### CURRICULUM VITAE

May 23, 2019

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Moores Cancer Center

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**Education:**

1976-1980 Pharmacy Degree (M.Sc.), University of Buenos Aires, Argentina

1976-1983 Biochemistry Degree (M.Sc.), University of Buenos Aires, Argentina.

1985 Ph.D. in Pharmacy and Biochemistry, University of Buenos Aires, Argentina

# Employment History:

2015-present Professor, Department of Pharmacology

Associate Director of Basic Science, UC San Diego Moores Cancer Center

Co-Director, Head and Neck Cancer Center

1998-2015 Chief, Oral and Pharyngeal Cancer Branch, National Institute of Dental and Craniofacial Research, NIH, Bethesda, USA

1997-2015 Chief, Cell Growth Regulation Section and Molecular Carcinogenesis Unit, Oral and Pharyngeal Cancer Branch, National Institute of Dental and Craniofacial Research, NIH, Bethesda, USA

1996-1997 Acting Chief, Oral and Pharyngeal Cancer Branch, National Institute of Dental Research, NIH, Bethesda, USA

1993-1997 Chief, Molecular Signaling Unit, Laboratory of Cellular Development and Oncology, National Institute of Dental Research, NIH, Bethesda, USA.

1992-1993 Head, Molecular Signaling Group, Laboratory of Cellular Development and Oncology, National Institute of Dental Research, NIH, Bethesda, USA.

1989-1992 Visiting Associate, Laboratory of Cellular Development and Oncology, National Institute of Dental Research, NIH, Bethesda, USA.

1988-1989 Fogarty Visiting Fellow, Laboratory of Cellular Development and Oncology, National Institute of Dental Research, NIH, Bethesda, USA.

1987-1988 Fogarty Visiting Fellow, NIDR, Guest Researcher at the Laboratory of Cellular and Molecular ­Biology, National Cancer Institute, NIH, Bethesda, USA.

* 1. International Fogarty Fellow, Laboratory of Clinical Science, National Institute of Mental Health, NIH, Bethesda, USA.

1983-1986 Research Assistant, Department of Pharmacology, School of Pharmacy and Biochemistry, University of Buenos Aires, Argentina.

1981-1983 Part-time Instructor, Department of Pharmacology, School of Pharmacy and Biochemistry, University of Buenos Aires, Argentina.

1979-1980 Part-time Instructor, Department of Organic Chemistry, School of Pharmacy and Biochemistry, University of Buenos Aires, Argentina.

**Honors and Awards:**

2019 Elected Chair, Division of Molecular Pharmacology, American Society for Pharmacology and Experimental Therapeutics (ASPET)

Elected Co-Chair, Gordon Conference in Molecular Pharmacology, Ventura CA

2017 International Association of Dental Research (IADR), Distinguished Scientist Award

Keynote Lecture, ASPET 2017, Division for Molecular Pharmacology Postdoctoral Scientist Award

2015 Pharmaceutical Research and Manufacturers of America (PhRMA), 2015 Research & Hope Award for “Excellence in Academic Research”, for the seminal work on GPCR Function in Cancer

Keynote Lecture, ASPET Upstate New York Pharmacology Society 4th Annual Meeting, Rochester, NY

2014 Keynote Lecture, 2014 American Head and Neck Society (AHNS) Annual Meeting and 5th World Congress-IFHNOS

Distinguished Lecture Series at Massachusetts Eye and Ear Infirmary/Schepens Eye Research Institute, Harvard University, MA

Keynote Speaker, Dental Research in Review, University of North Carolina, Chapel Hill, NC

Keynote Speaker, Fifth Annual Cancer Biology Research Retreat, University of Maryland-Baltimore

2013 PABMB (Pan-American Association for Biochemistry and Molecular Biology) Plenary Lecture, Madrid, Spain

Elected, Keynote Lecture, 2014 American Head and Neck Society (AHNS) Annual Meeting and 5th World Congress-IFHNOS

Elected, Councilor, Basic Research, International Academy/Association

of Oral Oncology (IAOO)

International Keynote speaker at the Weizmann-Brazil Signal Transduction meeting, “Novel Angiogenic and Antiangiogenic Signaling Circuitries”, The Weizmann Institute of Science, Israel

Honorary Professor, West China School of Stomatology, Sichuan University, Chengdu, China

2012 Elliot Osserman Award, Israel Cancer Research Foundation

2011 Raices Award, Ministry of Science, Presidency of Argentina, for scientific contributions and efforts in enhancing research training and technology development, Argentina.

Keynote Speaker, (IADR, Chile) Asociación Internacional de Investigación Dental – División Chile, Chile

Keynote Speaker, NCI Frederick Spring Research Festival, Frederick, MD

Visiting Professor, Georgetown University, Washington DC

2010 Visiting Professor and Clinical Ground Round Speaker, Memorial Sloan Kettering Cancer Center, New York, NY

Keynote Speaker, 6th Annual International Head and Neck Symposium, Los Angeles, CA, July 2010

Honorary Professor, University of Buenos Aires, Argentina

Keynote Speaker, The First South American Spring Symposium in Signal Transduction and Molecular Medicine, SISTAM 2010, Cordoba, Argentina

2009 Keynote Lecture, Symposium on Molecular Medicine, Virginia Commonwealth University, Richmond, VA

Keynote Speaker, School of Dentistry University of Michigan Research Day, Ann Arbor, MI

Keynote speaker at the Annual Meeting of the Chilean Society of Biochemistry and Molecular Biology, Concepcion, Chile

Keynote Inaugural Lecture, Annual meeting of the Argentine Society of Research in Biochemistry and Molecular Biology, Tucuman, Argentina

2008 Hyman Niznik Memorial Keynote Lectureship, Annual Joint Meeting of the Great Lakes: G Protein-Coupled Receptor Retreat, Bromont, Canada

Merk Frosst Lecture, Institut de Recherches Cliniques de Montreal (IRCM), Montreal, Canada

R.M. Tiwari Oration, National Conference, Foundation for Head and Neck Oncology, Bhubaneswar, India

2007 Frank Brook Memorial Lecture, American Pancreatic Association, Chicago, IL

2006 Elected, Co-chair, Gordon Research Conference, “Phosphorylation & G-Protein Mediated Signaling Networks”, 2008

2006 Miguel Aleman Lecture, Miguel Aleman Foundation, Mexico DF, Mexico

2005 NIH Director's Award

2005 Elliot Osserman Award, Israel Cancer Research Foundation

2004 International Association of Dental Research (IADR) Distinguished Scientist Award, Oral Medicine and Pathology

2003 NIH Hispanic Heritage Month Celebration: Hispanic Contributions to Research in the United States, Lecture

2000 NIDCR Director’s Exemplary Service Award

1999 EEO Special Achievement Award, NIDCR, NIH

1998 Appointment as member of the Senior Biomedical Research Services (SBRS)

1997 NIDR Director’s Exemplary Service Award

1996 NIH Merit Award

1989 Funds for Young Scientists, Travel Award, Organizing Committee of the 7th International Conference on Protein Phosphorylation, Kobe, Japan

1986 International Fogarty Fellowship, National Institutes of Health, USA

1983 Gold Medal Award and Diploma of Honor, first rank student of the School of Pharmacy and Biochemistry, University of Buenos Aires, Argentina.

**Editorial Responsibilities:**

1998-2003 Member, Editorial Board, Journal of Biological Chemistry

* 1. Editor, Book on Signaling Networks and Cell Cycle Control, Humana Press

2000-2003 Co-Editor, Book on Head and Neck Cancer, Emerging Perspectives, Wiley & Co

2000-2016 Member, Editorial Board, Oral Oncology

2001-2011 Member, Editorial Board, Biochemistry

2001-2006 Member, Editorial Board, Revista de Oncologia, Mexico-Spain

2002-2003 Co-Editor, Book on Signal Transduction and Human Disease, Wiley & Co

2002-2017 Member, Faculty 1000, Reviewing Editor

2003-2005 Member, Editorial Board, Drug Discovery Today: Disease Mechanisms

# 2005-present Member, Editorial Board, Molecular Biology of the Cell

2008-present Member, Editorial Board, Cancer Prevention Research

2009-present Member, Editorial Board, Molecular and Cellular Biology

2009-2015 Member, Editorial Board, Genes & Cancer

2010-2014 Member, Editorial Board, Journal of Biological Chemistry

2012-present Member, Editorial Board, Science Signaling

2013 Co-editor, Current Opinion in Cell Biology, Cell Regulation Issue, April 2013

2015-present Member, Editorial Advisory Board for Molecular Pharmacology

2017-2018 Co-Editor, Journal of Dental Research, Oral Cancer Special Issue

**Ad-hoc Reviewer:**

Biochemical and Biophysical Acta; Blood; British Journal of Cancer; Cancer Cell; Cancer Research; Clinical Cancer Research; Cell; Cell Stem Cell; Cell Growth and Differentiation; Clinical Cancer Research; Current Biology; Developmental Cell; EMBO Journal; FEBS letters; Journal of Biological Chemistry; Journal of Cell Biology; Journal of Cell Physiology; Journal of Clinical Investigation; Journal of Immunology; Journal of Neurochemistry; Molecular and Cellular Biology; Molecular and Cellular Neurobiology; Molecular Cell; Molecular Pharmacology; Nature; Nature Cell Biology; Nature Communications; Nature Genetics; Nature Medicine; Oncogene; Oral Oncology; Trends in Biological Science; Proceedings of the National Academy of Science, USA; Science, Science Signaling, Science Translational Medicine

**Membership and Activity in Professional Societies:**

Executive Committee Member, American Society for Pharmacology and Experimental Therapeutics (ASPET)

American Association of Cancer Research (AACR)

American Society for Biochemistry and Molecular Biology (ASBMB)

International Association for Dental Research (IADR)

American Association for Dental Research (AADR)

Founding Member, International Academy of Oral Oncology (IAOO)

**Extramural Activities:**

**NIH Extramural**

1997 Ad-hoc member, Program Project Review Panel, DER, NCI

1999-2000 Member, Grant Review Panel, Division of Basic Science, NCI

2002 Ad-hoc Member, NIH Study Section, CDF-4

2002 Co-chair, FY2004 NIDCR Initiatives, Head and Neck Cancer, Molecular Anatomy of Head and Neck Cancer: A Genomic/Proteomic Approach

2003-2004 Member AIDS Malignancies Consortium, NIH

2003 Member, Biological Pathways and Networks Group, NIH Road Map Initiative

2004-2007 Member, NIH extramural Study Section, NDT

2005 Member, NIGMS, Special Emphasis Review Panel

2005 Member, Review Panel NRSA-NIH, Fellowships: Molecular and Cellular Mechanisms

2007 Ad-hoc Member, NIH extramural Study Section, Intercellular Interactions (ICI)

2008 Ad-hoc Member, NIH extramural Study Section, Tumor Microenvironment (TME)

Ad-hoc Member, NIH extramural Study Section, Molecular and Integrative Signal Transduction (MIST)

2008-2012 Member, NIH extramural Study Section, Tumor Microenvironment (TME)

2009 Member, NIH extramural Study Section, NIH Challenge Grants in Health and Science Research, American Recovery and Reinvestment Act of 2009

2010 Site Visit Review Panel, Laboratory of Biochemistry, Office of Biotechnology Products, Center for Biologics Evaluation and Research, FDA

2012 Reviewer, NIH extramural Study Section, Center for Scientific Review Special Emphasis Panel, Cancer Biology -2

2012 Reviewer, PREVENT Cancer Preclinical Drug Development Program, NCI

2013 Reviewer, NIH extramural Study Section, NCI Omnibus R03/R21 Grant Application Review, Cancer Biology-2

2013 Reviewer, NIH extramural Study Section, Special Emphasis Panel/Scientific Review Group Basic Translational (OBT)

2014 Participant, Center for Scientific Review’s Pilot Study, evaluation of relative quality of grant applications, NIH

2014 Reviewer, NIH/NCI extramural Study Section, Center for Scientific Review Special Emphasis Panel/Scientific Review Group ZCA1 SRB-C R

2014 Reviewer, PREVENT Cancer Preclinical Drug Development Program, NCI

2015 Reviewer, NCI Outstanding Investigator Award (OIA)

2016 Reviewer, NIH Study Section, Basic Mechanisms of Cancer Therapeutics (BMCT)

2016 Reviewer, PREVENT Cancer Preclinical Drug Development Program, NCI

2016 Reviewer, NCI Special Emphasis Panel, PROGRAM PROJECT III (P01)

2017 Reviewer, NIH Study Section, Basic Mechanisms of Cancer Therapeutics (BMCT)

2017-2023 Member, NIH Study Section, Mechanisms of Cancer Therapeutics (MCT-1)

**International**

1996-present Reviewer, The Israel Science Foundation

1997-present Reviewer, Italian Association for Scientific Research

1997-2002 Reviewer, German-Israeli Foundation for Scientific Research & Development

1997-2006 Reviewer, National Science Foundation

1998-2001 Member, Cancer Genome Anatomy Program

1998-2004 Member, Reviewing Council, FONCYT, Argentina

2003-2005 Member Reviewing Panel, The Israel Cancer Research Foundation

2008-2017Member Scientific Advisory Board, Max Planck Institute for Heart and Lung Research, Bad Nauheim, Germany, Germany

2009 Review Panel, Regional Collaborative Program SFB/TR23, Vascular Differentiation, and Remodeling, Manheim, Germany

2010-2017 Comité Científico Asesor Externo de la Red Temática de Investigación Cooperativa en Cáncer (RTICC), Spain

2010-2012 Member Reviewing Panel, The Israel Cancer Research Foundation

2013 Review Panel, Regional Collaborative Program SFB/TR23, Vascular Differentiation, and Remodeling, Mannheim, Germany

2013 Site Visit Review, Foundation Leloir Institute, Buenos Aires, Argentina

2015 Site Visit Review, Life Sciences Center, McGill University, Montreal, Canada

2016 Site Visit Review, Foundation Leloir Institute, Buenos Aires, Argentina

2018 Review Panel, Collaborative Research Centre (CRC) 1366 "Vascular Control of

Organ function”, Mannheim, Germany

**Selected NIH Intramural Activities outside the NIDCR**

1998-2000 Chair, Head and Neck Cancer Consortium, NIH

1998-2001 Member, NIH Central Tenure Committee

2001-2004 Member, Steering Committee, NIH-NCI Upper Aerodigestive Track Cancer Intramural Faculty

2003-2015 Member, NIDCD, Title 42 Standing Committee

2007 Member, Member, Search Committee, Scientific Director of the Center for Cancer Research, NCI

2011 Chair, Cancer Biology Search Committee, NIH Stadtman Investigator

2013 Representative, Office of the NIH Director, Tenure Committee, 3 Tenure Track reviews, NCI

2014 Member, NIDCR NIH Intramural Research Program (IRP) Review Group, a Vision for the IRP 2014

2014 Representative, Office of the NIH Director, Tenure Committee, 3 Tenure Track reviews, NCI

2019 Board of Scientific Counselors (BSC) for the Division of Intramural Research (DIR) in the National Institute of Allergy and Infectious Diseases (NIAID), NIH, Bethesda, MD

**Selected Activities within NIH NIDCR**

1995-1997 Member, Gene Targeting Facility Oversight Committee, NIDR

1995-1996 Member, Sequencing Core Facility Oversight Committee, NIDR

1997-2006 Member, NIDCR Administrative Oversight Committee

1997-2006 Member, NIDCR Tenure and Promotion Committee

2006-2015 Co-chair, Craniofacial Tissue Remodeling Initiative, NIDCR

2011 Organizing Committee, Workshop on salivary Gland Tumor Research: Current Status and Future Directions, Bethesda

2014 Member, NIDCR NIH Intramural Research Program (IRP) Review Group, a Vision for the IRP 2014

**Invited Presentations (past 10 years and planned)**

2019- Keynote, German PharmTox Summit, Stuttgart, Germany

Purdue University, West Lafayette, IN

Experimental Biology Symposium, Orlando, FL

AACR Special Conference on “The Hippo Pathway, Signaling, Cancer, and Beyond”, San Diego, CA

IADR Presidential Symposium, Vancouver, Canada

AACR Think Tank on Combination Therapies, Washington DC

Molecular Therapeutics of Cancer Center Conference, Tahoe resort, CA

International Symposium on Pharmacology of 7TM-receptors and downstream Signaling pathways, University of Bonn, Germany

UT Health School of Dentistry, Houston, TX

Baylor College of Medicine, Houston, TX

Boston University, Boston, MA

NYU Langone Health, New York, NY

NCI Innovative Molecular Analysis Technologies (IMAT) program,

Cedars Sinai Medical Center, Los Angeles, CA

Tohoku University Cancer Symposium, Sendai, Japan

2018- Keystone Meeting on GPCRs. Santa Fe, NM

Pathology Research Seminar Series at the Weill Cornell Medical College, NYC

AACR Annual Meeting, Chicago, IL

Experimental Biology Meeting, San Diego, CA

Sidney Kimmel Cancer Center at Thomas Jefferson University, Philadelphia, PA

Gordon Research Conference on “Phosphorylation and G-Protein Mediated Signaling Networks”, University of New England, Biddeford, ME

3rd New Horizons in Immunotherapu and Head and Neck Cancer, Pittsburgh, PA

NIH Head & Neck/Thyroid SPORE Workshop, Rockville, MD

AACR-LACOG Translational Cancer Medicine Conference, Sao Paolo, Brazil

Fourth South American Spring Symposium in Signal Transduction and Molecular Medicine, SISTAM 2018, Bariloche, Argentina

9th Xiamen Winter Symposium on the Hippo Signaling in Development & Disease, Xiamen, China

British Pharmacological Society-Molecular Pharmacology of GPCRs meeting, Monash University, Parkville, Victoria, Australia

2017- Keynote Speaker, 9th ÖGMBT Annual Meeting & 8th Life Science Meeting, Innsbruck, Austria

Stanley S. Scott Cancer Center Invited Speaker Series, New Orleans, LA

Loma Linda University, Loma Linda, CA

IADR, International Association of Dental Research Annual Meeting, San Francisco, CA

Symposium: "12 years SFB-TR23: From Vascular Differentiation and Remodeling to Organotypic Vasculature", Heidelberg, Germany

AACR-Head and Neck Cancer Meeting, San Diego, CA

G Protein Coupled Receptor Meeting, Boon, Germany

VanTol symposium at the 18th annual joint meeting of the Great Lakes GPCR Retreat, Ottawa, Canada

2016- UCSF Helen Diller Comprehensive Cancer Center Director’s Seminar Series, San Francisco, CA

Cancer Prevention Summit, American Association of Cancer Research (AACR), Leesburg, VA

The Salk Post-Translational Regulation of Cell Signaling Meeting, La Jolla, CA

Gordon Research Conference, Phosphorylation & G-Protein Mediated Signaling Networks, Biddeford, Maine

MedImmune, Gaithersburg, MD

3rd Annual Meeting of the International Ovarian in conjunction with International Symposium on Tumor Microenvironment & Therapy Resistance, Oklahoma City, OK

International Symposium ROOTS Program, Winning The War Against Cancer, Buenos Aires, Argentina

AAAS Annual Meeting. Session on Oral Cancer Epidemiology, Mechanism, and Early detection. Washington DC

Global Cancer Forum, New York City, NY

Experimental Biology, ASPET Symposium on GPCR signaling through Rho GTPases, San Diego, CA

Society of Clinical Investigation & Society of Pharmacology, joint Annual Meeting. Mar Del Plata, Argentina.

Bioquant and University of Heidelberg, Heidelberg, Germany

2015- American Association of Cancer Research (AACR), Philadelphia, PA

American Society of Clinical Oncology (ASCO), Chicago, IL

Cancer Prevention Think Tank, National Cancer Institute, Bethesda, MD

Keynote Lecture, ASPET Upstate New York Pharmacology Society 4th Annual Meeting, Rochester, NY

UNC Lineberger Comprehensive Cancer Center's Seminar Series, University of North Carolina (UNC), Chapel Hill, NC

The Second South American Spring Symposium in Signal Transduction and Molecular Medicine, SISTAM 2015, Argentina

The Dean's Biomedical Research Seminar, Virginia Commonwealth University, Richmond, VA

University of Virginia, Charlottesville, VA

University of California Los Angeles (UCLA), Vascular Biology Lecture, LA, CA

UCSD Moores Cancer Center, San Diego, CA

Gordon Research Conference, “Molecular Pharmacology”, Ventura, CA

2014- Great Lakes GPCR Retreat, Bromont, Canada, upcoming.

Keynote Lecture, 2014 American Head and Neck Society (AHNS) Annual Meeting and 5th World Congress-IFHNOS

Clinical Grand Rounds, Division of Cancer Medicine, MD Anderson Cancer Center, Houston, TX

UCSD Moores Cancer Center, San Diego, CA

Keynote Speaker, Dental Research in Review, University of North Carolina, Chapel Hill, NC

Distinguished Lecture Series at Massachusetts Eye and Ear Infirmary/Schepens Eye Research Institute, Harvard University, MA

Mini-Symposium, Cancer Biology, Medical School, University of Chile, Chile

Summer Course, Cancer Biology: From Basic to Clinic, University of Concepcion, Chile

IVMB, The 18th International Vascular Biology Meeting, Kyoto, Japan

West China School of Stomatology , Sichuan University, Chengdu, China

Leuven University, Leuven, Belgium

Maastricht University, Netherlands

2013- University of Pittsburgh Cancer Institute, Hillman Cancer Center, Pittsburgh, PA

The Weizmann Institute of Science, Israel

PABMB (Pan-American Association for Biochemistry and Molecular Biology) Plenary Lecture, Madrid, Spain

Annual Meeting, American Society for Biochemistry and Molecular Biology, ASBMB, Boston, MA

West China School of Stomatology, Sichuan University, Chengdu, China

GPCR Workshop, Maui, Hawaii

UC Berkeley, San Francisco, CA

Ocular Melanoma Workshop, Melanoma Society, Philadelphia, PA

2012- Keystone Meeting, G Protein-Coupled Receptors: Molecular Mechanisms and Novel Functional Insights, Alberta, Canada

NIH 2012 Demystifying Medicine Course, NIH, Bethesda, MD

Gordon Research Conference, Phosphorylation & G-Protein Mediated Signaling Networks, Biddeford, Maine

First Symposium on Head and Neck Cancer Stem Cells, Ann Arbor, MI

8th International Conference on Head & Neck Cancer, Toronto

NIH Clinical Center Grand Rounds

The Second South American Spring Symposium in Signal Transduction and Molecular Medicine, SISTAM 2012, Argentina

University of Sydney, Sydney, Australia

Australian Health & Medical Research Congress, Adelaide, Australia

2011- IMCB Institute of Molecular and Cellular Biology, Singapore

Institute for Cancer Research and Treatment, University of Torino, Torino, Italy

University of Illinois College of Medicine, Chicago, IL

AACR 102 Annual Meeting, Orlando, FL

MinnCResT Symposium: Head & Neck Cancer, University of Minnesota, Minneapolis, MN

Boston University, Department of Molecular and cellular Biology, Boston, MA

Yale University, Department of Pharmacology, New Haven, CT

Third Meeting, International Association of Oral Oncology (IAOO), Singapore

IADR Annual Meeting, Stem Cells, Reprogramming, Immunomodulation and Cancer session, San Diego, CA

IADR Annual Meeting, Stem Cells, New Targets for the Prevention and Treatment of Oral and Head and Neck Cancer session, San Diego, March 2011

Keynote Speaker, (IADR, Chile) Asociación Internacional de Investigación Dental – División Chile, Chile

Cell Signaling Networks, Merida, Yucatan, Mexico

Vascular Differentiation and Remodeling Meeting, Schloss Mannheim, Germany

Keynote Speaker, NCI Frederick Spring Research Festival, Frederick, MD

Visiting Professor, Georgetown University, Washington DC

2010- Moores UCSD Cancer Center, Director's Seminar Series, UCSD, CA

University of Buenos Aires, Buenos Aires, Argentina

Keynote Speaker, The First South American Spring Symposium in Signal Transduction and Molecular Medicine, SISTAM 2010, Cordoba, Argentina

IBYME, Buenos Aires, Argentina

Basic Science Speaker, 92nd Annual Meeting, American Association of Oral and Maxillofacial Surgeons (AAOMS), Chicago, IL

Visiting Professor and Clinical Ground Round Speaker, Memorial Sloan Kettering Cancer Center, New York, NY

University of Cincinnati, Cincinnati, OH

AACR 101st Annual Meeting, Washington, DC

Fudan University, Shanghai, China

2009- Keynote Speaker, U. Michigan School of Dentistry Research Day, Ann Arbor, MI

Symposium on “The Origin of Cancer”, Van Andel Institute, Grand Rapids, MI

Keynote Lecture, Symposium on Molecular Medicine, Virginia Commonwealth University, Richmond, VA

Keynote Speaker, Annual Meeting of the Argentinean Society for Biochemistry, n Tucuman, Argentina

Keystone Symposia: Angiogenesis and Lymphangiogenesis in Cancer, Big Sky, MT

FASEB Symposium on Lipid Signaling, Session Chair and Lecture, Carefree, AZ

Van Andel Institute, Origins of Cancer Symposium, Grand Rapids, MI

University of Maryland, Baltimore, MD

University of North Carolina, Chapel Hill, NC

University of Pittsburgh, Pittsburgh, PA

University of Chicago Cancer Research Center, Chicago, IL

Louisiana State University, Head and Neck Surgical Oncology Feist-Weiller Cancer Center, Shreveport, LA

ASPET’s Experimental Biology 2009 Symposia on Virally-encoded G-Protein Coupled Receptors as New Drug Targets, New Orleans, LA

Gordon Research Conference, “Molecular Pharmacology”, Il Ciocco, Italy

Unidad de Biologia Celular Centro Nacional de Microbiologia, Instituto de Salud Carlos III, Madrid, Spain

Centro de Investigacion del Cancer IBMSS, Salamanca, Spain

2008- Clinical Ground Round, MD Anderson, Houston, TX

New York Academy of Science, New York, NY

North America Vascular Biology Organization (NAVBO), Biology of Signaling in the Cardiovascular System Workshop, Hyannis, MA

Vascular Differentiation and Remodeling, Frankfurt, Germany

International Conference on Frontiers of Dental and Craniofacial Research, Beijing, China.

Hyman Niznik Memorial Lectureship, 9th Annual Joint Meeting of the Great Lakes: G Protein-Coupled Receptor Retreat, Bromont, Canada

Merk Frosst Lecture, Institut de Recherches Cliniques de Montreal (IRCM), Montreal, Canada

# Symposia Organized:

1995 Workshop on Signaling through G proteins, NIH

1996 Workshop on Signal Transduction from the Membrane to the Nucleus, NIH

1996 Third Annual Signal Transduction Therapy Conference, San Diego, California

1996 Symposium on Regulation of Protein Kinases Involved in Cell Division, Congress of the Pan American Association of Biochemistry and Molecular Biology, Pucon, Chile

1998 Workshop on G proteins, 10th International Conference on Second Messengers & Phosphoproteins, Jerusalem, Israel

1999 Workshop on “Head and Neck Cancer Priority Setting”, organizing committee, NIH

1999 Keystone Winter Symposia, “Oncogene Networks” and Session on “Cell Surface Receptors”

2002 Workshop on Exchange factors, Juan March Foundation, Madrid, Spain

2002 Symposium, Frontiers in Molecular Mechanisms in Cancer, Strategies and Application, Santander, Spain

2002 NCI, NIDCD, NIDCR, Trans-NIH Squamous Carcinogenesis Retreat

2002 International Oral Cancer Tissue Array Initiative, Organizing Meeting, NIDCR

2004 Tva-Animal Models Meeting, Bethesda, MD

2005 Advisory Organizing Committee, 10th International Congress on Oral Cancer (ICOOC), Crete, Greece

2006 “Oral Cancer”, Naresuan University, Phitsanulok, Thailand

2006 Organizing Committee, “Workshop on Biology and Treatment of Malignant Salivary Gland Cancers”, NIH, Bethesda, MD

2006 Elected, Co-chair, Gordon Research Conference, “Phosphorylation & G-Protein Mediated Signaling Networks”, 2008

2007 Advisory Committee, International Association of Oral Oncology, 1st World Congress, Amsterdam

2008 Co-chair, Gordon Research Conference, “Phosphorylation & G-Protein Mediated Signaling Networks”, Biddeford, Maine

2008 Organizing Committee, International Conference on Frontiers of Dental and Craniofacial Research, Beijing, China.

2008 Program Committee, 7th International Conference on Head and Neck Cancer, San Francisco, CA.

2008 Program Committee, Workshop on Salivary Gland Tumor Research: Current Status and Future Directions. Bethesda, MD.

2009 Scientific Advisory Committee, International Oral Oncology Meeting, Toronto, Canada.

2010 Co-Organizer, The First South American Spring Symposium in Signal Transduction and Molecular Medicine, SISTAM 2010, Cordoba, Argentina

2011 Scientific Advisory Committee, Cell Signaling Networks 2011, Merida, Yucatan, Mexico

2012 Program Organizing Committee, Workshop on salivary Gland Tumor Research: Current Status and Future Directions, Bethesda

2012 Co-Organizer, The Second South American Spring Symposium in Signal Transduction and Molecular Medicine, SISTAM 2012, Argentina

2015 Co-Organizer, The Third South American Spring Symposium in Signal Transduction and Molecular Medicine, SISTAM 2015, Argentina

2016 Co-Organizer, Global Cancer Forum, New York City, NY, 2016

2016 Co-organizer, Symposium on Cancer Stem Cells as Pharmacological Targets, ASPET/EB Annual Meeting, San Diego, 2016

2017 Co-Organizer, AACR-AHNS Conference on Head and Neck Cancer, San Diego, CA

2017 Organizer, Moores Cancer Center Science Retreat, La Jolla, CA

2018 Co-Organizer, Fourth South American Spring Symposium in Signal Transduction and Molecular Medicine, SISTAM 2018, Bariloche, Argentina

2018 Co-organizer, Symposium on G Proteins and GPCRs in Cancer, ASPET/EB Annual Meeting, San Diego, CA

2018 Organizer, Moores Cancer Center Science Retreat, La Jolla, CA

2019 Elected Co-Chair, Gordon Conference in Molecular Pharmacology, Ventura CA

**Funding and Support**

Research Support (including only current funded grants in which Dr. Gutkind is a PI)

R01DE026644 (MPI Gutkind/Lippman) 01/01/2017-12/31/2021

NIH/NIDCR

Targeting Signaling Vulnerabilities for Oral Cancer Prevention

The major goals of this project are to discover novel genomic markers of response and resistance to metformin in oral premalignancy, to test the influence of bioenergetic pathways involving LKB1/AMPK, and mTOR and YAP inhibition in the activity of metformin, and to apply genetic screens to identify novel molecular mechanisms determining response or resistance to metformin.

Role: PI

R01DE026870 (PI Gutkind)                         09/01/2017-08/31/2022

NIH/NIDCR

Targeting the EGFR-PI3K/mTOR Signaling Circuitry: A Network-Based Approach for Oral Cancer Precision Therapy

The goals of this project are to identify novel systems vulnerabilities cetuximab and PI3K/mTORi sensitization and the impact of targeting this pathway on the tumor and immune microenvironment.

Role: PI

R33CA225291 (PI Gutkind) 09/01/2018-08/31/2021

NIH/NCI

Area C: Genome-wide identification and targeting of resistance to cancer therapy

This project aims to establish a new genome wide approach for identifying and targeting resistance pathways in cancer and experimentally test and study its applications in specific cancer types, including breast cancer, colon cancer, head and neck and melanoma.

Role: PI

U01DE028227 (Schoenberger/Gutkind/Rao) 09/01/2018-08/31/2023

NIH/NIDCR

Stimulating Neo-Antigen Specific T Cell Responses in Head and Neck Cancers

The goals of this project is to study experimentally the tumor-T cell ecosystem in head and neck squamous cell carcinoma (HNSCC), and will exploit the emerging information to develop novel approaches to enhance the anti-tumor immune response, resulting in tumor regression (cure).

Role: MPI

Recently Completed Grant Support:

*The laboratory was funded from 1996-2015 by the NIDCR Intramural Research Program, NIH.*

* Project Z01DE00551, Molecular Mechanisms of Growth Control and Carcinogenesis
* Project Z01DE00558, Oral Carcinogenesis

2016 PEDAL15 Research Grant Award, Pedal the Cause. The GNAS-PKA Onco-Signaling Network in Colorectal Malignancies

2015 Million Dollar Bike Ride Pilot Grant, University of Pennsylvania Orphan Disease Center. Development of next-gen animal models for fibrous dysplasia (FD)/McCune-Albright syndrome (MAS)

2004-2015 Intramural AIDS Targeted Antiviral Program (IATAP)

Study of AIDS-associated malignancies, with emphasis on Kaposi’s Sarcoma and HPV+ cancers

American Asthma Foundation (GPCR-trafficking and tachyphylaxis)

Human Science Frontier Program (Clonogenic cooperation in cancer)

**Clinical Protocols**

* NCT02581137, Metformin for Oral Cancer Prevention (M4OC-Prevent). UCSD Moores Cancer Center.

PI: Scott Lippman; Gutkind J.S., Co-Lead, Open

* NCT01195922, A Pilot Trial Targeting mTOR as a Novel Mechanism-Based Neoadjuvant Therapy for Head and Neck Cancer. NIDCR/NCI/NIDCD/MUSC.

PI: Gutkind J.S. 2011. Completed, 2018.

* 14CN018. Pilot Study to Evaluate the Natural History of Head and Neck Cancer Precursors in Taiwan. NCI/NIDCR, 2014.

PI: Anil Chaturvedi. Open.

* T-D-0024, The Molecular Anatomy of Oral Wound Healing. NIDCR.

PI: Gutkind J.S. 2010. Completed, 2014.

# Invention Reports and Patents:

* U.S. Patent 5,384,243, issued January 24, 1995. J. Silvio Gutkind and Keith C. Robbins: Method for screening an agent for its ability to prevent cell transformation.
* NIH Ref No. E-302-2008, Chemoprevention of Head And Neck Squamous Cell Carcinomas. US Patent Application No. 13/059,335 filed August 20, 2009. Canadian Patent Application No. 2734828 filed August 20, 2009. European Patent Application No. 09791732.2 filed August 20, 2009
* NIH Ref No. E-282-2009, Sustained Release Delivery Systems for the Prevention and Treatment of Head and Neck Cancers. International Patent Application No. PCT/IL2010/000694 filed August 25, 2010
* U.S. Patent 9,151,762, issued October 6, 2015. J. Silvio Gutkind, Vyomesh Patel, Alfredo Molinolo, Timothy D. Veenstra. Identification of DSG3 as a Biomarker for the Detection of Metastasis in Lymph Nodes.
* U.S. Patent 9,278,090, issued March 8, 2016. J. Silvio Gutkind J. Silvio Gutkind, Ramiro Iglesias-Bartolome, Vyomesh Patel, Ana p. Cotrim, Alfredo Molinolo, and James B. Mitchell. Methods of preventing the development of mucositis and related disorders

# Ph.D. Thesis Directed:

# G.M. Kalinec, Ph.D., University of Cordoba, Cordoba, Argentina, 1992

M. Chiariello, M.D. Ph.D., University of Naples, Naples, Italy, 1999. Co-director

L.M. Laguinge, Ph.D., Catholic University of Cordoba, Cordoba, Argentina, 2000

C. Leethanakul, D.D.S., Ph.D., Chulalongkorn University, Bangkok, Thailand, 2000

P. Amornphimoltham, D.D.S., Ph.D., University of Maryland, 2006

M.D. Castellone, M.D., Ph.D., University of Naples, Naples, Italy, 2005. Co-director

K. Leelahavanichkul , D.D.S. Ph.D., Tammasat University, Bangkok, Thailand, 2011

X. Feng, PhD., West China School of Stomatology, Sichuan University, Chengdu, China, 2013

Ann Hoeben, M.D., Ph.D., Catholic University of Leuven, Belgium, 2014

Z. Wang, Ph.D., West China School of Stomatology, Sichuan University, Chengdu, China, 2014

X. Wu, Ph.D., West China School of Stomatology, Sichuan University, Chengdu, China, 2017

X. Zhao, PhD., West China School of Stomatology, Sichuan University, Chengdu, China, 2018

**Bibliography** [Author=(Gutkind J\* OR Gutkind S\*)]. [Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/?term=Gutkind+JS+or+Gutkind+S+Not+Gutkind+Sarah)

**Total 495 publications: 416 peer-reviewed studies, 45 review articles, 34 book chapters, with 54,859 citations and an H index of 104 [ISI] and 122 [Google Scholar]**

**Selected publications, signal transduction research:**

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