# University of California, San Francisco CURRICULUM VITAE

Name: Thea Dorothy Tlsty, PhD

**Position:** Professor, Step 9

Pathology

School of Medicine

Address: Box 0511

Core Campus, HSW, 513

University of California, San Francisco

San Francisco, CA 94143 Voice: 415-502-6115 Fax: 415-502-6163

Email: thea.tlsty@ucsf.edu

### **EDUCATION**

1969 - 1973	University of South Florida	B.S.	Zoology
1974 - 1976	University of North Carolina (transferred)	Doctoral Candidate	Pathology
1976 - 1980	Washington University School of Medicine	Ph.D.	Molecular/Cellular Biology
-	Advisor: Michael Lieberman		
1980 - 1981	Washington University School of Medicine	Postdoctoral Fellow	Microbiology
-	Advisor: Douglas Berg		
1981 - 1984	Stanford University, Stanford, CA	Postdoctoral Fellow	Biological Sciences
-	Advisor: Robert Schimke		
1984 - 1985	Stanford University, Stanford, CA	Research Assistant Professor	Biological Sciences

## PRINCIPAL POSITIONS HELD

1995 - 1996	University of California, San Francisco	Associate Professor	Pathology
1996 - present	University of California, San Francisco	Professor	Pathology

### OTHER POSITIONS HELD CONCURRENTLY

1972 - 1974 University of South Florida, FL Undergraduate Chemistry

-	Advisor: David Wilkinson		
1974 - 1976	University of North Carolina, NC	Doctoral Candidate	Pathology
-	Advisor: Michael. W. Lieberman		
1976 - 1980	Washington University, St. Louis, MO	Doctoral Candidate	Biomedical Sciences
-	Advisor: Michael W. Lieberman		
1980 - 1981	Washington University, St. Louis, MO	Postdoctoral Fellow	Microbiology; Immunology
-	Advisor: Douglas E. Berg		
1982 - 1982	University of Geneva, Switzerland;	Visiting Scientist	Molecular Biology
-	Advisor: Jeffrey H. Miller		
1981 - 1984	Stanford University, CA	Postdoctoral Fellow	Biological Sciences
-	Advisor: Robert T. Schimke		
1984 - 1985	Stanford University, CA	Research Assistant Professor	Biological Sciences
1985 - 1992	Lineberger Comprehensive Cancer Center, UNC, NC	Assistant Professor	Pathology
-	UNC Molecular Biology and Biotechnology	Member	Program
1992 - 1992	University of Zimbabwe	Visiting Faculty	Physiology
1992 - 1995	Lineberger Comprehensive Cancer Center, UNC, NC	Associate Professor	Pathology
-	Lineberger Comprehensive Cancer Center, UNC, NC	Member (UNC)	Genetic Toxicology
-	UNC Molecular Biology and Biotechnology	Member	Program
-	Biological Sciences	Member	Program
-	Biomedical Sciences	Member	Program
-	Cancer Research Institute	Member	Molecular
1995 - 1996	University of California, San Francisco, CA	Associate Professor	Pathology
1996 - present	University of California, San Francisco	Professor	Pathology

-	UCSF Center for Translational Research	Director	Mol. Genet. Cancer
-	UCSF Comprehensive Cancer Center	Member	Program
-	Program in Biological Sciences (PIBS)	Member	Program
-	Program in Biomedical Sciences (BMS)	Member	Program
-	UCSF Institute for Regenerative Medicine	Member	Molecular

# **HONORS AND AWARDS**

1969	Gold Key Honor Society, member.	
1981	Viral Oncology Fellowship	Washington University
1982	Cancer Biology Program Fellowship	Stanford University
1986	Pharmaceutical Manufacturers Association Starter Grant Award	
1997	1st Gerald Wogan Distinguished Lectureship, Boston, MA	
1998	Distinguished Lecture Series	Harvard School of Public Health
1998	8th Annual corpus Ortigoza Distinguished Lectureship, Houston, TX	
2001	Avon Scholar	
2001	Richard T. Israels Distinguished Lectureship	British Columbia Cancer Research Centre
2001	Fellow, American Association for Advancement of Science, 2001	
2002	Meyenburg-Stiftung Honorary Lectureship, Heidelberg, Germany	
2003	Knudson Award	NCI
2004	Distinguished Lecture in Molecular Medicine	University of Toronto
2005	Olaf Pearson Lecture, Cleveland, OH	
2006	Robert S. Harris Lecture	Massachusetts Institute of Technology
2010	Kingsbury Lectureship	Yale University
2011	Komen Scholar	

2012	The Nakahara Memorial Prize of the 43rd International Symposium of the Princess Takamatsu Cancer Research Fund	Princess Takamatsu Cancer Research Fund
2013	Blaffer Distinguished Lecturer	MD Anderson, Houston, TX
2014	Baxter Research Institute Keynote Speaker	Stanford University, Palo Alto, CA
2014	Biomedical Engineering Distinguished Lecturer	University of California, Irvine, CA
2015	Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research Distinguished Speaker	USC, Los Angeles, CA
2015	US Oncology Research Translational Oncology Keynote Speaker	Scottsdale, AZ
2015	Sylvester Comprehensive Cancer Center at the University of Miami Distinguished Lecturer	Miami, FL
2016	Outstanding Investigator Award	Bethesda, MD

#### **KEYWORDS/AREAS OF INTEREST**

Regulation of cellular plasticity and genomic integrity via epigenetic and genetic processes, stochastic fluctuations, metaplasia, phenotypic switching, study of cellular systems which respond to DNA damage, stromal/epithelial interactions, risk stratification, mammographic density and desmoplasia, cell cycle checkpoints, regulation of gene amplification and the formation of other chromosomal abnormalities, nuclear architecture and chemical carcinogenesis.

## **CLINICAL ACTIVITIES**

#### **CLINICAL ACTIVITIES SUMMARY**

Program Director - Center for Translational Research in the Molecular Genetics of Cancer

## **PROFESSIONAL ACTIVITIES**

## **MEMBERSHIPS**

1976 -	American Association for the Advancement of Science
1985 -	American Society for Microbiology
1981 -	Association for Women in Science
1988 -	American Association for Cancer Research
1988 -	American Society for Biological Chemists & Molecular Biologists
1987 -	Women in Cancer Research

1992 -	Women in Cell Biology	
1995 -	California Society of Pathologists	
1995 -	Association of Molecular Pathologists	
1995 -	American Society for Investigative Pathology	
1995 -	American Society for Cell Biology	
1995 -	American Society for Biochemistry and Molecular Biology	
SERVICE TO	PROFESSIONAL ORGANIZATIONS	
-	Review Panels, Grants and Site Visits	
1987 -	NIH, Molecular Cytology Section	Ad Hoc Reviewer
1989 -	NIH, Molecular Cytology Section	Ad Hoc Reviewer
1990 -	NSF, Eucaryotic Genetics Program, ad hoc reviewer	Ad Hoc Reviewer
1991 - 2001	NIH, Pathology B Study Section	Ad Hoc Reviewer/Reserve Reviewer/Member
1994 -	NIH, Sloan-Kettering Program Project Grant review	Site Visit Reviewer
1994 -	NIH/NCI, National Institute of Health/National Cancer Institute, Internal Review, Laboratory of Molecular Pharmacology	Site Visit Reviewer
1994 -	Karolinska Institute, Internal Institutional Evaluation Committee	Member
1995 - 1998	NIEHS, National Institutes of Environmental Health Sciences, Board of Scientific Advisors	Member
1995 -	NIH/NCI, National Institute of Health/National Cancer Institute, Internal Review, Laboratory of Viral Carcinogenesis	Site Visit Reviewer
1995 -	DOE, Office of Health and Environmental Research, Los Alamos National Laboratory	Site Visit Reviewer
1996 -	AACR Board of Directors Meeting, Board of Directors, Philadelphia, PA	Member
1996 -	NIEHS, Board of Scientific Counselors, Durham, NC	Reviewer
1996 -	U.S. Army Medical Research and Material Command	Reviewer

Breast Cancer Research, Peer Review Panel

Member/Consultant, Arlington, VA

1997 -	DOD, US. Army Medical Research and Materiel Command (USAMRMC) Breast Cancer Research Program (BCRP), ad hoc reviewer, programmatic reviewer	Ad Hoc Reviewer, Programmatic Reviewer
1997 -	AACR Board of Directors Meeting, Board of Directors, Rockville Pike, Rockville, MD,	Member
1997 -	NIEHS Board Meeting, Board of Directors, Raleigh, NC	Member
1997 -	UCSF Cancer Research Institute: Inaugural Symposium Committee	Chair
1997 -	Department of Health and Human Services National Institute of Health Division of Research Grants, Oncological Sciences Initial Review Group, Pathology B Study Section, Washington, DC	Reviewer
1997 -	NIH Pathology B Study Section, Washington, DC	Reviewer
1997 - 2001	NIH/NCI, National Institute of Health/National Cancer Institute, "Tumor Hypoxia: Molecular Studies and Clinical Exploitation," Program Project Retreat, Stanford, CA, Martin Brown, P.I.	External Advisor
1997 -	NIEHS Board of Scientific Counselors, Review of the Laboratory of Molecular Genetics, Durham, NC	Reviewer
1997 -	DOD, U.S. Army Medical Research and Material Command Breast Cancer Research	Site Visit Reviewer
1998 - 2000	NIEHS, National Institutes of Environmental Health Sciences, Board of Scientific Advisors	Chair
1998 -	NIH Pathology B Study Section, San Diego, CA	Reviewer
1998 - 2002	NIH, Werner's Syndrome Program Project Grant Retreat, University of Washington, Seattle, WA	External Advisor
1999 -	NIH/NCI, National Institute of Health/National Cancer Institute, Mouse Models of Human Cancers Consortium	Reviewer
1999 -	NIH/NCI, National Institute of Health/National Cancer Institute, State of the Science Workshop in Prostate Cancer	Speaker
1999 -	DOD, US. Army Medical Research and Materiel Command (USAMRMC) Breast Cancer Research Program (BCRP)	Ad Hoc Reviewer, Programmatic Reviewer
2000 -	NIH/NCI, National Institute of Health/National Cancer Institute, Roles and Regulation of p53, Columbia University, Carol Prives, P.I.	Site Visit Reviewer

2001 - 2006	NIH/NCI, National Institute of Health/National Cancer Institute, Board of Scientific Counselors, Subcommittee	Member
2001 -	DOD, US. Army Medical Research and Materiel Command (USAMRMC) Breast Cancer Research Program (BCRP)	Ad Hoc Reviewer, Programmatic Reviewer
2002 - 2006	General Motors, Cancer Research Foundation Awards Assembly	Voting Member
2003 -	Board of Scientific Counselors, National Cancer Institute, Washington, DC	Member
2003 -	NIH/NCI Board of Scientific Counselors Meeting, Bethesda, MD	Member
2003 -	NIH/NCI, National Institute of Health/National Cancer Institute, Combined Intramural PI Retreat, Chantilly, VA	Knudson Award Speaker
2003 -	NIH/NCI, National Institute of Health/National Cancer Institute, Internal Review, Bethesda, MD, Laboratory of Cellular Oncology and the NIEHS Laboratory of Molecular Carcinogenesis	Site Visit Reviewer
2003 -	NIH/NCI, PO1, "Mechanism-Based Approaches for the Management of Prostate Cancer," Program Project Application, Houston, TX, Arap Wadih, P.I.	Site Visit Reviewer
2004 -	NIH/NCI Board of Scientific Counselors Meeting, Bethesda, MD	Member
2005 - 2008	American Cancer Society, Peer Review Committee	Member
2005 - 2006	NIH/NCI, National Institute of Health/National Cancer Institute, Board of Scientific Counselors	Chair
2005 - 2009	NCI/TRWG, The Translational Research Working Group	Member
2005 -	NIH/NCI, National Institute of Health/National Cancer Institute, Joint NCAB, PCP, BSA and BSC Board Retreat, Bethesda, MD	Member
2005 -	NIH/NCI, National Institute of Health/National Cancer Institute, Roles and Regulation of p53, Columbia University, Carol Prives, P.I.	Site Visit Reviewer
2005 -	CRUK, Quinquennial Review of the Cancer Research UK, "Chromosomal Replication Group", 2005	Site Visit Reviewer
2005 -	NIH/NCI, National Institute of Health/National Cancer Institute, PO1, Signal Transduction II, Cluster Review	Site Visit Reviewer
	Meeting, Irving, TX	

2006 -	1st Annual Albert Szent-Gyorgyi Prize Committee for Progress in Cancer Research, New York, NY	Voting Member
2006 -	PPG External Review Committee/Retreat Tumor Hypoxia: Molecular Studies and Chemical Exploration , Menlo Park, CA	Member
2006 -	BCRP, USAMRMC programmatic review of BCRP proposals, BCRP Integration Panel, Baltimore, MD	Ad Hoc Member
2007 -	BCRF/AACR, Breast Cancer Research Foundation- AACR Grants for Translational Breast Cancer Selection Committee	Member
2007 -	NIH, National Institute of Health, NIH Director's Pioneer Award Program	Reviewer
2007 -	NIH/NCI, National Institute of Health/National Cancer Institute, Breast Cancer Pre-Malignancy Steering Committee, Bethesda, MD	Member
2007 -	ECFPR, European Commission's 7th Framework Program for Research topic, "Genomic Instability and Genomic Alterations in Pre-Cancerous Lesions and/or Cancer"	Expert Evaluator
2007 -	Dana Farber/Harvard Cancer Center, Harvard SPORE in Breast Cancer Retreat with External Advisory Board	External Advisor
2007 -	MD Anderson Cancer Center, University of Texas, Lung Cancer SPORE Scientific Advisory Board	External Advisor
2007 -	2nd Annual Albert Szent-Gyorgyi Prize Committee for Progress in Cancer Research, New York, NY	Voting Member
2008 -	NIH, National Institute of Health, Operational Planning Meeting for the NIH Reference Epigenomes	Member
2008 -	POCRC, Pacific Ovarian Cancer Research Consortium, External Advisory Board	External Advisor
2008 -	MPM, MPM's Medical Scientific Advisory Board Retreat, Regulatory Cell Fates in Medicine	External Advisor
2008 -	Dana Farber/Harvard Cancer Center, Harvard SPORE in Breast Cancer Retreat with External Advisory Board	External Advisor
2008 -	CISN, Cancer Information and Support Network Incorporated, Medical Advisory Board	External Advisor, Website
2008 -	NIH/NCI, National Institute of Health/National Cancer Institute, Applied Research Program at the Division of Cancer Control and Population Sciences, Website devoted to "Ductal Carcinoma In Situ (DCIS) Research Resources"	Reviewer, Website

2009 - 2011	NIH/NCI, National Institute of Health/National Cancer Institute, CaHUB Acquisition of Normal Tissues Taskforce	Scientific Advisor
2009 -	AVON, Avon Foundation	Ad Hoc Reviewer
2009 - present	Avon/Dr. Susan Love Army of Women - Board of Scientific Advisors	Scientific Advisor
2009 - present	Susan G Komen for the Cure Foundation - Board of Scientific Advisors	Scientific Advisor
2009 -	NIH/NCI, National Institute of Health/National Cancer Institute, DCIS Inter-SPORE Roundtable Meeting	Member
2009 -	UMCCC, University of Michigan Comprehensive Cancer Center, Breast Cancer SPORE, External Advisory Board	External Advisor
2010 -	Cancer Prevention Research Senior and Deputy Editorial Board Meeting, Washington, DC	Member
2011 -	Washington University, School of Medicine, Siteman Innovative Fund	External Reviewer
2012 -	Komen Review Panel, Dallas, Texas	Member
2013 -	Komen Review Panel, Dallas, Texas	Member
2013 -	NIH/NCI Intramural Site Visit for the Laboratory of Human Carcinogenesis, Washington, DC	Mentor
2013 - present	Women in Cancer Research, Advisory Board	Scientific Advisor
2014 - present	American Association for Cancer Research, Women in Cancer Research, Lectureship Award Committee	Chair
2014 -	American Association for Cancer Research, Women in Cancer Research, Charlotte Friend Lectureship, Award Committee	Chair
2014 -	Duke University Pharmacology Department, Review Committee	Chair
2014 -	The Wellcome Trust, London, UK	Reviewer
2014 -	NIH/NCI Provocative Questions Study Section, Bethesda, MD	Reviewer
2014 - present	Estrogen, SERMS and TSECS, Pfizer, Tampa, FL	Advisory Board
2015 - present	Multiple Myeloma Research Institute, Little Rock, AK	Scientific Advisory Board
2015 -	Congressionally Directed Medical Research Program/Breast Cancer Research Program Study Section, Bethesda, DC	Reviewer

2016 -	Science Foundation Ireland, Dublin	Reviewer
2016 -	NIH/NCI Provocative Questions Study Section, Bethesda, MD	Reviewer
2016 -	Multiple Myeloma Research Institute, PO1 External Advisory Board Review Little Rock, AK	Reviewer
2016 -	NIH/NCI Outstanding Investigator Award Study Section, Bethesda, MD	Reviewer
2016 -	American Association for Cancer Research, Women in Cancer Research, Executive Advisory Board	Advisory Board
2016 -	NIH/NCI Physical Sciences Oncology Center Workshop for Applied Mathematics in Germinating Oncology Solutions (AMIGOS)	Mentor
2016 -	International Society for Stem Cell Research, Abstract Committee	Member
2016 -	Rainin Foundation, Innovative Award Reviewer	Member
2016 -	NIH/NCI Cancer Biomarkers Study Section (CSBB), Washington, DC	Reviewer
-	Program Committees	
1991 -	American Association for Cancer Research Annual Symposium	Member
1992 -	American Association for Cancer Research Annual Symposium	Member
1992 -	American Association for Cancer Research Task Force on Carcinogenesis,	Member
1993 -	UNC Lineberger Comprehensive Cancer Center Annual Symposium, "Loss of Genomic Integrity in Neoplasia"	Organizer
1993 -	American Association for Cancer Research Rhoades Award Committee	Member
1993 - 1996	American Association for Cancer Research, Special Conferences Committee	Member
1994 -	American Association for Cancer Research Special Conferences, "Cancer: Perturbations in Cell Cycle Control and Genomic Integrity," Banff, Canada	Co-organizer with Larry Loeb
1994 -	Program in Molecular Biology and Biotechnology, Symposium on "Chromosome Structure and Dynamics: Biological Consequences of Genomic Instability," Chapel Hill, NC	Organizer

1994 - 1997	American Association for Cancer Research, elected to Board of Directors	Member
1994 -	American Association for Cancer Research, By-Laws Committee	Member
1994 -	American Association for Cancer Research, Public Education Committee	Member
1994 -	American Association for Cancer Research, Research Integrity & Ethics Committee	Member
1995 -	Princess Takamatsu Cancer Symposium	Co-organizer with Larry Loeb
1995 -	American Association for Cancer Research, Rhodes Award Committee	Chair
1995 -	American Association for Cancer Research, Legislative Committee in California	Member
1996 -	American Association for Cancer Research, Gertrude Elion Awards Committee	Chair
1997 -	American Association for Cancer Research, Program Committee	Member
1998 -	American Association for Cancer Research, Clowes Memorial Awards Committee	Member
1998 -	13th Aspen Cancer Conference, Organizing Committee	Member
1998 -	American Association for Cancer Research, Member Development Committee	Member
1998 -	American Association for Cancer Research, Ad hoc Committee on Research Integrity & Ethics	Member
1998 -	American Association for Cancer Research, Molecular Biology Program Committee	Member
1998 -	American Society for Investigative Pathology Program Committee	Member
1998 - 2004	Women in Cell Biology, Board of Directors	Member
1999 -	American Association for Cancer Research, Clowes Memorial Awards Committee	Member
1999 -	14th Aspen Cancer Conference, Organizing Committee	Member
1999 -	American Association for Cancer Research, Development Committee	Member
1999 - 2004	Women in Cell Biology, Investigator Awards Committee	Member

1999 -	AACR, Career Development Awards Committee, Breast Cancer Research	Member
1999 - 2001	General Motors Cancer Research Foundation Awards Program Committee	Member
2000 -	10th International p53 Workshop, Monterey, CA	Organizer
2000 -	15th Aspen Cancer Conference, Organizing Committee	Member
2000 - 2004	General Motors Cancer Research Foundation Award Assembly	Member
2001 - 2005	Ethel and Jane Sokolow Memorial Cancer Endowment Lectureship Committee	Member
2001 -	16th Aspen Cancer Conference, Organizing Committee	Member
2002 -	9th Prouts Neck Meeting on Prostate Cancer, Prouts Neck, ME, Organizing Committee	Member
2002 -	17th Aspen Cancer Conference, Organizing Committee	Member
2002 -	11th International p53 Workshop, Barcelona, Spain, Organizing Committee	Member
2003 -	18th Aspen Cancer Conference, Organizing Committee	Member
2004 -	12th International p53 Workshop, Dunedin, New Zealand, Organizing Committee	Member
2004 - 2006	American Association for Cancer Research, Nominating Committee	Member
2004 -	19th Aspen Cancer Conference, Organizing Committee	Member
2005 -	13th International p53 Workshop, New York, NY, Organizing Committee	Member
2005 -	American Association for Cancer Research, Program Committee	Member
2005 -	20th Aspen Cancer Conference, Organizing Committee	Member
2005 -	2nd International Conference on Breast Cancer, Molde, Norway, Organizing Committee	Member
2005 - 2008	Albert Szent-Gyorgyi Award Committee	Member
2005 -	The Campbell Family Institute for Breast Cancer Research, Clinical and Scientific Advisory Board	Scientific Advisor
2005 - 2006	Translational Research Working Group	Member
2006 -	Aspen Cancer Conference Advisory Committee	Member
2006 -	American Society for Cell Biology, Program Committee	Member

2006 -	American Association for Cancer Research, Program Committee	Member
2006 -	American Association for Cancer Research, Nominating Committee	Member
2006 -	21st Aspen Cancer Conference, Organizing Committee	Member
2006 -	18th EORC-NCI-AACR, Scientific Committee	Member
2006 -	NIH/NCI Annual Meeting of the Board of Scientific Chairs, Bethesda, MD	Chair
2006 -	American Association for Cancer Research, Scientific Program Committee	Co-Chairperson
2006 -	21st Aspen, Cancer Conference: Mechanisms of Toxicity, Carcinogenesis, Cancer Prevention and Cancer Therapy, Aspen, CO	Invited Advisory Committee Member
2006 - 2007	American Association for Cancer Research, Selection Committee for the Laboratory Research Awards	Co-Chairperson
2006 - 2007	American Association for Cancer Research, Human Epigenome Task Force	Member
2006 - 2007	American Association for Cancer Research-WICR Leventhal Scholar in Cancer Research Committee	Member
2007 -	American Association for Cancer Research, Education Committee	Member
2007 -	Breast Cancer Research Foundation - AACR Grants for Translational Breast Cancer Research	Member
2007 -	22nd Aspen Cancer Conference, Organizing Committee	Member
2007 -	SPORE Scientific Advisory Board	Scientific Advisor
2007 -	NIH Director's Pioneer Awards	Member
2007 -	NIH Director's New Innovator Award	Member
2007 - 2008	Kirk A. Landon-AACR Prize for Basic Cancer Research, Selection Committee	Member
2008 - 2009	Kirk A. Landon-AACR Prize for Basic Cancer Research, Selection Committee	Chair
2008 -	23rd Aspen Cancer Conference, Organizing Committee	Member
2008 - 2009	Scientific Review Committee for the 31st Annual SABCS	Member
2008 -	American Association for Cancer Research Centennial Grants Committee	Reviewer
2008 - 2010	American Association for Cancer Research, Human Epigenome Task Force, Executive Committee	Member

2008 - 2010	Dr. Susan Love Research Foundation/Army of Women Scientific Advisory Committee	Member
2009 -	American Association for Cancer Research, Frontiers in Cancer Prevention, Program Committee	Member
2009 -	NCI Process to Accelerate Translational Science Working Group (PATS WG), Working Group	Member
2009 -	24th Aspen Cancer Conference, Organizing Committee	Member
2010 -	15th International p53 Workshop, Philadelphia, PA, Organizing Committee	Member
2010 -	Gordon Research Conference on Genetics and Epigenetics of Cancer, Ventura, CA	Co-organizer
2010 -	25th Aspen Cancer Conference, Organizing Committee	Member
2010 -	Keystone Conference on Extrinsic Control of Tumorigenesis and Progression, Vancouver, Canada	Co-organizer
2011 -	Keystone Conference on Stem Cells in Development, Tissue Homeostasis and Disease, Santa Fe, NM	Co-organizer
2011 -	26th Aspen Cancer Conference, Organizing Committee	Member
2012 -	Princess Takamatsu Cancer Symposium	Co-organizer with Atsushi Ochiai
2012 -	27th Aspen Cancer Conference, Organizing Committee	Member
2013 -	28th Aspen Cancer Conference, Organizing Committee	Member
2014 -	American Association for Cancer Research, Frontiers in Cancer Prevention, Program Committee	Member
2014 -	16th International p53 Workshop, Stockholm, Sweden, Organizing Committee	Member
2014 -	29th Aspen Cancer Conference, Organizing Committee	Member
2014 -	NIH/NCI Physical Sciences Oncology Center Workshop	Member
2014 -	American Association for Cancer Research, Frontiers in Cancer Prevention, Program Committee	Member
2015 -	30th Aspen Cancer Conference, Organizing Committee	Member
2015 -	"Using Next Generation Science to Understand the Normal Breast and the Development of Breast Cancer , Susan Love Foundation, Santa Barbara, CA.	Member
2016 -	31st Aspen Cancer Conference, Organizing Committee	Member
2016 -	Susan Love Foundation Symposium, Santa Barbara, CA.	Member
2017 -	31st Aspen Cancer Conference Organizing Committee	Member

# **SERVICE TO PROFESSIONAL PUBLICATIONS**

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-	Editorial Boards
1992 - present	Molecular Carcinogenesis
1993 - 2002	Carcinogenesis
1995 - 2004	Cancer Research
1996 - 2002	Environmental Health Perspectives
1997 - 2006	American Journal of Pathology
2005 - present	Cancer Biomarkers
2007 - present	Cancer Prevention Research
2016 - present	Cancer Convergence, Associate Editor
-	
-	Review Panels, Journals (ad hoc reviewer) - Ongoing
1983 - present	Cell, Nature, Science, Molecular Cell, Proceedings of the National Academy of Sciences, Molecular and Cellular Biology, Journal of Biological Chemistry, Genes & Development, Nature Genetics, Nature Cell Biology, Nature Medicine, Nature Reviews Cancer, Developmental Cell, PLoS, PLoS Medicine, PLoS Biology, PLoS One
1985 - present	Cancer Research, Oncogene, Journal of the National Cancer Institute, Clinical Cancer Research, Carcinogenesis, Molecular Carcinogenesis, The Cancer Journal, Oncology Research, Archives of Pathology & Laboratory Medicine, American Journal of Pathology
1985 - present	Genetics, Journal of Bacteriology, Nucleic Acids Research, Molecular Biology of the Cell, Experimental Cell Research, Trends in Cell Biology, Trends in Genetics, Genomics, Biochimica & Biophysica Acta, Mutation Research
-	
-	Consultant
1987 - 1987	Bristol-Meyers Co provided scientific expertise
1990 - 1994	Glaxo - provided scientific expertise
1993 - 1994	Regulon - provided scientific expertise
1993 - 1995	Geron - provided scientific expertise
1995 - 1997	Oncormed - provided scientific expertise
1997 - 1998	Onyx - provided scientific expertise
1999 - 2000	Day Casebeer - provided scientific expertise
2001 - 2002	Pennie and Edmonds - provided scientific expertise
2006 - 2006	Merchant and Gould - provided scientific expertise

**Invited Speaker** 

Conference

Speaker

Organizer and

**Invited Speaker** 

2007 - 2008 Epizyme - provided scientific expertise

2009 - present Kleiner, Perkins - provided scientific expertise

2010 - 2010 MPM - provided scientific expertise

2011 - present Pfizer - provided scientific expertise

2016 - Robinson Calcagnie, Inc. - provided scientific expertise

#### **INVITED PRESENTATIONS - INTERNATIONAL**

1992 US-Japan Co-Operative Workshop, Genetic Instability Invited Speaker
 6th p53 Workshop, Tiberias, Israel Invited Speaker

American Association for Cancer Research Special Session Chair and Conference, Chemicals, Mutations and Cancer Invited Speaker session, Banff, Alberta, Canada

1993 British Society for Cell Biology, DNA Repair Network

Conference , Cambridge, England

ell Biology, DNA Repair Network Invited Speaker bridge. England

American Association for Cancer Research, Interactions of Cancer Susceptibility Genes and Environmental Carcinogenesis, Lyon, France

DNA Replication, Recombination and Repair in the Invited Speaker

Genetics of Human Cancers Paris, France

1994 American Association for Cancer Research Special

Conference, Genomic Instability and Cancer, Banff, Alberta, Canada

Research Institute of Molecular Pathology, Molecular Mechanism of Human Disease, Vienna, Austria

7th p53 Workshop, Ontario, Canada Invited Speaker

International Conference of Neuropathology, Toronto, Invited Speaker Canada

Symposium on Genetic Instability and Cancer, Munich, Invited Speaker Germany

Joint Conference of the American Association for Cancer Invited Speaker Research and the Institute of Biomedical Sciences (Taiwan), Modern Developments in Cancer

Therapeutics , Taiwan

9th Annual Maimonides Conferences on Cancer Invited Speaker Research, Molecular Analysis of Tumor Progression, Ein Gedi, Israel

	2nd Nature International Conference in Europe, Cycling Out of Control: the cell cycle in growth, differentiation and disease , Paris, France	Invited Speaker
	17th Annual Meetings of Japanese Society of Molecular Biology, Molecular Biology of Cellular Senescence and Immortalization, Kobe, Japan	Invited Speaker
1995	86th Meeting of the American Association for Cancer Research, Toronto, Canada	Session Chair and Invited Speaker
	26th International Symposium of the Princess Takamatsu Cancer Research Fund, Genetic Instability and Carcinogenesis , Tokyo, Japan	Co-Organizer and Invited Speaker
	Cancer: The Translation of Advances in Basic Science to Human Therapy , Fondation des Treilles, France	Invited Speaker
1996	Eighth International p53 Workshop, Dundee, Scotland	Invited Speaker
	Bristol-Myers Sqibb Seminar on the Biological Bases of Cancer: Clinical Studies, Segovia, Spain	Invited Speaker
	Welcome/CRC Institute, Cambridge, England	Invited Lecturer
	BACR/ACP/EACR Scientific Meeting, Riccarton, Edinburgh, Scotland	Invited Speaker
	Gordon Research Conferences, Molecular Cytogenetics , Barga, Italy	Invited Speaker
	International Society for Analytical Cytology, Rimini, Italy	Invited Speaker
1997	International Symposium on Genotoxic Agents and Cancer, Madrid, Spain	Invited Speaker
	UICC Cancer Management Meeting, Vienna, Austria	Invited Speaker
	7th International Conference on Environmental Mutagenes, Toulouse, France	Invited Speaker
	The 1st Joint Meeting of Japan Cytometry Society and International Society for Analytical Cytology, Hachimartai National Park, Iwate, Japan	Invited Speaker
	31st Paterson Symposium, Li-Fraumeni Syndrome , Manchester, England	Invited Speaker
1998	9th International p53 Workshop, Crete, Greece	Invited Speaker

	The Cell Cycle, Toronto, Canada	Invited Speaker
	Tenth Pezcollar Symposium, Trento, Italy	Invited Speaker
	7th International Symposium on Predictive Oncology and Therapy, Impact of Biotechnology on Cancer , Nice, France	Invited Speaker
	International Theodor-Boveri-Symposium of the SFB 172, Genomic Instability in Carcinogenesis , Wurzburg, Germany	Invited Speaker
	4th Annual Symposium, Samuel Lunenfeld Research Institute of Mount Sinai Hospital, The Cell Cycle, Toronto, Ontario	Invited Speaker
2000	US-Japan Cancer Symposium, Genetic Instability and Cancer , Tokyo, Japan	Invited Speaker
2001	British Columbia Cancer Research Center Israels QC Inaugural Memorial Lecture , Vancouver, British Columbia, Canada	Distinguished Lecturer
2002	Gordon Research Conference on Mammary Gland Biology, Lucca, Italy	Participant
	11th International p53 Workshop, Barcelona, Spain	Session Speaker, Session Chair
	EMBO/EMBL Conference on Centrosomes and Spindle Pole Bodies, Heidelberg, Germany	Participant
2003	AACR 94th Annual Meeting, Redefining the Frontiers of Science , Toronto Convention Centre, Toronto, Ontario, Canada	Invited Speaker
	Arolla Workshop, Cell Growth in Development and Disease , Arolla, Switzerland	Invited Speaker
2004	12th International p53 Workshop, Dunedin, New Zealand	Invited Speaker
2005	Keystone Symposium, The Role of Microenvironment in Tumor Induction and Progression , Banff, Alberta, Canada	Invited Speaker

	European Human Genetics Conference 2005, Prague, Czech Republic	Invited Speaker
	3rd International Symposium on the Molecular Biology of Breast Cancer, Molde, Norway	Invited Speaker
	EMBO Conference on Centrosomes and Spindle Pole Bodies, Heidelberg, Germany	Invited Speaker
	The Campbell Family Institute for Breast Cancer Research, CSAB meeting, Toronto, Canada	Invited Speaker
	4th Annual Future of Breast Cancer: An International Congress, Southampton, Bermuda	Invited Speaker
2006	3rd International Symposia for College of Medicine, The Catholic University of Korea, Seoul Korea	Invited Speaker
	Gordon Research Conference, Mammary Gland Biology , Barga, Italy	Invited Speaker
	Workshop on Breast Cancer at the University of St. Andrews, St. Andrews, Scotland	Invited Speaker
	Hong Kong International Cancer Congress, Plenary Lecture, Hong Kong, China	Invited Plenary Speaker
	The Campbell Family Institute for Breast Cancer Research, SAB meeting, Toronto, Canada	Board Advisor
2007	Genomic Instability and Genomic Alterations in Precancerous Lesions and/or Cancer Conference, Brussels, Belgium	Invited Expert Evaluator
	Gordon Research Conference, Cancer Genetics & Epigenetics, Tuscany, Italy	Invited Speaker
	2007 Weekend to End Breast Cancer International Symposium, Toronto, Canada	Invited Speaker
	The Campbell Family Institute for Breast Cancer Research, SAB meeting, Toronto, Canada	Board Advisor
2008	Cancer Stem Cell Workshop, Toronto, Canada	Invited Participant
	Gordon Research Conference, Chromatin Structure & Function , Tuscany, Italy	Invited Speaker
	The Campbell Family Institute for Breast Cancer Research Retreat, Alliston, Ontario, Canada	Board Advisor

	14th International p53 Workshop, Fudan University, Shanghai, China	Invited Speaker
2009	ISSCR 7th Annual Meeting, Barcelona, Spain	Invited Speaker
	Keystone Symposia, Deregulation of Transcription in Cancer: Controlling Cell Fate Decisions , Killarney, Co. Kerry, Ireland	Invited Speaker
	Breast Cancer Symposium Think Tank 19 , Costa Rica	Invited Speaker
	Canadian Institutes of Health Research, Café Scientifique, Vancouver, British Columbia	Invited Speaker
	Keystone Symposia, Extrinsic Control of Tumor Genesis and Progression , Vancouver, British Columbia	Organizer and Invited Speaker
	Structural Genomics Consortium Workshop, Bellairs Research Institute, Probes for Epigenetics Barbados	Invited Speaker
	Catalan Institute of Oncology, Cancer Epigenetics and Biology Symposium, Barcelona, Spain	Plenary Invited Speaker
	Epigenetics and Breast Cancer Meeting, Institut Curie, Paris, France	Invited Speaker
	Workshop on Evolution: Foundations, Fundamentals and Disease, Hong Kong, China	Invited Speaker
	19th Breast Cancer Thinktank, Costa Rica	Invited Speaker
2010	20th Breast Cancer "Think Tank", Barbados	Invited Speaker
	2nd Annual AACR Dead Sea International Conference on Advances in Cancer Research: From the Laboratory to the Clinic, Dead Sea, Jordan	Invited Speaker
	Keystone Symposia of Molecular and Cellular Biology, Victoria, BC, Canada	Invited Speaker
	National Cancer Research Institute, Liverpool, United Kingdom	Keynote Speaker
	International Human Epigenome Consortium, Paris	Invited Speaker
	Sixth International Symposium on Hormonal Ontogenesis, Tokyo, Japan	Invited Speaker
	10th Advanced Meeting on CancerOmics, Erice, Italy	Invited Speaker
	Systems Biology of Cancer and Aging, Beijing, China	Invited Speaker
	HSC Symposium, Hiroshima, Japan	Invited Speaker

	41st International Symposium of the Princess Takamatsu Cancer Research Fund, Epigenetics , Tokyo, Japan	Invited Speaker
	Gordon Research Conference, "Mammary Gland Biology", Barga, Italy	Invited Speaker
	1st Annual Cold Cold Spring Harbor Asia Symposium, Inaugural Watson Symposium on Cancer Research, Suzhou, China	Invited Speaker
	The 20th HCS International Symposium, Hiroshima, Japan	Invited Principal Speaker
	21st Breast Cancer Thinktank, Barbados	Invited Speaker
2011	Breast Cancer Symposium Think Tank 21 , Montego Bay	Invited Speaker
	9th International Society for Stem Cell Research Meeting, Toronto, Canada	Plenary Speaker
	42nd International Symposium of the Princess Takamatsu Cancer Research Fund, Tokyo, Japan	Organizer/Invited Speaker
2012	24th Lorne Cancer Conference, Melbourne, Australia	Keynote Speaker
	28th IABCR/Breakthrough Breast Cancer Conference, Manchester, UK	Keynote Speaker
	Gordon Research Conference, "Mammary Gland Biology", Barga, Italy	Invited Speaker
	Nobel Forum, Frontiers in Cancer Research and Therapy, Karolinska Institute, Stockholm, Sweden	Invited Speaker
	16th International p53 Workshop, San Paolo, Brazil	Invited Speaker
	Breast Cancer Symposium "Think Tank 22", The Mayan Riviera, Mexico	Invited Speaker
	Distinguished Lecturer, Cambridge University, London	Invited Speaker
	CRI Seminars in Cancer, University of Cambridge, Cambridge, UK	Distinguished Lecturer
	European Congress of Pathology, Prague, Czech Republic	Invited Speaker
	4th International Conference on Stem Cells and Cancer, Heidelberg, Germany	Invited Speaker
	43nd International Symposium of the Princess Takamatsu Cancer Research Fund, Phenotypic Stochasticity and Implications for Tumor Heterogeneity and Therapy , Tokyo, Japan	Organizer/ Invited Speaker
	22nd Breast Cancer Thinktank, Puerto Morales, Mexico	Invited Speaker

2013	Winter Scientific Joint Meeting Pathological Society and Dutch Pathological Society, Utrecht, The Netherlands	Invited Speaker		
	23rd Annual Breast Cancer Think Tank, Dominican Republic	Invited Speaker		
	Keystone Symposia: Stem Cell Regulation in Homeostasis and Disease, "Extensive Plasticity in Rare Somatic Cells Found in Adult Human Tissue," Banff, Alberta, Canada	Invited Speaker		
	The Cancer Genetics and Epigenetics Gordon Research Conference, Lucca, Italy	Invited Speaker		
	Jacques Monod Conference: Ecological and evolutionary perspectives in cancer, Roscoff, France	Invited Speaker		
	23rd Breast Cancer Thinktank, Cap Cana, Dominican Republic	Invited Speaker		
2014	17th International p53 Workshop, Stockholm, Sweden	Invited Speaker		
	Keystone Symposium, Stem Cells and Cancer , Banff, Alberta, Canada	Invited Speaker		
	Physics Symposium "Complex Adaptive Systems" Hong Kong, China	Invited Speaker		
	Institute of Advanced Studies, Hong Kong University of Science and Technology, Physics Approach to Simplifying Complexity in Biology, Hong Kong, China	Invited Speaker		
2015	Emergent cell-cell networks and Signaling in Tissue	Invited Speaker		
	Breast Cancer Think Tank 26, Grand Cayman Islands	Invited Speaker		
	Cancer Biology Outstanding Lecture Series, University of Lausanne, Lausanne, Switzerland	Invited Speaker		
2016	Breast Cancer Think Tank 27, Saint Kitts	Invited Speaker		
	47th International Symposium of the Princess Takamatsu Cancer Research Fund, Current Status and Perspective of Cancer Stem Cell Research , Tokyo, Japan	Invited Speaker		
2017	Breast Cancer Think Tank 28, Saint Lucia	Invited Speaker		
INVITED PRESENTATIONS - NATIONAL				
1981	Cold Spring Harbor Banbury Conference, Gene In Amplification , Cold Spring Harbor, NY	nvited Speaker		
1983	Cold Spring Harbor Banbury Conference, Mechanisms In of Mutagenesis , Cold Spring Harbor, NY	nvited Speaker		

1984	North Carolina Conference, Gene Expression and Transfer, Quail Roost Conference Center, NC	Invited Speaker
1988	UCLA Symposium, Biological Consequences of DNA Damage , Los Angeles, CA	Invited Speaker
	FASEB Summer Conference, Molecular Cell Genetics, Saxtons River, VT	Invited Speaker
1991	American Association for Cancer Research Annual Symposium, Houston, TX	Invited Speaker
	UCLA Symposium, Genetic Instability and Tumorigenicity , Los Angeles, CA	Invited Speaker
	NIH Workshop, Genetic Instability , Seattle, WA	Invited Speaker
	Fred Hutchinson Cancer Research Center Symposium, Genetic Instability and Its Role in Carcinogenesis , Seattle, WA	Invited Speaker
	Cell Signaling for Activation or Death, Bald Head Island, NC	Invited Speaker
1992	American Association for Cancer Research Annual Symposium, symposium chair: Genomic Fluidity session, San Diego, CA	Invited Speaker
	International Union Against Cancer, Genotype and Phenotypes of Tumor Suppression , Woods Hole, MA	Invited Speaker
	7th Aspen Cancer Conference Workshop, Mechanisms of Toxicity and Carcinogenesis , Aspen, CO	Invited Speaker
	UCSF Minisymposium, "Mechanisms of Genomic Disarray in Cancer", San Francisco, CA Invited Speaker	Invited Speaker
1993	84th American Association for Cancer Research Annual Symposium, Orlando, FL	Invited Speaker
	Radiation Research Society, Genomic Instability , Dallas, TX	Invited Speaker
	American Association for Cancer Research Special Conference, Genetic Control of Cell Growth , Galveston, TX	Invited Speaker

Cold Spring Harbor, Banbury Conference, Polygenic Invited Speaker Basis of Cancer , Cold Spring Harbor, NY 17th Annual Symposium, UNC Lineberger Symposium Organizer Comprehensive Cancer Center, Loss of Genomic and Speaker Integrity In Neoplasia , Chapel Hill, NC Gordon Conference, Molecular and Genetic **Invited Speaker** Regulation of Cell Proliferation . Kimball Union Academy, Meriden, NH Carolina Conference on Integrins and Cell Signaling, Invited Speaker Chapel Hill, NC 8th Aspen Cancer Conference Molecular Mechanisms Invited Speaker of Toxicity in Relation to the Genetics of Animal and Human Neoplasia , Aspen, CO Hereditary Disease Foundation, Expanding Repeats: Invited Speaker Whimper or Big Bang , Dallas, TX American Society for Human Genetics Annual Invited Speaker Symposium, New Orleans, LA 58th Symposium on Quantitative Biology, DNA and Invited Speaker Chromosome , Cold Spring Harbor, NY 24th Environmental Mutagenesis Society Annual Invited Speaker Meeting, Global Responses to Genotoxic Stress, Norfolk, VA Fifth International Workshop on Chromosomes in Solid **Invited Speaker** Tumors, Tucson, AZ Short Course in Cancer Biology, Eppley Institute for Visiting Faculty Research in Cancer and Allied Diseases, University of Nebraska Medical Center Keystone Symposium on Molecular and Cellular Invited Speaker Biology, Tumor Suppressor Genes / Human Tumor Viruses, Taos, NM Cold Spring Harbor Annual Symposium, Molecular Session Chair and Genetics of Cancer , Cold spring Harbor, NY Invited Speaker 2nd Annual Carolina Conference, Chromosome Conference Organizer Structure and Dynamics , Chapel Hill, NC and Speaker American Association for Cancer Research, Annual Invited Speaker Symposium, plenary session, San Francisco, CA Cold Spring Harbor Conference, Cell Cycle , Cold Invited Speaker Spring Harbor, NY

1994

General Motors Cancer Research Foundation, Awards Invited Speaker Ceremony, Genetic Predisposition to Cancer, Bethesda, MD

Gordon Conference, Plymouth, NH Invited Speaker

Banbury Conference, Targets for Specific Therapies in Invited Speaker Leukemia, Cold Spring Harbor, NY

5th International Congress of the Metastasis Research Invited Speaker Society, Bethesda, MD

1995 Keystone Symposia, Molecular Toxicology, Copper Invited Speaker Mountain, CO

Gordon Conference, DNA Repair , Ventura, CA Invited Speaker

3rd Joint Conference of the American Association for Cancer Research and the Japanese Cancer Association, Molecular Biology of Cancer: Implications for Prevention and Therapy, Maui, HI

6th International Workshop on Chromosomes in Solid Invited Speaker Tumors, Tucson, AZ

SOT Symposium, Cell Cycle Controls and Invited Speaker Carcinogenesis, Baltimore, MD

Keystone Symposia, DNA Damage , Taos, NM Invited Speaker

3rd Annual Ben May Institute Symposium, Chicago, IL Invited Speaker

ASBMB Symposium, Genetic Instability and Cancer , Invited Speaker San Francisco, CA

Gordon Conference, Molecular Targets of Cancer Invited Speaker Therapy , Newport, RI

Radiation Effects Branch (NCI/NASA) Workshop, Invited Speaker Mechanisms of Transmissible Genomic Instability from the Exposure of Mammalian Cells to Ionizing Radiation

Neoplastic Transformation in Human Cell Systems in Invited Speaker Culture Mechanisms of Carcinogenesis , Chicago, IL

Mary Lasker Symposium on Frontiers of Cancer Invited Speaker Research, Modern Concepts in Tumor Biology and Their Relevance to Prostate Cancer, San Diego, CA

19th Annual Symposium, Signaling Pathways in Invited Speaker Development and Cancer , Chapel Hill, NC

Invited Speaker

11th International Conference on Brain Tumor Research Invited Speaker and Therapy, Napa, CA

UCSF Cancer Research Institute: Seminar Series Chair

1996 Cambridge Symposia, Genetic, Molecular, and Invited Speaker Structural Control of Signal Transduction , Lake Tahoe, NV

Department of Health and Human Services, National Invited Speaker institutes of Health, Division of Research Grants,
Oncological Sciences Initial Review Group, Pathology B
Study Section Workshop, Washington, DC

University of California, San Diego Cancer Center, Invited Speaker Topics in Cancer Research: Cancer Genetics, La Jolla, CA

32nd Annual American Society of Clinical Oncology Invited Speaker Meeting, Philadelphia, PA

Vanderbilt Cancer Center Seminar, Nashville, TN Invited Speaker 87th Annual Meeting of the AACR, Washington, DC Invited Speaker

National Cancer Institute Workshop, Seattle, WA

Invited speaker

Keystone Symposia, Conference on Breast and

Invited Speaker

Cambridge Symposia Conference on Emergent Invited Speaker Technologies for the Treatment of Brain Tumors, Lake

Technologies for the Treatment of Brain Tumors, Lake Tahoe. CA

Prostate Cancer: Basic Mechanisms, Taos, NM

Gordon Research Conference Mechanisms of Invited Speaker Toxicity, New England College, Henniker, NH

48th Annual American Association for Clinical Chemistry and Canadian Society of Clinical Chemist Meeting and Clinical Laboratory Exposition, Chicago, IL

4th Annual SPORE Investigators Meeting, Washington, Invited Speaker DC

ASCB 6th International Congress on Cell Biology / 36th Invited Speaker American Society for Cell Biology Annual Meeting, Plenary session, San Francisco, CA

International Business Communications Conference, Invited Speaker Tumor Suppressors and Oncogenes , San Francisco, CA

Keystone Symposia, The Cell Cycle , Taos, NM Invited Speaker

35th Annual Meeting of the Society of Toxicology, Invited Speaker Anaheim. CA Cambridge Symposia Conference on Emergent Invited Speaker Technologies for the Treatment of Brain Tumors, Lake Tahoe, CA 1997 Banbury Center Conference, The Biology of p53 and Invited Speaker its Implications for Diagnosis and Therapy, Cold Spring Harbor, NY ASIP Experimental Biology 97, New Orleans, LA Invited Speaker Molecular Carcinogenesis Conference, Molecular Invited Speaker Mechanisms of Cancer Causation and Prevention, Maui, HI Keystone Symposia on Molecular and Cell Biology, Invited Speaker Growth Control , Keystone, CO Keystone Symposia on Molecular and Cell Biology Invited Speaker Genetics of Human Cancer: Pathogenesis and Diagnosis, Keystone, CO Aspen Cancer Conference, Twelfth Aspen Cancer Keynote Speaker Conference: Mechanisms of Toxicity and Carcinogenesis , Aspen, CO The National Managed Health Care Congress Program Speaker Bio/Technology Conference Division: Cell Cycle Therapeutics. Loews Coronado Bay Resort, Coronado, CA 17th International Congress of Biochemistry and **Invited Speaker** Molecular Biology/Annual Meeting American Society for Biochemistry and Molecular Biology, San Francisco, CA Gordon Conference on Cancer, Cell Specificity in Discussion Leader/ Cancer Mechanisms , Newport, RI **Invited Speaker** 50th Annual Symposium on Fundamental Cancer Invited Speaker/ Research, Molecular Determinants of Cancer Faculty Metastasis , Houston, TX Scientific Co-DOD Breast Cancer Research Program Meeting, Era of Hope , Washington, DC Chair/Speaker IBC Symposium, Tumor Suppressors & Oncogenes, Invited Speaker San Francisco, CA ICN Symposium, Cell Cycle Therapeutics: Setting the Invited Speaker Balance , San Diego, CA

	88th Annual Meeting of the American Association for Cancer Research, San Diego, CA	Invited Speaker
1998	4th Joint Conference of the AACR/JCA, Maui, HI	Invited Speaker
	Cancer Genetics Course, U of Michigan, Ann Arbor, MI	Invited Speaker
	AACR 89th Annual Meeting, New Orleans, LA	Invited Speaker
	8th Annual Symposium in Molecular and Cell Biology, U of Maryland, Baltimore, MD	Invited Speaker
	46th Annual Meeting, Radiation Research Society, Louisville, KY	Invited Plenary Speaker
	SPORE Investigators Meeting, Baltimore, MD	Invited Speaker
	Gordon Research Conference, Molecular Cancer Biology , Newport, RI	Invited Speaker
	Cold Spring Harbor Conference, Cancer Genetics and Tumor Suppressor Genes , Cold Spring Harbor, NY	Invited Speaker
	AACR Special Conference, Cellular Targets of Viral Carcinogenesis, Dana Point, CA	Conference Chairperson/Speaker
	American Society for Investigative Pathology Annual Meeting, San Francisco, CA	Invited Speaker
	Keystone Symposia, Genomic Instability: Regulation and Consequences , Lake Tahoe, NV	Invited Speaker
1999	Keystone Symposia, The Molecular Basis of Cancer , Taos, NM	Invited Speaker
	The American Association for Cancer Research, 90th Annual Meeting, Philadelphia, PA	Invited Symposium Speaker
	Pediatric Academic Societies Annual Meeting, San Francisco, CA	Invited Speaker
	Biochemistry & Molecular Biology 99, New World Science for the Next Millennium, San Francisco, CA	Invited Speaker
	General Motors Cancer Research Foundation, 1999 Annual Scientific Conference, Bethesda, MD	Invited Speaker
	AACR Summer Workshop, Pathobiology of Cancer , Keystone, CO	Lecturer
	Gordon Research Conference, Cancer , West Kingston, RI	Invited Speaker
	ASCB Annual Meeting, Washington, DC	Invited Speaker

Invited Speaker

Loeb Lab Retreat, Seattle, WA ASBMB Satellite Meeting, Cellular Aging & Genomic **Invited Speaker** Instability, San Francisco, CA Women in Cell Biology/Education Committee-sponsored Participant lunch, Career Options and Issues Facing Cell Biologists, 39th ASCB annual meeting, Washington, DC CaP CURE Sixth Annual Scientific Retreat, Incline **Participant** Village, NV 2000 Keystone Symposia, Cancer, Cell Cycle and Invited Speaker Therapeutics , Steamboat Springs, CO Keystone Symposia on Molecular and Cellular Biology, Invited Speaker Molecular Epidemiology: A new Tool in Cancer Prevention, Taos, NM The American Association for Cancer Research, 91st Invited Speaker Annual Meeting, DNA Repair on Genetic Stability, San Francisco, CA 10th International p53 Workshop, Monterey, CA Co-Organizer, Opening Address General Motors Annual Scientific Conference. Genetic Moderator Instability and Cancer , Bethesda, MD NIH SPORE Investigator s Meeting, Chantilly, VA Invited Speaker AACR Summer Workshop, Pathobiology of Cancer, Lecturer DNA Repair and Genetic Instability , Keystone, CO P & S Biomedical Symposium, Control of Genomic Invited Speaker Stability in Normal and Cancer Cells , Harriman, NY International Conference at Mayo Clinic, Fragile site, Invited Speaker Gene Amplification and Cancer , Rochester, MN 2001 Keystone Symposia on Molecular and Cellular Biology, Invited Speaker Keystone, CO The American Association for Cancer Research, 92nd Invited Speaker Annual Meeting, New Orleans, LA SPORE Investigators Meeting, Baltimore, MD Invited Speaker General Motors Cancer Research Foundation Scientific Invited Speaker Conference, Mechanism of Metastasis, Washington, DC

	Experts Research Roundtable Meeting The Role of the Bone Microenvironment in Multiple Myeloma Chicago, IL	Invited Speaker
	ACCR Summer Workshop, Pathobiology of Cancer 2001, Progression and Genomic Instability, Keystone, CO	Invited Speaker
	FASEB, Nuclear Structure and Cancer , Saxtons River, VT	Invited Speaker
	Salk/EMBL, Oncogenes and Growth Control , La Jolla, CA	Invited Speaker
	AACR, Cancer and Chromosomal Organization Epigenetics of Cancer, Palm Desert, CA	Invited Speaker
	Washington State University, 3rd Annual Inland Northwest Cancer Conference, Spokane, WA	Invited Speaker
2002	The American Association for Cancer Research, 93rd Annual Meeting, San Francisco, CA	Invited Speaker
	Environmental Mutagen Society, Frontiers Beyond the Human Genome, Anchorage, AK	Invited Speaker
	International Society for Analytical Cytology, 21st International Congress, Frontiers in Oncogenetics, San Diego, CA	Invited Speaker
	10th SPORE Investigators Workshop, Chantilly, VA	Invited Speaker
	Conference on Cell Immortalization and Transformation, Cold Spring Harbor, NY	Invited Speaker
	Conference on Cancer Intervention, Grand Rapids, MI	Invited Speaker
	9th Prouts Neck Meeting on Prostate Cancer, Prouts Neck, ME	Invited Speaker
	AACR, The Role of Telomeres and Telomerase in Cancer, San Francisco, CA	Invited Speaker
2003	AACR, The TGF-B Superfamily , La Jolla, CA	Invited Speaker
	Massachusetts Institute of Technology, Boston, MA	Invited Speaker
	Breast Cancer Conference for Researchers, Santa Barbara, CA	Invited Speaker
	General Motors Cancer Research Foundation Awards Assembly Meeting, New York City, NY	Invited Speaker

	Cold Spring Harbor Meeting, Telomeres & Telomerase, Cold Spring Harbor, NY	Invited Speaker
	Genomic Instability Symposium, Cellular Consequences of Genome Instability , University of Virginia, Charlottesville, VA	Invited Speaker
	Gordon Research Conference, Mammary Gland Biology , Bristol, RI	Invited Speaker
	FASEB Summer Research Conference, Nuclear Structure and Cancer , Saxtons River, VT	Invited Speaker
	Multiple Myeloma Consortium Meeting, Washington, DC	Invited Speaker
2004	AACR 95th Annual Meeting, Epigenetics and Cancer , Orlando, FL	Invited Speaker
	CME Conference, Myeloma & Plasma Cell Disorders, Los Angeles, CA	Invited Speaker
	NCI/NIH and National Human Genome Research Institute, Exploring Cancer Through Genomic Sequence Comparisons, Bethesda, MD	Invited Speaker
	NCI 12th Spore Investigators Workshop, Baltimore, MD	Invited Speaker
	Cold Spring Harbor Meeting, Cancer Genetics & Tumor Suppressor Genes , Cold Spring Harbor, NY	Invited Speaker
	Dana-Farber Cancer Institute s Seminars in Oncology, Boston, MA	Invited Speaker
	Early Detection Research Network/GYN Workshop, New York, NY	Invited Speaker
	EMS 35th Annual Meeting, Genes, Mutations and Disease; the Environmental Connection , Pittsburg, PA	Invited Speaker
	27th Annual San Antonio Breast Cancer Symposium, San Antonio, TX	Invited Speaker
	Cancer Institute of New Jersey, Distinguished Lecture Series, New Brunswick, NJ	Invited Speaker
2005	3rd Breast SPORE Round Table Meeting, Nashville, TN	Invited Speaker
	13th SPORE Investigator s Workshop, Washington, DC	Invited Speaker
	The Burnham Institute, La Jolla, CA	Invited Speaker

Keystone Symposium, Molecular Target for Cancer Therapy, Santa Fe, NM	Invited Speaker
AACR Special Conference- Chromatin, Chromosomes, and Cancer Epigenetics, Waikoloa, HI	Invited Speaker
Gordon Research Conference, New Frontiers In Cancer Detection & Diagnosis , Santa Barbara, CA	Invited Speaker
Keystone Symposium, Cellular Senescence and Cell Death , Keystone, CO	Invited Speaker
Keystone Symposium, Inflammation and Cancer , Breckenridge, CO	Invited Speaker
36th Midwest Student Biomedical Research Forum, University of Nebraska Medical Center, Omaha, NE	Keynote Invited Speaker
ASIP Experimental Biology 2005, San Diego, CA	Invited Speaker
Virginia Commonwealth University, Richmond, VA	Invited presenter for Pathology Grand Rounds
John Hopkins University, Biology of Cancer Seminar Series, Baltimore, MD	Invited Speaker
70th Cold Spring Harbor Laboratories Symposium, Molecular Approaches to Controlling Cancer , Cold Spring Harbor, NY	Invited Speaker
University of California San Francisco, Epigenetic Regulation and Chromatin Remodeling Symposium, San Francisco, CA	Co-organizer/Speaker
University of Pennsylvania, Hematology/Oncology Research Seminar, Philadelphia, PA	Invited Speaker
4th Era of Hope 2005 Conference, Philadelphia, PA	Invited Platform Presenter
SPORE Investigators Meeting, Baltimore, MD	Invited Speaker
NIH/NHGRI Toward a Comprehensive Genomic Analysis of Cancer workshop Washington, DC	Invited Presenter
Aspen Cancer Conference, Twentieth Aspen Cancer Conference: Mechanisms of Toxicity and Carcinogenesis, Aspen, CO	Invited Keynote Speaker
FASEB Summer Research Conference, Hematopoietic Malignances , Saxtons River, VT	Invited Speaker
Case Western Reserve University, Olof Pearson Lecture, Cleveland, OH	Invited Speaker

	58th M.D. Anderson Annual Symposium, Biomarker Discovery , Houston, TX	Invited Speaker
	NCI Workshop, Defining the Epigenome , Rockville, MD	Invited Speaker
	AACR Special Conference, Cancer Proteases and the Microenvironment , Bonita Springs, FL	Invited Speaker
	Banbury Center, Cold Spring Harbor Laboratory, Cancer Stem Cells , Cold Spring Harbor, NY	Invited Speaker
	45th ASCB Annual Meeting, San Francisco, CA	Invited Speaker
2006	5th Timberline Symposia on Cell Biology, Timberline Lodge, OR	Invited Speaker
	10th NCI Retreat & 3rd Annual Joint Retreat, Bethesda, MD	Invited Speaker
	Olaf Pearson Lecture, Cleveland, OH	Invited Speaker
	Wilbur Hot Springs Cell Biology Retreat, Wilbur Hot Springs, CA	Invited Speaker
	NCI BSC-2 Meeting, Bethesda, MD	Invited Speaker
	Epigenome Task Force Meeting, Philadelphia, PA	Invited Speaker
	3rd Annual NCI Joint Board Retreat and Intramural Scientific Retreat, Bethesda, MD	Invited Speaker
	University of California San Francisco, Bay Area Epigenetics Symposium: Stem Cells and Epigenetics, San Francisco, CA	Co-organizer/Speaker
	NCI, Division of Cancer Biology, Workshop, Nuclear Microenvironment and Cancer , Washington, DC	Invited Speaker
	Translational Research Working Group Meeting, Phoenix, AZ	Invited Speaker
	AACR Special Conference, Cancer Susceptibility and Cancer Susceptibility Syndromes , Maui, HI	Invited Speaker
	Keystone Symposium, Molecular Targets for Cancer Prevention , Tahoe City, CA	Invited Speaker
	AACR 97th Annual Meeting, Major Symposium, Tumor Microenvironment , Washington, DC	Chair and Organizer
	AACR Workshop, Cancer Stem Cells , Lansdowne, VA	Invited Speaker

Memorial Sloan-Kettering Cancer Center, Presidential Research Seminar Series, New York, NY	Invited Speaker
MIT, 2006 Robert S. Harris Lecture, Cambridge, MA	Invited Speaker
NIH, Prestigious Lecture Series, Bethesda, MD	Invited Lecturer
ASCO Annual Meeting, Atlanta, GA	Invited Speaker
Pancreatic Cancer 2006: Early Detection and Novel Therapeutics, UNC, Chapel Hill, NC	Invited Speaker
14th Spore Investigators Workshop, Baltimore, MD	Invited Speaker
Breast Cancer Research Program Centers of Excellence Meeting, Arlington, VA	Invited Speaker
Translational Research Working Group Meeting, Chicago, IL	Participant
13th EDRN Steering Committee Meeting, Pittsburg, PA	Participant
University of Texas M.D. Anderson Cancer Center, Department of Cancer Biology s Cancer Metastasis Research Program Seminar Series, Houston, TX	Invited Speaker
University of Texas M.D. Anderson Cancer Center, Mike Hogg Distinguished Lecture Series, Austin, TX	Invited Speaker
Translational Research Working Group Meeting, Atlanta, GA	Participant
	Participant Co-chair/Speaker
Atlanta, GA  5th Annual AACR International Conference, Frontiers	·
Atlanta, GA  5th Annual AACR International Conference, Frontiers in Cancer Prevention Research, Boston, MA  Translational Research Working Group Meeting, North	Co-chair/Speaker
Atlanta, GA  5th Annual AACR International Conference, Frontiers in Cancer Prevention Research, Boston, MA  Translational Research Working Group Meeting, North Bethesda, MD	Co-chair/Speaker Participant
Atlanta, GA  5th Annual AACR International Conference, Frontiers in Cancer Prevention Research, Boston, MA  Translational Research Working Group Meeting, North Bethesda, MD  ASCB 46th Annual Meeting, San Diego, CA  NCI Breast Cancer Pre-Malignancy Steering	Co-chair/Speaker  Participant  Invited Speaker
Atlanta, GA  5th Annual AACR International Conference, Frontiers in Cancer Prevention Research, Boston, MA  Translational Research Working Group Meeting, North Bethesda, MD  ASCB 46th Annual Meeting, San Diego, CA  NCI Breast Cancer Pre-Malignancy Steering Committee, Bethesda, MD  EMS 38th Annual Meeting, EMS Women s Special Interest Group, Symposium 7: Women in Science: The	Co-chair/Speaker  Participant  Invited Speaker  Invited Speaker
Atlanta, GA  5th Annual AACR International Conference, Frontiers in Cancer Prevention Research, Boston, MA  Translational Research Working Group Meeting, North Bethesda, MD  ASCB 46th Annual Meeting, San Diego, CA  NCI Breast Cancer Pre-Malignancy Steering Committee, Bethesda, MD  EMS 38th Annual Meeting, EMS Women s Special Interest Group, Symposium 7: Women in Science: The Engine Behind Discovery, Atlanta, GA  FASEB Nuclear Structure and Cancer, Saxtons River,	Co-chair/Speaker  Participant  Invited Speaker  Invited Speaker  Invited Speaker

2007

US Army Medical Research and Material Command Breast Cancer Research Program, Baltimore, MD	Invited Programmatic Reviewer
14th EDRN Steering Committee Meeting, Denver, CO	Invited Speaker
Gordon Research Conference, New Frontiers in Cancer Detection and Diagnosis , Ventura, CA	Invited Speaker/ Co- chair
AACR Special Conference, Translational Research at the Aging and Cancer Interface , San Diego, CA	Session Chair/Speaker
NCI/NIH, Ductal Carcinoma in Situ: Strategies for Integrating Tumor Biology and Population Sciences, San Francisco, CA	Invited Speaker
Susan Love Research Foundation, 5th International Symposium on The Intraductal Approach to Breast Cancer, Santa Monica, CA	Invited Speaker
ASPO 31st Annual Meeting, Inflammation and Cancer , Houston TX	Invited Speaker
AACR 98th Annual Meeting, Educational Sessions, Controlling Epigenetic Programs: Consequences for Stem Cells and Carcinogenesis , Los Angeles, CA	Session Chair and Speaker
AACR 98th Annual Meeting, Major Symposium, Tumor Microenvironment , Los Angeles, CA	Invited Speaker
NCI Symposium on Chromosome Biology 2007: The Current Status of Chromosome and Chromatin Biology Research , Bethesda, MD	Invited Speaker
NCI, Cancer Stem Cells as Targets for Prevention and Early Detection, Bethesda, MD	Invited Speaker
2007 ASCO Annual Meeting, Chicago, IL	Invited Speaker
13th International Congress of Radiation Research Conference, San Francisco, CA	Invited Speaker
15th Spore Investigators Workshop, Baltimore, MD	Speaker
22nd Aspen Cancer Conference: Mechanisms of Toxicity, Carcinogenesis, Cancer Prevention and Cancer Therapy, Aspen, CO	Invited Speaker
Aspen Cancer Conference Satellite Meeting, New Frontiers in Clinical Oncology , Aspen, CO	Invited Speaker
AACR Translational Cancer Medicine Think Tank, Sonoma County, CA	Participant
Summit for Pancreatic Cancer, Pancreatic Cancer Action Network, La Jolla, CA	Invited Speaker

NIH, Stratified Cancer Prevention: Identifying Predictive Invited Speaker Epithelial Markers for Breast Cancer Risk and Risk Reduction, Bethesda, MD CBCRP, From Research to Action: Breaking New Invited Speaker Ground , Breast Cancer Research Symposium, Los Angeles, CA San Antonio Breast Cancer Symposium, San Antonio, Invited Speaker TX Fred Hutchinson Cancer Research Center, Invited Speaker Conditional Expression of Stress Markers Predicts Future Tumor Formation , Seattle, WA 2008 Avon Foundation Prevention Research Initiative, San Invited Speaker Francisco, CA MPM s Medical Science Advisory Board Retreat, **Invited Speaker** Boston, MA Breast Cancer Symposium Think Tank 18, **Invited Speaker** Waikoloa, HI Avon Foundation Breast Cancer Forum: Advancing Invited Speaker Prevention and Access to Treatment, Houston, TX AACR Special Conference in Cancer Research. The Invited Chair and Role of Cancer Stem Cells in the Initiation and Keynote Speaker Propagation of Tumorigenesis Los Angeles, CA NCI, integrating and Leveraging the Physical sciences **Invited Participant** to Open a New Frontier in Oncology, Arlington, VA AACR Annual Meeting 2008, Opening Plenary Session, Opening Plenary Biological clues identify pre-malignancies at high risk Speaker for future tumor formation , San Diego, CA AACR Special Conference in Cancer Research, Invited Speaker Cancer Epigenetics , Boston, MA NCI Think Tank: Physical Sciences-Based Frontiers in **Invited Participant** Oncology: Evolution and Evolutionary Theory and Cancer, McLean, VA Invited Session 23rd Aspen, Cancer Conference: Mechanisms of Toxicity, Carcinogenesis, Cancer Prevention and Chair/Speaker Cancer Therapy, Aspen, CO 3rd AACR International Conference on Molecular Session Chair and Diagnostics in Cancer Therapeutic Development: Invited Speaker Fulfilling the Promise of Personalized Medicine, Philadelphia, PA

Breast Cancer Network of Strength, DCIS Invited In service Speaker University of California, Davis Symposium, DNA **Invited Speaker** Methylation from Basic Mechanisms to Human Diseases , Davis, CA APA/Lustgarten Symposium, The Chronic Pancreatitis Invited Speaker to Pancreatic Cancer Continuum, Chicago, IL NCI Translational Science Meeting, Washington, DC Session Co-chair Lennox K. Black Intl. Prize for Excellence in Biomedical **Invited Speaker** Research 5th Symposium, Transformational Discoveries in Cancer , Philadelphia, PA AACR, Frontiers in Cancer Prevention Research, Session National Harbor, MD Chairperson/Invited Speaker ASCB 48th Annual Meeting, San Francisco, CA Co-Chair, Minisymposium, **Invited Speaker** 2009 3rd Cancer Metastasis & Lymphovascular System: Invited Speaker Basis for Rational Therapy, San Francisco, CA Distinguished Series of Lombardi CCC, Washington, Invited Speaker DC Signaling Networks and Cancer Colloquium at Duke Invited Speaker University, Raleigh/Durham, NC SPORE DCIS Round Table Meeting, Boston, MA Invited Speaker 7th Clinical Trials Advisory PATS Committee Meeting, Invited Speaker Bethesda, MD Avon Foundation Breast Cancer Forum, Miami, FL Invited Speaker Keystone Symposia, Emerging Tumor Suppressors, Invited Speaker Taos, NM Gordon Research Conference, Cancer Genetics & Conference Epigenetics , Ventura, CA Chair/Speaker Avon Foundation Breast Cancer Forum: Advancing Invited Speaker Prevention and Access to Treatment Houston, TX AACR 100th Annual Meeting 2009, Major Scientific Invited Speaker Session, Epithelial Mesenchymal Transition, Co-Chair and Speaker; AACR/ASCO Special Joint Session, COX-2 and Cancer Treatment, Denver, CO

National Breast Cancer Coalition Fund s Annual Advocacy Training Conference, Washington, DC  24th Aspen, Cancer Conference: Mechanisms of Toxicity, Carcinogenesis, Cancer Prevention and Cancer Therapy, Aspen, CO  ASCP, Current Issues and Problems in Breast Pathology, Santa Barbara, CA  NCI Workshop on Adolescent and Young Adult Cancer Breast, Colon and All, Bethesda, MD  Moores UCSD Cancer Center Director s Seminar, San Invited Speak Diego, CA  AACR, Frontiers in Cancer Prevention Research, Boston, MA	
Toxicity, Carcinogenesis, Cancer Prevention and Cancer Therapy, Aspen, CO  ASCP, Current Issues and Problems in Breast Pathology, Santa Barbara, CA  NCI Workshop on Adolescent and Young Adult Cancer Breast, Colon and All, Bethesda, MD  Moores UCSD Cancer Center Director is Seminar, San Diego, CA  AACR, Frontiers in Cancer Prevention Research, Boston, MA	У
Pathology , Santa Barbara, CA  NCI Workshop on Adolescent and Young Adult Cancer Invited Speak Breast, Colon and All, Bethesda, MD  Moores UCSD Cancer Center Director s Seminar, San Invited Speak Diego, CA  AACR, Frontiers in Cancer Prevention Research, Invited Speak Boston, MA	er
Breast, Colon and All, Bethesda, MD  Moores UCSD Cancer Center Director s Seminar, San Invited Speak Diego, CA  AACR, Frontiers in Cancer Prevention Research, Boston, MA	er
Diego, CA  AACR, Frontiers in Cancer Prevention Research, Boston, MA  Invited Speak	er
Boston, MA	er
MILL Decidence Enterprise Decidence 1 19 10 11	er
NIH Roadmap Epigenomics Program Investigators Invited Speak Meeting, Bethesda, MD	er
49th Annual ASCB Meeting, San Diego, CA Invited Speak	er
NCI Stem Cell Think Tank , Board of Scientific Featured Spe Advisors, Washington, DC	aker
CTRC-AACR San Antonio Breast Cancer Symposium, Invited Speak San Antonio, TX	er
3rd Cancer Metastasis & Lymphovascular System: Invited Speak Basis for Rational Therapy, San Francisco, CA	er
Cambridge Healthtech Institute s Fifth Annual Invited Speak Translational Medicine, Novel Approaches to Cancer Biomarkers, San Francisco, CA	er
8th Annual AACR-JCA Joint Conference: Cancer Invited Speak Genomics, and the Development of Novel Therapeutics, Waikoloa, HI	ær
CIRM Meeting, San Francisco, CA Invited Speak	er
Annual NCI Investigators Conference, National Harbor, Invited Speak MD	er
101st AACR Annual Meeting 2010, Plenary Session, Invited Speak Washington DC Panelist	er and
25th Aspen, Cancer Conference: Mechanisms of Invited Speak Toxicity, Carcinogenesis, Cancer Prevention and Cancer Therapy, Aspen, CO	er
15th International p53 Workshop, Philadelphia, PA Invited Speak	or

2010

CTAC/PATS Face-to-Face Meeting, Bethesda, MD Participant NCI, Executive Strategic Planning Conference, **Invited Speaker** Washington, DC 9th AACR Annual International Conference on Frontiers Session in Cancer Prevention Research, Philadelphia, PA Chairperson/Invited Speaker NCI, CaHUB Taskforce, Washington, DC Invited Speaker 1st Annual Physical Sciences Oncology Center Invited Speaker Investigators Meeting, Washington, DC Howard Hughes Medical Institute Symposium on Invited Speaker Epigenetics, Chevy Chase, MD NCI Stem Cell Think Tank , Board of Scientific Featured Speaker Advisors, Washington, DC Southwestern Oncology Program, Detroit, MI Invited Speaker Cold Spring Harbor, Stem Cell Workshop, Cold Spring Invited Speaker Harbor, NY Physical Sciences-Oncology Center Symposium on Event Organizer / **Invited Speaker** Quantum Biology, Sedona, AZ American Cancer Society, Consensus Meeting on **Invited Speaker** Ductal Carcinoma in situ, Atlanta, GA Yale University, The Patricia and Julia Kingsbury **Invited Speaker** Memorial Lecture, New Haven, CT Cancer Forum: Workshop on Quantum Mechanics and Attendee Cancer Biology, Tempe, AZ Keystone Symposia, Stem Cells in Development, Organizer and Invited Tissue Homeostatis and Disease, Santa Fe, NM Speaker AACR 102nd Annual Meeting 2009, Plenary session, **Invited Speaker** Orlando, FL Avon Symposium on Cancer Research, New York, NY Invited Speaker Cold Spring Harbor, Banbury Conference, The Future of Invited Speaker Biomarker Discovery and Biobanks in Cancer Diagnosis, Prognosis and Therapy, Cold Spring Harbor, NY 7th International Symposium on the Intraductal Organizer and Invited Approach to Breast Cancer, Dr. Susan Love Research Speaker Foundation DCIS Meeting, Santa Monica, CA

2011

	26th Aspen, Cancer Conference: Mechanisms of Toxicity, Carcinogenesis, Cancer Prevention and Cancer Therapy, Aspen, CO	Invited Session Chair/Speaker
	Estrogen s SERM s and TSEC s Conference, Clearwater, FL	Keynote Speaker
	Southwest Oncology Group National Meeting, San Francisco, CA	Keynote Speaker
	3rd International Meeting on Breast Density, San Francisco, CA	Invited Speaker
	2nd Annual Physical Sciences-Oncology Center Investigators Meeting, La Jolla, CA	Invited Speaker
	Regulatory Networks in Health and Disease seminar series, Duke University	Invited Speaker
	Site Visit with Dr. Anthony Atala, Wake Forest Institute for Regenerative Medicine	Invited Speaker
	Advances in Breast Cancer Research: Genetics, Biology, and Clinical Applications, San Francisco, CA	Invited Participant
	2011 Epigenetics & Drug Therapy, Hilton Head Island, South Carolina	Invited Speaker
2012	Susan G. Komen 3-Day For The Cure - Breast Cancer	Invited Participant
	Issues Conference, Portland, OR	·
	Issues Conference, Portland, OR  AACR Annual Meeting 2012, Chicago, IL	Invited Speaker
		·
	AACR Annual Meeting 2012, Chicago, IL  Physical Sciences-Oncology Center Annual Meeting,	Invited Speaker
	AACR Annual Meeting 2012, Chicago, IL  Physical Sciences-Oncology Center Annual Meeting, Tampa Bay, Florida  38th Annual Educational Conference and Exposition,	Invited Speaker Invited Speaker
	AACR Annual Meeting 2012, Chicago, IL  Physical Sciences-Oncology Center Annual Meeting, Tampa Bay, Florida  38th Annual Educational Conference and Exposition, San Diego, CA  NIH Roadmap Epigenomics Program Investigators	Invited Speaker Invited Speaker Invited Speaker
	AACR Annual Meeting 2012, Chicago, IL  Physical Sciences-Oncology Center Annual Meeting, Tampa Bay, Florida  38th Annual Educational Conference and Exposition, San Diego, CA  NIH Roadmap Epigenomics Program Investigators Meeting, Bethesda, MD	Invited Speaker Invited Speaker Invited Speaker Invited Speaker
	AACR Annual Meeting 2012, Chicago, IL  Physical Sciences-Oncology Center Annual Meeting, Tampa Bay, Florida  38th Annual Educational Conference and Exposition, San Diego, CA  NIH Roadmap Epigenomics Program Investigators Meeting, Bethesda, MD  Pfizer meeting, Tampa, Florida  Physical Sciences-Oncology Center Think Tank,	Invited Speaker Invited Speaker Invited Speaker Invited Speaker Invited Speaker
	AACR Annual Meeting 2012, Chicago, IL  Physical Sciences-Oncology Center Annual Meeting, Tampa Bay, Florida  38th Annual Educational Conference and Exposition, San Diego, CA  NIH Roadmap Epigenomics Program Investigators Meeting, Bethesda, MD  Pfizer meeting, Tampa, Florida  Physical Sciences-Oncology Center Think Tank, Washington, DC  Committee on Cancer Biology Seminar Series, U.	Invited Speaker Invited Speaker Invited Speaker Invited Speaker Invited Speaker Invited Speaker Invited Participant
	AACR Annual Meeting 2012, Chicago, IL  Physical Sciences-Oncology Center Annual Meeting, Tampa Bay, Florida  38th Annual Educational Conference and Exposition, San Diego, CA  NIH Roadmap Epigenomics Program Investigators Meeting, Bethesda, MD  Pfizer meeting, Tampa, Florida  Physical Sciences-Oncology Center Think Tank, Washington, DC  Committee on Cancer Biology Seminar Series, U. Chicago, Chicago, IL	Invited Speaker Invited Speaker Invited Speaker Invited Speaker Invited Speaker Invited Participant Invited Speaker

	11th Annual AACR International Conference on Frontiers in Cancer Prevention Research, Anaheim, CA	Invited Speaker
	National Academy of Sciences Workshop, Use of Emerging Environmental Health Decisions, Washington, DC	Keynote Speaker
	CTRC-AACR San Antonio Breast Cancer Symposium, San Antonio, TX	Invited Speaker
2013	Komen Scholars Annual Meeting, Dallas, Texas	Invited Speaker
	Avon Foundation Meeting, New York, New York	Invited Participant
	4th Annual Physical Sciences - Oncology Centers (PS-OC) Network Investigators' Meeting, Scottsdale, Arizona	Invited Participant
	Gordon Research Conference: Molecular Mechanisms in Evolution, Easton, MA	Invited Speaker
	2nd International Biennial Evolution and Cancer Conference, UCSF, CA	Invited Speaker
	The 28th Aspen Cancer Conference, Aspen, Colorado	Invited Speaker
	Tissue Specific Estrogen Complex Symposium, Clearwater, FL	Invited Speaker
	Theoretical Viewpoints Emerging around the PS-OC Network "Clinical Tools Derived from a Basic Understanding of Stochastic Fluctuations and Clinical Implications , Rockville, MD	Invited Speaker
	Workshop on Game Theory and Cancer, "Social Evolution of Cellular Communities Under Stress, Baltimore, MD	Invited Speaker
	Wendy and Emery Reves International Breast Cancer Symposium "Phenotypic Plasticity and Implications for Tumor Heterogeneity and Therapy", Dallas, TX	Invited Speaker
2014	John H. Blaffer Lecture Series, MD Anderson Cancer Center, Houston, TX	Invited Speaker
	29th Aspen Cancer Conference, Aspen, CO	Invited Speaker
	2014 Advocate Leadership Summit, National Breast Cancer Coalition, Washington, DC	Invited Speaker
	NCI Physical Sciences-Oncology Center, Bethesda, MD	Invited Speaker
	Tissue Selecting Estrogen Complex Meeting, Clearwater, FL	Invited Speaker
	Gordon Research Conference, Rare Cells in Circulation, South Hadley, MA	Invited Speaker

Harvard School of Medicine, Department of Systems Invited Speaker Biology, Boston, MA 13th Annual AACR International Conference, Frontiers Session in Cancer Prevention Research, New Orleans, LA Chairperson/Invited Speaker Arizona State University, Physical Sciences Oncology **Invited Speaker** Workshop, Phoenix, AZ American Physical Society March Meeting, Denver, CO **Invited Speaker** American Association for Cancer Research Annual Invited Speaker Meeting, San Diego, CA NCI Laboratory of Human Carcinogenesis, Bethesda, Invited Speaker MD Third Symposium on Translational Genomics, Advances Invited Speaker in Transgenomics, Bethesda, MD Estrogen, SERMS and TSECS. Clearwater, FL Invited Speaker Biomedical Engineering Distinguished Lecturer Series, **Invited Speaker** University of California, Irvine, Irvine, CA Harvard University Tumor Microenvironment **Invited Speaker** Symposium, Boston, MA American Society for Cell Biology, Cell Cycle, **Invited Speaker** Reprogramming and Differentiation, Philadelphia, PA 8th International Symposium on the Breast, Susan Love Invited Speaker Research Foundation, Santa Monica, CA United States Urology Oncology Translational Research Keynote Speaker Mtg., Scottsdale, AZ Mathematical Biosciences Institute Workshop, Tumor Invited Speaker Heterogeneity and the Microenvironment, Columbus, OH **Invited Speaker** Estrogen, SERMS and TSECS, Clearwater, FL NIH/NIEHS Stem Cell Symposium, Washington, DC Invited Speaker University of Southern California Stem Cell Center, Los Invited Speaker Angeles, CA Society for Basic Urologic Research / The Society of Invited Speaker Urologic Oncology, Joint Mtg, New Orleans, LA Pfizer Symposium on TSEC and SERMS, Las Vegas Invited Speaker

2015

	Sylvester Comprehensive Cancer Center at the University of Miami Distinguished Lecturer	Invited Speaker
2016	12th Annual Tucson Symposium, Tucson, AZ	Invited Speaker
	Estrogen, SERMS and TSECS, Clearwater, FL	Invited Speaker
	30th International Association for Breast Cancer Research Conference, Portland, OR	Invited Speaker
	Laura Evans Memorial Breast Cancer Symposium, Sun Valley, Idaho	Invited Speaker
	NCI Provocative Questions for Medical Physics in Oncology, Boston	Invited Speaker
	Medical University of South Carolina, Charleston, South Carolina	Invited Speaker
	9th International Symposium on the Breast, Los Angeles, California	Invited Speaker
	University of Miami, Miami Florida	Invited Speaker
	Case Comprehensive Cancer Center, Seminar Series, Cleveland, OH	Invited Speaker
	Mari Lowe Center for Comparative Oncology Seminar Series, University of Pennsylvania, Philadelphia, PA	Invited Speaker
INVITED PRES	SENTATIONS - REGIONAL AND OTHER INVITED PR	RESENTATIONS
1997	Stanford University, Department of Biological Sciences, Mechanisms of DNA Repair , Stanford, CA	Invited Speaker
	23rd Annual Asilomar Research Conference/Retreat, PIBS, Pacific Grove, CA	Invited Speaker
	Association of Pathology Chairs, West/Midwest Regional Meeting, San Francisco, CA	Invited Speaker
	IBC Symposium, Tumor Suppressors & Oncogenes , San Francisco, CA	Invited Speaker
1998	UCSF Prostate Cancer Center Retreat, San Francisco, CA	Invited Speaker
	Program Project Grant Retreat, Tumor Hypoxia: Molecular Studies and Clinical Exploitation , Stanford, CA	External Reviewer

UCSF Cancer Center Symposium, San Francisco, CA Invited Speaker

2000

	UCSF Cell Biology Retreat, Wilbur Hot Springs, CA	Invited Speaker
	UCSF BOP Retreat, Napa, CA	Invited Speaker
	UCSF Genetics Day Retreat, San Francisco, CA	Invited Speaker
	UCSF Tetrad Retreat, Lake Tahoe, CA	Invited Speaker
	Loeb Lab Retreat, Seattle, WA	Invited Speaker
2001	UCSF Genetic Day, Marin Headlands Institute, CA	Invited Speaker
2002	Schilling Conference, Aptos, CA	Invited Speaker
2003	External & Internal Advisory Boards Meeting, UCSF Comprehensive Cancer Center, San Francisco, CA	Member
2004	UCSF, Molecular Medicine Research Conference, San	Invited Speaker
	Francisco, CA	пинов Сровно
	President s Cancer Panel Meeting, San Francisco, CA	Invited Speaker
2005	BOP Retreat, San Francisco, CA	Invited Speaker
	Cell Biology Retreat, Wilbur Hot Springs, CA	Invited Speaker
	University of California San Francisco, Epigenetic Regulation and Chromatin Remodeling Symposium, San Francisco, CA	Invited Speaker
	Stanford University Medical Center Alumi Association, Stanford Synapses: A Meeting of the Minds, Stanford, CA	Invited Speaker
	UCSF Tetrad Retreat 2005, Granlibakken, Lake Tahoe, CA	Speaker
2006	CBCRP Advisory Board Council Meeting, San Francisco, CA	Invited Speaker
	3rd Annual Breast Cancer Environmental Research Symposium, Berkeley, CA	Invited Speaker
	Wilbur Hot Springs Cell Biology Retreat, Wilbur Hot Springs, CA	Invited Speaker
	Granlibakken TETRAD Retreat, Lake Tahoe, CA	Invited Speaker

	University of California San Francisco, Bay Area Epigenetics Symposium: Stem Cells and Epigenetics, San Francisco, CA	Co- organizer/Speaker
2007	UCSF Pancreas Retreat, San Francisco, CA	Invited Speaker
	UCSF Grand Rounds, Early Epigenetic and Genetic Events in Carcinogenesis , San Francisco, CA	Invited Speaker
	Exploratorium Public Lecture "Cancer: When Good Cells Go Bad", San Francisco, CA	Invited Speaker
	UCB Tumor Biology Symposium, San Francisco, CA	Invited Speaker
	Breast Oncology Program Scientific Retreat, San Francisco, CA	Invited Speaker
	The Cancer League Conference, Oakland, CA	Invited Speaker
	Translational Research Working Group Meeting, Millbrae, CA	Participant
	CBCRP Advisory Council (board) Meeting, San Francisco, CA	Invited Speaker
	From Molecules to Medicine 5th Annual Minisymposium, University of California, San Francisco, CA	Invited Speaker
2008	UCSF Pancreas Cancer SPORE EAB Meeting, San Francisco, CA	Invited Speaker
	Annual Prostate Cancer Research Retreat, San Francisco, CA	Invited Speaker
	Stem Cell Conference, San Rafael, CA	Invited Speaker
	UCSF Institute for Regeneration Medicine, 1st Annual Retreat, Monterey, CA	Invited Speaker
	UCSF Epigenetics: From Basic Science to the Clinic, Gladstone Institute of Virology and Immunology, San Francisco, CA, Director Cell Cycling and Signaling Program	Speaker
2009	Exploratorium, Darwin Days , San Francisco, CA	Invited Speaker
	5th Anniversary Celebration, Avon Foundation Comprehensive Breast Center, San Francisco General Hospital, San Francisco, CA	Invited Speaker

	UCSF Foundation, "Stem Cell Research: Transforming Medicine", San Francisco, CA	Invited Speaker
2010	California Breast Cancer Research Program Investigator s Meeting, Oakland, CA	Invited Speaker
	California Breast Cancer Research Program Symposium	Speaker
2011	UCSF Tetrad Retreat, Lake Tahoe, CA	Invited Participant
2012	Breast Oncology Program Scientific Retreat, San Francisco, CA	Invited Speaker
	Tri-institutional Stem Cell Retreat, Asilomar, CA	Participant
	UCSF Tetrad Retreat, Lake Tahoe, CA	Participant
2013	Breast Oncology Program Scientific Retreat, University of California, San Francisco, CA	Invited Speaker
	UCSF Biomedical Science Program, Student Seminar Series	Invited Speaker
2014	Stanford University Bio-X Seminar Series, Frontiers in Interdisciplinary Biosciences, Stanford, CA	Invited Speaker
	Stanford University Baxter Stem Cell Retreat, Stanford, CA	Keynote Speaker
	UCSF Biomedical Science Program, Student Seminar Series	Invited Speaker
	UCSF Program in Biological Sciences, Faculty Lunch	Invited Speaker
	World Alliance Forum in San Francisco, The Impact of Regenerative Medicine, UCSF, CA	Invited Speaker
	University of California, Irvine, Department of Biophysics, Irvine, CA	Invited Speaker
	UCSF Department of Pathology, Research Interest Group	Invited Speaker
2015	CALICO Symposium on Stem Cells and Aging	Invited Speaker
2016	UCSF Breast Oncology Program Retreat, San Francisco	Invited Speaker

2016

Kenneth Rainin Foundation Innovations Symposium, San Invited Participant Francisco, CA

## UNIVERSITY AND PUBLIC SERVICE

### SERVICE ACTIVITIES SUMMARY

Since joining the UCSF faculty in 1995, I have made service contributions to the University in general and the Department of Pathology specifically. For UCSF in general, in my first 20 years I spent a major effort in organizing and helping to establish the Cancer Center. I served as the Inaugural Chair of the Faculty Search Committee for three years recruiting the first Director, Frank McCormick, as well as the first 12 faculty that included several stellar investigators such as Alan Balmain, Rosemary Akhurst, Gerald Evans, Lisa Coussens, David Toczyski, among others. I served as the first weekly Seminar Series organizer, first UCSF Cancer Center Symposium Organizer and founding Director of three programs, Cell Biology of Cancer, Dysregulation of Cancer Cell Signaling, as well as the Program in Cell Cycling and Signaling. I was actively involved in the re-organization and application preparation for what has now become the Helen Diller Family Comprehensive Cancer Center when we received NIH/NCI clinical comprehensive designation in record time. When it came time for a new Director, I served on the search committee in evaluating candidates. I remain actively involved in several of the Cancer Center Programs and assist with executive policy decisions in the Breast Oncology Program. I have served UCSF in the capacity as a member of the President's Postdoctoral Fellowship Program Advisory Committee, as well as serving a term on the schoolwide UCSF Graduate Council Committee, a UCSF committee devoted to improving the experiences of graduate and postgraduate trainees at our institution. Currently I am serving on the UCSF School of Medicine Admissions Committee, interviewing candidates for the 2017 entering class. My longest-term service to the UCSF community has been to serve on the School of Medicine Bridge Funding Committee. I have served continuously since 2007, helping evaluate the candidates and set the policies for allocating emergency funds to faculty in financial crises. In serving specific Departments, I have assisted several UCSF Departments (Laboratory Medicine, Urology, and Cell and Tissue Biology, Biochemistry, etc.) in their Search Committee activities (please see list in CV), often acting as the qualifying committee member to represent the Programs in Biological Sciences (PIBS) Program and Biomedical Sciences (BMS) Program. This involves screening applications to identify a subgroup of researchoriented applicants, making sure they meet the criteria for inclusion in the PIBS or BMS programs, interviewing multiple candidates over a period of months, and meeting with the other committee members to select the candidates for recruitment. As an example, I am currently serving on a Search Committee for the Department of Obstetrics, Gynecology and Reproductive Sciences. I have served on Search Committees in my own Department of Pathology that were instrumental in recruiting several current faculty members as well as the current chair. Since my arrival at UCSF I have been a member of the Program in Biological Sciences (PIBS) Program, serving on admissions committees, orals committees, thesis advisor, journal club coach, lecturing in mandatory Ethics classes, class lecturer, class organizer and mini-class organizer. I have served the identical functions in the Biomedical Sciences (BMS) Program, serving on admissions committees, orals committees, thesis advisor, journal club coach, lecturing in mandatory Ethics classes, class lecturer, class organizer and mini-class organizer. On a continuing basis I have participated in Community and Public Service. For example, I have been on National Public Radio (NPR) to discuss the state of cancer research (as a representative of the American Association for Cancer Research) as well as at a later time to discuss my own work on stem cells. I have participated in similar activities throughout my whole career. In similar service presentations, I have

addressed The Cancer League, a philanthropic society, several times (including 2008, 2009, 2010, 2011 and 2013) to educate them about basic issues in cancer research as well as my own specific research. Since 2006, I have worked intermittently with San Francisco Exploratorium. I developed a permanent exhibit for the San Francisco Exploratorium on cancer cells. This exhibit was unveiled in 2007 and has been seen by the hundreds of thousands of people that visit the Exploratorium per year and has received extensive positive commendation. Accompanying comments can be seen in

https://www.youtube.com/watch?v=JYXaF7ZJii8. It was accompanied by a public lecture that I presented on the initial steps of cancer. I was invited back two years later, in 2009, to deliver a San Francisco Exploratorium presentation on Darwinian Evolution and Cancer and also was asked to become a faculty member for a grant application that they submitted to the government. I worked with staff from the Exploratorium to design a class on clinical aspects of cancer therapy. Additionally, I presented a cancer lecture to the 7th grade class in Middle School, Raleigh, North Carolina in March of 2008 to teach them about cancer cells and women in science. I have been the featured public speaker for the Aspen Cancer Conference and was taped for televised presentation. I presented our recent work on risk stratification of breast cancer. The most prominent lay lecture I presented was in 2011 when I was one of the Mini Medical School faculty presentations featured at UCSF and broadcast in San Francisco (https://www.youtube.com/watch?v=QymKG8mXm6g). I presented a broad summary of advances in cancer research and risk stratification of cancer. Most recently I have served on several panel discussions about cancer and prevention, the latest at the Idaho Expedition Inspiration Fund in 2016. I continue to participate in similar activities to this day.

## **SCHOOL OF MEDICINE**

UCSF Committees	
Executive Steering Committee, Cancer Research Institute	Member
Committee on Diversity	Member
Breast SPORE Steering Committee	Member
Program in Biochemical Sciences (PIBS)	Member
Program in Biomedical Sciences (BMS)	Member
Admissions Committee for Program in Biomedical Sciences	Member
President's Postdoctoral Fellowship Program Advisory Committee	Member
UCSF Cancer Center Faculty Search Committee	Chair
Cancer Research Institute Search Committee	Chair
Gastrointestinal Cancer Search Committee	Member
Cancer Risk Program	Member
Graduate Council Committee	Member
UCSF Cancer Center Program in Cell Cycle Signaling	Program Leader
Pathology Chair Search Committee	Member
UCSF Academic Senate Committee	Member
	Executive Steering Committee, Cancer Research Institute Committee on Diversity Breast SPORE Steering Committee Program in Biochemical Sciences (PIBS) Program in Biomedical Sciences (BMS) Admissions Committee for Program in Biomedical Sciences President's Postdoctoral Fellowship Program Advisory Committee  UCSF Cancer Center Faculty Search Committee Cancer Research Institute Search Committee Gastrointestinal Cancer Search Committee Cancer Risk Program Graduate Council Committee  UCSF Cancer Center Program in Cell Cycle Signaling Pathology Chair Search Committee

2001 -	Pathology Department, Faculty Search Committee	Chair
2001 -	Pathology Department, Faculty Search Committees	Member
2001 - 2005	UCSF Comprehensive Cancer Center, Space Appropriations Committee	Member
2001 - present	UCSF Comprehensive Cancer Center, Academic Promotions and Merit Committee	Member
1996 - present	American Cancer Society, Institutional Grant to UCSF, Review Committee	Member
2001 - 2004	UCSF Chancellor's Council	Member
2004 - 2005	Pathology Department, Faculty Search Committee	Chair
2005 - 2009	Stem Cell and Developmental Biology Search Committee	Member
2005 - 2007	Radiology Search Committee	Member
2006 - 2007	UCSF U24 Internal Advisory Committee	Member
2008 - 2012	UCSF Resource Allocation Program (RAP) Cancer Committee	Member
2009 - 2010	Pathology Department, Faculty Search Committee	Member
2007 - present	UCSF Bridge Funding Review Committee	Member
2015 -	Breast Oncology Program Developmental Grant Review Committee	Member
2016 -	UCSF Bridge Funding Review Committee	Member
2016 -	UCSF School of Medicine Admissions Committee	Member
2016 -	UCSF Search Committee for the Chair of the Department of Obstetrics, Gynecology and Reproductive Sciences	Member
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-	Thesis Committees	
-	Darryl Miles - School of Medicine, Dr. Kevin Shannon (advisor)	Member
-	Maureen Fitch - Biomedical Sciences Program, Dr. Tristram Parslow (advisor)	Member
-	Melissa Rivera - Department of Microbiology, Dr. Elizabeth Blackburn (advisor)	Member
-	Michael Lowenstein - Department of Biophysics, Dr. John Sedat (advisor)	Member
-	Audrey Rosales - Department of Microbiology, Dr. Joachim Li (advisor)	Member

-	Karen Fitzgerald - Department of Biochemistry, Dr. Martin McMahon (advisor)	Member
-	Charles Holst - Program in Biological Sciences, Dr. Thea Tlsty (advisor)	Chair
-	Yongping Crawford - Program in Biomedical Sciences, Dr. Thea Tlsty (advisor)	Chair
-	Curtis Pickering - Program in Biological Sciences, Dr. Thea Tlsty (advisor)	Chair
-	Geoffrey Benton - Program in Biological Sciences, Dr. Thea Tlsty (advisor)	Chair
-	Brian Green - Department of Microbiology, Dr. Joachim Li (advisor)	Member
-	Kenneth Finn - Department of Microbiology, Dr. Joachim Li (advisor)	Member
-	Kevin Martinez - Program for Stem Cell Biology, Dr. Thea Tlsty (advisor)	Chair
-	Joseph Ologa Oloo - Program for Stem Cell Biology, Dr. Thea Tlsty (advisor)	Chair
-	Robert Weber, Program in Biological Sciences, Dr. Zev Gartner (advisor)	Member
-		
-	Orals Committees, PIBS	
1996 -	Sue Jasperson	Member
1996 -	Maxine Bauzon	Member
1996 -	Julia Charles	Member
1996 -	Christina Hull	Member
1997 -	Seiko Ishida	Member
1997 -	Melissa Rivera	Member
2001 -	Karen Fitzgerald	Member
2002 -	Greg Whitworth	Member
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-	Orals Committees, BMS	
1996 -	Madhu Macrae	Member
1997 -	Maureen Fitch	Member
2000 -	Le Trinh	Member

# SERVICE AT OTHER UNIVERSITIES

-	School of Medicine, University of North Carolina at Chapel Hill
1985 - 1989	Lineberger Cancer Research Center, Library Committee
1986 -	Search Committee for Biochemistry
1986 -	Search Committee for LCRC, Chemical Carcinogenesis
1987 - 1989	Lineberger Cancer Research Center, Seminar Committee
1987 - 1995	Medical Student Advisor
1988 - 1995	Graduate Education Committee, Department of Pathology
1988 - 1995	Curriculum Committee, General Pathology Course, 1st year Medical Students, Dept. of Pathology
1989 -	Subcommittee Member of Liaison Committee on Medical Education (LCME) Institutional Self Study Task Force Research Subcommittee
1990 -	Search Committee for Director of Genetics Curriculum
1992 -	UNC Lineberger Comprehensive Cancer Center Administrative Committee
1992 -	Search Committee for Department of Pathology Associate
1993 - 1994	Search Committee for Department of Radiology
1993 - 1994	Search Committee for Lineberger Comprehensive Cancer Center
1994 -	Search Committee for Chair of Biochemistry Department at UNC
1994 - 1995	Search Committee for Lineberger Comprehensive Cancer Center
2002 -	Search Committee for Division of Medical Oncology in Breast Oncology
-	Graduate Division, University of North Carolina at Chapel Hill
1985 - 1995	Curriculum in Toxicology
1989 - 1995	Curriculum in Toxicology, Admissions Committee
1989 - 1995	Curriculum in Genetics
1987 -	Curriculum in Genetics, Examination Committee
1990 -	Curriculum in Genetics, Examination Committee
1991 -	Curriculum in Genetics, Examination Committee
1991 - 1993	Curriculum in Genetics, Chair Seminar Committee

1985 - 1995	Program in Molecular Biology and Biotechnology
1993 - 1994	2nd Carolina Conference On Chromosome Structure and Dynamics
-	Thesis Committees, UNC
-	Connie Cirks - Department of Microbiology, Dr. J.S. Pagano (advisor)
-	Margaret Price - Department of Microbiology, Dr. M. Edgell (advisor)
-	John Benson - Genetics Curriculum, Dr. E-S. Huang (advisor)
-	Scott Peterson - Genetics Curriculum, Dr. G. Maroni (advisor)
-	Guang Jin Im - Department of Pharmacology, Dr. Y-C. Cheng (advisor)
-	Tamela Butler - Department of Pathology, Dr. D. Kaufman (advisor)
-	Steve (Yaw-Wen) Guo - Genetics Curriculum, Dr. E-S. Huang (advisor)
-	Dana L. Shuey - Curriculum in Toxicology, Dr. J. Lauder (advisor)
-	Robert Whitehead - Curriculum in Toxicology, Dr. C. Barrett (advisor)
-	Michael Howard - Curriculum in Genetics, Dr. J. Griffith (advisor)
-	Cynthia Afshari - Curriculum in Toxicology, Dr. C. Barrett (advisor)
-	Pengchin Chen - Department of Pathology, Dr. B. Weissman (advisor)
-	Sunny Zhang - Department of Pathology, Dr. N. Maeda (advisor)
-	School of Medicine, University of Zimbabwe
1992 -	Course Director and sole Lecturer for quarter-long Medical Genetics Class, taught to first-year medical students at the University of Zimbabwe, Harare, Zimbabwe
-	Karolinska Institutet, Stockholm, Sweden
1994 -	Served the Karolinska Institutet on their Institutional Evaluation Committee, Member
-	University of Lausanne, Lausanne, Switzerland

2015 - Lectured in Cancer Class (Summer)

#### **COMMUNITY AND PUBLIC SERVICE**

- 2006 present San Francisco Exploratorium Developed a permanent exhibit on cancer cells titled Cells Behaving Badly
- 2007 present San Francisco Exploratorium Gave a presentation on the initial steps of cancer entitled When Good Cells Go Bad
- 2007 present NCI Women in Science Forum: The Engine Behind Discovery Gave a presentation on Early Epigenetic and Genetic Events in Carcinogenesis .
- 2007 present The Heritage House Senior Living Gave a presentation entitled Finding Early Cancers: Opportunities for Insight and Intervention .
- 2007 present Saint Francis Hospital, San Francisco Gave a public presentation entitled x Insights into the Origin and Progression of Cancer .
- 2007 present Summit Health Education Center Gave a public presentation in New Frontiers in Cancer
- 2008 2013 Addressed The Cancer League, a philanthropic society, to educate them about basic issues in cancer research
- 2008 present Durant Middle School, Raleigh, North Carolina Presented a cancer lecture and then took extended questions and answers from the 7th grade class about women in science
- 2008 present Public Forum of the Aspen Cancer Conference Gave a presentation on Predicting a Tumor before it Forms .
- 2009 present National Breast Cancer Coalition Fund (NBCCF) Advocacy
  Training Conference Gave a presentation entitled Getting
  Back to Basics: What do We Actually Know about Breast
  Cancer . Also participated as a panelist.
- 2009 present San Francisco Exploratorium Gave a presentation on Darwinian Evolution and Cancer .
- 2009 present San Francisco Stem Cell Forum participated as a panelist.
- 2010 2010 National Public Radio (NPR) Discussed the state of cancer research
- 2011 present San Francisco Exploratorium Worked with staff to design a class on clinical aspects of cancer therapy
- 2012 present UCSF Mini Medical School faculty presentation featured at UCSF and broadcast in San Francisco entitled Cancer Biology 101: Opportunities for Insight and Intervention .

- 2013 present Komen Foundation Created a webinar and video presentation on the Science of Breast Density . This is archived in their library.
- 2013 present Avon Public Forum Gave a presentation on Finding Molecular Markers that Predict Future Formation of Malignant Breast Cancer .
- 2013 present UCSF Public Forum on DCIS and Breast Cancer Risk Gave a presentation entitled Molecular Markers that Predict Future Formation of Malignant Breast Cancer . Also participated as a panelist.
- 2013 present Smithsonian Institute Journal Presentation on Rare Cells in the Adult Human with Pluripotent Potential .
- 2014 2014 National Public Radio (NPR) Discussed my stem cell research
- 2014 present Emerging Technology Foundation Gave a presentation on Aging and Rejuvenation: An Invitation to Mold the Future .
- 2014 present Abbivie Webinar Gave a presentation on The Biological Basis of Fibrotic Phenotypes .
- 2016 present World Alliance Forum in San Francisco: The Impact of Regenerative Medicine Gave a presentation entitled The Future Insights and Applications Provided by Studying Regenerative Medicine .
- 2016 present Panelist at the International Association for Breast Cancer Research Public Panel Discussion on Confronting the Confusion: How to Think about Breast Cancer Screening:
- 2016 present Sun Valley, Idaho Expedition Inspiration Public Forum Panelist at the Forum entitled Stratifying DCIS Biopsies for Future Tumor Formation .

## **TEACHING AND MENTORING**

#### **TEACHING SUMMARY**

In 1995, I assumed a full-time tenured position at University of California at San Francisco. Teaching and research occupy the majority of my time. Many of these obligations have remained the same over the last several years (2013 2016) as I participate in the various programs at UCSF. These teaching responsibilities fall into six major areas.

The first area, which takes the greatest amount of time, is the daily interactions with the predoctoral and postdoctoral fellows and residents that have chosen my laboratory for their training experiences. Detailed discussions concerning experimental protocol, interpretation of the results, and the attainments of the professional skills necessary for their advancement are only some of the interactions that take place every day. In addition, there are scheduled talks and presentations upon which they critiqued. Culmination of their work results in publications,

presentations and career advancement. They are individually tutored in each of these aspects. For the last few years I have had a laboratory group that includes 8-14 individuals. The distribution of trainees in my laboratory this last year was composed of 2 masters students, 2 undergraduate students, 4 research associates, 3 technicians, 4 postdoctoral fellows and 1 volunteer. Several students have now graduated and we are hosting rotating students.

The second area of teaching includes the formalized hours that I contribute to teaching the medical, dental, professional and graduate students. I typically average between 50 to 90 contact hours per year that includes lectures and faculty laboratory participation in the first and second years of Pathology for professional students, and graduate classes such as Cell Biology and the Molecular Biology and Pathology of Cancer. In 2000, I was the course organizer for a PIBS/BMS course called the Molecular Pathology of Neoplasia . It had an accompanying laboratory section. When it is offered (every few years), I arrange the course, recruit the faculty, administer and score the examinations and provide selective lectures. Past lectures have addressed mutations in cancer, as well as, stem cells and cancer. It was not offered this year. Additionally, I have taught a two-hour lecture entitled The Source of Mutations in Cancer to the first year professional students and formerly participated in the laboratory exercises let by Dr. Henry Sanchez as part of the first year curriculum. My formal contact hours were occupied in past years by Discussion Sessions for the PIBS Cell Biology course. For the past 3 years I have also given lectures in a new BMS class (225A) on Stem Cells and Cancer. I routinely coach graduate students as one of their official coaches for their journal club presentations in PIBS or BMS. In 2012, I taught a PIBS-sanctioned mini-course on Cellular Response to Stress in Biology and Disease. In 2013, I have completed a PIBSsanctioned and Biophysics-sponsored mini-course on Modeling Biological Systems; genetic circuitry. For the last 3 years, I lectured in the Epidemiology of Cancer Biology (EPI252), as well as my long-standing lecture in Pathology (PATH135), in addition to single lectures in additional classes listed in the teaching section. In 2013-2016, I executed the same teaching load.

The third area of teaching responsibilities is as guest lecturer internationally and nationally. In addition to presenting seminars in established series in various Universities, I have also given lectures in specialized classes. For the last several years I gave several keynote/plenary presentations. The interactions with students are particularly rewarding when I visit Universities or lead discussion groups in the professional sessions that are sponsored by societies such as the American Association for Cancer Research. Previously, I have routinely taught in an annual class entitled the Molecular Biology of Cancer that is sponsored by the American Association for Cancer Research. This cancer camp brings in students from over the country and the world to learn about the new advances in molecular aspects of cancer biology. As part of my responsibilities as the co-PI for a major Center on Physical Science and Oncology, I have participated (and taught) in 5 workshops over the past 18 months. Also included in this area is the organization of timely professional symposia. I recently chaired two Keystone Symposia and a Gordon Conference. I served as the 2012 US organizer for the Princess Takamatsu Cancer Research Symposium. This is my second time serving in this capacity. In 2011, I was a visiting faculty member for the Cold Spring Harbor Course on Stem Cell Biology, a two-week course. Finally, I have been intensively involved in the Physical Science and Oncology Center, participating in 3 workshops and the annual meeting in 2012-2013, and 2 workshops and the annual meeting in 2014 and 2 workshops in 2015. In 2015, I taught in Lausanne, Switzerland for an International Course on Cancer Biology 2015. This required approximately 12 hours of preparation and lecture. Finally, this year, 2016, I participated in a special workshop for students combining physics and oncology, Applied

Mathematics in Germinating Oncology Solutions (AMIGOS program).

A fourth area addresses an aspect of teaching that is less formalized but very important. It includes extended discussions with a wide spectrum of individuals that have various questions about science as a way of life or as a profession. These individuals are often in the process of making life decisions and seek insight into actualities of an academic existence. I am asked to speak to groups and individuals in national and international symposia on this subject. Additionally, we have hosted several young investigators for summer jobs within our laboratory who are trying to decide if life as an academic scientist is for them. Just recently, my laboratory hosted May Zepeda, an engineer from Cisco systems that wishes to change career paths and work on clinical trials. She has successfully made this transition. I think this type of crossfertilization is important in science and society. In 2014, I addressed the National Breast Cancer Coalition in Washington, DC. I provided information on the current state of Beast Cancer research. Additionally, my lab hosted a high school biology teacher, who has now gone back to school to study genetic counseling.

Finally, a fifth area of teaching is directed to the lay public. I have organized and participated in symposia designed to educate lay people in ongoing cancer research. I have frequently done this for the American Association for Cancer Research, working extensively with patient advocates at annual symposia as well as targeted meetings. Additionally, I have spoken publicly on the activities of UCSF faculty in battling cancer. For example, I have addressed The Cancer League, a cancer charity organization, several times to educate them about basic issues in cancer research as well as my own specific research. I have worked with the San Francisco Exploratorium, developing a permanent exhibit on cancer cells that has been seen by the hundreds of thousands of visitors that visit the Exploratorium per year. On YouTube it has garnered almost 200 thousand views. It was accompanied by a public lecture that I presented on the initial steps of cancer. I also gave a presentation on Darwinian Evolution and Cancer. I have been the featured public speaker for the Aspen Cancer Conference and the Komen Cancer Foundation that was taped for televised presentation. I presented our work on risk stratification of breast cancer. The most prominent lay lecture I presented was in 2011 when I was one of the Mini Medical School faculty presentations featured at UCSF and broadcast in San Francisco. I presented a broad summary of advances in cancer research and risk stratification of cancer which has been viewed on YouTube by thousands of people. I have participated in similar activities to the present day.

In summary, the teaching aspect of my position easily occupies in excess of 1200 hours per year. This estimate would be accurate for the past academic calendar years, but is an underestimate for the last few years (partially due to my large laboratory group). I anticipate that many of these obligations will remain the same during my future at the University of California at San Francisco.

# **FORMAL TEACHING**

Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
	Biomedical Sciences Program, BMS 225, Tissue and Organ Biology	Lecturer		

Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
1996 - BMS 225A, Tissue present and Organ Biology - 1-2 lectures, 2-4 hours		Lecturer		
1996 - 2000	MED SCHL 170,1, Cancer Seminar - coach 2 students/class, 10 hours	Coach		
1998 -	Biomedical Sciences Program, BMS 198	Lecturer		
1998 -	Cell Biology, PIBS, Cell Cycle Lectures	Lecturer		
1997 - 2003	Cell Biology, PIBS, Cell Cycle Lectures	Lecturer		
1998 -	Molecular Pathology of Neoplasia, Pathology 126, 135, 135.01 (PIBS, BMS)	Lecturer		
1999 - 2002	PIBS, Cell Biology - 60 hours	Discussion Leader		
2000 -	Molecular Pathology of Neoplasia, Pathology 126, 135, 135.01 (PIBS, BMS)	Lecturer		
1998 -	PIBS/BMS Journal Club Coach, Emmitt Jolly (PIBS)	Coach		
1999 -	PIBS/BMS Journal Club Coach, Le Trinh (BMS)	Coach		
1999 - present	Ethical Conduct of Science for PIBS/BMS students (Data Management)	Lecturer		

A	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
	000 - resent	Path 126,135,135.01,160, Cellular and Molecular Aspects of Neoplasia - 2 hour lecture	Lecturer		
	003 - resent	PIBS/BMS, Molecular Pathology of Neoplasia - Usually give 1-3 lectures, 6 hours, participate in 10 laboratory sessions.	Course Organizer		
21	004 -	Molecular Pathology of Neoplasia, Pathology 126, 135, 135.01 (PIBS, BMS)	Lecturer		
21	003 -	Breast Oncology Program, Breast Cancer Today and Tomorrow	Lecturer		
2	005 -	Breast Oncology Program, Breast Cancer Today and Tomorrow	Lecturer		
2	006 -	Biomedical Sciences Program, BMS 225A, Developmental and Stem Cell Biology	Lecturer		
21	006 -	Molecular Pathology of Neoplasia, Pathology 126, 135, 135.01 (PIBS, BMS)	Lecturer		
2	000 -	Molecular Pathology and Biology of Neoplasia, Biochemistry 297 (PIBS, BMS)	Lecturer		

Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
2004 -	Molecular Pathology and Biology of Neoplasia, Biochemistry 297 (PIBS, BMS)	Lecturer		
2007 -	Molecular Pathology and Biology of Neoplasia, Biochemistry 297 (PIBS, BMS)	Lecturer		
2007 -	Biomedical Sciences Program, BMS 220, Basic & Clinical Aspects of Stem Cell Biology	Lecturer		
2007 - present	BMS, Stem Cell Biology- 2 hour lecture/ 2 hour discussion group	Discussion Leader		
2008 -	Biomedical Sciences Program, BMS 225A, Developmental and Stem Cell Biology	Lecturer		
2009 - present	Biomedical Sciences Program, BMS 225A, Developmental and Stem Cell Biology	Lecturer		
2010 -	Biomedical Sciences Program, BMS 225B, Tissue and Organ Biology	Lecturer		
2010 -	Biomedical Sciences Program, BMS 270, Cellular Stress Responses in Disease Processes	Lecturer		
2010 -	Biomedical Sciences Program, BMS 270, Special Topics in Biomedical Sciences	Lecturer		

Academic	Yr Course No. & Title	Teaching Contribution	School	Class Size
2010 -	PIBS Mini-course, Cellular Response to Stress in Biology and Disease	Organizer and Lecturer		
2010 - 201	0 BMS, Cellular Responses to stress and its effect on disease - 20 hours	Lecturer and Course Organizer		
2011 -	Biomedical Sciences Program, BMS 225B, Vertebrates, Organogenesis and Development	Lecturer		
2011 -	Biophysics 219, PIBS Mini-course: Modeling Biological Systems: genetic circuitry	Organizer and Lecturer		
2011 -	BMS 255B, Tissue and Organ Biology, Stem cell biology	Lecturer		
2011 -	UCSF Osher Mini Medical School Series, Winning the War on Cancer in the 21st Century	Lecturer		
2008 -	Pathology 135, Cellular and Molecular Aspects of Neoplasia	Lecturer		
2009 -	Pathology 135, Cellular and Molecular Aspects of Neoplasia	Lecturer		
2010 -	Pathology 135, Cellular and Molecular Aspects of Neoplasia	Lecturer		

Academic `	Yr Course No. & Title	Teaching Contribution	School	Class Size
2011 -	Pathology 135, Cellular and Molecular Aspects of Neoplasia	Lecturer		
2011 - 2011	PIBS/BP 219 Modeling Biological Systems 40 hours	Course Organizer		
2013 -	PIBS Mini-course, Cellular Response to Stress in Biology and Disease	Organizer and Lecturer		
2013 -	Pathology 135, Cellular and Molecular Aspects of Neoplasia	Lecturer		
2013 - 2013	PIBS/BP 219 Modeling Biological Systems - 40 hours	Course Organizer		
2013 - 2013	BMS, Cellular Responses to stress and its effect on disease - 20 hours	Lecturer and Course Organizer		
2014 -	Epidemiology 252, Cancer Epidemiology	Lecturer		
2014 -	Pathology 135, Cellular and Molecular Aspects of Neoplasia	Lecturer		
-	Department of Pathology, Research Interest Group	Lecturer		
2015 -	Epidemiology 252, Cancer Epidemiology	Lecturer		
-	Pathology 135, Cellular and Molecular Aspects of Neoplasia	Lecturer		

Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
-	BMS 230, Molecular Aspects of Stem Cell Biology	Lecturer		
-	BMS 260, Cell Biology	Proposal Evaluator		
2016 -	Epidemiology 252, Cancer Epidemiology (Spring 2016)	Lecturer		
-	BMS 230, Molecular Aspects of Stem Cell Biology	Lecturer		
-	BMS 260, Cell Biology	Proposal Evaluator		

#### MENTORING SUMMARY

I spend a great deal of time mentoring the graduate students and postdoctoral fellows in my research laboratory. Detailed discussions concerning experimental protocol, interpretation of the results, and the attainments of the professional skills necessary for their advancement are only some of the interactions that take place every day. In addition, there are scheduled talks and presentations upon which they critiqued. Culmination of their work results in publications, presentations and career advancement. They are individually tutored in each of these aspects and the mentoring does not finish after they leave the laboratory, it continues throughout their careers. I am asked to speak to groups and individuals in national and international symposia on the subject of mentoring. For the last several years when I visit Universities or lead discussion groups for the professional societies such as the American Association for Cancer Research, I lead sessions that are aimed at mentoring young scientists in advancing their career. In formal settings sponsored by societies such as Women in Cancer Research, I repeatedly have led table discussions giving advice and mentoring to graduate students and postdoctoral fellows in how to prepare a CV, how to interview for a job, how to teach effectively, how to set up your first laboratory and other subjects. This year, 2016, I was recruited as a formal Mentor and participated in a special workshop for students combining physics and oncology, Applied Mathematics in Germinating Oncology Solutions (AMIGOS program). Our specially selected group of Mentors screened applications to choose the 25 participants that would be allowed to compete for special funding from a joint program hosted by the NIH/NCI and Breast Cancer Research Foundation. In a Washington DC based workshop, we worked with the participants to craft insightful questions and design novel experimental approaches that would address the questions. We aided the students in composing applications to apply for funding from this special effort to support the most meritorious applications. We, the Mentors, were also asked to assess the significance and novelty of the applications that were submitted. This ongoing mentoring activity lasted through the year. I also mentor and have extended discussions with a wide spectrum of individuals that have various questions about science as a way of life or as a profession. These individuals are often in the process of making life decisions and seek insight into actualities of an academic existence. Additionally, we have hosted several young investigators for summer jobs within our laboratory who are trying to decide if life as an academic scientist is for them. Just

recently, my laboratory hosted May Zepeda, an engineer from Cisco systems that wishes to change career paths and work on clinical trials. She has successfully made this transition. I think this type of cross-fertilization is important in science and society. Additionally, my lab hosted a high school biology teacher, who has now gone back to school to study genetic counseling. Additionally, much of my mentoring has involved fellow faculty at UCSF. I have extensive discussions with fellow faculty members as well as more junior scientists on a regular basis. I have critiqued grant applications for colleagues (i.e. Phil Coffino, Osamu Tetsu, Jay Debnath, Chris Hagg, Michael Korn, Joachim Li, Marta Margeta, etc) as well as junior scientists both within my laboratory (i.e. Drs. DeFilippis, Wilson, Roy, Dumont, Liu, Pickering, Benton, Fordyce, etc.) and outside my laboratory (i.e. Alana Welms, Mark Sternlicht, Julie Lang, etc). Within the Department of Pathology I am currently the formal mentor for Dr. Marta Margeta. We have met for scheduled discussions on career and science. Outside the Department of Pathology, I act as an informal mentor to several young investigators which include a UCSF Fellow, Dr. Saul Villeda. We talk routinely. Finally, I often assemble an informal mock study section to teach trainees and young faculty about grant applications. I have continued this mentoring load throughout my career at UCSF.

# PREDOCTORAL STUDENTS SUPERVISED OR MENTORED

Dates	Name	Program or School	Mentor Type	Role	Current Position
	Graduate Students UCSF (Rotations)				
_	Ludmila Pawlikowska - rotation	BMS, UCSF		Mentor	
-	Lori Roberts - rotation	BMS, UCSF		Mentor	
-	Neal Freedman - rotation	BMS, UCSF		Mentor	
-	David Sanchez - rotation	BMS, UCSF		Mentor	
-	Jennifer Giampaolo - rotation	BMS, UCSF		Mentor	
_	Joshua Anderson - rotation	BMS, UCSF		Mentor	
_	Amy Young - rotation	BMS, UCSF		Mentor	
-	Daniel Garcia - rotation	BMS, UCSF		Mentor	

Dates	Name	Program or School	Mentor Type	Role	Current Position
-	Robert Judson - rotation	BMS, UCSF		Mentor	
_	Michael Cronin - rotation	PIBS, UCSF		Mentor	
_	Justine Melo - rotation	PIBS, UCSF		Mentor	
_	Nathan Edwards - rotation	PIBS, UCSF		Mentor	
	Jonathan Zalevsky - rotation	PIBS, UCSF		Mentor	
-	Joyce Tung - rotation	PIBS, UCSF		Mentor	
_	Greg Whitworth - rotation	PIBS, UCSF		Mentor	
_	Max Heiman - rotation	PIBS, UCSF		Mentor	
_	Analeah Sundberg - rotation	PIBS, UCSF		Mentor	
-	Curtis Pickering - rotation	PIBS, UCSF		Mentor	
-	Lucy Lebedeva - rotation	PIBS, UCSF		Mentor	
-	Veena Singla - rotation	PIBS, UCSF		Mentor	
_	Katherine Sorber - rotation	PIBS, UCSF		Mentor	
-	Ashley Robinson - rotation	PIBS, UCSF		Mentor	
-	Alvin Tamsir - rotation	PIBS, UCSF		Mentor	

Dates	Name	Program or School	Mentor Type	Role	Current Position
-	Angela Castanieto - rotation	PIBS, UCSF		Mentor	
2013 - 2013	Aude Bouagnon - rotation	PIBS, UCSF		Mentor	
2014 - 2014	Nathan Edwards - rotation	PIBS, UCSF		Mentor	
-	Aparna Sohoni - rotation	medical student, UCSF		Mentor	
-	Pamela Washington - rotation	MTPCCR		Mentor	
_	Graduate Students UCSF (doctoral projects)				
-	Charles Holst	PIBS, UCSF		Advisor	
-	Yong Ping Crawford	BMS, UCSF		Advisor	
-	Curtis Pickering	PIBS, UCSF		Advisor	
-	Geoffrey Benton	PIBS, UCSF		Advisor	
-	Kevin Martinez	SFSU		Advisor	
-	Undergraduate Students UCSF				
-	Alaa-Eddine Djedouani			Mentor	
_	Roopa Vemireddy			Mentor	
-	Jason Ju Hyung			Mentor	
	Molly Lemann			Mentor	

Dates	Name	Program or School	Mentor Type	Role	Current Position
	Scott Marx			Mentor	
	Tamara Bhandari			Mentor	
	Leonard Kusdra			Mentor	
	Brittany Grovey			Mentor	
	Timothy Fessenden			Mentor	
	Anna Baer			Mentor	
	Peggy Weng			Mentor	
	Tomi Lanre- Amos			Mentor	
	Dena Goldberg			Mentor	
	Andrew Prokop			Mentor	
	Graduate students UNC (rotations)				
	James Samet			Mentor	
	Paula Adams			Mentor	
	Stuart Thompson			Mentor	
	John O'Brien			Mentor	
	Todd Wyatt			Mentor	
	Ingrid Hall			Mentor	
	Alicia White			Mentor	
	Jonathan Phillips			Mentor	
	Andrew Sparks			Mentor	
	Amy Briot			Mentor	
	Jason Sprouse			Mentor	
	Eric Fleming			Mentor	

Dates	Name	Program or School	Mentor Type	Role	Current Position
_	Mary Hixon			Mentor	
-	Andrea Gonzales			Mentor	
_	Jennifer Goulet			Mentor	
_	Lee Bennett			Mentor	
_	Victoria Lee			Mentor	
_	Amy O'Conner			Mentor	
-	graduate students UNC (doctoral projects)				
_	Ingrid Hall			Advisor	
-	Alicia White			Advisor	
_	Mary Hixon			Advisor	
-	undergraduate students UNC				
-	Peter McInernee	Chemistry Major		Mentor	
-	Kevin Watson	Chemistry Major		Mentor	
-	Raj Solanki	Chemistry Major		Mentor	
-		Chemistry Major		Mentor	
_	Benjamin Poulose	Biology Major		Mentor	

# POSTDOCTORAL FELLOWS AND RESIDENTS MENTORED

	Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
-		Post-doctoral Fellows USCF				

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
1995 - 1996	Antonio Gualberto			Advisor	
1995 - 1998	Janice Nigro			Advisor	
1994 - 2000	Serge Romanov			Advisor	
1995 - 1998	Aria Olumi			Advisor	
1997 - 1999	Richard Chao			Advisor	
1997 - 2000	Valeria Ossovskaya			Advisor	
1999 - 2001	Larisa Haupt			Advisor	
1999 - 2002	Patrick Hein			Advisor	
2001 - 2009	Kim McDermott			Advisor	
2001 - 2007	Mona Gauthier			Advisor	
2001 - 2004	Jianmin Zhang			Advisor	
2002 - 2010	Colleen Fordyce			Advisor	
2003 - 2007	Paul Reynolds			Advisor	
2003 - 2011	Nancy Dumont			Advisor	
2003 - 2013	Rosa-Anna Defilippis			Advisor	
2004 - 2007	Bob Liu			Advisor	
2005 - 2006	Jennifer Markovics			Advisor	
2005 - 2006	Vivian Siegel			Advisor	
2005 - 2008	Matthew Wilson			Advisor	
2006 - 2006	Christopher Sarkisian			Advisor	
2007 - 2013	Somdutta Roy			Advisor	
2009 - 2013	Luis Estevez- Salmeron			Advisor	
2009 - 2011	Mekhala Maiti			Advisor	
2009 - 2010	Steve Oh			Advisor	

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2010 - 2012	David Liao			Advisor	
2011 - 2015	Deng Pan			Advisor	
2013 - 2014	Marina Voronchikhina			Advisor	
2013 - 2014	Kenneth Finn			Advisor	
2014 -	Joseph Anthony Caruso			Advisor	
2015 - 2016	Fang Xiao			Advisor	
-	Medical Fellows UCSF				
-	Ken Aldape			Advisor	
-	Aria Olumi			Advisor	
_	Lucy Song			Advisor	
_	Richard Chao			Advisor	
-	Max Meng			Advisor	
_	Kristin Mantei			Advisor	
-	Hal Berman			Advisor	
-	Jochen Schaefer			Advisor	
-	Cynthia Jimenez			Advisor	
-	Post-doctoral Fellows UNC				
1985 - 1987	David Sorscher			Advisor	
1987 - 1988	Edward Otto			Advisor	
1990 - 1991	Ron LaBiche			Advisor	
1990 - 1992	Laura Livingstone	,		Advisor	
1990 - 1993	Piotr Jonczyk			Advisor	

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
1991 - 1993	Deborah Iman Schaefer			Advisor	
1992 - 1994	Helene Roelofs			Advisor	
1993 - 1994	Dhan Kuppuswamy			Advisor	
1993 - 1995	Suzanne Hess			Advisor	
1994 - 1995	Todd Gray			Advisor	
-	Medical Fellows UNC				
	Tul Kalayanamit			Advisor	
-	John Norris			Advisor	

## RESEARCH AND CREATIVE ACTIVITIES

### RESEARCH AND CREATIVE ACTIVITIES SUMMARY

Breast tissue from healthy women, contains a wealth of information. We have studied diseasefree tissue to understand basic biology as well as diseased tissue to understand cancer and cancer risk.

One of our long-standing goals is to identify pre-malignant lesions that will progress to invasive cancers and develop a preventive approach to stop their progression. We have made significant advances in accomplishing these goals. Using a large, established and wellcharacterized population-based cohort with twenty years of follow-up of DCIS treated by lumpectomy alone, we, and our collaborators, have found a signature of biomarkers that stratify risk for the formation of subsequent tumors (Gauthier et al., 2007). Since only one out of ten pre-malignant lesions is actually associated with a future invasive tumor, these biomarkers allow us to identify the women that need aggressive treatment and spare the women whose DCIS lesions will never progress further. These original pilot studies have now been validated in a large retrospective cohort and have been published (Kerlikowske et al. 2010). Prospective validation is ongoing at five sites internationally. We have adapted this stratification tool to a CLIA-compliant protocol and the assay has been licensed and is being developed for a clinical test. An exciting extension of these studies has also allowed us to identify those specific pre-malignant lesions that are associated with future metastases. This collaboration with Dr. Kerlikowske (UCSF) has the potential to provide a major change in the clinical treatment of women diagnosed with DCIS.

Recently, while studying injured tissues, we made an unexpected discovery. We identified and characterized a novel population of somatic cells isolated from adult human disease-free tissue that exhibits extensive lineage plasticity. Indeed, these cells are able to reproduce not only the

functional architecture of the mammary gland, but also have the ability to differentiate into functional derivatives of ectodermal, endodermal and mesodermal germ layers. For example, a clonogenic population (derived from a single cell obtained from the human breast) can give rise not only to milk producing breast cells but also to functional adipocytes, beating cardiomyocytes, pancreatic cells and intestinal goblet cells. Therefore, these cells have great potential as a non-embryonic resource for regenerative medicine. While several studies have examined the occurrence of cells with lineage plasticity in post-natal and adult tissue, none to date have characterized somatic cells with such extensive lineage plasticity. These cells are mortal and retain genomic integrity in contrast to what has been observed for many ESC and iPS cells. Additionally, they do not have elevated telomerase activity or hTERT expression. Thus, this is a unique population of somatic cells that will provide insights into both normal biology and pathology. Our most recent work has characterized the signaling pathways that allow endogenous Plastic Somatic (ePS) cells to express pluripotency factors. We have demonstrated that these cells can enter pluripotency through signaling that is not used (or available) to human Embryonic stem cells or IPS cells. We hypothesize that these novel cells are used in wound healing and have found them in chronically injured tissues.

In addition to the cells described above, breast tissue from healthy women, when examined in vitro, contains a subpopulation of variant mammary epithelial cells (vHMEC) that may be precursors to breast cancer. These cells have silenced p16INK4a through hypermethylation of promoter sequences and exhibit several properties that distinguish them from the majority of mammary epithelial cells that proliferate from a tissue explant (HMEC). These phenotypes include the acquisition of centrosomal dysfunction (McDermott et al. 2005), the stabilization of p53 (Zhang et al., 2006) and most notably, the activation of epigenetic remodeling (Reynolds et al., 2006. Dumont et al., 2008 and 2009). In culture, nearly 100% of vHMEC acquire chromosomal defects, including aneuploidy, telomeric associations, and various other classes of structural abnormalities which mimic those seen in the earliest lesions of breast cancer (Holst et al., 2003; Romanov et al., 2001; Tlsty et al., 2001). We have documented that tissue from a substantial fraction of women with no indication or predisposition to breast cancer contain discrete foci of histologically normal human mammary cells with hypermethylated p16INK4a promoter sequences (Holst et al., 2003). We hypothesized that this subpopulation of vHMEC, which exists in vivo, is poised for progression to pre-malignant, and ultimately malignant, lesions of the breast. Our characterization of these cells (and their microenvironment) have provided molecular markers for identifying early lesions of breast cancer in vivo, as well as, predicting their clinical outcome (see below). We are currently funded to develop a non-invasive imaging technique for the visualization of these premalignant foci in human breast.

To characterize these cells, we performed expression profiling to identify markers that distinguish vHMEC from HMEC. We found that cyclo-oxygenase 2 (COX-2), a gene that is often over-expressed in many human cancers, is up-regulated in vHMEC. This up-regulation of COX-2 contributes to premalignant phenotypes such as increased prostaglandin synthesis, increased invasive ability in vHMEC and increased endothelial cell invasion. Additionally, these cells have also suppressed apoptosis and thus provide significant growth advantages to these genomically unstable cells. Ominously, we found that cells with p16INK4a promoter hypermethylation and co-incident intense COX-2 expression exist in histologically normal human tissues in vivo, creating ideal candidates for breast cancer precursors. Our finding of COX-2 over-expression in premalignant lesions such as atypical ductal hyperplasia (ADH) and ductal carcinoma in situ (DCIS) lends credence to our hypothesis that vHMEC are involved in disease progression (Shim et al., 2003, Gauthier et al., 2005). Even more intriguing was the finding that the histologically normal epithelial cells surrounding DCIS lesions, also

demonstrated increased expression of COX-2. These observations suggest that cells with over-expression of COX-2 may provide a fertile field for the emergence of premalignant lesions.

We have been fortunate to be funded by the NIH as part of a large roadmap initiative established as the Reference Epigenome Mapping Centers. Three of these Centers were funded and our mission is to provide a reference epigenome map of primary human cells that have not been cultured. Our Center has contributed profiles from breast stem cells as well as myoepithelial and luminal cells, hematopoietic stem cells, pancreatic stem cells, neural stem cells and several others. Analyzing these data we have recently discovered cell fate-specific differences in methylated loci. This has resulted in multiple publications.

In addition to the efforts described above, we have also established one of the 12 Physical Sciences-Oncology Centers that were brought into existence by the National Cancer Institute to bring mathematics, engineering, physics and computational sciences to bear on the cancer problem. We have initiated novel approaches to understanding cell-cell interactions in the generation of cancer and drug resistance that we are developing for clinical application. We have developed a clinical tool, the Metronomogram, that allows clinicians to optimize metronomic therapy (dose and timing) and prevent the emergence of drug resistant variants.

Finally, our laboratory is also pursuing our original observations that stromal-epithelial interactions are important for carcinogenesis. Characterizing carcinoma-associated-fibroblasts from human tissues allowed us to identify molecular markers that distinguish these cells from normal fibroblasts. We have asked if non-diseased tissue ever contains fibroblasts with these characteristics. We find that women at as high risk for breast cancer contain such cells and that they are manifested as mammographically dense tissue (DeFilippis et al. 2012). Other than age, mammographic breast density is one of the strongest predictors of breast cancer risk. We have now identified signal transduction pathways that modulate mammographic density and breast cancer risk. In recent publications we have demonstrated that signals from these cells within the microenvironment can reprogram the epigenome of epithelial cells (Dumont et al 2010). These data open a novel area for therapeutic opportunities. Our most recent studies have identified telomere-associated signaling pathways in epithelial cells that reprogram stromal cells to a pro-tumorigenic state and therapeutic/preventative molecules that will reverse breast density and the associated risk for breast cancer. This discovery, the holy grail of preventative research, is being prepared for publication and is the agents we identified are currently being tested in a window trial as a preventative approach.

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### **BOOKS AND CHAPTERS**

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- 3. Tlsty, TD, Brown, P, Johnston, R, and Schimke, RT. Enhanced frequency of generation of methotrexate resistance and gene amplification in cultured mouse and hamster cell lines, In: <u>Gene Amplification</u>, Schimke, RT, ed., Cold Spring Harbor Laboratory, New York, pp. 231-238, 1982.
- 4. Albertini, AM, Hofer, M, Calos, MP, Tlsty, TD, and Miller, JH. An analysis of spontaneous deletions and gene amplification in the *lac region* of *Escherichia coli*, In: Cold Spring Harbor Symposium, Quantitative Biology, Volume 47, pp. 841-850, 1983.
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- 7. Tlsty, TD, McCord, S, and Otto, E. Gene amplification and tumorigenicity, In: Mechanisms and Consequences of DNA Damage Processing, UCLA Symposia on Molecular and Cellular Biology, E. Friedberg and P. Hanawalt, eds, Alan R. Liss, Inc., New York, NY, New Series, 83:571-575, 1988.
- 8. Barrett, JC, Tsutsui, T, Tlsty, TD, and Oshimura, M. Role of genetic instability in carcinogenesis, In: <a href="https://docs.py.ncb.nlm.nc
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- Tlsty, TD. Genomic instability and response to DNA damage, In: <u>DNA Damage and Repair Biochemistry</u>, <u>Genetics and Cell Biology</u>, MF Hoekstra, JA Nickoloff, eds, Humana Press, Totowa, NJ, 1995.
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#### SIGNIFICANT PUBLICATIONS

- 1. Romanov, S, Kozakiewicz, BK, Holst, CR, Stampfer, MR, Haupt, LM, and Tlsty, TD. Normal human mammary epithelial cells spontaneously emerge from senescence and acquire genomic instability, Nature. 409:633-37, 2001. PMID: 11214324.
  - I conceived the study, performed the initial experiment to characterize the emerging properties of a sub-population of human mammary epithelial cells and helped write the manuscript.
- 2. Crawford, YG, Gauthier, ML, Joubel, A, Mantei, K, Kozakiewicz, K, Afshari, CA, and Tlsty, TD. Normal human mammary epithelia with silenced p16(INK4a) overexpress COX-2, promoting a premalignant program, Cancer Cell. <u>5</u>:263-73, 2004. PMID: 1505918.
  - I conceived the study, performed the initial experiment, identified COX-2 as a clinically important marker and helped write the manuscript.
- Reynolds, PA, Sigaroudinia, M, Zardo, G, Wilson, MB, Benton, GM, Miller, CJ, Hong, C, Fridlyand, J, Costello, JF, and Tlsty TD. Tumor suppressor p16INK4A regulates polycombmediated DNA hypermethylation in human mammary epithelial cells, J Biol Chem. 281:24790-802, 2006. PMID: 16766534.
  - I conceived the study, designed several of the experimental protocols, interpreted the data and helped write the manuscript.
- Gauthier, ML, Berman, HK, Miller, CJ, Kozakiewicz, K, Chew, K, Moore, D, Rabban, J, Chen, YY, Kerlikowske, K, and Tlsty TD. Abrogated stress response distinguishes basal-like tumors and DCIS lesions associated with subsequent tumor events, Cancer Cell. <u>12</u>:479-491, 2007. PMID: 17996651.
  - I conceived the study, designed several of the experimental protocols, interpreted the data and helped write the manuscript.
- Dumont, N, Wilson, MB, Crawford, YG, Reynolds, PA, Sigaroudinia, M, and Tlsty, TD. Sustained induction of epithelial to mesenchymal transition activates DNA methylation of genes silenced in basal-like breast cancers, Proc. Natl. Acad. Sci. <u>105</u>:14867-72, 2008. PMID: 18806226.
  - I conceived the study, designed several of the experimental protocols, interpreted the data and helped write the manuscript.
- Kerlikowske, K, Molinaro, AM, Gauthier, ML, Berman, HK, Waldman, F, Bennington, J, Sanchez, H, Jimenez, C, Stewart, K, Chew, K, Ljung, BM, and Tlsty TD. Biomarker expression and risk of subsequent tumors after initial ductal carcinoma in situ diagnosis, J Natl Cancer Inst. <u>102</u>:627-37, 2010. Erratum in: J Natl Cancer Inst. <u>102</u>:993, 2010. PMID: 20427430.
  - I participated in the design of several of the experimental protocols, helped interpret the data and helped write the manuscript.

7. Defilippis, RA, Chang, H, Dumont, N, Rabban, JT, Chen, YY, Fontenay, GV, Berman, HK, Gauthier, ML, Zhao, J, Hu, D, Marx, JJ, Tjoe, JA, Ziv, E, Febbraio, M, Kerlikowske, K, Parvin, B, Tlsty, TD. CD36 repression activates a multicellular stromal program shared by high mammographic density and tumor tissues, Cancer Discov. 2:826-39/ 2012. PMID: 22777768.

I participated in the design of several of the experimental protocols, helped interpret the data and helped write the manuscript.

- 8. Roy S, Gascard, P, Dumont N, Zhao J, Pan, D, Petrie S, Margeta, M, and Tlsty, TD. Rare somatic cells from human breast tissue exhibit extensive lineage plasticity, Proc Natl Acad Sci. [In press March 4, 2013. doi:10.1073/pnas.1218682110.] PMID: 23487770.
  - I conceived the study, designed several of the experimental protocols, interpreted the data and helped write the manuscript.
- 9. DeFilippis DA, Fordyce C, Patten K, Chang H, Zhao J, Fontenay GV, Kerlikowske K, Parvin B, Tlsty TD. Stress Signaling from Human Mammary Epithelial Cells Contributes to Phenotypes of Mammographic Density. Cancer Research, 74(18):5032-44, 2014. PMID: 25172842

I participated in the design of several of the experimental protocols, helped interpret the data and helped write the manuscript.

#### OTHER CREATIVE ACTIVITIES

1. University of North Carolina at Chapel Hill

Pathology, second year medical class, 1987 - 56 hours, laboratory faculty; 1988, 1989 - 12 hours laboratory faculty; 1990, 1991, 1992 - lecture on metastasis plus 12 hours laboratory faculty; 1993, 2 lectures in gastrointestinal pathology and metastasis (40 hours); 1994 - 1 lecture in pathology plus 20 hours laboratory faculty.

General Pathology, first year medical class, 1987 - 40 hours laboratory faculty, 1 hour as

lecturer; 1988 - 36 hours, unit director and 2 hours as lecturer; 1989, 1990 and 1991 - 40 hours laboratory faculty and 1 hour as lecturer; 1992-1994 - 12 hours laboratory faculty and 1 hour as lecturer;

Microbiology 190, 1986 and 1987 - 4 hours, 2 lectures

Genetics 145, 1986, 1988 - lecturer

Pathology 418, School of Medicine elective, 1986 and 1987 - 6 hours, 2 lectures

Pathology 214 (Graduate), 1987 and 1991 - 2 hours, 1 lecture

Pathology, 1st year dental class, 1988 and 1989 - 4 hours and 1 hour lecture

Microbiology 156, Growth Control in Normal and Neoplastic Cells, 1990 - 3 lecture hours, 1992-1995, 1.5 lecture hours

### Other Institutions

Medical Genetics, entire course, 21 lectures, University of Zimbabwe, Department of Physiology, 1992.

Eppley Institute for Research in Cancer and Allied Diseases, University of Nebraska, Med. Center, Short course in cancer Biology, Cell Cycle Regulation, 1993 Karolinska Institue, Short course, Molecular Mechanisms of Mutagenesis and

Carcinogenesis, 1994

Stanford, Lecturer, Cancer Biology 1997-2000

Cold Spring Harbor Course on Stem Cell Biology, two week course, faculty member, 2011 Cancer Biology Class, University of Lausanne, Switzerland, Invited Lecturer, 2015

## **Prior Teaching**

Genomic Fluidity - Organization and presentation of a course sponsored by the Cancer Biology Program at Stanford University, 1985

Chemical Carcinogenesis - Organization and presentation of a seminar course given at the National Institute for Environmental Health Sciences, Research Triangle Park, North Carolina, 1976

Pathology - to remedial medical students 1st year, School of Medicine, University of North Carolina, 1976

Biochemistry - Tutored in School of Medicine, University of North Carolina, 1974 Pathology - Tutored in School of Medicine, University of North Carolina, 1974 Comparative Anatomy - Teaching Assistant in Biology Department, University of South Florida, 1972-1973

# Lectureships

- University of California, San Francisco, Dept. of Microbiology and Immunology (1982)
- Pasteur Institute, Paris, France (1982)
- University of Karlsruhe, Institute for Genetics, Karlsruhe, Federal Republic of Germany (1982)
- Biogen, Geneva, Switzerland (1982)
- University of Geneva, Department of Molecular Biology, Geneva, Switzerland (1982)
- Lawrence Berkeley Laboratories, Berkeley, California (1983)
- ARCO Plant Cell Research Institute, Dublin, California (1983)
- Genetics Curriculum, University of North Carolina at Chapel Hill, North Carolina (1984)
- IRSC, Villejuif, France (1984)
- University of Geneva, Department of Molecular Biology, Geneva, Switzerland (1984)
- Vanderbilt University, Dept. of Biochemistry (1986)
- Burroughs Welcome Co., Molecular & Cellular Biology (1987)
- Bristol Myers Co., Molecular & Cellular Biology (1987)
- National Inst. of Environmental Health Sciences (1987)
- Chemical Institute of Industrial Toxicology (1989)
- New York University (1989)
- Children s Hospital of Los Angeles (1989)
- Cornell University, NY (1989)
- Environmental Biostatistics at the University of North Carolina at Chapel Hill (1989)
- North Carolina State University (1990)
- Environmental Protection Agency (1990)
- Univ. of California at Berkeley (1990)
- Stanford University, Dept. of Biological Sciences (1991)
- Columbia University, Dept. of Biochemistry and Biophysics (1991)
- National Institutes of Health, Laboratory of Experimental Carcinogenesis, Bethesda, MD (1991)

- McArdle Laboratory, University of Wisconsin (1991)
- Ohio State University, Department of Radiology (1991)
- Johns Hopkins University (1992)
- Southwestern Med., University of Texas, Dallas (1992)
- Lawrence Berkeley Laboratory, Life Sciences Division, Berkeley, CA (1992)
- Milton S. Hershey Medical Center, Pennsylvania State University, Department of Microbiology and Immunology (1992)
- Stanford University, Palo Alto, CA, Department of Pathology (1992)
- Fred Hutchinson Cancer Research Center, Seattle, Washington (1992)
- Pennsylvania State University, Philadelphia (1992)
- Duke University (1993)
- Washington University School of Medicine, St. Louis, MO (1993)
- The Cancer Institute of New Jersey, 1992-1993 Distinguished Lecture Series New Brunswick, NJ (1993)
- University of Nebraska Medical Center, Eppley Institute for Research in Cancer and Allied Diseases, Omaha, NE (1993)
- University of California at San Francisco (1993)
- Salk Institute (1993)
- Fred Hutchinson Cancer Research Center, Seattle, Washington (1993)
- University of Texas at Austin (1994)
- New York University (1994)
- Case Western, Cleveland (1994)
- Duke University (1994)
- Emory University (1994)
- McArdle Laboratory, Univ. of Wisconsin, Madison (1994)
- Fox Chase Cancer Center, Philadelphia (1994)
- Karolinska Institute, Stockholm, Sweden (1994)
- Princeton University (1994)
- Los Alamos National Laboratory, Los Alamos, NM (1994)
- NIEHS, Research Triangle Park, NC, Distinguished Women Scientists Seminar Series (1995)
- Stanford University (1995)
- Temple University, Sugarloaf Estate Conference Center, Philadelphia, PA (1995)
- Molecular & Cellular Biology Program, External Seminar Series, Charleston, S.C. (1997)
- 1st Gerald Wogan Distinguished Lectureship, Boston, MA (1997)
- Molecular Medicine Seminar Series, San Antonio, TX (1997)
- Massachusetts Institute of Technology (1997)
- University of California, Berkeley (1997)
- Distinguished Lecturer Series, Harvard School of Public Health, Boston, MA (1998)
- 8th Annual Corpus Ortigoza Distinguished Lectureship, Houston, TX (1998)
- Eppley Institute for Research in Cancer and Allied Diseases, Seminar Series, Omaha, NE (1998)
- Stanford University, Tumor Biology Postdoctoral Training Program, Stanford, CA (2001)
- University of Michigan, Cancer Center Grand Rounds, Ann Arbor, MI (2001)
- Department of Microbiology & Molecular Genetics students-sponsored seminar series, UC Irvine, CA, (2001)
- British Columbia Cancer Research Center Israels Lecture , Vancouver, British Columbia, Canada, Distinguished Lectureship (2001)
- Fred Hutchinson Cancer Research Center (2001)
- Joint International Journal of Cancer/Meyer-Stiftung Lectureship, Distinguished Speaker Series, Deutsches Krebforschungszentrum (DKFZ), Heidelberg, Germany (2002)

- Vanderbilt-Ingram Cancer Center, Breast Cancer Research Program Seminar Series, Nashville, TN (2002)
- NCI Combined Intramural Principal Investigator Retreat, Knudson Award Lecture, Chantilly, VA (2003)
- MIT Department of Biology Colloquium Series, Cambridge, MA (2003)
- Dana-Farber Cancer Institute s Seminars in Oncology, Boston, MA (2004)
- Cancer Institute of New Jersey, Distinguished Lecture Series, New Brunswick, NJ (2004)
- Midwest Student Biomedical Research Forum, University of Nebraska Medical Center, Omaha, Nebraska (2005)
- Virginia Commonwealth University, Richmond, VA (2005)
- John Hopkins, Baltimore, MD (2005)
- University of Pennsylvania, Philadelphia, PA, (2005)
- Case Western Reserve University, Olof Pearson Lecture, Cleveland Ohio (2005)
- University of California, San Francisco, Dept. of Pathology (2005)
- University of California, San Francisco, Bay Area Epigenetics (2006)
- Memorial Sloan-Kettering Cancer Center, New York, NY (2006)
- MIT, Robert S. Harris Lecture, Cambridge, MA (2006)
- NIH, Prestigious Lecture Series, Bethesda, MD (2006)
- Exploratorium Public Lecture, San Francisco, CA (2007)
- Duke Comprehensive Cancer Center, Durham, NC (2007)
- Signaling/Cell Cycle Series, Washington University Siteman Cancer Center, St. Louis, MO (2007)
- Fred Hutchinson Cancer Research Center, Seattle, Washington (2007)
- University of California, San Francisco, Pancreas Cancer Program (PCP) Speaker Series (2009)
- Exploratorium s Darwin Days Series, San Francisco, CA (2009)
- Duke University, Regulatory Networks in Health and Disease Seminar, Durham, NC (2009)
- Moores UCSD Cancer Center Director s Seminar, San Diego, CA (2009)
- 11th Annual Frank M. Townsend, M.D. Lecture, Univ. of Texas Health Sciences Cntr, San Antonio, TX (2009)
- Patricia and Julie Kingsbury Lectureship, Yale University, New Haven Conneticut (2010)
- Dean Forum Lecture, Peking University, Beijing, China (2010)
- Duke Comprehensive Cancer Center, Durham, NC (2011)
- Blaffer Distinguished Lectureship, MD Anderson Medical Center, Houston, TX (2014)
- Baxter Research Institute Keynote Speaker, Stanford University, Palo Alto, CA (2014)
- Biomedical Engineering Distinguished Lecturer Series, University of California, Irvine, CA (2014)
- US Oncology Research Translational Oncology Keynote Speaker, Scottsdale, AZ (2015)
- 8th International Symposium on the Breast, Susan Love Research Foundation, Santa Monica, CA
- United States Urology Oncology Translational Research Mtg., Scottsdale, AZ
- Mathematical Biosciences Institute Workshop, Tumor Heterogeneity and the Microenvironment, Columbus, OH
- NIH/NIEHS Stem Cell Symposium, Washington, DC
- University of Southern California Stem Cell Center, Los Angeles, CA
- Society for Basic Urologic Research / The Society of Urologic Oncology, Joint Mtg, New Orleans, LA
- Sylvester Comprehensive Cancer Center at the University of Miami Distinguished Lecturer

- 12th Annual Tucson Symposium, Tucson, AZ- Sylvester Comprehensive Cancer Center Distinguished Lecture Speaker, Miami, FL (2015)