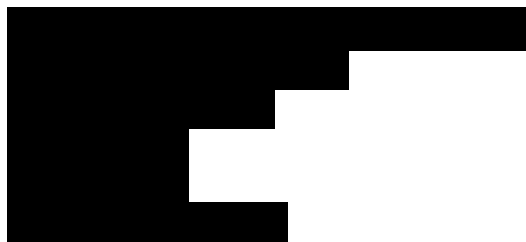


CHARLES L. SAWYERS, MD

Address:



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EDUCATIONAL BACKGROUND

<u>Degree</u>	<u>Institution name and location</u>	<u>Dates attended</u>	<u>Year awarded</u>
B.A.	Princeton University, Princeton, NJ	1977–1981	1981
M.D.	Johns Hopkins, Baltimore, MD	1981–1985	1985

PROFESSIONAL POSITIONS AND EMPLOYMENT

Post-doctoral training (residency/fellowships)

<u>Title</u>	<u>Institution name and location</u>	<u>Dates held</u>
Internship & Residency	University of California, San Francisco Dept. of Medicine, San Francisco, CA	1985 – 1988
Fellow	University of California, Los Angeles Division of Hematology-Oncology, Department of Medicine, Los Angeles, CA	1988 – 1991
Post-doctoral training	UCLA/Howard Hughes Medical Institute Dr. Owen N. Witte, Professor of Microbiology & Molecular Genetics Los Angeles, CA	1989 – 1993

Academic positions (teaching and research)

<u>Title</u>	<u>Institution name and location</u>	<u>Dates held</u>
Clinical Instructor	University of California, Los Angeles Division of Hematology-Oncology, Department of Medicine	1991 – 1993
Assistant Professor	University of California, Los Angeles Division of Hematology-Oncology, Department of Medicine	1993 – 1997

Member	University of California, Los Angeles Jonsson Comprehensive Cancer Center	1993 – 2006
Full Member	University of California, Los Angeles Molecular Biology Institute	1993 – 2006
Associate Chief	University of California, Los Angeles Basic Research, Division of Hematology- Oncology, Department of Medicine	1996 – 2006
Associate Professor	University of California, Los Angeles Division of Hematology-Oncology Department of Medicine	1997 – 2000
Professor	University of California, Los Angeles Division of Hematology-Oncology Department of Medicine	2000 – 2006
Joint Appt.	University of California, Los Angeles Department of Urology	2000 – 2006
Joint Appt.	University of California, Los Angeles Department of Molecular & Medical Pharmacology	2000 – 2006
Member	Memorial Sloan-Kettering Cancer Center New York, NY	2006 – Present
Professor	Joan & Sanford Weill Graduate School of Medical Sciences of Cornell University Cell and Developmental Biology Program	2011 - Present

Hospital positions

<u>Title</u>	<u>Institution name and location</u>	<u>Dates held</u>
Attending	UCLA Medical Center Los Angeles, CA	1991 – 2006
Director	University of California, Los Angeles Hematopoietic Malignancies and BMT Program Area, Jonsson Comprehensive Cancer Center	1996 – 1998

Director	University of California, Los Angeles Genitourinary Cancer Program Area Jonsson Comprehensive Cancer Center	1998 – 2006
Investigator	Howard Hughes Medical Institute Los Angeles, CA	2002 – 2006 2008-present
Vice Chair	University of California, Los Angeles Department of Molecular & Medical Pharmacology	2005 – 2006
Attending	Memorial Hospital for Cancer and Allied Diseases, New York, NY Leukemia Service, Department of Medicine	2006 – Present
Chair	Human Oncology and Pathogenesis Program (HOPP)	2006 – Present

PROFESSIONAL MEMBERSHIP *(in chronological order)*

Member	American Society of Hematology (ASH)	1993 – Present
Member	American Association for Cancer Research (AACR)	1998 – Present
Member	American Society of Clinical Investigation (ASCI)	1999 – Present
Subcommittee Chair	American Association for Cancer Research (AACR)	1999 – 2000
Scientific Program Cmte	American Society for Clinical Oncology (ASCO)	2001 – 2003
Organizer	National Cancer Institute (NCI) Joint meeting of the Mouse Models of Human Cancers Consortium (MMHCC) and the Prostate SPOREs	2002
Program Cmte Chair	AACR/NCI/EORTC Meeting on Molecular Targets	2002 – 2003
Scientific Program Cmte	American Society of Hematology	2002 – 2005

Program Director	AACR Aspen Cancer Course	2004 – Present
Organizer	Mouse Models of Human Cancer Consortium Meeting	2004
Co-organizer	Keystone Symposium Meeting “Protein Kinases and Cancer: The Promise of Molecularly Targeted Therapy”	2004
Course Director	American Association for Cancer Research (AACR) “Molecular Biology in Clinical Oncology,” Aspen, CO	2004 – 2008
Co-organizer	Cold Spring Harbor Cancer Genetics Meeting	2004, 2006
Co-chair	William Guy Forbeck Research Foundation 2004 Forum, “Molecular Targets in Pediatric Malignancies,” Hilton Head, SC	2004
Chair	American Society of Hematology (ASH) Scientific Committee on Neoplasia	2004 – 2006
Vice President, President-Elect, and President	American Society of Clinical Investigation (ASCI)	2005 – 2008
Co-organizer	Keystone Symposium Meeting on Cancer and Kinases: Lessons from the Clinic, Santa Fe, NM	2006
Scientific Program Cmte	AACR Annual Meeting	2007
Co-Chair	Pezcoller Foundation Symposium	2007
Member	Institute of Medicine National Academy of Science	2008 2010
Co-Chair	Cold Spring Harbor Nuclear Receptors Meeting	2008

President	American Association of Cancer Research	2013-2014
Member	American Academy of Arts and Sciences	2014

HONORS AND AWARDS *(in chronological order)*

<u>Name of award</u>	<u>Date awarded</u>
Summa Cum Laude - History of Science Department Princeton University	1981
National Cancer Institute Physician Scientist Award	1990 – 1995
Howard Hughes Medical Institute Physician Research Fellow	1991 – 1993
Stop Cancer Career Research Award	1993 – 1996
Cheryl Whitlock Memorial Prize for Leukemia Research	1994
James S. McDonnell Foundation Scholar	1994 – 1997
Leukemia Society of America Scholar	1995 – 2000
Franklin D. Murphy Prize	1998
American Society for Clinical Investigation	1999
Stohlman Scholar Award The Leukemia and Lymphoma Society	2000
Recipient of Endowed Chair Peter Bing Chair of Urologic Research	2000
Doris Duke Distinguished Clinical Scientist Award	2001
Investigator, Howard Hughes Medical Institute	2002
Bristol-Myers-Squibb Freedom-to-Explore Unrestricted Research Award in Cancer	2003
UCSD-Nature Medicine Translational Medicine Award	2003

Plenary Session Talk at American Society of Hematology (ASH) (Abstract #1) "Hematologic and Cytogenic Responses in Imatinib Resistant CML Patients Treated with BMS 354825," San Diego, CA	2004
American Association of Clinical Research (AACR) Richard and Hinda Rosenthal Foundation Award	2005
American Society of Clinical Oncology (ASCO) David A. Karnofsky Memorial Award	2005
Elected President, American Society of Clinical Investigation (ASCI)	2005
Emil Freireich Award	2007
Elected to membership, Institute of Medicine, NAS	2008
Dorothy Landon-AACR Prize for Translational Cancer Research	2009
Lasker~DeBakey Clinical Medical Research Award	2009
Elected to membership, National Academy of Sciences	2010
Stanley J. Korsmeyer Award American Society of Clinical Investigation (ASCI)	2011
Science of Oncology Award American Society of Clinical Oncology (ASCO)	2013
Taubman Prize for Excellence in Translational Medical Science	2013
Giants of Cancer Care Award	2013
Breakthrough Prize in Life Sciences	2013
Hope Funds for Cancer Research Honoree	2014

CURRENT AND PAST INSTITUTIONAL RESPONSIBILITIES

Teaching/Mentoring

Admissions Committee, Medical Scientist Training Program, UCLA	1994 – 1999
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Molecular Biology 298 Instructor, UCLA	1994 – 2006
Medical Internship Selection Committee, UCLA	1995 – 2000
Hematology-Oncology Fellowship Selection Committee, UCLA	1995 – 2002
Faculty Member of Ph.D. Program in Molecular Biology Interdepartmental Degree Programs, UCLA	2001 – 2006
Pharmacology 288 Instruction, UCLA	2002 – 2006
Doctoral Committee in Molecular Biology UCLA Graduate Division	2002 – 2006
Section Leader, Cancer Biology in the Core Curriculum Course for Gerstner Sloan-Kettering Graduate School, MSKCC	2006 – Present
Lecturer, Molecular Biology of Cancer Course Tri-Institutional MD, PhD Program	2006 – Present

Clinical care (*duties, dates*)

Clinical In-patient Rounds, UCLA	1993 – 2006
Continuity Clinic in Hematology/Oncology, UCLA	1991 – 2006

Administrative duties, including committees, dates

UCLA Jonsson Cancer Center Signal Transduction Program Search Committee	1993 – 1997
Jonsson Comprehensive Cancer Center, Clinical Research Seed Grants Review Committee, UCLA	1994 – 2002
Organizer of UCLA Cancer Center Research Conference	1995 – 1999
Co-Organizer of UCLA Parvin Cancer Symposium, “Abnormal Signal Transduction in Human Cancer,” (with Dr. Chris Denny, Pediatrics)	1995
Gene Therapy Program Seed Grant Review Panel, UCLA	1995 – 1998

Dept. of Medicine Specialty Training and Advanced Research (STAR) Executive Committee, UCLA	1995 – 2000
Organizer of monthly Prostate Cancer Research Conferences, UCLA	1998 – 2006
UCLA Institutional Representative to American Society Of Clinical Investigation (ASCI)	2001 – 2006
Associate Member, Crump Institute for Molecular Imaging, UCLA	2002 – 2006
Memorial Hospital Committee on Credentialing and Privileging (MHCCP), MSKCC	2006 – Present
Correlative Science Assessment Team (CSAT) for Phase I/II Clinical Contracts (D. Kelsen, PI), MSKCC	2006 – Present
MSKCC Prostate SPORE, Advisory Board (P. Scardino, PI)	2006 – Present
MSKCC Cancer Genome Characterization Center Advisory Board (M. Ladanyi, PI)	2006 – Present

RESEARCH SUPPORT

ACTIVE RESEARCH SUPPORT

Howard Hughes Medical Institute (Sawyers) **3/1/08-**
Major Goals of this project: Patient oriented research into molecularly targeted therapy of cancer

R01-CA155169 (Sawyers) **5/1/12-3/31/17**
NCI/NIH

Understanding Resistance to Next Generation Antiandrogens

Specific Aims:

To explore the molecular basis by which GR selectively activates certain AR target genes (Aim 1), the functional role of GR, AR and the GR/AR target gene SGK1 in maintaining drug resistance (Aim 2), and the clinical relevance of these findings in circulating tumor cells obtained from patients at treatment start and at relapse (Aim 3).

P50-CA092629 (Scher) **9/1/08 – 8/31/16**
National Institutes of Health
MSKCC Spore in Prostate Cancer

Major Goals of this Project: This allocation is split between three projects: Project 1, Project 6 and Core C. Project 1 covers a campus-wide oncogenome project, Project 6 serves to enhance the clinical development of a novel antiandrogen named A52 and the Core covers animal maintenance and experimentation costs.

Role: Co-Leader of Project 1 and 4, Co-Leader of Mouse Core D and Admin Core F

Stand up to Cancer Dream Team Award (PI: Sawyers) 8/1/12-7/31/15
SU2C/AACR

Precision Therapy of Advanced Prostate Cancer

The goal of this project is to establish a precision medicine paradigm for castration-resistant prostate cancer. This proposal primarily funds the collection of clinical trial biopsies, sequencing and computational analysis.

5 T32 CA160001-03 (PI: Sawyers) 7/11/11-6/30/16
NCI

Translational Research in Oncology Training Program

The training program for translational cancer research will provide opportunities to postdoctoral PhD trainees to learn about human oncology and pathogenesis, and work collaboratively with clinicians to advance the treatment of cancer patients. The goals are: to help basic scientists to develop a strong clinical backgrounds so that they may effectively bring discoveries from bench to bedside; and to foster interdisciplinary research and collaboration. These funds support the institution.

3 P30 CA008748-47 S4 (PI: Thompson) 7/31/08-12/31/14
NCI

Cancer Center Support Grant

The CCSG funds support MSK's research infrastructure. These shared resources facilitate the research activities of the clinical, translational and laboratory programs at the Cancer Center.

GC220267 (PI: Sawyers) 1/1/2013 - 12/31/2014
Prostate Cancer Foundation

Prostate Organoid Proposal

Prostate organoid technology has the potential to revolutionize the prostate cancer field by:
(1) generating a tissue bank of several hundred matched tumor/normal human organoid pairs from localized cancers that represent the genomic diversity of primary prostate cancer
(2) establishing a tissue bank of metastatic prostate cancer organoids

W81XWH-13-2-0070 (PI: Scher) 9/30/2013 - 9/29/2016
Congressionally Directed Medical Research Programs

Toward the Practice of Precision Medicine: A Biomarker Validation Coordinating Center

To use the centralized infrastructure of the Assay Validation Coordinating Center to cross-validate additional assays for biomarkers identified via established and emerging discovery platforms.

PENDING SUPPORT

1 P01 CA193126-01 (PI: Sawyers)

4/1/15-3/31/2020

NCI

Overcoming Castration Resistance in Advanced Prostate Cancer

Next generation androgen receptor (AR) pathway therapy is extending the lives of thousands of men with castration resistant prostate cancer (CRPC) but resistance remains a significant problem. Whereas resistance to earlier generation AR therapy occurs predominantly through increased AR expression, resistance to these more potent AR pathway inhibitors is more complex, involving a range of distinct mechanisms. This research program assembles a unique team of investigators, who, collectively bring together the expertise necessary to define these resistance mechanisms and develop strategies to overcome them.

1 R01 CA19387-01 (PI: Sawyers)

4/1/2015 -3/31/2020

NCI

Defining the Role of ERG in Modulating the AR Cistrome and Antiandrogen Sensitivity

This project will shed light on the molecular mechanism by which ERG causes prostate cancer and the impact of ERG on response to therapies directed against the androgen receptor, the common form of treatment for metastatic prostate cancer.

RECENTLY COMPLETED RESEARCH SUPPORT

U01 CA141502 (Sawyers, Holland)

8/26/09-7/31/14

NIH/NCI

PI3K Signaling and Biology of Therapeutic Response

Major Goals of this Project: To dissect the effects of PI3K pathway inhibitors on tumor maintenance in mouse models of glioma and prostate cancer.

Role: Co-PI

I5-A557 STARR Grant Award (Sawyers, Hannon)

8/1/11-7/31/13

STARR Cancer Consortium

Discovery of Prostate Cancer Tumor Suppressors and Treatment Biomarkers Through In Vivo RNA Interference Screens

Major Goals of this Project: To use mouse and human models of CRPC to identify new prostate tumor suppressors and to identify determinants of therapy response.

I5-A531 STARR Grant Award (Hicks)

8/1/11-7/31/13

STARR Cancer Consortium

Genome wide profiling of single cells for diagnosis and monitoring in prostate cancer. To examine two important biomarker sources, radical prostatectomy samples and circulating tumor cells (CTCs) from castration-resistant PC cases, for heterogeneity and to compare SCGA to results from microarray based CGH.

Oregon Health and Science University (Brian Druker)

10/01/05 - 09/30/10

Leukemia & Lymphoma Society
Molecularly Targeted Therapy for Leukemia

This project investigates mechanisms of resistance to Abl kinase inhibitors and the signaling properties of BCR-ABL mutants.

Role: Project 1 co-Leader

P01 CA 089021-06A1 (Lewis Cantley)

6/29/07 - 5/31/12

National Institutes of Health

The role of PTEN and PI3K Pathway in Prostate Cancer

This project examines Akt-independent pathways of PI3K transformation.

Role: Project 3 Leader

5P50 CA92131 (Robert Reiter)

8/13/07 - 6/30/12

National Institutes of Health

UCLA SPORE in Prostate Cancer

To define and measure pathway-specific, prostate cancer biomarker signatures in tumor tissue and serum using mouse models and human patients.

Role: Project co-Leader

Stand up to Cancer Dream Team Award (Cantley)

12/1/09-11/31/11

American Institute for Cancer Research

Targeting PI3K in Women's Cancers

To discover approaches that will predict patients who will respond to PI3K pathway inhibitors, thereby accelerating drug approvals and ultimately providing techniques for personalized cancer treatment that can be incorporated into standard practice.

Role: Dream Team Leader, MSKCC

20010856 (Charles L. Sawyers)

12/15/06-12/14/09

Doris Duke Charitable Foundation

Kinase Inhibitor Therapy for Cancers with Aberrant PTEN/Akt Pathway Signaling

This project supported clinical trials of mTOR inhibitors in glioblastoma patients with abnormalities in the PTEN/Akt pathway.

Role: PI

U01CA84128 (Charles L. Sawyers)

09/27/04 - 03/31/09

National Cancer Institute

Mouse Models for Human Prostate Cancer

This project was part of an NCI-sponsored consortium to establish mouse models for different human cancers. Dr. Sawyers' laboratory focused on creating transgenic mice expressing a Tet-regulated androgen receptor gene and crossing these mice to Myc and Akt transgenic mice.

Role: PI

P01 CA 32737-18A2 (Dennis Slamon)

09/1/02-06/30/07

National Institutes of Health

Signal Transduction in Oncogenesis

Dr. Sawyers' project studied the scaffold protein MAGI-2 through creation of knockout mice.

Role: Project Leader

EXTRAMURAL PROFESSIONAL RESPONSIBILITIES

Named Lectureships

- 2001 D. Wayne Calloway Lectureship in Prostate Cancer, Memorial Sloan-Kettering Cancer Center, New York, NY
- 2003 Woodward Visiting Professor, Memorial Sloan-Kettering Cancer Center, New York, NY
- 2004 4th Annual William Wallace Scott Research Lectureship, Johns Hopkins University, Baltimore, MD
- 2004 Link Lecture, Institute for Cancer Research (ICR), London, England
- 2005 Orrin Ingram Distinguished Lecture, Vanderbilt University, Nashville, TN
- 2005 Twentieth Annual Apffel Memorial Lecture, Boston Cancer Research Association, Boston, MA
- 2005 Dorcas Cummings Memorial Lecture, Cold Spring Harbor Laboratory, NY
- 2005 Maurice, Ethel, and Jane Sokolow Memorial Cancer Endowment Lectureship, University of California, San Francisco Comprehensive Cancer Center and Cancer Research Institute, San Francisco, CA
- 2006 The Robert Sternlicht Memorial Lectureship, Case Western Reserve University School of Medicine, Department of Pathology, Cleveland, OH
- 2006 Thirteenth William C. Maloney Lecture, Brigham & Women's Hospital, Harvard Medical School, Boston, MA
- 2009 The Julia Hudson Freund Memorial Lecture, Siteman Cancer Center, Washington University School of Medicine, St. Louis, MO.
- 2009 The Robert Krigel Endowed Lecture, Fox Chase Cancer Center, Philadelphia, PA.

- 2010 Landon - AACR Prize Lecture, "Mechanisms of Resistance to Targeted Cancer Therapy," Miami, FL
- 2011 Simon M. Shubitz Award Lecture, "Overcoming Resistance to Targeted Therapy," University of Chicago, Chicago, IL
- 2011 Oon International Lecture and Award for Preventive Medicine, "Drug resistance and disease progression: lessons from prostate cancer," Downing College, Cambridge, UK
- 2012 John Mendelsohn Visiting Professor in Cancer Medicine, MD Anderson Cancer Center, Houston, TX
- 2013 Ernst Eichwald Lecture, University of Utah, Salt Lake City, UT
- 2013 Heath Memorial Award Lecture, MD Anderson Cancer Center, Houston, TX

Other Invited Lectures

- 1992 American Society for Clinical Oncology (ASCO), Molecular Biology Educational Session, San Diego, CA
- 1993 Leukemia...the next questions, Session on Molecular Biology, Gene Therapy and new Treatments of Leukemia, "Signal pathway for transformation by the BCR-ABL Oncogene," Houston, TX
- 1993 University of Maryland, Mini-symposium on Mechanisms of Hematopoietic Malignancy, "Positive and Negative Growth Effects of the ABL Genes", Baltimore, MD
- 1994 European Hematology Association (EHA), Working Group on Chronic Myelogenous Leukemia "Molecular Biology of Bcr-Abl," Brussels, Belgium
- 1994 Pezcoller Foundation Symposium, Normal and Malignant Hematopoiesis, "Positive and Negative Growth Effects of Abl Genes," Roverto, Italy
- 1994 American Society of Hematology (ASH), Education Session, "Myeloproliferative and Myelodysplastic Syndromes," Nashville, TN
- 1994 Onyx Pharmaceuticals, "Signal Transduction by ABL Genes," Richmond, CA
- 1995 Oregon Health Sciences University, "Signaling by Abl Genes," Portland, OR

- 1995 The Johns Hopkins Oncology Center, "Signal Transduction by Abl Genes in Human Leukemia," Baltimore, MD
- 1995 John Wayne Cancer Institute, "Signal Transduction by Abl Genes in Human Leukemia," Santa Monica, CA
- 1995 Specialty Laboratories, Inc., "Signaling by Genes in Leukemia," Santa Monica, CA
- 1995 University of Washington, Seattle, Department of Molecular Biotechnology, "Oncogenes in Leukemia and Prostate Cancer," Seattle, WA

- 1995 Stanford University School of Medicine, Tumor Biology Seminar Speaker, "Signal Transduction by Abl Genes in Human Leukemia," Stanford, CA
- 1995 International Symposium on Molecular Biology of Hematopoiesis, "Bcr-Abl Signal Transduction," Genova, Italy
- 1995 Growth Factor Symposium, "Growth Factors: Bench to Bedside," Birmingham, AL
- 1995 William Dameshek Symposium, "Molecular Advances in the Myelodysplastic Syndromes," Wichita, KS
- 1995 American Association for Cancer Research (AACR), "Cancer: The interface Between Basic and Applied Research," Baltimore, MD
- 1995 American Society of Hematology (ASH), Education Session, "Myeloproliferative and Myelodysplastic Syndromes," Seattle, WA
- 1996 International Conference on Chronic Myelocytic Leukemia – Biology and treatment, "Molecular Biology of BCR-ABL," Jerusalem, Israel
- 1996 European Hematology Association Working Group on Chronic Myeloid Leukemia, "Signaling by BCR-ABL," Paris, France
- 1996 U.S.-Japan Workshop in Molecular Pathology, "Chronic Myelogenous Leukemia," Honolulu, HI
- 1996 International Society of Experimental Hematology, "Signal Transduction by BCR-ABL Genes in Chronic Myelogenous Leukemia," New York, NY
- 1996 The Chronic Leukemias, "Molecular Biology of BCR-ABL in CML," Prague, Czech Republic
- 1996 City of Hope, Gene Therapy Seminar Speaker, "Signal Transduction by the ABL Genes in Human Leukemia, Duarte, CA
- 1996 Sugem, Inc., "Animal Models for Human Prostate Cancer," Redwood City, CA
- 1996 CaP CURE Annual Retreat, "Animal Models for Human Prostate Cancer," Lake Tahoe, CA
- 1996 Millennium Pharmaceuticals, "Animal Models for Human Prostate Cancer," Cambridge, MA
- 1997 Keystone Symposia – Hematopoiesis, "Signal Transduction in Chronic Myelogenous Leukemia," Tamarron, CO
- 1997 Molecular Biology of Prostate Cancer, "Xenograft Models for Prostate Cancer," Dresden, Germany
- 1997 American Association for Cancer Research, "High Efficiency Propagation of Human Advanced Prostate Cancer Xenografts in SCID Mice," San Diego, CA
- 1997 CaP CURE Scientific Retreat, "Xenograft Models for Prostate Cancer," Lake Tahoe, NV
- 1997 American Society of Hematology, "The Ras Pathway in Chronic Myelogenous Leukemia," San Diego, CA
- 1998 Yale University School of Medicine, Cancer Center Lecture – Cell Cycle Series, "Signal Transduction in Chronic Myelogenous Leukemia," New Haven, CT
- 1998 Jefferson University, Kimmel Cancer Center, "Signal Transduction in Chronic

- Myelogenous Leukemia," Philadelphia, PA
- 1998 University of California at San Francisco, Prostate Cancer Program Area Lecture, "Using Xenograft Models to Study Prostate Cancer Progression," San Francisco, CA
- 1998 Jennifer Jones Symposium on Prostate Cancer, "Using Xenograft Models to Study Prostate Cancer Progression," Beverly Hills, CA
- 1998 Mitotix, "Using Xenograft Models to Study Prostate Cancer Progression," Cambridge, MA
- 1998 Memorial Sloan-Kettering Cancer Center (MSKCC), "Using Xenograft Models to Study Prostate Cancer Progression," New York, NY
- 1998 Cambridge Healthtech Institute, Prostate Cancer: Advances in Understanding Diagnostics and Therapy, "Using Xenograft Models to Study Prostate Cancer Progression," McLean, VA
- 1998 CaP CURE Genetics/Clinical Consortium Meeting, Seattle, WA
- 1998 CaP CURE Prostate Cancer Scientific Retreat, Keynote Address: "Kinases and Phosphatases in Prostate Cancer Progression," Lake Tahoe, CA
- 1998 Dana-Farber Cancer Institute Seminars in Oncology, "Signaling by Kinases and Phosphatases in Prostate Cancer," Boston, MA
- 1998 University of Virginia, Signal Transduction Symposium, "Mechanisms of Androgen Independent Prostate Cancer Growth," Charlottesville, VA
- 1998 University of Southern California, Therapy Consortium, "Mechanisms of Androgen Independent Prostate Cancer Growth," Palm Springs, CA
- 1999 Wyeth-Ayerst Pharmaceuticals, "Molecular Basis of Prostate Cancer Progression," Pearl River, NY
- 1999 Amgen Pharmaceuticals, "Kinases and Phosphatases in Prostate Cancer Progression," Thousand Oaks, CA
- 1999 Stanford University, "Signal Transduction in Chronic Myeloid Leukemia," Stanford, CA
- 1999 Genetech, "Kinases and Phosphatases in Prostate Cancer Progression," South San Francisco, CA
- 1999 Society for Basic Urologic Research, "Kinases and Phosphatases in Prostate Cancer Progression," Dallas, TX
- 1999 Vertex Pharmaceuticals, "Kinases and Phosphatases in Prostate Cancer Progression," Cambridge, MA
- 1999 Signal Transduction in Chronic Myeloid Leukemia, Biarritz, France
- 1999 Herceptin Investigators Meeting, "Signal Transduction in Prostate Cancer," San Francisco, CA
- 1999 CaP CURE Annual Retreat, "The PTEN/Akt Signaling Pathway in Prostate Cancer," Lake Tahoe, NV

- 2000 "Targeted Cancer Therapy: Lessons from Leukemia and Prostate Cancer," Big Sky, MT
- 2000 University of North Carolina, "Targeted Cancer Therapy: Lessons from Leukemia and Prostate Cancer," Chapel Hill, NC
- 2000 36th American Society of Clinical Oncology (ASCO), Educational Session, "Targeted Therapy for Chronic Myeloid Leukemia," New Orleans, LA
- 2000 Keynote Address, "STI571 in the Treatment of CML," Bologna, Italy
- 2000 The Endocrine Society's 82nd Annual Meeting, "Signal Transduction in Prostate Cancer," Toronto, Ontario, Canada
- 2000 American Urologic Association, "Animal Models for Prostate Cancer," Houston, TX
- 2000 CaP CURE Seventh Annual Scientific Retreat, Lake Tahoe, NV
- 2000 Stanford Oncology Retreat, Keynote Speaker, "Signal Transduction Pathway Abnormalities in Prostate Cancer," Monterey, CA
- 2000 The Leukemia & Lymphoma Society, Stohlman Scholar Symposium, "Mechanisms of Resistance to STI571 in CML," Indianapolis, IN
- 2000 Hormones and Cancer Meeting, "Signal Transduction in Prostate Cancer," Port Douglas, Australia
- 2000 Hansen Center Bi-Annual Meeting, "Signal Transduction in Prostate Cancer," Adelaide, Australia
- 2000 American Society of Hematology, Organizer and Session Chair, "Targeted Therapy of Chronic Myeloid Leukemia," Super Friday Session, San Francisco, CA
- 2001 National Cancer Institute (NCI), Mouse Models in Human Cancer Consortium, Orlando, FL
- 2001 American Association of Cancer Research Education Session, "Signal Transduction by P13K/PTEN/Akt"
- 2001 "Targeted Therapy of Chronic Myeloid Leukemia," New Orleans, LA
- 2001 American Society of Clinical Oncology Plenary Session Discussant, "Targeted Therapy of Cancer in the STI571 Era," San Francisco, CA
- 2001 Advisory Board Meeting, Accelerate Brain Cancer Cure (ABC2), Santa Barbara, CA
- 2001 Federation of American Societies for Experimental Biology (FASEB) Summer Search Conference, "Molecular Basis for Resistance to STI571 in Chronic Myeloid Leukemia," Snowmass, CO
- 2001 CaP CURE Annual Retreat, Lake Tahoe, NV
- 2001 President's Lecture, Memorial Sloan-Kettering Cancer Center, "Developing Kinase Inhibitor for Cancer Therapy," New York, NY
- 2001 Cold Spring Harbor Laboratory Executive Conference, "Gleevec and other Kinase Inhibitors in Cancer Therapies," Cold Spring Harbor, NY
- 2001 The Jackson Laboratory, Modeling Human Prostate Cancer in Mice, Meeting Organizer

Bar Harbor, ME

- 2001 ASCO/NCI Scientific Symposium: Molecular Oncology for the Clinical Oncologist, "Clinical Development of Molecularly Targeted Agents," Boston, MA
- 2001 Pezcoller Foundation Symposium, "Signal Transduction in Prostate Cancer, Roverto, Italy
- 2001 Onyx Pharmaceuticals Conference, "Kinase Inhibitors in Cancer: the CML Experience," Richmond, CA
- 2001 Eos Pharmaceuticals, "Kinase Inhibitors in Cancer Treatment," South San Francisco, CA
- 2001 Society for Basic Urologic Research, "Kinase Signaling in Prostate Tumorigenesis," Tucson, AZ
- 2001 American Society of Hematology Annual Meeting, Speaker in Education Session on "Chronic Myeloid Leukemia," Speaker in Joint ASH/ASCO Session on "Targeted Therapy of Cancer," Orlando, FL
- 2001 The Leukemia and Lymphoma Society, New Treatments in Chronic Myelogenous Leukemia Conference, "Understanding Chronic Myelogenous Leukemia (CML) and its Treatment," Washington, DC
- 2002 University of Miami, 2002 Distinguished Lecture Series, "Developing Kinase Inhibitor Therapy for Cancer, Miami, FL
- 2002 St. Jude Children's Research Hospital, "Developing Kinase Inhibitor Therapy for Cancer," Memphis, TN
- 2002 University of California at San Francisco, Seminars in Biomedical Sciences, "Kinase Inhibitors in Cancer Therapy," San Francisco, CA
- 2002 American College of Medical Genetics, Presidential Plenary Symposium, "Kinase Inhibitors in Cancer Therapy," New Orleans, LA
- 2002 American Association for Cancer Research (AACR) Annual Meeting, Symposium on Targeted Therapy, "Kinase Inhibitor Therapy in Leukemia," Symposium on Prostate Cancer, "PTEN Pathway in Prostate Cancer," San Francisco, CA
- 2002 CaP CURE, "Signal Transduction Inhibitor Therapy in Prostate Cancer," Los Angeles, CA
- 2002 Mayo Clinic, Prostate Seminar Series, "Kinase Inhibitor Therapy for Cancer," Rochester, MN
- 2002 Accelerate Brain Cancer Cure (ABC²) Summer Conference, "Targeting Therapies to Patients," Half Moon Bay, CA
- 2002 National Cancer Institute Cancer Therapy Evaluation Program, Signal Transduction Working Group Meeting: Agents Targeting PI3Kinase-AKT-Pathway, "Identification of PTEN Null Cancers by Immunohistochemical Analysis using Activation State Antibodies and by Gene Expression Profiling," Washington, DC
- 2002 Washington University School of Medicine, Barnes-Jewish Hospital and Alvin J. Siteman Cancer Center, The Rena Schechter Memorial Lecture in Cancer Research, "Kinase Inhibitors in Cancer," St. Louis, MO
- 2002 First Annual Symposium on Anti-Receptor Signaling Strategies in Human Neoplasia,

- “Targeting MTOR in PTEN Null Cancers,” Chicago, IL
- 2002 CaP CURE Ninth Annual Scientific Retreat, Keynote Speaker, “Targeting the PTEN/Akt Pathway in Prostate Cancer,” Washington, DC
- 2002 16th Annual Center for Advanced Biotechnology and Medicine (CABM) Symposium, “Kinase Inhibitor Therapy of Cancer,” Piscataway, NJ
- 2002 Harbor-UCLA Medical Center, Pathology Grand Rounds, “Kinase Inhibitor Therapy for Cancer,” Torrance, CA
- 2002 University of California, Berkeley, Cell and Molecular biology Department Seminar Speaker, “Kinase Inhibitors in Cancer Therapy,” Berkeley, CA
- 2002 Academy of Molecular Imaging (AMI) Annual Conference 2002, IMT Industry Forum Program, “Clinical Applications of Tyrosine Kinase Inhibitors,” San Diego, CA
- 2002 Doris Duke Charitable Foundation (DDCF) Clinical Scientist Meeting, “Kinase Inhibitor Therapy for Cancers with Aberrant PTEN/Akt Pathway Signaling,” Newport, RI
- 2002 University of Pennsylvania Research Series, “Kinase Inhibitors in Cancer,” Philadelphia, PA
- 2003 Cold Spring Harbor Laboratory – Topic: Cancer, Invited Speaker, “Kinase Inhibitors in Cancer,” Cold Spring Harbor, NY
- 2003 The Miami Nature Biotechnology Winter Symposium, Cancer – Life and Death, Watson-Crick Meeting, “Kinase Inhibitors in Cancer,” Miami, FL
- 2003 National Cancer Institute (NCI) USA/Japan Cancer Seminar, “Kinase Inhibitors in Cancer,” Kihei, HI
- 2003 Amgen, Oncology Seminar Series, “Kinase Inhibitors in Cancer Therapy,” Thousand Oaks, CA
- 2003 44th Annual Clinical Conference: Molecular Therapeutics for Cancer Metastasis, “Targeting the PDGF-receptor, c-kit and Bcr-Abl: Principles of Tumor Sensitivity and Resistance,” Houston, TX
- 2003 Genentech, “Kinase Inhibitors in Cancer,” South San Francisco, CA
- 2003 Accelerate Brain Cancer Cure (ABC²), Annual Conference, “EGFR and PTEN Pathways in Cancer,” Washington, DC
- 2003 American Society of Clinical Oncology (ASCO), Education Session Speaker: “Impact of Imatinib Mesylate on the Treatment of Chronic Myeloid Leukemia,” Chicago, IL
- 2003 Bristol-Myers Squibb (BMS), “Kinase Inhibitors in Cancer,” Princeton, NY
- 2003 Memorial Sloan-Kettering Cancer Center (MSKCC), Department of Medicine, Immunology Program, Woodward Visiting Professor, “Androgen Receptor and EGFR/Her2 Pathways in Prostate Cancer,” New York, NY
- 2003 5th Federation of European Cancer Societies (FECS)/American Association for Cancer Research (AACR/American Society of Clinical Oncology (ASCO) Workshop on Methods in Clinical Cancer Research, Keynote Lecture: “Translational Medicine,” Flims, Switzerland

- 2003 American Association for Cancer Research (AACR) Workshop, Molecular Biology in Clinical Oncology, Faculty Member, "Kinase Inhibitors in Cancer," Given Biomedical Institute, Aspen, CO
- 2003 The Alex Matter Symposium, Pathway to a Cure, "Kinase Inhibitors in Cancer," Basel, Switzerland
- 2003 3rd Reino Lahtikari Symposium, Molecular Targets of Prostate Cancer – from Genetic Basis to Clinical Practice, "Kinase Inhibitors in Prostate Cancer," Murikka Institute, Tampere, Finland
- 2003 University of California, San Francisco, Comprehensive Cancer Center, 2003 Symposium Hematopoietic Malignancies, "Abl Kinase Inhibitors in Chronic Myeloid Leukemia," San Francisco, CA
- 2003 National Foundation for Cancer Research, International Genomics Consortium, Biofunding Summit 2003, New Frontiers in Cancer Research, "Signal Transduction (Kinase Inhibitors): Targets for Drug Design," Phoenix, AZ
- 2003 American Association for Cancer Research (AACR), National Cancer Institute (NCI), European Organization for Research and Treatment of Cancer (EORTC) International Conference on Molecular Targets and Cancer Therapy, "Abl Kinase Inhibitors in Chronic Myeloid Leukemia," Boston, MA
- 2003 American Society for Hematology (ASH), Targeted Therapies in Hematology: CML and Beyond Symposium Chair, San Diego, CA
- 2004 Bristol-Myers Squibb, Cancer Selection Committee Meeting, Topic: Cancer Drugs and Targets: 2010 – 2015, "Today's Resistance – Tomorrow's Drugs," Salt Lake City, UT
- 2004 Western Regional Meeting, Moderator and State-of-the-Art Speaker, "Targeted Cancer Therapy," Carmel, CA
- 2004 Celgene, "Kinase Inhibitors in Cancer," San Diego, CA
- 2004 Keystone Symposia on Molecular and Cellular Biology, Protein Kinases and Cancer: The Promise of Molecular-Based Therapies, Meeting Organizer, "Clinical Reality: How Do Oncologists Screen for Signaling Abnormalities?" Tahoe City, CA
- 2004 American Association for Cancer Research (AACR), 95th Annual Meeting Forum: Small Molecule Tyrosine Kinase Inhibitors: Is the Glass Half Empty or Half Full? "MTOR Inhibitors in Cancer," Orlando, FL
- 2004 Gordon Research Conference on Second Messengers & Protein Phosphorylation, "Kinase Pathways and Inhibitors," Meriden, NH
- 2004 American Association for Cancer Research, Molecular Biology in Clinical Oncology: A Workshop, "Kinase Inhibitors in Cancer," Aspen, CO
- 2004 National Cancer Institute (NCI), 12th Annual SPORE Investigator's Workshop,

- “Hormone Refractory Prostate Cancer,” Baltimore, MD
- 2004 The Scripps Research Institute, Cancer Affinity Group, “Kinase Inhibitors in Cancer,” La Jolla, CA
- 2004 Genomics Institute of the Novartis Research Foundation, “Kinase Inhibitors in Cancer,” San Diego, CA
- 2004 Cold Spring Harbor Laboratory (CSHL), Cancer Genetics & Tumor Suppressor Genes, “Kinase Inhibitors in Cancer,” Cold Spring Harbor, NY
- 2004 Johns Hopkins University School of Medicine and The James Buchanan Brady Urological Institute, 4th Annual William Wallace Scott Research Lectureship 2004, “Molecular Studies of Prostate Cancer Progression,” Baltimore, MD
- 2004 Institute of Cancer Research, Link Lecture, “Kinase Inhibitors in Cancer,” London, UK
- 2004 National Cancer Institute (NCI), 3rd Mouse Hematopoietic Malignancies Workshop, “Kinase Inhibitors in Chronic Myeloid Leukemia,” Memorial Sloan-Kettering Cancer Center, New York, NY
- 2004 Columbia University, Institute for Cancer Genetics, “Kinase Inhibitors in Cancer Therapy,” New York, NY
- 2004 Dana Farber/Harvard Cancer Center, Renal and Prostate Cancer SPORE Retreat, “Hormone Refractory Prostate Cancer,” Newport, RI
- 2004 University of California, Davis Cancer Center, Frontiers of Cancer Research, Keynote speaker: “Hormone Refractory Prostate Cancer,” Davis, CA
- 2004 Prostate Cancer Foundation, 11th Annual Scientific Retreat, “Designing Novel Anti-Androgens for Hormone Refractory Prostate Cancer,” Lake Tahoe, NV
- 2004 William Guy Forbeck Research Foundation 2004 Forum, Targeted Therapies in Pediatric Malignancies, “Lessons from Imatinib,” Hilton Head Island, SC
- 2004 Exelixis, “Kinase Inhibitors in Cancer,” South San Francisco, CA
- 2004 The 35th International Symposium of the Princess Takamatsu Cancer Research Fund, Current Challenges and Novel Approaches to Modern Cancer Drug Discovery and Development, “Kinase Inhibitors: Lessons from Imatinib,” Tokyo, Japan
- 2004 Genentech, “Kinase Inhibitors in Cancer,” South San Francisco, CA
- 2004 The Broad Institute of MIT and Harvard, “Kinase Inhibitors in Cancer,” Cambridge, MA
- 2004 American Society for Hematology (ASH), 46th Annual Meeting & Exposition, Plenary Session Speaker: “Hematologic and Cytogenetic Responses in Imatinib Resistant CML Patients Treated with BMS 354825,” San Diego, CA
- 2005 Keystone Symposium, Molecular Targets for Cancer Therapy, “Kinase Inhibitor Therapy of Cancer,” Santa Fe, NM
- 2005 Vanderbilt-Ingram Cancer Center, Orrin Ingram Distinguished Lecture Seminar, “Kinase Inhibitors in Cancer Treatment,” Nashville, TN

- 2005 University of Wisconsin Medical School, Fourth Int'l Symposium on Genitourinary Cancers, "Mechanisms of Resistance to Androgen Ablation," Los Angeles, CA
- 2005 Foundation IPSEN, Can Cancer Be Treated as a Chronic Disease? "Kinase Inhibitors in Cancer," Agra, India
- 2005 2005 Keystone Symposium on Hormonal Regulation of Tumorigenesis, "Mechanisms of Hormone Refractory Prostate Cancer," Monterey, CA
- 2005 University of Pennsylvania, Abramson Family Cancer Center Institute, Abramson Seminar Series, "Kinase Inhibitors in Cancer: Lessons for Chronic Myeloid Leukemia," Philadelphia, PA
- 2005 Exelixis, "Mechanisms of Hormone Refractory Prostate Cancer," San Diego, CA
- 2005 2nd Annual Pacific Rim Conference on Breast & Prostate Cancer, Keynote Speaker, Sessions 3 & 4: "Mechanisms of Hormone-Refractory Prostate Cancer," Palm Springs, CA
- 2005 American Association for Cancer Research (AACR), Richard and Hinda Rosenthal Foundation Award Lecture, "Molecularly Targeted Cancer Therapy: Future Challenges," Anaheim, CA
- 2005 Boston Cancer Research Association, Twentieth Annual Apffel Memorial Lecture, Frontiers in Cancer Treatment, "Kinase Inhibitors in Cancer Treatment," Boston, MA
- 2005 University of Michigan, Fourth Annual Life Sciences Institute's Symposium, Molecular Insights and new Therapeutic Approaches to Cancer, "Kinase Inhibitors in Cancer Treatment," Ann Arbor, MI
- 2005 American Society of Clinical Oncology (ASCO) Annual Meeting 2005, ASCO David A. Karnofsky Memorial Award and Lecture, "Molecularly Targeted Cancer Therapy: Future Challenges," Orlando, FL
- 2005 Prostate Cancer Foundation's 12 Annual Scientific Retreat, "Strategies to Overcome Resistance to Anti-Androgens," Scottsdale, AZ
- 2005 Bristol-Myers Squibb Freedom to Discover Awards for Distinguished Achievement Presentation and Banquet, "Combating Kinase Inhibitor Resistance," Hopewell, NJ
- 2005 Cancer Genomics Center, Genomic Approaches and Molecular Mechanisms in Cancer, Keynote Speaker, "Mechanisms of prostate Cancer Progression," Amsterdam, The Netherlands
- 2005 Federation of European Cancer Societies (FECS) – ECCO 13 – The European Cancer Conference "Kinase Inhibitors in Cancer: Lessons from the Chronic Myeloid Leukemia," Paris, France
- 2005 Institut de Recherches Servier, "Mechanisms of Prostate Cancer Progression," Paris, France
- 2005 Institut Curie, Annual Curie-Servier Lecture, "Kinase Inhibitors in Cancer," Paris, France
- 2005 American Society of Hematology (ASH) Scientific Symposium on Neoplasia, "Overcoming Resistance to Kinase Inhibitors," Atlanta, GA

- 2006 UCLA Stem Cell Symposium, "Cancer Stem Cells: Lessons from Chronic Myeloid Leukemia," Los Angeles, CA
- 2006 Keystone Symposium "Cancer and Kineses: Lessons from the Clinic," Santa Fe, NM
- 2006 Developing Biomarker-Based Tools for Cancer Screening, Diagnosis and Treatment: The State of the Science, Evaluation, Implementation, and Economics, and Moderator "Clinical Investigator Perspective," Washington, DC
- 2006 Academy of Molecular Imaging, "Signal Transduction Targeted Cancer Treatments," Orlando, FL
- 2006 ASCI/AAP Joint Meeting, "Molecularly Based Targeting of the Cancer Genome," Chicago, IL
- 2006 Society of Urologic Oncology Meeting/American Urological Association, "Molecular Biology of Prostate Cancer and its Translation," Atlanta, GA
- 2006 Cancer Genomics and Emerging Technologies Conference, "Oncogenomics and Targeted Therapy: Lessons from Chronic Myeloid Leukemia," Boston, MA
- 2006 Future Forum on Breast Cancer, Plenary Session, Keynote Lecture, "Kinase Inhibitors: Lessons from Chronic Myeloid Leukemia," New York, NY
- 2006 American Association for Cancer Research (AACR), International Symposium on Translational Cancer Research, "Kinase Inhibitors in Cancer," Beijing, China
- 2006 American Association for Cancer Research (AACR), Shanghai Conference, "Future Directions in Targeted Therapy," Shanghai, China
- 2006 Cold Spring Harbor Laboratory Meeting, "Nuclear Receptors: From Bench to Bedside," "Targeting Androgen Resistant Prostate Cancer," Cold Spring Harbor, NY
- 2006 Mount Sinai School of Medicine, Chemotherapy Foundation Symposium XXIV, Innovative Cancer Therapy for Tomorrow, "Kinase Inhibitors: Lessons from Chronic Myelogenous Leukemia (CML)," New York, NY
- 2006 New York University School of Medicine, "Kinase Inhibitors in Cancer Therapy," New York, NY
- 2006 University of Chicago Cancer Research Center Seminar Series, "New Insights into Kinase Inhibitor Therapy," Chicago, IL
- 2007 ASCO Prostate Cancer Symposium, Orlando, FL
- 2007 Freirich Award, Houston, TX
- 2007 American Association for Cancer Research, Los Angeles, CA
- 2007 Pezcoller Annual Meeting, Trento, Italy
- 2007 Beatson Conference Keynote Address, Glasgow, Scotland
- 2007 CNIO Conference, "Targeting the androgen receptor in hormone refractory prostate cancer with novel anti-androgens," Madrid, Spain

- 2007 Cleveland Clinic, 27th Annual Lecture, "Molecularly Targeted Cancer Therapies," Cleveland, OH
- 2008 Davos World Economic Forum, Update 2008: Designing a Cure for Cancer (Collins, Mendelsohn, Sawyers, Walsh), Davos, Switzerland
- 2008 University of Colorado, Dean's Lecture, "Lessons from Resistance to Targeted Cancer Therapy," Denver, CO
- 2008 AACR 2008 Annual Meeting, "Novel Strategies to Overcome Anti-Androgen Resistance in Prostate Cancer," San Diego, CA
- 2008 UNC Lineberger Cancer Center's 32nd Annual Scientific Symposium, "Overcoming Resistance to Molecularly-Targeted Cancer Therapy," Chapel Hill, NC
- 2008 Mouse Models of Human Cancer Consortium Steering Committee meeting, Pathway-Specific Mouse Prostate Cancer Signatures," Colorado Springs, CO.
- 2008 Herbert Irving Comprehensive Cancer Center Seminar Series, Columbia University Medical Center "Lessons from Resistance to Targeted Cancer Therapy," New York, NY
- 2008 Institute for Advanced Study, "Overcoming resistance to molecularly targeted therapy, Princeton, NJ
- 2008 American Society for Therapeutic Radiology and Oncology (ASTRO) 50th Annual Meeting, Keynote Address III: del Regato Lecture, "Overcoming Resistance to Molecularly-Targeted Cancer Therapy," Boston, MA
- 2008 Keynote Lecture, 2008 Herbert Irving Comprehensive Cancer Center Retreat, "Overcoming resistance to molecularly targeted therapy," Columbia University Medical Center, New York, NY
- 2008 Merck, Chinese Academy of Medical Sciences, Emerging Concepts in Molecular Oncology, "Overcoming resistance to molecularly targeted therapy", Beijing, China
- 2008 AACR, Targeting the PI3-Kinase Pathway in Cancer Symposium, Predicting Patient Responses to PI3-Kinase Pathway Inhibitors," Cambridge, MA
- 2010 MGH Cancer Research Award Lecture, Massachusetts general Hospital, Boston, MA
- 2010 16th Annual Melvin L. Samuel's Lectureship, "Overcoming Resistance to Antiandrogen Therapy," Houston, TX
- 2010 Plenary Lecture, 92nd Annual Meeting of the Endocrine Society (ENDO), "Overcoming Resistance to Molecularly Targeted Cancer Therapy," San Diego, CA
- 2010 Cold Spring Harbor Symposia on Quantitative Biology - Biology, Society and the Future, "Personalizing Cancer Medicine," Cold Spring Harbor, NY
- 2010 Princess Takamatsu Cancer Research Fund Lectures, Tokyo/Kyoto/Nagoya, Japan
- 2011 NCI Center for Cancer Research, Eminent Lecture Series, "New Insights into Prostate Cancer Therapeutics," Bethesda, MD

- 2011 Joint Lecture Series in Cancer Research, Overcoming Cancer Drug Resistance,”
Diana Helis Henry and Adrienne Helis Malvin Medical Research Foundations
Baylor College of Medicine, Houston, TX
- 2011 The Gordon Wilson Lecture, American Clinical and Climatological Association
Annual Meeting, Sarasota, FL
- 2011 Giacchino Lecture in Cancer Research, Kimmel Cancer Center, Philadelphia, PA
- 2011 Oon Award Lecture - Downing College, Cambridge, UK
- 2012 Chancellor's Lecture for dedication of the Duke Cancer Institute, Durham, NC
- 2012 Trefethen Lecture, UC San Francisco, San Francisco, CA
- 2012 St Jude’s Children’s Hospital Cancer Center 50th Anniversary Celebration, Memphis,
TN
- 2013 Heath Memorial Award Lecture, MD Anderson Cancer Center, Houston, TX

Non-profit Advisory Boards

Past

- 2002 – 2006 External Advisory Board, Winship Cancer Center, Emory University
- 2003 – 2006 External Advisory Board, Harvard Prostate Cancer SPORE, Cambridge, MA
- 2003 – 2004 Scientific Advisory Board, Den Haag Breast Cancer Foundation
- 2003 – 2006 Board of Scientific Consultants, Memorial Sloan-Kettering Cancer Center,
New York, NY
- 2003 – 2007 External Review Board, Institute of Chemical Genomics (ICG), NCI
- 2003 – 2006 Board of Directors, American Association for Cancer Research (AACR)
- 2004 National Cancer Advisory Board (NCAB), Ad Hoc Committee on National
Advanced Technology Initiative for Cancer (NATIC)
- 2004 – 2009 Board of Scientific Counselors (BSC), National Cancer Institute (NCI)
- 2004 – 2006 Scientific Advisory Board, Burnham Institute Cancer Center, La Jolla, CA
- 2005 – 2008 Scientific Advisory Board, Translational Genomics Research Institute, (Tgen),
Phoenix, AZ
- 2005 – 2008 Scientific Advisory Board, Southwest Oncology Group
- 2006 – 2007 Institute of Medicine’s (IOM) Committee on Developing Biomarker-based
Tools for Cancer Screening, Diagnosis and Treatment, The National
Academies, Washington, DC
- 2005 – 2013 External Advisory Board, Vanderbilt/Ingram Cancer Center, Nashville, TN
- 2005 – 2013 External Advisory Board, St. Jude’s Children’s Hospital Cancer Center,
Memphis, TN

Current

- 2008 – Present Board of Directors, Cold Spring Harbor Laboratories, Cold Spring Harbor, NY
2009 – Present Scientific Advisory Board, St. Jude Children’s Research Hospital, Memphis, TN
2010 – Present Scientific Advisory Board, Broad Institute, Cambridge, MA

Consulting Activities

Past

- 1996 – 2000 Ciba-Geigy Pharmaceuticals/ Novartis, “Designing Phase I-II Trials of STI-571 (formerly CGP57148), A Specific Inhibitor of the ABL Tyrosine Kinase for Treatment of Chronic Myelogenous Leukemia,” Basel, Switzerland
1996 – 2006 Agensys, Co-Founding Scientist & Consultant, Santa Monica, CA
2002 – 2004 Scientific Advisory Board, Eos Pharmaceuticals, South San Francisco, CA
2003 – 2006 Scientific Advisory Board, Pliramed, Slough, Berkshire, UK
2004 – 2006 Scientific Advisory Board, Biogen-IDEC, Cambridge, MA
2005 – 2012 Scientific Advisory Board, Exelixis, South San Francisco, CA
2004 – 2013 Scientific Advisory Board, Merck, West Point, PA
2006 – 2013 Scientific Advisory Board, Aveo, Cambridge MA
2007 – 2013 Scientific Advisory Board, Pfizer, New York, NY
2009 – 2013 Scientific Advisory Board, Aragon Pharmaceuticals, San Diego, CA
2012 – 2013 Scientific Advisory Board, Tetralogic, Malvern, PA

Current

- 2003 – Present Scientific Advisory Board, Housey Pharmaceuticals, Southfield, MI
2010 – Present Scientific Advisory Board, Agios, Cambridge MA
2009 – Present Scientific Advisory Board, Nextech, Zurich, Switzerland
2010 – Present Scientific Advisory Board, Tracon, San Diego, CA
2012 – Present Scientific Advisory Board, Beigene, Beijing, China
2012 - Present Scientific Advisory Board, Blueprint, Cambridge, MA
2013 – Present Scientific Advisory Board, Seragon, San Diego, CA

Community Service

- 2001 – 2006 Board of Directors of the Leukemia & Lymphoma Society, Los Angeles Chapter
2005 Howard Hughes Medical Institute, Capitol Hill Briefings, Washington, DC

2008 Coalition for the Life Sciences, Congressional Biomedical Research Caucus Briefing, "Coping with Drug Resistance in Cancer Therapy"

External Grant Review Service

1997 National Institutes of Health, Ad Hoc Reviewer, Biology-2 Study Section
1997 – 2001 American Cancer Society, "Cell Cycle and Growth Control" Study Section
1998 National Institutes of Health, Urology Special Emphasis Panel, Study Section, National Cancer Institute of Canada, Ad Hoc Reviewer "Hematopoiesis, Growth Factors and Signal Transduction" Study Section
1999 – 2000 Dept of Defense Study Sections – Breast Cancer, Prostate Cancer
1999 – 2003 CaP CURE/Prostate Cancer Foundation Grant Review Panel
2001 – 2005 Leukemia and Lymphoma Society Grant Review Panel
2002, 2004 Concern Foundation
2002 – 2008 Doris Duke Charitable Foundation Advisory Panel
2002 – 2007 Accelerate Brain Cancer Cure (ABC²) Scientific Review Board
2002 Study Section Chair – Department of Defense/CML Panel
2003, 2005–2007 Leukemia & Lymphoma Society, Specialized Center of Research (SCOR) Review Panel

External Review Service

1995 – Present Reviewer of Abstracts for American Society of Hematology (ASH) and the American Association for Cancer Research (AACR)
1993 – Present Reviewer for Science, Nature, Cell, Molecular Cell, New England Journal of Medicine, Nature Medicine, Nature Genetics, Blood, PNAS, Oncogene, Molecular and Cellular Biology, Genes and Development, Cancer Research, Clinical Cancer Research, Journal of Clinical Investigation, Journal of the National Cancer Institute, and The Prostate.

Editorial Boards

2000 – 2004 Associate Editor, Cancer Research
2002 – 2006 Associate Editor, Clinical Cancer Research
2002 – 2009 Consulting Editor, Journal of Clinical Investigation
2002 – 2006 Editorial Board, Cell Cycle
2006 – 2008 Editorial Board, Molecular and Cellular Biology
2000 – Present Associate Editor, The Prostate
2001 – Present Editorial Board, Cancer Cell
2006 – Present Editorial Board, Cell
2008 – Present Editorial Board, Science Translational Medicine

2011 – Present Scientific Editor, Cancer Discovery
2012 – Present Senior Editor, eLIFE

Patents

- 2000 U. S. Patent No. 6,093,800, Issued June 25, 2000, “E25a protein, methods for production and use thereof”
- 2002 *U. S. Patent No. 6,365,797, Issued April 2, 2002, “Mice models of human prostate cancer progression”*
- 2004 U. S. Patent No. 6,815,574, Issued November 9, 2004, “Methods of simulating human prostate cancer progression”
- 2004 U. S. Patent No. 6,828,471, Issued December 7, 2004, “Mice models of human prostate cancer”
- 2005 U. S. Patent No. 6,949,690, Issued September 27, 2005, “Methods of assessing the effect of a gene of interest on human prostate cancer progression”
- 2005 U. S. Patent No. 6,956,145, Issued October 18, 2005, “Mice models of human prostate cancer progression”
- 2006 U. S. Patent No. 7,030,232, Issued April 18, 2006, “E25A protein, methods for producing and use thereof”
- 2006 U. S. Patent No. 7,053,263, Issued May 30, 2006, “Mouse Models of Human Prostate Cancer Progression”
- 2006 U. S. Patent No. 7, 122, 714, Issued October 17, 2006, “Mouse Models of Human Prostate Cancer”
- 2009 U. S. Patent No. 7,521,175, Issued April 21, 2009, “Mutations in the Bcr-Abl tyrosine kinase associated with resistance to STI-571”
- 2009 U. S. Patent No. 7,595.431, Issued September 29, 2009, “Mouse Models of Human Prostate Cancer”
- 2010 U.S Patent No. 7,709,517 B2, Issued May 4, 2010, “Diaryhydantoin Compounds”

Patents Pending

- 2002 UC Case No. 2002-135-2; “Animal Models of Prostate Cancer and Methods for Their Use” PCT US03/19818
- 2003 UC Case No. 2003-279-2, “Methods and Materials for Assessing Prostate Cancer Therapies” PCT US04/42221
- 2004 UC Case No. 2004-129-2 “Methods and Materials for Assessing Prostate Cancer Therapies and Compounds” PCT US04/4222

- 2004 UC Case No. 2004-659, "Methods and Materials for Examining the PI3K/AKT Pathway in Gliomas and Prostate Cancers" International Application Number PCT/US2004/037288
- 2005 UC Case No. 2005-197, "Biomarkers for Sensitivity to MTOR Inhibitor Therapy in Kidney Cancer" U. S. Provisional Patent Application Filed
- 2005 UC Case No. 2005-452, "Molecular Determinants of EGFR Kinase Inhibitor Response in Glioblastoma" U. S. Provisional Patent Application Filed
- 2005 UC Case No. 2005-438, "Novel Androgen Receptor Inhibitors with Minimal Agonistic Activities" U. S. Provisional Patent Application Filed

BIBLIOGRAPHY

1. **Sawyers CL**, Moore RD, Lerner SA, Smith CR. A model for predicting nephrotoxicity in patients treated with aminoglycosides. *J Infect Dis* 1986; 153: 1062-1068
2. Hughes T, Martiat P, Morgan G, **Sawyers C**, Witte ON, Goldman ON. Significance of residual leukaemia transcripts after bone marrow transplant for CML. *Lancet* 1990; 335:50.
3. **Sawyers CL**, Timson L, Kawasaki ES, Clark SS, Witte ON, Champlin R. Molecular relapse in Chronic Myelogenous Leukemia patients after bone marrow transplantation detected by polymerase chain reaction. *Proc Natl Acad Sci U S A* 1990; 87: 563-567.
4. **Sawyers CL**, Callahan W, Witte ON. Dominant negative MYC blocks transformation by ABL oncogenes. *Cell* 1992; 70: 901-910.
5. **Sawyers CL**, Gishizky ML, Quan S, Golde DW, Witte ON. Propagation of human blastic myeloid leukemias in the SCID mouse. *Blood* 1992; 79: 2089-98.
6. **Sawyers CL**, Golde DW, Quan S, Nimer SD. Production of granulocyte macrophage colony-stimulating factor in two patients with lung cancer, leukocytosis, and eosinophilia. *Cancer* 1992; 69: 1342-1346.
7. Afar DE, Goga A, McLaughlin J, Witte ON, **Sawyers CL**. Differential complementation of Bcr-Abl point mutants with c-Myc. *Science* 1994; 264: 424-26.
8. Afar DE, Goga A, Cohen L, **Sawyers CL**, McLaughlin J, Mohr RN, Witte ON. Genetic approaches to defining signaling by the CML associated tyrosine kinase BCR-ABL. *Cold Spring Harb Symp Quant Biol* 1994; 589-594.
9. Hathorn RW, Tso CL, Kaboo R, Pang S, Figlin R, **Sawyers C**, deKernion JB, Belldegrun A. In vitro modulation of the invasive and metastatic potentials of human renal cell carcinoma by interleukin-2 and/or interferon-alpha gene transfer. *Cancer* 1994; 74: 1904-1911.
10. Orr SL, Hughes TP, **Sawyers CL**, Kato RM, Quan SG, Williams SP, Witte ON, Hood L. Isolation of unknown genes from human bone marrow by differential screening and single-pass cDNA sequence determination. *Proc Natl Acad Sci U S A* 1994; 91: 11869-11873.
11. **Sawyers, CL**, Denny DT. Chronic myelomonocytic leukemia: Tel-a-kinase what Ets all about. *Cell* 1994; 77: 171-173.
12. **Sawyers CL**, McLaughlin J, Goga A, Havlik M, Witte O. The nuclear tyrosine kinase c-Abl negatively regulates cell growth. *Cell* 1994; 77: 121-131.

13. Sugiyama H, Wang Y, Jackson P, **Sawyers CL**, Klein G. Molecular requirements for rapid plasmacytoma and pre-B lymphoma induction by Abelson murine leukemia virus in myc-transgenic mice. *Int J Cancer* 1994; 58: 135-141.
14. Goga A, Liu X, Hambuch TM, Senechal K, Major E, Berk AJ, Witte ON, **Sawyers CL**. p53 dependent growth suppression by the c-Abl nuclear tyrosine kinase. *Oncogene* 1995; 11: 791-799.
15. Raitano AB, Halpern JR, Hambuch TM, **Sawyers CL**. The Bcr-Abl leukemia oncogene activates Jun kinase and requires Jun for transformation. *Proc Natl Acad Sci U S A* 1995; 92: 11746-11750.
16. **Sawyers CL**, McLaughlin J, Witte ON. Genetic requirement for Ras in the transformation of fibroblasts and hematopoietic cells in the Bcr-Abl oncogene. *J Exp Med* 1995; 181:307-13.
17. Senechal K, Halpern J, **Sawyers CL**. The CRKL adaptor protein transforms fibroblasts and functions in transformation by the BCR-ABL oncogene. *J Biol Chem* 1995; 271: 23255-23261.
18. Shuai K, Halpern J, ten Hoeve J, Rao X, **Sawyers CL**. Constitutive activation of STAT5 by the BCR-ABL oncogene in chronic myelogenous leukemia. *Oncogene* 1996; 13: 247-254.
19. Yuan ZM, Huang Y, Fan MM, **Sawyers C**, Kharbanda S, Kufe D. Genotoxic drugs induce interaction of the c-Abl tyrosine kinase and the tumor suppressor protein p53. *J Biol Chem* 1996; 271: 26457-26460.
20. Yuan ZM, Huang Y, Whang Y, **Sawyers C**, Weichselbaum R, Kharbanda S, Kufe D. Role for c-Abl tyrosine kinase in growth arrest response to DNA damage. *Nature* 1996; 382: 272-274.
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22. Klein KA, Reiter RE, Redula J, Moradi H, Zhu XL, Brothman AR, Lamb DJ, Marcelli M, Belldgrun A, Witte ON, **Sawyers CL**. Progression of metastatic human prostate cancer to androgen independence in immunodeficient SCID mice. *Nat Med* 1997; 3: 402-408.
23. Schiller G, Lee M, Miller T, Lill M, Mittal-Henkle A, Paquette R, **Sawyers C**, Territo M. Transplantation of autologous peripheral blood progenitor cells procured after high-dose cytarabine-based consolidation chemotherapy for adults with acute myelogenous leukemia in first remission. *Leukemia* 1997; 11: 1533-39.
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25. Kharbanda S, Pandey P, Morris PL, Whang Y, Xu Y, Sawant S, Zhu LJ, Kumar N, Yuan ZM, Weichselbaum R, **Sawyers CL**, Pandita TK, Kufe D. Functional role for the c-Abl tyrosine kinase in meiosis I. *Oncogene* 1998; 16: 1773-1777.
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35. **Sawyers CL**. Chronic myeloid leukemia. *N Engl J Med* 1999; 340: 1330-1340.
36. Schiller G, Lee M, Paquette R, **Sawyers C**, Khoubian F, Territo M. Transplantation of autologous peripheral blood progenitor cells procured after high-dose cytarabine-based consolidation chemotherapy for adults with secondary acute myelogenous leukemia in first remission. *Leuk Lymphoma* 1999; 33: 475-484.
37. Wang X, Scott E, **Sawyers CL**, Friedman AD. C/EBPalpha bypasses granulocyte colony-stimulating factor signals to rapidly induce PU.1 gene expression, stimulate granulocytic differentiation, and limit proliferation in 32D cl3 myeloblasts. *Blood* 1999; 94: 560-571.
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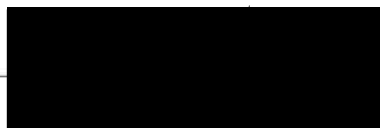
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Committee on Energy and Commerce
U.S. House of Representatives
 Witness Disclosure Requirement - "Truth in Testimony"
 Required by House Rule XI, Clause 2(g)

1. Your Name: <i>CHARLES SAWYERS, MD</i>		
2. Are you testifying on behalf of the Federal, or a State or local government entity?	Yes	No ✓
3. Are you testifying on behalf of an entity that is not a government entity?	Yes ✓	No
4. Other than yourself, please list which entity or entities you are representing: <i>American Association of Cancer Research</i>		
5. Please list any Federal grants or contracts (including subgrants or subcontracts) that you or the entity you represent have received on or after October 1, 2011: <i>See attached.</i>		
6. If your answer to the question in item 3 in this form is "yes," please describe your position or representational capacity with the entity or entities you are representing: <i>PAST PRESIDENT</i>		
7. If your answer to the question in item 3 is "yes," do any of the entities disclosed in item 4 have parent organizations, subsidiaries, or partnerships that you are not representing in your testimony?	Yes	No ✓
8. If the answer to the question in item 3 is "yes," please list any Federal grants or contracts (including subgrants or subcontracts) that were received by the entities listed under the question in item 4 on or after October 1, 2011, that exceed 10 percent of the revenue of the entities in the year received, including the source and amount of each grant or contract to be listed: <i>ATTACHED</i>		
9. Please attach your curriculum vitae to your completed disclosure form. <i>ATTACHED</i>		

Signature: _____



Date: _____

9/5/14

LIST OF FEDERAL GRANTS TO THE AACR (1 OCTOBER , 2011 – PRESENT)

GRANT#	TITLE	PI	BUDGET START	AMOUNT
1R13CA165612-01	AACR Special Conference on Tumor Microenvironment Complexity: Emerging Roles in C	DECLERCK	11/1/2011	\$ 4,000
5R25CA057732-20	Molecular Biology in Clinical Oncology Workshop	KAELIN	6/1/2012	\$ 249,998
5R25CA068647-17	Methods in Clinical Cancer Research Workshop	VON HOFF	8/1/2012	\$ 291,748
5R13CA076526-16	MSI Faculty in the Field of Cancer Research	FOTI	9/1/2012	\$ 99,000
5R13CA040577-27 (MPI)	Young Minority Scientists in the Field of Cancer	CLARKSON	9/1/2012	\$ 99,000
1R13CA174376-01	Eleventh Annual AACR International Conference on Frontiers in Cancer Prevention Research	FOTI	9/11/2012	\$ 25,000
5R25CA057732-21	Molecular Biology in Clinical Oncology Workshop	KAELIN	6/1/2013	\$ 249,998
5R25CA068647-18	Methods in Clinical Cancer Research Workshop	VON HOFF	8/1/2013	\$ 291,747
5R25CA068647-18	Methods in Clinical Cancer Research Workshop	VON HOFF	8/1/2013	\$ 118,675
5R13CA076526-17	MSI Faculty in the Field of Cancer Research	FOTI	9/1/2013	\$ 74,999
1R25CA174664-01	Integrative Molecular Epidemiology Workshop	SELLERS	9/1/2013	\$ 249,213
5R13CA040577-28 (MPI)	Young Minority Scientists in the Field of Cancer	CLARKSON	9/1/2013	\$ 74,999
1R13CA183563-01A1	AACR Conference on The Science of Health Disparities in Racial/Ethnic Minorities	FOTI	9/1/2013	\$ 74,999
1U13CA183291-01	Twelfth Annual AACR International Conference on Frontiers in Cancer Prevention Re	FOTI	9/27/2013	\$ 30,000
5R25CA057732-22	Molecular Biology in Clinical Oncology Workshop	KAELIN	6/4/2014	\$ 249,998
1R13CA189528-01	Advances in Melanoma: From Biology to Therapy	FOTI	8/6/2014	\$ 4,000
5R25CA174664-02	Integrative Molecular Epidemiology Workshop	SELLERS	9/1/2014	\$ 249,213
5R13CA040577-29 (MPI)	Young Minority Scientists in the Field of Cancer	CLARKSON	9/1/2014	\$ 74,999
5R13CA076526-18	MSI Faculty in the Field of Cancer Research	FOTI	9/1/2014	\$ 74,999

OTHER SUPPORT
Sawyers, Charles L.

ACTIVE SUPPORT

5 R01 CA155169-03 (PI: Sawyers) NCI/NIH	5/1/12-3/31/17 \$221,187	3.0 calendar
Understanding Resistance to Next Generation Antiandrogens To explore the molecular basis by which GR selectively activates certain AR target genes (Aim 1), the functional role of GR, AR and the GR/AR target gene SGK1 in maintaining drug resistance (Aim 2), and the clinical relevance of these findings in circulating tumor cells obtained from patients at treatment start and at relapse (Aim 3).		
5 P50 CA092629-13 (PI:Scher) National Institutes of Health MSKCC Spore in Prostate Cancer	9/1/08 – 8/31/16 \$ 324,295	2.88 calendar
Major Goals of this Project: This allocation is split between three projects: Project 1, Project 6 and Core C. Project 1 covers a campus-wide oncogenome project, Project 6 serves to enhance the clinical development of a novel antiandrogen named A52 and the Core covers animal maintenance and experimentation costs. Role: Co-Leader of Project 1 and 4, Co-Leader of Mouse Core D and Admin Core F		
5 T32 CA160001-03 (PI: Sawyers) NCI	7/11/11-6/30/16 \$192,974	0.0 calendar
Translational Research in Oncology Training Program The training program for translational cancer research will provide opportunities to postdoctoral PhD trainees to learn about human oncology and pathogenesis, and work collaboratively with clinicians to advance the treatment of cancer patients. The goals are: to help basic scientists to develop a strong clinical backgrounds so that they may effectively bring discoveries from bench to bedside; and to foster interdisciplinary research and collaboration. These funds support the institution.		
3 P30 CA008748-47 S4 (PI: Thompson) NCI	7/31/08-12/31/14	1.8 calendar
Cancer Center Support Grant The CCSG funds support MSK's research infrastructure. These shared resources facilitate the research activities of the clinical, translational and laboratory programs at the Cancer Center.		
W81XWH-13-2-0070 (PI: Scher) Congressionally Directed Medical Research Programs	9/30/2013 - 9/29/2016 \$0	0.6 calendar
Toward the Practice of Precision Medicine: A Biomarker Validation Coordinating Center To use the centralized infrastructure of the Assay Validation Coordinating Center to cross-validate additional assays for biomarkers identified via established and emerging discovery platforms.		