# L. MARIO AMZEL, Ph.D.

# Johns Hopkins University School of Medicine 725 N. Wolfe Street. WBSB 606 Baltimore, Maryland 21205 USA

E-mail: mamzel@jhmi.edu

Citizenship: U.S.A.

# **EDUCATION**

Licenciado en Quimica in Physical Chemistry, Universidad de Bueno	•
Argentina	1960 - 1965
Ph.D. in Physical Chemistry, Universidad de Buenos Aires, Argentina	a 1965 - 1968
RESEARCH AND PROFESSIONAL EXPERIENCE	
Undergraduate Teaching Assistant, Universidad de Buenos Aires	1962 - 1965
Graduate Teaching Assistant, Universidad de Buenos Aires	1965 - 1966
Instructor, Universidad Central, Caracas, Venezuela	1967 - 1969
Postdoctoral Fellow, Johns Hopkins University School of Medicine	1969 - 1970
Invited Professor, Regional Course in Physical Chemistry	July, 1971
Organization of American States, Caracas, Venezuela	
Instructor of Biophysics, Johns Hopkins School of Medicine	1970 - 1973
Assistant Professor of Biophysics, Johns Hopkins School of Medicine	e 1973 - 1978
Associate Professor of Biophysics, Johns Hopkins School of Medicin	e 1978 - 1983
Professor of Biophysics, Johns Hopkins School of Medicine	1984 – present
Interim Director, Department of Biophysics and Biophysical N	lovember 2003 – June 2006
Chemistry	
Director, Department of Biophysics and Biophysical Chemistry	July 2006 - present
	•

#### **HONORS**

Damon Runyon Postdoctoral Fellowship	1970 -1971
Honorary Professor, University of Buenos Aires, Argentina	1988 - present
Teacher of the Year Award Graduate Students	1994
Teaching Award University Alumni	1999
Colman Fellow in Life Science – Ben Gurion University, Israel	2007
RAICES Prize, Ministerio de Ciencia, Technologia e Innovacion Productiva, Argent	tina 2011
Fellow, American Association for the Advancement of Science	2014
Fellow, Biophysical Society (award in 2016)	2016
Honorary Speaker, Honorary Hispanic Society of the Baltimore Polytechnic Instit	ute 2017
Doctor Honoris Causa, University of Buenos Aires Sep	tember, 2019

# **PROFESSIONAL ACTIVITIES**

Biological Energy Research Workshop - Department of Energy	1979
Workshop: Applications of Supercomputers to Life Sciences - NSF	1984

Scientific Advisory Panel, Institute of Genetic Eng. and Biotech Spain	1986
Member of DRR-BRS NIH Special Study Sections	1984
Member of Am. Soc. of Eng. Education Fellowships Study Section	1985 & 1987
Latino American Biophysical Society - Treasurer	1985 - 2000
NSF Panel for Facility Centers	1987 - 1992
Editorial Board Journal of Molecular Recognition	1987 - 2008
Biophysical Society - Annual Meeting - Co-Chairman	1990
Member of BIOM NIH Study Section	1990 - 1994
Consultant for SmithKline Beacham	1990 - 1992
Editorial Board of Proteins: Structure, Function and Genetics	1991 - present
Editorial Board Journal of Bioenergetics and Biomembranes	1991 - present
Chairman Proteins Gordon Research Conference (with Dr. E. Getzhoff)	1991 - present 1995
Biophysical Society Annual Meeting - Local Chairman	1996
	1996
Hopkins Protein Folding Meeting - Chairman (with Dr. E. Freire)	
Review Board for NCI Supercomputing	1987 - present
Biophysical Society Annual Meeting - Local Chairman	1996
Member, Biophysical Society Council	1998
Biophysical Society Annual Meeting - Local Chairman	1999
Biophysical Society Annual Meeting - Program Sort Committee (most ye	•
Johns Hopkins Protein Folding Meeting – Chair (with E. Friere)	2000
Scientific Review of Argentinean Science – Panel Member	2000
Latino American Biophysical Society – Vice President (President Elect)	2000-2002
Member, NSLS Science Advisory Committee	May, 2001-2005
The Scientific World, Editorial Board	August, 2001-2004
National Science Foundation Advisory Panel	October 9-11, 2002
National Synchrotron Light Source Advisory Panel	November 7, 2002
National Institute Health Review Panel	November 21-22, 2002
President, Society of Latin American Biophysicists	2003-2006
Organizing Committee, V SOBLA Congress	2006
National Science Foundation – Molecular Biochemistry Panel	April 5-7, 2004
Co-Organizer, Mid-Atlantic Protein Crystallography Meeting	June 2-4, 2004
Scientific Advisory Committee, National Synchrotron Light Source	2004 – 2013
Chair, National Synchrotron Light Source - X6A Advisory Committee	2004 - 2014
Member, External Advisory Council of the Instituto Leloir	2003 - 2013
Member, Crystallography Expert,	2006
Center for Scientific Review Special Emphasis Panel	
Member, Editorial Board of Journal of Thermodynamics	2008
Panel Member, F04B Study Section, NIH	2009
Member, BNL Light Sources Directorate Science Advisory Committee	2009
Co-Organizer, Mid-Atlantic Protein Crystallography Meeting	June 10-12, 2010
Member of the International Advisory Committee, Universidad de Leloi	r October 2010
Organizer, Latin American Protein Society	October 12-16, 2010
Panel Member, PDB NSF Site Visit	November 1 2010
The Scientific World, Editorial Board	2009-present
Panel member, Institutional Education	2009-2018
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Session Chair, ASBMB	April 9-13, 2011
Four Symposium Organizer, ASBMB	April 9-13, 2011
Session Chair, Gordon Conference	June 19-24, 2011
Summary and Concluding Remarks, Future of Biophysics	2011
Member of the Future of Biology Committee	2011
Member of NIH, NSF and ONR Grants Review Panels	
Member of NSF Small Business Grants Panel	
Member of NIH Small Business Study Section	
Reviewer, Board of Scientific Counselors	October 13-14, 2011
,	nber 30-December 2, 2011
Reviewer, NIH Internet Assisted Review	March 15, 2012
Ad Hoc Consultant, Board of Scientific Counselors	June 11-13, 2012
Peer Reviewer, National Agency for the Evaluation	2012
of Universities and Research Institute, Italy	
Reviewer, Fellowships: Biophysical, Physiological, Pharmacological, a	and March 4, 2013
Bioengineering Neuroscience	1110 11101 1, 2013
Reviewer, Virtual Panel, Protein Data Bank Management	April 15, 2013
Reviewer, Site Visit for Protein Data Bank	May 9-10, 2013
Member, PhD Evaluation Committee,	Sept. 16-20, 2013
Danish Technical University of Denmark	3cpt. 10 20, 2013
Reviewer, Millennium Science Initiative, Chile	2014-present
External Reviewer, University of Maryland Structural Biology	May 19, 2014
Reviewer, Site Visit for Cell Biology and Metabolism Program, NIH	March 11-12, 2015
International Reviewer, Search Committee, IBR Rosario, Argentina	May 2015
Biomedical Technology Research Resources Assessment Panel (NIGN	•
Grant Reviewer for Kuwait, Denmark, Italy, Argentina and Colombia	, 2002, 2013
Reviewer, NSF Site Visit	June, 2016
National Cryo-EM Facility Oversight Working Group, Frederick Natio	
Laboratory Advisory Committee	
Grant Reviewer, NSF Bio-XFEL	March 2018
Reviewer, Molecular Biophysics	March 2019
,	
PROFESSIONAL ACTIVITIES AT HOPKINS	
Medical School	
Academic Council	1975 - 1977
Ad-Hoc Committee on Tenure Policy	1976 - 1977
Admissions Committee (Year I)	1975 - 1976
Medical Scientist Training Program	1977 – present
Director, Computing and X-Ray Facility	1981 – present
Academic Council	1991 - 1992
Professorial Promotions Committee	1997 - 2002
Search Committee, Pharmacology	1997 - 1998
Faculty Leadership Program	1999 - 2001
Search Committee Chair, Pharmacology	2000 - 2001

Search Committee, Physical Medicine and Rehabilitation Search Committee, Biomedical Engineering Department Faculty Search Committee on Education, Value and Reward Standing Committee on Discipline Advisory Board to the Medical Faculty Agenda Committee Member, Institute for Basic Biomedical Sciences Advisory Committee Member, Institute for Excellence in Education	2001 - 2003 2007 - present 2007 - present 2007 - present 2007 - 2013 2007 - present 2009 - 2012 2007 - present 2009-present
University	
Member, Steering Committee of Institute for Biophysical Research on Macromolecular Assemblies (IBRMA)	
Chairman, Instrumentation Committee IBRMA	ended 2000
Member, Program in Iberian and Latin American Studies	ended 2000
Advisory Committee, Department of Biology	2010-2015
GRADUATE PROGRAMS AT HOPKINS Graduate Program in Biochemistry, Cellular and Molecular Biology Member Steering Committee Examinations Committee, Chairman Ad-Hoc Committee for the Evaluation of Curriculum Admissions Committee, Chairman Admissions Committee Curriculum Committee - Program Review1 Course Director - Topics in Biophysical Chemistry	1978 - present 1975 - 2000 1976 - 1978 1976 1978 - 1982 1982 - 1998 1989 and 1994 1987 - 2003
Course Director - Computer Modeling of Biological Macromolecules	1994 - present
Course Director – Biochemical and Biophysical Principles	2003 - present
Program in Molecular Biophysics Admissions Committee Curriculum Committee Steering Committee	present 1984-2016 1984-present
Program Institute for Multiscale Modeling of Biological Interactions	
Steering Committee	2003-present

# **Other Graduate Programs**

Graduate Program in Immunology Pharmacology Graduate Program

# **TEACHING AT HOPKINS**

Physical Biochemistry - Year I (Course Director)	1975 - 1978
Biochemistry	1978 - 1982
Topics in Biophysical Chemistry - Course Director	1981 - 2003
Biochemical and Biophysical Principles – Course Director	2004 - present
(replaces Topics in Biophysical Chemistry)	
Topics in Biophysics and Molecular Biology	1978 -1991
X-Ray Diffraction of Biological Macromolecules	1978 - 2006
Bioorganic Chemistry (Lectures on Enzyme Mechanisms, isotope	1981- present
effect, nicotinamide enzymes, flavin enzymes)	
Principles of Protein Structure	1982 - 1998
Topics in Macromolecular Structure and Function	1983 - present
Immunoglobulins: Structure, Synthesis and Genetics (lectures on Ig Structure)	1987 - 1992
Graduate Immunology (lectures on immunoglobulin structure)	1988 - 2002
Computer Modeling of Biological Macromolecules (Course Director)	1991 - present
*Molecular Physiology (Homewood) (lectures on Immunoglobulins and ATPase	s) 1992 - 2002
Molecular Biophysics (Homewood) (lectures on binding)	1998 - 2002
Physical Chemistry of Biological Macromolecules (Homewood)	2002 - 2014
(lectures on binding)	
Biological Macromolecules (lectures on ATPases)	2002 - 2009

# Mentoring

#### **Graduate Students**

Odell, L.	1998-04 (PhD)	University of Chicago
Siebert, X.	1999-05 (PhD)	Université Libre de Bruxelles
Lopez, G.	2000-04	Reed College
Armstrong, A.	2001-07 (PhD)	University of Illinois Urbana, Champaign
Kang, LW.	2001-04 (PhD)	Pohang University Science and Technology, Korea
Pabon, G.	2001-07 (PhD)	University National Columbia
Messing, S.	2002-10 (PhD)	Macalester College
Nadella, M.	2002-07 (PhD)	McMaster University
Huang, CH.	2004-08 (PhD)	National Taiwan University
Duong-Ly, K.	2006-11 (PhD)	Swarthmore College
Echeverria, I.	2007-11 (PhD)	Pontificia Universidad Catolica de Chile

Boto, A.	2005-2012 (MD/PhD)	Caltech
Erdemli, B.	2006-2012 (PhD)	Koc University, Istanbul, Turkey
Yeh, TL.	2006-2012 (PhD)	National Tsing Hua University (Taiwan)
Aripirala, S.	2007-2013 (PhD)	IIT Kharagpur, Integrated 5 Yr Course
Kim, Y.S.	2010-2012 (PhD)	Johns Hopkins University
Simon, O.	2008-2014 (PhD)	University of New Mexico
Hernandez, A.	2010-2015 (PhD)	University of Houston
Al Qassim, S.	2010-2014 (PhD)	University of Michigan, Ann Arbor
Liu, Yunlong	2013-2018 (PhD)	Tsinghua University
Yoder, J.	2013-2018 (PhD)	Goshen College
Chakrabarti, M.	2017-present	Univ MD Balto. Co. Johns Hopkins Univ

# **Postdoctoral Fellows**

Y. Sanchez

	2002 2014- 2015	Los Andes	2015	binding affinities	NAC Čolombia
S. Yuhasz	1997- 2002	JHU	1987	Structure of antibodies. Structure of $A\beta$ -protein complexes.	Editor Rehabilitation Research and Development published by the Veterans Administration
M. Faig	1998- 2002	University of La Plata, Argentina	1994	Structure of Lipoxygenase	Scientist Associate JHU
A. Leyva	2001 – 2007	Johannes Gutenberg University	2001	Computer simulation of the F1 ATPase synthesis hydrolysis	Faculty, Universidad Javeriana
M. Urquiza	2010- pres	University of Colombia	2008	Kinetic and structural studies of MICAL	Postdoc/ NIH

1997- University of 2002 Computation of Faculty/ Univ. of

K. Rudzka	2010- 2014	Utah State University	2008	Structural and mechanistic studies of PAM (Peptidylglycine alpha-amidating monooxygenase )	Postdoc/ Paragon Instructor – Towson University
S. DiLella	Jan- March 2011	University of Buenos Aires	2009	The effect of pH in the affinity and specificity of human gelectin-1.	Visiting Postdoctoral Fellow/ Instructor, Argentina
E. Chufan	2005- 2010	National University of San Luis, Argentina	1999	Structural and mechanistic studies on peptidylglycine α-amidating mooxygenase (PAM)	Research Fellow/Laboratory of Cell Biology/NCI/NIH
M. A. Bianchet	1990- pres	University of La Plata	1988	3-D structure quinone reductase/ structure and mechanism MICAL	Asst. Prof./JHMI, Neuroscience, Joint Appt in Biophysics and Biophysical Chemistry
Ghosh, A.	2010- 2014	Purdue University	PhD	Interaction of the HIV-Tat protein with NMDA receptor	Postdoctoral Fellow/ NIH
De Almeida Marques, Ivo	2015- 2016	University Federal de Goias (Brazil)	PhD	Structural studies of Septine	Postdoctoral fellow CNPQ (Brasil)
Avila, Cesar	2015	Universidad de Jucuman	PhD	Binding of GAPDH to hipsinonimst CS	Visiting Scientist/ Fulbright
Maheshwari, Sweta	2014- present	University of Montpellier, France	PhD	Biochemical structural characterization of phosphoinositid e 3-kinase	Postdoctoral fellow/ DOD and NSF
Panozzo, Esteban	2014- 2015	National University of Rosario (UNR)	PhD	Purification and structural elucidation of NHE3 citoplasmatic tail	Visiting Scientist
Saavedra, Harry	2015- pre	Uni (Peru) PUC-Rio (Brazil) Johns Hopkins University	BS MSc PhD	Understanding transport mechanism of Na+/I- symporter (NIS)	Post-doctoral fellow/ NIH

Miller, Miller	2013- 2019	Monash University, AU	PhD	Fragment based approach to target novel PISKx binding sites.	Scientist/ Walter and Eliza Hall Institute
Wright, Katharine	2017- pres	University of Scanton	BSc	Laser-induced breakdown spectroscopy (LIBS) for elemental analysis in pharmaceutical market products	Postdoctoral Fellow/
		George Washington University	PhD		
				Structural and functional analysis of human MID1 B-box1 E3 ligase domain: Implications to X-linked optiz syndrome and overall MID1 function	

### **THESIS COMMITTEES (past 5 years)**

Feiran Zhang Jacqueline McCabe Lily Raines Elizabeth Petro Alfredo Julio Caro Maia Shoemaker Tural Aksel Melissa Zarr Andrew Buller Hoku West-Foyle Sarah Classen Osi Iyalomhe Juan Perilla **Thomas Cleveland** Yunlong Liu John Belcher Jordan Wagner Samerjeet Samerjeet Tyler Wied Brian Tenner Yunlong Liu

**Boyang Hua** 

Jesse Yoder Mariusz Matyszewski Sean Klein Afif Bandak

#### **VISITORS FOR COLLABORATIONS - (1990-2012)**

Pedro Alzari. Immunologie Structurale - Institut Pasteur- Paris, France

Visit: May and June, 1990 (Duration 6 weeks)

Subject: Phase improvement Using Maximum Entropy

Hugo Monaco . Dipartamento di Structuristica Chimica - University of Pavia -

Pavia Italy

Visit: Monaco to Hopkins, July, 1990 (Duration: 4 weeks)
Visit: Amzel to Pavia, March, 1991 (Duration: 3 weeks)

Subject: Structural Studies of an Odorant Binding Protein - (NATO

Collaboration Grant)

Julio Urbina. Departamento de Biologia Universidad Central-Caracas, Venezuela

Visit: September and October, 1990 (Duration 8 weeks)
Subject: Crystallization of Proteins from Trypanosoma Cruzi

(NSF Collaboration Grant)

Fred Saul. Immunologie Structurale - Institute Pasteur, Paris, France

Visit: June 1992 to September 1992 (Duration 12 weeks)

Subject: Fatty acid binding to Lipoxygenase.

Pedro Alzari. Immunologie Structurale - Institute Pasteur, Paris, France

Visit: December 1992 (duration 2 weeks)

Subject: Implementation of New Molecular Replacement Software

Ewa Jankun. University of Toledo

Visit: Several visits, 1994-1995

Subject: Structure of Soybean Lipoxygenase L3

Hugo Monaco. Dipartamento di Structuristica Chimica - University of Pavia - Pavia, Italy

Visit: Amzel to Pavia, May 1996 Subject: Odorant Binding Protein

Hugo Monaco. Dipartamento di Structuristica Chimica - University of Pavia -Pavia Italy

Visit: Monaco to Hopkins, March 1997

Subject: Odorant Binding Protein

Alberto Pojarni. Strasbourg, France

Visit: August 1999

Subject: Refinement of structures at very high resolution

(NSF Collaboration Grant)

Mauricio Urquiza. Instituto Immunologico - Bogota, Colombia

Visit: September 1999 - November 1999
Subject: Calorimetry of Vaccine Peptides

Alberto Podjarni. Strasbourg, France

Visit: June 2000

Subject: Refinement of structures at very high resolution

(NSF Collaboration Grant)

Daniel Vega. Atomic Energy Comission - Buenos Aires, Argentina

Visit: August-September 2000

Subject: Establishment of Crystallographic software in Argentina.

Carlos Rojas Avellandeda, Unviersidad Javeriana – Bogota, Colombia

Visit: August/September 2003

Subject: Implementation on crystallographic software in Colombia.

Juan Pablo Acierno - Instituto Leloir, Buenos Aires, Argentina

Visit: November 2004
Subject: Collaboration

Maximo Barreras, Instituto Leloir, Buenos Aires, Argentina

Visit: June/July 2005 Subject: Collaboration

Yuly Sanchez, Pontificia Universidad Javeriana, Bogota, Colombia

Visit: November 2007

Subject: Training in computational biology.

Manuel Furlani, University of Verona, Italy

Visit: September 2009 – February 2010

Subject: Collaboration

Santiago DiLella, Universidad de Buenos Aires, Argentina

Visit: January 15, 2010 - March 30, 2010

Subject: Collaboration

Melisa Jacobs, Intituto Leloir, Buenos Aires, Argentina

*Visit:* March 2011 – May 2011

Subject: Collaboration

Yuly Sanchez, Pontificia Universidad Javeriana, Bogota, Colombia

Visit: February 2012 – August 2012

Subject: Training in computational biology.

Basilio Cieza Huaman, Universidad Cayetano Heredia, Peru

Visit: January 2014 – March 2014

Subject: Training in computational biology.

Yuly Sanchez, Pontificia Universidad Javeriana, Bogota, Colombia

Visit: July 2014 – December 2014

Subject: Training in computational biology.

César Ávila, Universidad Tucuman, Argentina

Visit: May 2015 – September 2015

Subject:

**COLLABORATORS** 

Solomon Snyder Johns Hopkins University Medical School

Ernesto Freire Johns Hopkins University

Hamilton Smith Johns Hopkins University Medical School

Maurice Bessman Johns Hopkins University

Peter L. Pedersen Johns Hopkins University Medical School Eduardo Marban Johns Hopkins University Medical School William Guggino Johns Hopkins University Medical School

#### **COLLABORATORS (continued)**

Paul Talalay Johns Hopkins University Medical School Stephen Desiderio Johns Hopkins University Medical School Betty Eipper University of Connecticut Health Center

Betty Gaffney Florida State University

Richard Mains University of Connecticut Health Center Shiuan Chen Beckman Institute of the City of Hope

David Ross University of Colorado Health Sciences Center

Blas Frangione New York University Medical School Jorge Ghiso New York University Medical School

Nancy Carrasco Yale University

Gerardo Vasta Center for Marine Biotechnology

Gordon Tomaselli Johns Hopkins University Medical School Steve Gould Johns Hopkins University Medical School Alexander Kolodkin Johns Hopkins University Medical School Mark Donowitz Johns Hopkins University Medical School Albert Mildvan Johns Hopkins University Medical School

Manuel Patarroyo Immunology Institute, Colombia Susanne O-Handley Rochester Institute of Technology

Donald McCarthy University of Florida
Thomas Hurley University of Indiana

Ying Zhang Bloomberg School of Public Health

Jim StiversJohns Hopkins University Medical SchoolBert VogelsteinJohns Hopkins University Medical SchoolNinian BlackburnOregon Health and Sciences University

Tony Romeo University of Florida

Dario Estrin University of Buenos Aires, Argentina
Peter Espenshade Johns Hopkins University Medical School

Blanca Barquera Rensselaer Polytechnic Institute

Roberto Docampo University of Georgia

Svetlana Lutsenko Johns Hopkins University Medical School Ritimukta Sarangi Stanford Synchrotron Radiation Lightsource

Juan Bautista Rodriguez University of Buenos Aires, Argentina

Eric Oldfield University of Illinois

Chris Ross Johns Hopkins University Medical School

Dolores Gonzalez Pacanowk- Granada, Spain Silvia Piñeiro University of Maryland

Joel B. Belasco

Thomas Woolf

Phillip Cole

New York University, Skirball Center

Johns Hopkins University Medical School

Johns Hopkins University Medical School

Gonzalo Pratt-Gay Institute Leloir, Argentina

Caren Meyer Johns Hopkins University Medical School Jun Liu Johns Hopkins University Medical School

James Barrow Lieber Institute

Peter Devreotes Johns Hopkins University Medical School

Greg Semenza Johns Hopkins University Medical School
Daniel Raben Johns Hopkins University Medical School

#### **SHORT COLLABORATIONS**

Jonathan Schneck Johns Hopkins University Medical School Bloomberg School of Public Health Noel Rose Janice Clements Johns Hopkins University Medical School Susan MacDonald Johns Hopkins University Medical School Jeremy Nathans Johns Hopkins University Medical School David Valle Johns Hopkins University Medical School Craig Montell Johns Hopkins University Medical School Min Li Johns Hopkins University Medical School

Santiago DiLella University of Buenos Aires Melisa Jacobs Institute of Leloir, Argentina

TRESENTATIONS AND CONTENENCES - (SINCE 1990)					
Indiana University Medical Center, Indianapolis, IN	January 22, 1996				
Seminar: Structure and Mechanism of DT-Diaphorase:					
A Flavoprotein Involved in Cancer Chemoprotection.					
University of California - Member Breast Cancer Panel	March 28, 1996				
Seminar: Immunology and Drug Development					
University of Verona-Faculty of Science	May 21, 1996				
Seminar: Three-Dimensional Structure of Quinone Reductase: M	echanism				
of Cancer Chemoprotection					
Jacques Cartier Conferences, Structure and Dynamics of Proteins	Sept. 30 - Oct. 4, 1996				
Seminar: Structure of Soybean Lipoxygenase					
FASEB Conference - Transport ATPases, Cooper Mountain, Colorado	August 18-23, 1996				
Seminar: The Structure of Rat Liver F <sub>1</sub> -ATPase					
Cornell Medical School, Department of Physiology	October 29, 1996				
Seminar: Structure of F <sub>1</sub> -ATPase and the Mechanism of ATP S	Synthesis				
University of Buenos Aires, Fac. of Pharmacy and Biochemistry	December 3, 1996				
Seminar: Structure of ATP Synthase and the Mechanism of ATP S	•				
Florida State University - Tallahassee, FL	January 8, 1997				
Seminar: Structure of ATP Synthase and the Mechanism of ATP S	•				
American Chemical Society, Maryland	March 27, 1997				
Seminar: The Three-dimensional Structure of Bovine Odorant					
	Birianing				
Protein and its Mechanism of Odor Recognition.					
Protein and its Mechanism of Odor Recognition.  III Ibero American Biophysical Congress, Buenos Aires, Argentina	Sentember 1997				
III Ibero American Biophysical Congress, Buenos Aires, Argentina	September 1997				
III Ibero American Biophysical Congress, Buenos Aires, Argentina  Key note speaker: Three-dimensional structure of rat-liver F1-ATI	Pase.				
III Ibero American Biophysical Congress, Buenos Aires, Argentina  Key note speaker: Three-dimensional structure of rat-liver F1-ATI  Intern. Union of Pure and Applied Biophysics, La Plata, Argentina	•				
III Ibero American Biophysical Congress, Buenos Aires, Argentina Key note speaker: Three-dimensional structure of rat-liver F1-ATI Intern. Union of Pure and Applied Biophysics, La Plata, Argentina Seminar: Future of Ibero American Biophysics.	Pase. September 24, 1997				
III Ibero American Biophysical Congress, Buenos Aires, Argentina  Key note speaker: Three-dimensional structure of rat-liver F1-ATI  Intern. Union of Pure and Applied Biophysics, La Plata, Argentina  Seminar: Future of Ibero American Biophysics.  University of Buenos Aires, Fac. of Pharmacy and Biochemistry	Pase. September 24, 1997 October 1, 1997				
III Ibero American Biophysical Congress, Buenos Aires, Argentina Key note speaker: Three-dimensional structure of rat-liver F1-ATI Intern. Union of Pure and Applied Biophysics, La Plata, Argentina Seminar: Future of Ibero American Biophysics. University of Buenos Aires, Fac. of Pharmacy and Biochemistry Talk: Amidation of peptide hormones: Structure and function of	Pase. September 24, 1997 October 1, 1997				
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<ul> <li>III Ibero American Biophysical Congress, Buenos Aires, Argentina         Key note speaker: Three-dimensional structure of rat-liver F1-ATI         Intern. Union of Pure and Applied Biophysics, La Plata, Argentina             Seminar: Future of Ibero American Biophysics.</li> <li>University of Buenos Aires, Fac. of Pharmacy and Biochemistry             Talk: Amidation of peptide hormones: Structure and function of peptidylamino monooxygenase.</li> <li>Case Western. Cleveland, Ohio             Talk: Three-dimensional structure of rat-liver F1-ATPase.</li> <li>Gordon Conference. Redox active amino acid side chains. Pisa, Italy</li> </ul>	Pase. September 24, 1997 October 1, 1997 October 30, 1997 May 1997				
III Ibero American Biophysical Congress, Buenos Aires, Argentina Key note speaker: Three-dimensional structure of rat-liver F1-ATI Intern. Union of Pure and Applied Biophysics, La Plata, Argentina Seminar: Future of Ibero American Biophysics. University of Buenos Aires, Fac. of Pharmacy and Biochemistry Talk: Amidation of peptide hormones: Structure and function of peptidylamino monooxygenase.  Case Western. Cleveland, Ohio Talk: Three-dimensional structure of rat-liver F1-ATPase.  Gordon Conference. Redox active amino acid side chains. Pisa, Italy Talk: Structure and mechanism of peptidyl amino monooxygenase.	Pase. September 24, 1997 October 1, 1997  October 30, 1997  May 1997 Se.				
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III Ibero American Biophysical Congress, Buenos Aires, Argentina  Key note speaker: Three-dimensional structure of rat-liver F1-ATI  Intern. Union of Pure and Applied Biophysics, La Plata, Argentina  Seminar: Future of Ibero American Biophysics.  University of Buenos Aires, Fac. of Pharmacy and Biochemistry  Talk: Amidation of peptide hormones: Structure and function of peptidylamino monooxygenase.  Case Western. Cleveland, Ohio  Talk: Three-dimensional structure of rat-liver F1-ATPase.  Gordon Conference. Redox active amino acid side chains. Pisa, Italy  Talk: Structure and mechanism of peptidyl amino monooxygenase.  Course on Structural Biology. Cartagena, Colombia (IUPMB)  Topic: Structural and thermodynamical aspects of binding and regordon Conference Bioenergetics, New Hampshire	Pase. September 24, 1997  October 1, 1997  October 30, 1997  May 1997  Se. May 1997				
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PRESENTATIONS AND CONFERENCES - (since 1996)

Protein Folding Meeting. Coolfont, W.Va. March 14-17, 1998 Discussion Leader. Protein Folding: thermodynamics and kinetics. Instituto de Inmunologia. Bogota, Colombia March 1998 Course on Structure and Thermodynamics of Peptide Binding. Universidad Nacional. Bogota, Colombia. March 24-27, 1998 Course on Membrane Proteins (with Dr. N. Carrasco). April 23, 1998 Lehman College, Bronx, New York. (1) Amidation of peptide hormones: Structure and function of Peptidylamino monooxygenase. (2) Use of monoclonal antibodies in the design of antihypertensive compounds. University of Maryland, School of Medicine, Maryland October 25, 1998 Seminar: The structure of rat liver F1-ATPase: Configuration of a critical intermediate in ATP synthesis/ hydrolysis. Catholic University of America, Washington, D.C. September 21, 1998 Seminar: The structure of rat liver F1-ATPase: Insights into the mechanism of ATP synthesis. City College of New York, New York October 14, 1998 Seminar: Amidation of Bioactive peptides: The structure and mechanism of peptidylglycine hydroxylating monooxygenase. Johns Hopkins University, School of Medicine, Maryland October 30, 1998 Roundtable Discussion - Hispanics in Science Albert Einstein College of Medicine, New York November 16, 1998 Seminar: The structure of rat liver F1-ATPase: Configuration of a critical intermediate in ATP synthesis/ hydrolysis. Lorne Protein Conference, Victoria, Australia February 9, 1999 Symposium Speaker: The structure of rat liver F1-ATPase: Configuration of a critical intermediate in ATP synthesis/ hydrolysis. University of Delaware, Dept. of Chemistry March 8, 1999 *Talk:* Structure and mechanism of peptidyl amidating monooxygenase: Pathway for electron transfer. March 30, 1999 **Protein Folding Conference, Coolfont, West Virginia** Talk: Estimation of free-Energies of binding and stabilization: Combined empirical and statistical mechanical approach. British Biochemical Society. Meeting on Quinone Biochem. Glasgow, UK. April 7-9, 1999 Talk: Structure and Mechanism of Cytosolic Quinone Reductases. NIH/NIDDK, Bethesda, Maryland June 17, 1999 Talk: The structure of F1-ATPase: New insights into the mechanism of ATP synthesis. Universidad Javeriana. XVIII Physics Congress Bogota, Colombia. June 24-30, 1999

Keynote Speaker: Structural and thermodynamical studies of binding.

Lecture: Thermodynamics of Binding: Combined Empirical and Statistical

Special Lecture: The structure at 2.8 Å of rat liver F<sub>1</sub> ATPase reveals new

June 30, 1999

July 5, 1999

**Colombian Physics Society, Annual Meeting.** 

**FASEB Summer Research Conference, Snowmass, Colorado** 

insights into the mechanism of ATP synthesis.

Mechanical Approach.

Talk: Structural Studies and Drug Design Gibbs Conference on Biothermodynamics, Carbondale, Illinois October 2-5, 1999 Talk: Calculation of entropy changes in biological processes: Folding, Binding, and Oligomerization **Texas A&M University** October 6, 1999 Talk: The structure of F1-ATPase: New insights into the mechanism of ATP synthesis. **Congress of Biophysics - Cordoba - Argentina** November 5-7, 1999 Keynote Speaker: New insights into the mechanism of ATP synthesis. **Review Panel Synchrotron Line. Argonne National Laboratory** November 10-11, 1999 Latino American Immunology Congress, Punta del Este, Uruguay December 12-15, 1999 Talk: Affinity maturation of anti NP antibodies. Symposium on Structural Molecular Biology, Instituto Campomar December 17, 1999 **Buenos Aires, Argentina** Talk: Structure and mechanism of biological redox reactions. Mount Sinai School of Medicine, New York January 19, 2000 Talk: Biochemistry and Physiology of Peptide Amidation. Universidad Javeriana. Bogota, Colombia February 7-12, 2000 Course on Molecular Biophysics Hopkins Protein Folding Meeting, Berkeley Springs, West Virginia March 18-21, 2000 Organizer (with Ernesto Friere) **Baylor College of Medicine, Houston, TX** April 12, 2000 Talk: Biological Redox Reactions: Insights from Structure. Secretary of Science and Technology, SECyT. Buenos Aires, Argentina April 18-19, 2000 Review Panel on Strategic Research Areas. Séminaire de Biologie Structurale, Paris, France June 7, 2000 Talk: Structure and Mechanism of Quinone Reductase: Improving Chemotherapeutic Drugs. Séminaires à l'IGBMC, Strasbourg, France June 16, 2000 Talk: Structure and Mechanism of Quinone Reductase: Improving Chemotherapeutic Drugs. Mayo Clinic, Rochester, Minnesota June 22, 2000 Talk: Structure and Mechanism of Quinone Reductase: Improving Chemotherapeutic Drugs. Gordon Conference, Hormonal and Neural Peptide Biosynthesis, New Hampshire July 2000 *Talk*: Structure of PHM and its mechanistic implications. IV Ibero American Biophysics Congress, Alicante, Spain October 11-14, 2000 Talk: Hormone Processing in Secretory Granules: Structure and Mechanism of the amidating enzyme. Universidad de Granada, Granada, Spain. October 16, 2000 Talk: Redesigning Chemotherapeutic prodrugs: Structure and Function of Quinone Reductase. **DARPA BioMIMS Meeting** January 3-4, 2001

September 30, 1999

Hispanic and Latin American Heritage, USAMRICD

Keynote Speaker: Structural Biology

The Sixth Johns Hopkins Folding Meeting, Berkeley Springs, W.Va. March 17-20, 2001 Presentation/Discussion Leader - Summary Session Department of Pharmacy and Biochemistry, Universidad de Buenos Aires April 6, 2001 *Talk:* Excretion of peptidic hormones: amidation by oxidative hydroxylation. Instituto de Investigaciones Fundacion Campomar, Buenos Aires, Argentina **April 2001** Talk: Directions and Challenges in Structural Biology Universidad de San Martin, Buenos Aires, Argentina. April 2001 *Talk:* Excretion of peptidic hormones: amidation by oxidative hydroxylation. International Workshop on Protein Folding, Structure and Design, Trieste, Italy June 11-27, 2001 *Talk*: Evaluation of entropy changes in binding, and folding. **Bioenergetics Gordon Conference, New Hampshire** June 17-22, 2001 Talk/Session Chair: Mechanism of ATP synthesis. Course in Molecular Modeling, Cuernavaca, Mexico August 13-21, 2001 Course Director/ Lectures Universidad Nacional Autonoma de Mexico, Cuernavaca, Mexico August 16, 2001 Talk: Estimating Binding Affinities based on Structural Data. Annual Biophysics/Cell Biology Symposium, Purdue University, November 10, 2001 W. Lafayette, Indiana Keynote Speaker: The mechanism of ATP synthesis. **XIV International Biophysics Congress** April 27-May 1, 2002 **Buenos Aires, Argentina** Talk: Understanding ATP synthesis: Structure and mechanism of the F1-ATPase. Satellite-IUPAB 2002 An Ion Channels and Transporters Odyssey May 3-4, 2002 Centro de Estudios Cientificos, Valdivia, Chile Talk: Proton transport and ATP synthesis: Structure and mechanism in the Mitochondrial ATPase. Instituto de Investigaciones Biologicas de la Fundacion Campomar April 24, 2002 **Buenos Aires, Argentina** Talk: Mechanism of ATP synthesis: Structure and function of the Mitochondrial ATPase. Universidad Nacional de la Patagonia, Delegacion San Juan Bosco, April 26, 2002 Puerto Madryn, Argentina Talk: Mechanism of ATP synthesis: Structure and function of the Mitochondrial ATPase. Universidad Nacional de Buenos Aires, Facultad de Ciencias Chemistry April 30, 2002 **Department, Argentina** Talk Mechanism of electron transfer in peptidylglycine hydroxylating monooxygenase. Structural Biology and Structural Genomics/Proteomics, Bethesda May 7-10, 2002 Marriott, Maryland Talk: Proton transport and synthesis of ATP: Structure and Mechanism of the Mitochondrial ATP-Synthase

**Gordon Research Conference, Connecticut College, Connecticut** July 21-26, 2002 Session Chair: "What's in a structure?" Talk: The mechanism of ATP synthesis. Instituto Fundacion Compomar, Buenos Aires, Argentina October 25, 2002 *Talk:* Chemoprotection and chemotherapy: two sides of the same coin. Mount Sinai School of Medicine, New York, NY December 6, 2002 Seminar: Chemoprotection and chemotherapy: two sides of the same coin. Structure and mechanism of Quinone Reductases. University of Connecticut Health Science Center, Farmington, CT Feb. 20, 2003 Seminar: Chemoprotection and chemotherapy: two sides of the same coin. Instituto Fundacion Compomar, Buenos Aires, Argentina March 24 – April 3, 2003 Course: X-ray Crystallography Diffraction of Macromolecules Instituto Immunologico de Colombia, Bogota, Colombia May 5 - 9, 2003 Talk: External Evaluation and Advisor Instituto Fundacion Compomar, Buenos Aires, Argentina March 24 – April 3, 2003 Seminar: Structure and mechanism of Nudix hydrolases. October 10, 2003 Organizing Committee V SOBLA Congress, Rio de Janeiro, Brazil October 12-15, 2003 University of Colorado Health Sciences Center, Denver, Colorado November 13, 2003 Talk: Amidation of bioactive peptides. Structure and mechanism of copper monooxygenase. University of Maryland at College Park, Chemistry and Biochemistry December 2, 2003 Department, Baltimore, Maryland Talk: Amidation of bioactive peptides. Structure and mechanism of copper monooxygenase. Universidad del Pais Vasco – Instituto de Biofisica, Bilbao, Spain February 9, 2004 Seminar: Chemoprotection and chemotherapy: Two sides of the same coin. Structure and mechanism of guinone reductase. Instituto for Biocomputation and Physics of Complex Systems (BIFI) February 13, 2004 Zaragoza, Spain International Conference Biology after the genome: A physical view. Symposium: Molecular Mechanics/ Dynamics Calculations of Biochemical Processes Course: X-ray Diffraction of Macromolecules Instituto Leloir – Fundación Campomar, Buenos Aires, Argentina March 31, 2004 Symposium in honor of Dr. Amzel Talk: Amidation of Bioactive Peptides Instituto Leloir – Fundación Campomar, Buenos Aires, Argentina March 28 - April 2, 2004 Course: Crystallography Class Society for Free Radical Biology and Medicine, Buenos Aires, Argentina May 5-9, 2004 Talk: Cancer chemoprevention and chemotherapeutics: two sides of the same coin. Structure and mechanism of quinone reductase. Chairperson: Reactive Species and Cancer

CyberInfrastructure and CyberScience Workshop, Johns Hopkins University

Talk: Computational Biophysics: What can we learn from atomic level calculations.

June 22, 2004

#### Indiana University School of Medicine, Indiana

September 27, 2004

*Seminar:* Catching oxygen in the act: Structure and mechanism of the bioactive-peptide amidating enzyme.

#### Wake Forest University, North Carolina

January 11, 2005

*Seminar:* Catching oxygen in the act: Structure and mechanism of the bioactive-peptide amidating enzyme.

#### **Rutgers University, New Jersey**

March 20, 2005

Panel: Scientific Review of the Protein Data Bank

#### Universidad Autonoma de Mexico-Chemistry Institute, Mexico

August 16-26, 2005

*Course:* Structure based drug design *Section on*: X-ray diffraction of proteins.

# Universidad Autonoma de Mexico–Institute of Cellular Physiology, Mexico August 25, 2005 Seminar: "Amidation of neuropeptides and hormones: structure and mechanism of the amidating enzyme"

#### Institut Pasteur, Paris, France

September 22, 2005

Talk: Structure and activity of MICAL, an axon guidance protein.

# **3**<sup>rd</sup> International SFB Conference: Metal Mediated Reactions Modeled September 28, 2005 after Nature

*Talk:* Catching oxygen in the act: Structure and mechanism of peptidylglycine hydroxylating monooxygenase.

#### Universidad Nacional de Colombia, Bogota, Colombia

October 7, 2005

*Talk:* Activation of oxygen by copper: Structure and mechanism of amidating hydroxylase.

# Sociedad Argentina de Investigaciones Clinicas, Mar del Plata,

Nov 29 - Dec 2, 2005

*Talk:* From structure to function to drug design: use of structural research in Biomedical Sciences.

# Sociedad Argentina de Investigaciones Bioquímicas, Pinamar,

December 6, 2005

# Argentina – Panomerican Association for Biochemistry and Molecular Biology

*Talk:* Structure and function of farnesyl diphosphate synthase from *Trypanosoma cruzi:* implications for drug design.

#### Johns Hopkins University, Maryland

January 25, 2006

*Talk:* Hydride transfer in flavin reactions: A quantum mechanical Molecular dynamics approach to enzyme function.

#### University of Zaragoza, Spain

February 8-11, 2006

*Talk:* From physics to biology: The interface between experiment and computation.

#### IV Ibero American Biophysics Congress, Madrid, Spain

September 24-27, 2006

*Plenary Lecture:* From structure to function to drug design: The use of structural information in Biomedical Research.

# Johns Hopkins University Homewood Campus, Baltimore, Maryland

December 13, 2006

Seminar (Evening Series): Electron transfer reactions: What's the matter?

#### University of Chicago, Chicago, Illinois

January 10, 2007

Talk: Redox signaling in axon guidance: Structure and activity of MICAL.

Instituto Leloir – Fundación Campomar, Buenos Aires, Argentina May 8-11, 2007 External Advisory Committee Pharmacy School, University of Buenos Aires, Argentina May 28 - June 1, 2007 Talk: From structure to function to drug design: The role of structural biology in biomedical research. Ben-Gurion University, Beer-Sheva, Israel May 28 - June 1, 2007 *Noun Shavit Memorial Lecture:* From structure to function to drug design: The role of structural biology in biomedical research. Ben-Gurion University, Beer-Sheva, Israel May 28 - June 1, 2007 Talk: Activation of bioactive peptides: Structure and mechanism of peptidyl hydroxylating monooxygenase. Universidad Javeriana. Bogota, Colombia. August 1, 2007 Talk: Structure and function in the drug design: The use of structural biology in biological sciences. Universidad Javeriana. Bogota, Colombia. August 3, 2007 *Talk:* Mechanism of a copper enzyme: Peptide amidating monooxygenase. Universidad Nacional de Buenos Aires, Facultad de Ciencias, Chemistry September 23, 2007 Department, Argentina Talk: Redox signaling in axon guidance: Structure and activity of MICAL. Universidad Nacional de Buenos Aires, Facultad de Ciencias, September 24-25, 2007 **Chemistry Department, Argentina Faculty Evaluation Committee** Universidad Javeriana, Bogota, Colombia October 25, 2007 Talk: Entropic contributions to reactions rates. Universidad Javeriana, Bogota, Colombia October 26, 2007 *Talk:* Unfolding proteins by forces. **Albert Einstein College of Medicine** November 26, 2007 Talk: Redox signaling in axon guidance: Structure and activity of MICAL. Instituto de Biolgia Molecular y Celular de Rosario, Argentina October 21, 2008 *Talk:* Structure and mechanism of Ocongenic PI3K- $\alpha$  mutations. Instituto Leloir - Fundación Campomar, Buenos Aires, Argentina October 24, 2008 *Talk:* Structure and mechanism of Ocongenic PI3K- $\alpha$  mutations. **NIGMS Meeting** October 30-31, 2008 Panel: Future of Protein Structure Initiative **Albert Einstein College of Medicine** November 10, 2008 Talk: Amidation of bioactive peptides: Structure and mechanism of PAM, the amidating enzyme. Centro de Biologia Molecular, Universidad Autonoma de Madrid, Spain January 28, 2009 Talk: Redox reactions in axon guidance: Structure and mechanism of MICAL. Universdiad Complutense, Madrid, Spain January 29, 2009 *Talk:* Structure and mechanism of oncogenic PI3K- $\alpha$  mutations. Centro Nacional de Inestigaciones Oncologicas, Madrid, Spain January 30, 2009 Talk: Insights into the oncogenic effects of PIK3CA mutations from the

structure of p110 $\alpha$  /p85 $\alpha$ .

and small molecule binding by a copper center. Rio De Janeiro, Brazil October 3, 2009 Talk: Insights into the oncogenic effects of PIK3CA mutations from the structure of p110 $\alpha$  /p85 $\alpha$ . November 10, 2009 University of Maryland, Department of Chemistry and Biochemistry Talk: Insights into the oncogenic effects of PIK3CA mutations from the structure of phosphoinsitide-3-kinase. Johns Hopkins University, School of Medicine, Dean's Lecture January 25, 2010 Dean's Lecture: Capitalizing on tumor genotyping toward the design of mutation-specific drugs. **University of Missouri, Kansas City** February 4, 2010 Talk: Capitalizing on tumor genotyping toward the design of mutation-specific drugs. PTEN Pathways and Targets Conference, Cold Spring Harbor, NY March 16, 2010 Talk: Insights into the oncogenic effects of PIK3CA mutations from the structure of phosphoinsitide-3-kinase. Institut Pasteur de Montevideo, Uruguay May 1, 2010 Course: "Macromolecular Crystallography: Introduction and applications." Course: Fourier Theory: the diffraction experiment revisited. Institut Pasteur de Montevideo, Uruguay May 1, 2010 Course: "Macromolecular Crystallography: Introduction and applications." *Lecture:* The Fourier transform: concepts & properties; related functions. May 1, 2010 Universita Degli Studi Di Verona, Verona, Italy September 28, 2010 Talk: Insights into the oncogenic effects of PIK3CA mutations from the structure of Phosphoinositide-3-kinase. XXXIX Annual Meeting of the Argentinean Biophysical Society, Salta, October 12-16, 2010 **Argentina** Talk: Capitalizing on tumor genotyping: Toward the design and mutation-specific Sociedad Mexicana de Bioquimica, Tuxtla Gutierrex, Mexico November 12, 2010

*Talk:* Mechanisms of activations by mutations revealed by the structure

Talk: What is a nice chemist like you doing in a place like Biophysics?

Talk: Activation of PI3Kalpha by physiological effectors and by oncogenic

Talk: Structural and mechanistic studies on peptidylglycine alpha-amidating

Johns Hopkins University, Chemistry-Biology Department

Mutations: structural and dynamic effects.

Talk: Peptidylglycine α-hydroxylating monooxygenase (PHM): Oxygen activation

July 29, 2009

January 28, 2011

April 9-13, 2011

August 10, 2011

14<sup>th</sup> International Conference on Biological Inorganic Chemistry,

Nagoya, Japan

of PI3K-alpha.

ASBMB, Washington, D.C.

enzyme. **Seoul University, Korea** 

Konkuk University, Korea

August 12, 2011

Talk: Activation of PI3Kalpha by physiological effectors and by oncogenic

Mutations: structural and dynamic effects.

Gibbs25 Conference, Carbondale, Illinois

September 17-20, 2011

Talk: Computation of free energies by multi-step trajectory combinations.

National Institutes of Health, Washington, DC

October 5, 2011

Talk: Activation of PI3Kalpha by physiological effectors and by oncogenic

mutations: structural and dynamic effects.

Universidad Autonoma Metropolitana, Mexico

October 27, 2011

Talk: Activation of PI3Kalpha by physiological effectors and by oncogenic

mutations: structural and dynamic effects.

LaFeBS Congress, Brazil

October 25, 2012

Session Chair: Plenary Lecture A

**LaFeBS Congress, Brazil** 

October 25, 2012

Session Chair: Plenary Lecture A

Panel Evaluation of Faculty Promotions, University of Buenos Aires

October 29, 2012

**Argentina** Panel member

Facultad de Ciencias Exactas of Naturales, University of Buenos Aires

November 5, 2012

Argentina Conference

**Gordon Research Conference, Mechanisms of Membrane Transport** 

June 16-21, 2013

Session Chair: Mechanisms of Membrane Transport

Gordon Research Conference, Mechanisms of Membrane Transport

June 16-21, 2013

Speaker: Thermodynamic/kinetic analysis of the populations contributing to Iodide transport by NIS

**Denmarks Tenknisk Universitet, Denmark** 

September 18, 2013

Talk: Structure and mechanism of peptidylglycine-alpha-amidating monooxygenase PAM.

**Kurume University School of Medicine, Japan** 

November 14, 2013

Talk: Amidation of Bioactive Peptides: Structure and Mechanism of Peptidylglycine α-Amidating Monoxygenase

Konkuk University, South Korea

November 17, 2013

Talk: Amidation of Bioactive Peptides: Structure and Mechanism of Peptidylglycine α-Amidating Monoxygenase

University of Maryland Baltimore, Graduate Student Association Lecture

May 9, 2014

*Talk:* Activation of PI3K by physiological effectors and by oncogenic mutations: structural and dynamic effects.

LABIC, University of Buenos Aries, Argentina

August 5, 2014

Talk: Structure and mechanism of the metalloenzyme peptidylglycine amidating monoxygenase.

Rensselaer Polytechnic Institute, New York

October 20, 2014

Talk: Activation of PI3K by physiological effectors and by oncogenic mutations: structural and dynamic effects.

Reunion de la Asociacion, Argentina de Cristolografia, October 28, 2014 Mar del Plata, Argentina Plenary Lecture: Crystallography and drug design: inhibition of parasitic farnesylpyrophosphate synthase. Facultad de Ciencias Exactas of Naturales, University of Buenos November 5, 2014 Aires, Argentina Seminar: Structure and function of farnesyl diphosphate synthase from Trypanosoma cruzi: implications for drug design. Sociedad Argentina de Investigaciones Bioquimicas, November 13, 2014 Rosario, Argentina Talk: Control of PIP3 levels: Structure and mechanism of PI3Kα. XLIII Annual Del Sociedad, Argentina de Biofisica (SAB), December 5, 2014 Sierra de la Ventana, Buenos Aires, Argentina Closing Conference: Control of PIP3 levels: Structure and mechanism of PI3Kα. Konkuk University, South Korea January 12, 2015 Workshop: Protein Structure **Yale University Medical School** April 7, 2015 Talk: Binding and Transport by the Sodium/Iodide symporter NIS **Yale University Medical School** April 9, 2015 *Talk:* Activation of PI3K by physiological effectors and by oncogenic mutations: Structural and dynamic effects. Pyeongchang Campus, Seoul National University, South Korea August 18, 2015 Talk: Control of the levels of PIP3 in normal and tumor cells: Structure and Function of the lipid kinase PI3Kα. **Korean Society for Applied Biological Chemistry South Korea** August 18, 2015 Talk: Control of the levels of PIP3 in normal and tumor cells: Structure and Function of the lipid kinase PI3Kα. Konkuk University, Seoul National University, South Korea August 19, 2015 Talk: Amidation of Bioactive Peptides. Biophysical Society Thematic Meeting, Stellenbosch, South Africa November 18, 2015 *Talk:* Inhibition of Parasitic Farnesyl Diphosphate Synthases (FPPS) Institute Cardiologic Investigations, Argentina December 9, 2015 *Talk:* Calmodulin and Ca<sup>2+</sup> control of voltage gate Na<sup>+</sup> channels. Ku Bio Symposium, Konkuk University, South Korea May 10-11, 2016 Talk: Activation of PI3Kα by physiological effectors and by oncogenic mutations: structural and dynamic effects. SAIC-SAFE, Annual de la Sociedad, Mar del Plata, Argentina November 16, 2016 Talk: Regulation of the cardiac sodium channel Nav1.5 by calmodulin and calcium. SAIC, Annual de la Sociedad, Mar del Plata, Argentina November 18, 2016 Talk: Control of PIP3 levels by PI3K alpha in health and disease. Vaccines R&D 2016, Cartagena, Colombia November 10-12, 2016 Talk: Development of inhibitors of parasitic Farnesyl Pyrophosphate Synthases. Vaccines R&D 2016, Cartagena, Colombia November 10-12, 2016 Talk: Recognition of the native protein by anti-peptide antibodies.

Universidad Nacional de Colombia, Bogota, Colombia	March 13-17, 2017				
Three Classes on x-ray diffraction.	March 13, 2017				
Three Classes on Molecular Modeling	March 16, 2017				
Talk: Control of PIP3 levels of PI3Kα in health and disease	March, 2017				
<i>Talk:</i> Calcium regulation of sodium channels: carboxy terminal tail interactions with calmodulin	March, 2017				
Virginia Commonwealth University, Virginia	April 6, 2017				
Talk: Calmodulin and Ca <sup>2+</sup> control of voltage gated Na <sup>+</sup> channels.	,				
Universidad de La Habana, Havana, Cuba	July 10-11, 2017				
Talk: Control of PIP3 levels by PI3K-alpha in health and disease.					
Congreso SEADIM, Varadero, Cuba	July 12-14, 2017				
<i>Talk:</i> Calmodulin and Ca <sup>2+</sup> control of voltage gated Na <sup>+</sup> channel.					
SISTAM, Symposium in Signal Transduction and Molecular Medicine,	October 14-19, 2018				
Bariloche, Argentina					
Talk: Control of PIP3 levels by PI3Ka and PTEN.					
XIV Reunión Anual de la AACr – Inaugural Lecture, Argentina	Oct 31-Nov 2, 2018				
Talk: Conformational landscape of Peptidylglycine α-Hydroxylating Monooxygenase					
AACR Targeting PI3K/mTOR Signaling, Boston, Massachusetts	Nov 30-Dec 3, 2018				
Talk: Control PIP3 levels by PI3Kα and PTEN					
ASBMB, The Many Faces of Kinases and Pseudokinases, San Diego, CA	Dec 9-12, 2018				
Talk: Increase in activity in PI3K $\alpha$ by oncogenic mutations is caused by					
changes in the protein dynamics(5).					