Movement. 1989 (Pavia-Italy)
2. Geiger G. and Zegarra-Moran O. The shape of the Form Resolving Field depends on the direction of reading. Presented at the 13th European Congress on Visual Perception. 1990 (Paris-France)
3. Virginio C., Moran O., Zegarra-Moran O. , Dobrina A. and Rottini G.D. An extrinsic glycoprotein of human erythrocytes (Gp57) as receptor for *Gardnerella vaginalis* cytolysine. Presented at the IV Convegno Nazionale di Proteine. 1991 (Trieste-Italy)
4. Moran O. and Zegarra-Moran O. Modulation of calcium channels by glutamate receptor activation in cerebellar granule cells. 14th European Neuroscience Association. 1991 (Cambridge-UK)

5. Sciancalepore M., Lin F., Zegarra-Moran O. and Moran O. Voltage dependent calcium channels in cerebellar granule cells. 14th European Neuroscience Association. 1991 (Cambridge-UK)
6. Moran O. , Zegarra-Moran O. ,Virginio C. and Rottini G.D. Physical characterization of the pore forming cytolytine from *Gardnerella vaginalis*. Presented at the 1st International Workshop on Pore Forming Toxins and their Role in the Competition Among Different Organism. 1991 (Trento-Italy)
7. Zegarra-Moran O., Zheng X. and Moran O. Activation of voltage dependent potassium channels depends on cell integrity. Presented at the 17th EMBO Annual Symposium on Molecular Mechanisms of Signal Transduction. 1991 (Heidelberg-Germany)
8. Zegarra-Moran O. and Moran O. Modulation of the activity of voltage dependent calcium channels by glutamate. Presented at the European Science Conference on Molecular Neurobiology: Structure and Functions of Neurotransmitter Receptors and Ion Channels. 1991 (Espinho-Portugal)
9. Hosokawa Y., Zegarra-Moran O., Ballarin C and Cherubini E Single channel anionic current in rat brain synaptosomes. Presented at the Italian Meeting of the Neuroscience Society. 1992 (Modena-Italy)
10. Moran O., Gheri A., Zegarra-Moran O., Imoto K. and Conti F. Proline mutations in the S4 segment of the rat brain sodium channel II A. Presented at the 11th International Biophysics Congress. 1993 (Budapest, Hungary)
11. Galietta L.J.V., Zegarra-Moran O., Mastrocola T., Whorle C., Rugolo M. and Romeo G. Regulation of K⁺ and Cl⁻ currents by UTP, ATP and Thapsigargin in pancreatic CFPAC-1 cells. Presented at the International Symposium on Exocrine Secretion. 1993 (Freiburg, Germany)
12. Galietta L.J.V., Zegarra-Moran O., Lantero S., Sacco O. and Rossi G.A.. Nedocromil sodium inhibits taurine efflux through volume-sensitive Cl⁻ channels in human tracheal cells. Presented at the International Conference of the American Thoracic Society. 1996 (New Orleans, USA)
13. Galietta L.J.V., Zegarra-Moran O., Lantero S., Sacco O. and Rossi G.A. Human tracheal cell taurine efflux through swelling-activated Cl⁻ channels are inhibited by nedocromil sodium. Presented at the European Respiratory Society annual congress. 1996 (Stockholm, Sweden).

14. Galietta L.J.V., Zegarra-Moran O., Sacco O., Romano L. and Rossi G.A. Extracellular ATP and UTP activate two types of Cl⁻ conductances in human bronchial cells. Presented at the tenth annual North American Cystic Fibrosis Conference. 1996 (Orlando, USA).
15. Galietta L.J.V., Zegarra-Moran O. Cl⁻ currents activated by ATP and UTP in human bronchial cells. Presented at the Symposium der Deutschen Akademie der Naturforscher Leopoldina on Ion Channels and Disease. 1996 (Freiburg, Germany).
16. Galietta L.J.V., Zegarra-Moran O., Lantero S., Rossi G.A., Romeo G. Characterization of ATP-dependent chloride transport in human airway epithelial cells. Presented at the 29th meeting of the European Society of Human Genetics. 1997. (Genova, Italy).
17. Zegarra-Moran O., Sacco O., Romano L., Rossi G.A. and Galietta L.J.V. Swelling-activated Cl⁻ channels are inhibited by nedocromil sodium and sodium cromoglycate in human tracheal cells. Presented at the International Conference of the American Thoracic Society. 1997 (San Francisco, USA)
18. Galietta L.J.V., Musante L., Lantero S., Gazzolo A., Romano L., Rossi G.A. and Zegarra-Moran O. Apical L-arginine elicits short-circuit current increase in polarized monolayers of normal and CF bronchial epithelial cells. Presented at the Annual North American CF Conference. 1997 (Nashville, USA).
19. Gazzolo A., Lantero S., Romano L., Casciaro R., Galietta L.J.V., Tubino B., Zegarra-Moran O. and Rossi G.A. An improved method for the electrophysiological study of bronchial epithelial cells from normal subjects and cystic fibrosis patients. Presented at the International Conference of the American Thoracic Society. 1997 (San Francisco, USA)
20. Galietta L.J.V., Musante L. and Zegarra-Moran O. Regulation of volume-sensitive anion channels permeable to Cl⁻ and taurine. Presented at the Meeting congiunto della Società Italiana di Fisiologia e della Società Italiana di Biofisica Pura e Applicata SIF/SIBPA. 1997 (Pavia, Italy).
21. Zegarra-Moran O. and Galietta L.J.V. Swelling-activated Cl⁻ currents in human 9HTEo- cells. Presented at the Meeting congiunto della Società Italiana di Fisiologia e della Società Italiana di Biofisica Pura e Applicata SIF/SIBPA. 1997 (Pavia, Italy).

22. Altieri P., Galietta L.J.V., Zegarra-Moran O., Di Duca M., Botti G., Ghiggeri G.M. and Gusmano R. TGF β inhibits cystogenesis by MDCK cells "in vitro" by modulating extracellular matrix composition and paracellular flux. Presented at the 30th annual meeting of the American Society of Nephrology. 1997 (Texas, USA).
23. Zegarra-Moran O., Rasola A., Rossi B. and Galietta L.J.V. L'espressione della proteina Nef del virus HIV-1 determina l'alterazione delle caratteristiche elettrofisiologiche di una linea cellulare linfoblastoide. Presented at the XIV meeting of the Società Italiana di Biofisica Pura ed Applicata. 1998 (Genova, Italy).
24. Galietta L.J.V., Romio L., Folli C., Romano L., Rossi G.A., Zegarra-Moran O. Ion transport regulation by interferon- α in human bronchial epithelial cells. Presented at the Twelfth Annual North American CF Conference. 1998 (Montreal, Canada).
25. Galietta L.J.V., Folli C., Romano L., Gazzolo A., Mettey Y., Vierfond J-M., Becq F. and Zegarra-Moran O. Functional study of the efficacy of CFTR openers on human bronchial epithelial cells. Presented at the Thirteen Annual North American Cystic Fibrosis Conference. 1999 (Seattle, U.S.A.)
26. Zegarra-Moran O., Folli C., Mettey Y., Vierfond J-M, Becq F. and Galietta L.J.V. Transepithelial ion transport regulation in Calu-3 cells. Presented at the Thirteen Annual North American Cystic Fibrosis Conference. 1999 (Seattle, U.S.A.)
27. Galietta L.J.V., Folli C., Silvestri M., Gonzalez Rodriguez R., Rossi G.A., Romano L., Zegarra-Moran O. Measurements of fluid transport in normal and CF bronchial epithelial cells. Presented at the Thirteen Annual North American Cystic Fibrosis Conference. 1999 (Seattle, U.S.A.)
28. Rugolo M., Porcelli A., Zegarra-Moran O., Gislimberti G., Stramiello S. Bicarbonate influx in C127 cell lines expressing wild-type or mutated (delta F508) Presented at the Thirteen Annual North American Cystic Fibrosis Conference. 1999 (Seattle, U.S.A.)
29. Musante L., Galietta L.J.V. and Zegarra-Moran O. Connexin-dependent ATP release in epithelial cells. Presented at the Fourteenth Annual North American Cystic Fibrosis Conference. 2000 (Baltimore, U.S.A.)
30. Romano L., Sacchi R., Zegarra-Moran O., Vanini P., Guerriero F., Casciaro R., de Vocht J., Minuto N. and Lorini R. Effects of topical applications of gentamicin on sweat test in CF patients carrying nonsense mutations.

Presented at the Fourteenth Annual North American Cystic Fibrosis Conference. 2000 (Baltimore, U.S.A.)

31. Zegarra-Moran O., Galietta L.J.V., Vierfond J-M., Fanen P., Goosens M., Caci E., Musante L., Folli C., Romio L; and Becq F. Comparative study of CFTR openers efficacy on different CFTR mutants. Presented at the Fourteenth Annual North American Cystic Fibrosis Conference. 2000 (Baltimore, U.S.A.)
32. Galietta L.J.V., Springsteel M., By K., Folli C., Caci E. , Zegarra-Moran O. Kurth M.J., Nantaz M.H. Verkman A.S.(2001) CFTR activation in airway epithelia by 7,8-benzoflavones identified by screening of a lead-based combinatorial library. Presented at the Fifteenth Annual North American Cystic Fibrosis Conference. 2001 (Orlando, U.S.A.)
33. Zegarra-Moran O., Pagesy P., Folli C., Caci E., Costes B., Nicolis E., Cabrini G., Goossens M., Galietta L.J.V. (2001) IL-4 is a potent modulator of ion transport in the human airway epithelia. Presented at the Fifteenth Annual North American Cystic Fibrosis Conference. 2001 (Orlando, U.S.A.)
34. Carpani D., Auriche C., Caci E., Zegarra-Moran O., Conese M., Ascenzioni F. (2001) Functional analysis of the entire CFTR gene in CHO clones bearing a human minichromosome. Presented at the Fifteenth Annual North American Cystic Fibrosis Conference. 2001 (Orlando, U.S.A.)
35. Romano L., Casciaro R., Negro I., Zegarra-Moran O., Galietta L.J.V. (2001) Lung function and nasal potential differences in deltaF508 homozygote cystic fibrosis patients. Presented at the Fifteenth Annual North American Cystic Fibrosis Conference. 2001 (Orlando, U.S.A.)
36. Sabatini F., Silvestri M., Folli C., Zegarra-Moran O., dasic G., Rossi G.A. (2001) Inhibitory activities of fluticasone and salmeterol on airway epithelial cell functions (FLIC24): adhesion molecule expression and cytokine release. Presented at the International Conference of the American Thoracic Society. 2001 (USA)
37. Folli C., Musante L., Caci E., Ravazzolo R., Galietta L.J.V., Zegarra-Moran O. Mimetic peptides as blockers of connexin-dependent ATP release in epithelial cells. Presented at the 25th European Cystic Fibrosis Conference. 2002 (Genoa, Italy)
38. Caci E., Folli C., Fanen P., ravazzolo R., Zegarra-Moran O. Low temperature correction in cells expressing F508del CFTR. Presented at the 25th European Cystic Fibrosis Conference. 2002 (Genoa, Italy)

39. Auriche C., Carpani D., Conese M Caci E., Zegarra-Moran O, Ascenzioni F. Functional human CFTR produced by a stable minichromosome. Presented at the 25th European Cystic Fibrosis Conference. 2002 (Genoa, Italy).
40. Galiotta LJV, Ma T, Zegarra-Moran O, Pedemonte N, Vetrivel L, Verkman AS. Novel Xanthine-type CFTR activators identified by high throughput screening. Presented at the 16th Annual North American Cystic Fibrosis Conference. 2002 (New Orleans, U.S.A.).
41. Zegarra-Moran O, Folli C, Ravazzolo R, Varesio L, Galiotta LJV. Metabolism and transport of tryptophan in airway epithelial monolayers. Presented at the 16th Annual North American Cystic Fibrosis Conference. 2002 (New Orleans, U.S.A.).
42. Moran O and Zegarra-Moran O. Molecular Model of the nucleotide binding domains of the CFTR: cystic fibrosis correlated mutations. Presented at the 17th Annual North American Cystic Fibrosis Conference. 2003 (Anaheim, U.S.A.)
43. Taddei A., Zegarra-Moran O., Folli C., Verkman A., Galiotta L.J.V. Electrophysiological analysis of CFTR block by thiazolidinone CFTR Inh-172. Presented at the 17th Annual North American Cystic Fibrosis Conference. 2003 (Anaheim, U.S.A.)
44. Zegarra-Moran O., Pedemonte N., Musante M., Bruschi M., Liberatori S., Bini L. Candiano G., Galiotta L.J.V. Proteomic analysis of the periciliary fluid in cultured human bronchial epithelial cells. Presented at the 17th Annual North American Cystic Fibrosis Conference. 2003 (Anaheim, U.S.A.)
45. Pedemonte N., Folli C., Taddei A., Caci E., Zegarra-Moran O., Galiotta L.J.V. Screening of a chemical library containing approved drugs and natural compounds to identify small molecules for the functional correction of CFTR mutants. Presented at the 18th Annual North American Cystic Fibrosis Conference. 2004 (St. Louis, U.S.A.)
46. Folli C., Caci E., Zegarra.Moran O., Verkman A., Galiotta L.J.V. Functional interaction between CFTR and ENaC in human bronchial epithelial cells investigated using CFTR-selective inhibitors. Presented at the 18th Annual North American Cystic Fibrosis Conference. 2004 (St. Louis, U.S.A.)
47. Zegarra-Moran O., Candiano G., Bruschi M., Caci E., Bini L., Liberatori S., Pedemonte N., Galiotta L.J.V. Increased gelsolin secretion in interleukin-4 treated bronchial epithelial cells and in asthmatic patient

airways. Presented at the 18th Annual North American Cystic Fibrosis Conference. 2004 (St. Louis, U.S.A.)

48. Zegarra-Moran O., Pedemonte N, Taddei A., Sonawane ND, Verkman A, Galiotta LJV. Pharmacologic activation of chloride transport in CF mutants. ECFS Conference. New Frontiers in Basic Science of Cystic Fibrosis. 2005 (Evora, Portugal)

10.- Publications

10a.-Full papers:

1. Moran, O., Lin F., Zegarra-Moran, O. and Sciancalepore M Voltage dependent calcium channels in cerebellar granule cells primary culture. *Eur. Biophys. J.* 20:157-164, 1991
2. Moran, O. , Zegarra-Moran, O., Virginio, C. and Rottini, G.D. Voltage dependent cationic channels formed by a cytolytic toxin produced by *Gardnerella vaginalis*. *FEBS Lett.* 283:317-320,1991
3. Geiger, G. Lettvin, J.Y. and Zegarra Moran, O. Task determined strategies of visual process. *Cognitive Brain Res.* 1:39-52, 1992
4. Moran, O. , Zegarra-Moran, O., Virginio, C. , L. Gusmani and Rottini, G.D. Physical characterization of the pore forming cytolysine from *Gardnerella vaginalis* *FEMS Lett.* 105:63-70, 1992
5. Zegarra-Moran, O. and Geiger, G. Visual recognition in the peripheral field: letters vs symbols and adults vs children. *Perception* 22:77-90, 1993
6. Zegarra Moran, O. and Moran, O. Modulation of voltage dependent calcium channels by glutamate in cerebellar granule cells. *Exp. Brain Res.* 95:65-69, 1993
7. Zegarra Moran, O. and Moran, O. Properties of the transient potassium currents in cerebellar granule cells. *Exp. Brain Res.* 98:298-304, 1994.
8. Galiotta, L.J.V., Zegarra-Moran ,O., Mastrocola, T., Whorle, C., Rugolo, M. and Romeo, G. Activation of Ca²⁺-dependent K⁺ and Cl⁻ currents by UTP and ATP in CFPAC-1 cells. *Pflügers Archiv* 426/6:534-541, 1994
9. Moran, O., Gheri, A., Zegarra-Moran, O., Imoto K., and Conti F. Proline mutations on the S4 segment of rat brain sodium channel II. *Biochem. Biophys. Res. Commun.* 202: 1438-1444, 1994

10. Galietta, L.J.V., Zegarra Moran, O. and Romeo, G. Hypotheses of postnatal and prenatal selection in cystic fibrosis. Cystic Fibrosis- Current Topics Volume 2: 75-89, 1994. Edited by J.A. Dodge, D.J.H. Brock and J.H. Widdicombe.
11. Zegarra-Moran O., Romeo G. and Galietta L.J.V. Regulation of transepithelial ion transport by two different purinergic receptors in the apical membrane of canine kidney (MDCK) cells. *Br. J. Pharmacol.* 114:1052-1056, 1995.
12. Galietta LJV, Romeo G and Zegarra-Moran O. Volume regulatory taurine release in human tracheal 9HTEo- and 9HTEo-/Dx cells. *Am. J. Physiol.* 271 (Cell Physiol. 40):C728-C735, 1996.
13. Zegarra-Moran O., Sacco O., Romano L., Rossi G.A. and Galietta L.J.V. Cl⁻ currents activated by extracellular nucleotides in human bronchial cells. *J. Memb. Biol.* 156:297-305, 1997.
14. Galietta L.J.V., Fanzoni S, Di Virgilio F, Romeo G and Zegarra-Moran O. Characterization of volume-sensitive taurine- and Cl⁻-permeable channels. *Am. J. Physiol.* 273:C57-C66, 1997.
15. Altieri P., Zegarra-Moran O., Galietta L.J.V. Torri Taselli L., Sessa A., Ghiggeri G.M. Transforming growth factor beta blocks cystogenesis by MDCK epithelium in vitro by enhancing the paracellular flux: Implication of collagen V. *J. Cell. Physiol.* 177(2):214-224, 1998.
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10b.-Abstracts and Local publications

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11.- Teaching Activities

- 1988-1990 Specialized Course. Neurosciences. Settore di Biofisica. Scuola Internazionale Superiore di Studi Avanzati (Trieste, Italy).
- 1991-1992 Specialized Course. Neurophysiology. Laboratorio di Neurofisiologia. Scuola Internazionale Superiore di Studi Avanzati (Trieste, Italy).
- 2003 Canali Ionici in Epiteli. Lessons for the PhD in Biofiphysics. Istituto di Cibernetica e Biofisica, Consiglio Nazionale delle Ricerche (Genova, Italy).
- 2003 Topics avanzados de biofisica: canales ionicos. (La Habana, Cuba).
- 2004 Transporte a traves de membranas: de la estructura a la fisiopatologia (Caracas, Venezuela)