# Ali Shilatifard, Ph.D.

Chairman, Department of Biochemistry and Molecular Genetics Director, Simpson Querrey Center for Epigenetics Northwestern University Feinberg School of Medicine

Searle 6-512, 320 E. Superior Street, Chicago, IL 60611

Family Married to Laura Shilatifard (1995) with four children:

Francesca (1996), Natalie (1997), Joseph (1999), and Anthony (2002)

E-mail: ASH@Northwestern.edu

<u>Citizenship</u> USA

#### **Academic Appointments**

2017-present	Director, Simpson Querrey Center for Epigenetics, Northwestern University
2014-present	
1	and Lurie Children's Hospital
2014-present	Robert Francis Furchgott Professor and Chairman, Department of
-	Biochemistry and Molecular Genetics, Northwestern University School of Medicine
2018-present	Editor, Science Advances
2014-2018	Chair of the Editorial Board and Deputy Editor, Science Advances
2015-2017	Senior Editorial Board, Science
2014-2018	Board of Reviewing Editors, <i>eLife</i>
2007-2017	Editor, Molecular and Cellular Biology
2003-2017	Instructor, Cold Spring Harbor Laboratory, Gene Expression Course
2007-2014	Investigator, Stowers Institute for Medical Research
2005-2007	Professor of Biochemistry, SLU-SOM
2002-2007	Associate Scientific Director, Saint Louis University Cancer Center
2002-2005	Associate Professor of Biochemistry with tenure, SLU-SOM
1997-2002	Assistant Professor of Biochemistry, Saint Louis University School of Medicine
1995-1997	Jane Coffin Childs Postdoctoral Fellow, Oklahoma Medical Research Foundation
<b>Education</b>	
1992-1994	Ph.D., University of Oklahoma School of Medicine, Department of Biochemistry,
	Advisor: Dr. Richard D. Cummings
1990-1992	University of Georgia, Department of Biochemistry and Complex Carbohydrate Research Center

#### **Scientific Community Responsibilities**

1986-1990

Advisor: Dr. Richard D. Cummings

• Member of the Scientific Advisory Board (SAB), BBVA Foundation Frontiers in Biomedicine (2017-present) • Max-Planck Society's SAB (2014-2019) • Genentech's Scientific Research Board (SRB) (2014-present) • Piramal Enterprises Limited, SAB (2014) • Cancer Prevention and Research Institute of Texas Board of Reviewers (2014-2019) • Keystone Symposia, SAB (2014-present) • Israel Centers of Excellence, SAB (I-COREs) (2012-2014) • Cell Signaling Technology, SAB (2012-2016) • Deutsche Forschungsgemeinschaft (DFG) SAB (2012) • Novartis Science Board (2011) • Fox Chase Cancer Center, Keystone External Advisory Board (2011-2013) • Starr Cancer Consortium, SAB (2011-present) • Member, Cancer Molecular Pathology (CAMP) study section (2010-2012) • Member of SAB, The Leukemia & Lymphoma Society (2007-2014) • Chairman, ASBMB Small Meetings Committee (2006-2011) • Member, Molecular Genetics B (CDF1) study section National Institutes of Health (2003-2007) • Member of the SAB for Sigma Chemical Company (1998-2004)

B.S., Kennesaw State University, Organic Chemistry (ACS Certified)

# **Active Funding**

2015-2022	National Cancer Institute, "Mutations of Chromatin and its Modifying Machineries in Malignancies" R35CA197569 (PI)
2004-2021	National Cancer Institute, "Transcriptional Elongation Control in Development and Disease" R01CA214035-15 (PI)
2018-2023	National Cancer Institute, "Understanding and targeting wild-type SS18 function and stability in synovial sarcoma" U54CA231638-01 (PI)
K-, R- and F	ellowship Awards Mentored by Shilatifard During the past 5 years
2014-2016	Hans-Martin Herz, Ph.D., Postdoctoral fellow, "Trithorax-related, MLL3 and MLL4 in enhancer-mediated cancer pathogenesis" K99CA181506
2015-2020	Benjamin D. Singer, M.D., Assistant Professor of Medicine, "Regulatory T Cell UHRF and DNA methylation in repair of acute lung injury" K08 HL128867
2015-2020	Jae (Jaehyuk) Choi, M.D., Ph.D., Assistant Professor of Dermatology and Biochemistry and Molecular Genetics, "The role of ZEB1 mutations in cutaneous T Cell" K08CA191019
2015-2018	Andrea Piunti, Ph.D., Postdoctoral Fellow EMBO Long-Term "Mutant histone H3.3 and Polycomb roles in Diffuse Intrinsic Pontine Gliomas" #ALTF 372-2015
2016-2021	Amanda Saratsis, M.D., Assistant Professor of Neurological Surgery, "Investigation of histone H3 post-translational modifications in pediatric brainstem glioma" K08NS097624
2016-2017	Andrea Piunti, Ph.D., Postdoctoral Fellow, AIRC-Marie Curie COFUND iCARE "Histone H3 mutant and Polycomb Repressive Complex 2 role in Diffuse Intrinsic Pontine Gliomas" #17912
2016-2021	Edwin R. Smith, Ph.D., "Histone Modifications and transcription elongation in human cancer" R50CA211428-01
2017-2019	Ryan Rickels, graduate student, "Investigating catalytic and non-catalytic roles for Trr/COMPASS in regulation of enhancer function during Drosophila development" F31CA213928
2017-2020	Christie Ching-Lin Sze, graduate student, "Functional Study of Mammalian Set1A/COMPASS Methyltransferase in Stem Cells and Development" F31CA228149
2017-2022	Kyle Eagen, Ph.D., "Biochemical Basis of Chromatin Folding and Chromosome Condensation" DP5OD024587
2017-2022	Elizabeth Bartom, Ph.D., "Bioinformatic Analysis of Next Generation Sequencing Data from Cancer Cells" R50CA221848
2017-2019	Ryan Rickels, graduate student, "Investigating the epigenetics of enhancer function in Cancer" F99/K00CA222988

2019-2021	Kaixiang Cao, postdoctoral fellow "Exploring novel regulatory mechanisms underlying enhancer activation and cell fate transition" K99HD094906
2010-2021	Andrea Divinti neetdeeteral fallow "A malegular informed therapy for Diffuse Intrinsic Ponti

Andrea Piunti, postdoctoral fellow "A molecular informed therapy for Diffuse Intrinsic Pontine 2019-2021 Gliomas (DIPG)" K99CA234434

# **Previous Funding**

2004-2016	National Institutes of Health, GM, R01GM069905, "Chromatin Modification by Histone
	Ubiquitination" (PI)
2001-2015	National Institutes of Health, and the National Cancer Institute, "Dot 1 Complex, Transcriptional
	Elongation Control and Human Cancer" R01CA89455 (PI)
2010-2015	National Institutes of Health, and the National Cancer Institute, "The COMPASS family of H3K4
	methylases in development and cancer" R01CA150265 (PI)
1999-2008	American Cancer Society, "Chromosomal translocations and human cancer"
	RSG-04-186-GMC (PI)
2001-2006	The Leukemia and Lymphoma Society, "Role of MLL protein in the development of Acute Human
	Leukemia" (PI)
1999-2002	The Edward Mallinckrodt Foundation, "Molecular Basis of Acute Human Leukemia"

### **Editorial Board Responsibilities**

- Editor, Science Advances (2018-present)
- Deputy Editor and Chair of the Editorial Board. Science Advances (2014-2018)
- Senior Editorial Board, Science (2015-2017)
- Board of Reviewing Editors, *eLife* (2014-2018)
- Editor, Molecular and Cellular Biology (2007-2017)
- Editorial Board, *Epigenetics and Chromatin* (2008-present)
- Editorial Board member, Journal of Biological Chemistry, (2002-07)
- Ad hoc reviewer for Science, Cell, Molecular Cell, Nature, Nature CB, Nature SMB, Genes and Development, and the Proceedings of the National Academy of Sciences USA

#### **Honors**

- 2016 Elected Fellow of the American Association for the Advancement of Sciences (AAAS)
- 2016 Martin E. and Gertrude G. Walder Award for Research Excellence
- 2016 Keynote Lecturer, ASBMB Symposium on Chromatin and Transcription, Snow Bird, Utah
- 2015 Keynote Lecturer, European Association for Cancer Research Symposium, Berlin, Germany
- 2015 Keynote Lecturer for the 2015 meeting of The Genetics Society of Korea, Seoul, Korea
- 2014 Keynote Lecturer, Oslo Epigenetics Meeting, Oslo, Norway
- 2013 Keynote Lecturer, Dutch Biochemical Society Symposium on Chromatin
- 2013 Keynote Lecturer, The Israeli Society for Developmental Biology
- 2013 Distinguished Lecturer, Cancer Science Institute of Singapore
- 2011 Keynote Lecturer, Spetses Summer School on Chromatin & Systems Biology
- Keynote Lecturer, Centre for Molecular Medicine, University of BC, Vancouver 2011
- 2007 Innovation Award, Academy of Science, St. Louis
- 2006 **ASBMB-AMGEN Award**
- 2006 American Cancer Society Award of Excellence
- 2006 Selected as Leukemia & Lymphoma Society Stohlman Scholar
- 2002 Recipient of the Sword of the American Cancer Society
- 2001-2006 Scholar of the Leukemia and the Lymphoma Society
- 1995-1997 Jane Coffin Childs Postdoctoral Fellow

# **Invited Seminar Presentations (2001-Present)**

## **2020**

Plenary Lecturer, Annual Research Symposium - University of Nebraska Medical Center, Omaha, NE Host: Punita Dhawan

Max Perutz Labs, Center for Medical Biochemistry, PhD Training Program on Tissue Homeostasis in Health and Disease, SFB-HIT Lectureship Vienna, Austria

Host: Karl Kuchler

Southeast University, Nanjing, China

Host: Chengqi Lin

Keystone Symposia on Gene Regulation: From Mechanisms to Disease/Cancer Epigenetics: New Mechanisms and Therapeutic Opportunities, Keystone, CO

Advances in Diagnostics and Therapeutics Session of the AACR Annual Meeting, San Diego, CA

Fusion meeting on Epigenetic Pathways and Human Disease, Crete Greece

Symposium on Epigenetics and Disease, Cambridge, UK

Gordon Research Conference on Chromatin Structure & Function, Castelldefels, Spain

Cold Spring Harbor Course on Chromatin Gene Expression, Cold Spring Harbor, NY

2nd Fusion conference on Epigenetics, Nassau, Bahamas

EMBL Meeting on Transcription and Chromatin, Heidelberg, Germany

Epigenetics and Epigenomics in Health and Disease Brussels, Belgium

Cold Spring Harbor Laboratory meeting on Epigenetics & Chromatin, Cold Spring Harbor, NY

Forbeck Forum on Targeted Therapies in Pediatric Cancers La Jolla, CA

Epigenetic mechanisms of aging and cancer, FASEB Portugal

ASBMB Symposium on Transcriptional Regulation: Chromatin and RNA polymerase II, Snowbird, UT

Frontiers in Cancer Science 2020 Conference, Singapore

Fourth Biennial Miami Epigenetics and Cancer Symposium, Miami, FL

6th Max Planck Freiburg Epigenetics Meeting, Max Planck Institute of Immunobiology and Epigenetics in Freiburg, Germany

Vencer el Cancer conference on Epigenetics and Cancer, Madrid, Spain

Keynote speaker, Cell Symposium on Transcription and Developmental Biology, Chicago, IL

Keynote speaker, Third International Epigenome Conference, Shanghai

Keynote speaker, University of Kansas Medical Center Invite Hosted Student in Cancer Biology Society

Keynote speaker, Southern Illinois University Annual Trainee Research Symposium

Host: The Graduate Student Organization

2019 Visiting Professor of Lerner Research Institute at Cleveland Clinic

Host: Michelle Longworth

"Leaders in the Field" Seminar Series, UCLA Jonsson Comprehensive Cancer Center,

Hosts: Michael Teitell and Siavash Kurdistani

University of Massachusetts, Worcester, MA

Host: Michael Green

The University of Toronto, Laboratory for Structural Genomics

Host: Cheryl H. Arrowsmith

Medical University of South Carolina, Department of Biochemistry and Molecular Biology

Host: Philip Howe

American Association for Cancer Research Annual Meeting, Atlanta, Ga

Suddath Symposium on Epigenetics and Cancer, Georgia Institute of Technology

European Society of Human Genetics 2019 Symposium "Regulatory Landscapes" in Gothenburg, Sweden

GRC conference on Epithelial differentiation, Newry, ME

Cold Spring Harbor Laboratory Gene Expression Course, Cold Spring Harbor, NY

Cold Spring Harbor Laboratory, Mechanisms of Eukaryotic Transcription, Cold Spring Harbor, NY

H2020 ITN project proposal "ChromDesign - Chromatin and Design", University of Copenhagen

Forbeck Forum focused on DIPG, Lake Geneva, WI

14th Asia Epigenome /3rd Taipei Epigenetics and Chromatin Meeting, Academia Sinica, Taipei, Taiwan

2019 National Institute of Health Chromatin Symposium, Bethesda, MD

Organizer, Outstanding Investigator Award annual meeting, National Cancer Institute, Bethesda, MD

Organizer, Nature/Chicago Science 2019: Epigenetics and Genome Editing, Northwestern University

The University of Texas Southwestern Medical Center at Dallas, Department of Molecular Biology Hosts: Eric Olson and Sean Morrison

Albert Einstein College of Medicine, Cancer Center Distinguished Lecture series

Host: Amit Verma

Oregon Health & Science University, Basic and Translational Sciences Seminar Series co-hosted by the Department of Cell, Developmental & Cancer Biology and the Knight Cancer Institute Hosts: Lisa M. Coussens, Sudarshan Anand, and Amanda Lund

Beckman Research Institute of City of Hope, Symposium on New Insights into Genetic and Environmental Factors

Host: Xiaochun Yu

University of Florida Health Cancer Center Seminar Series

Host: John Licht

New Frontiers in Cancer Research Seminars, Sanford Burnham Institute, San Diego, CA

Host: Peter Adams

Indo-US conference Symposium on Transcription, Chromatin structure, DNA repair and Genomic instability Bangalore, India

FASEB Meeting on Chromatin and Epigenetics, Florence, Italy

Gordon Conference on Chromatin Structure & Function Newry, Maine

EMBL Transcription and Chromatin meeting Heidelberg, Germany

Cold Spring Harbor Laboratory Meeting on Chromatin and Epigenetics, Cold Spring Harbor, NY

Epigenetic workshop, Barcelona, Spain

Cold Spring Harbor Laboratory Gene Expression Course, Cold Spring Harbor, NY

CNS Anticancer Drug Discovery and Development Conference, New Orleans, LA

Medical Epigenetics Symposium, Freiburg, Germany

William Guy Forbeck Research Foundation Symposium on Epigenetic Therapy, Lake Geneva, WI

39th Lorne Genome Conference, Victoria, Australia

University of Miami Cancer Epigenetics Symposium, Miami Beach, FL

Fusion Conference on "Epigenetics: from mechanisms to disease" Cancun, Mexico

Peter MacCallum Cancer Center, Melbourne, Australia

Host: Ricky Johnstone

CRG, Institute Seminar Series, Barcelona, Spain

Host: Luciano Di Croce

National Cancer Institute Center for Cancer Research Grand Round

Host: Tom Misteli

Columbia University Irvine Cancer Center, Distinguished Seminar Series Lecturer

Host: Jean Gautier

Memorial Sloan Kettering, Epigenetic Center Annual Retreat Research Symposium, New York, NY

Host: Ross Levine

Emil J Freireich Leukemia Hematology Grand Rounds MD Anderson Medical Center, Houston, TX

Host: Farhad Ravandi

Distinguished Lecture at the German Cancer Research Center (DKFZ) Heidelberg, Germany

Host: Darjus Tschaharganeh

Cornell University Medical Center, Department of Pathology, New York, NY

Host: Jessica Tyler

Marquette University Department of Biology, Milwaukee, WI

Host: Graduate Students

Institute for Cellular and Molecular Biology, A\*STAR Singapore

Host: Chengqi Lin

Northwestern University School of Medicine, Department of Rheumatology Grand Rounds, Chicago, IL

Host: Calvin R. Brown

Stanley Manne Children's Research Center, Chicago, IL

Host: Jhumku D. Kohtz

Institut de recherches cliniques de Montréal

Host: François Robert

Wistar Symposium on "Epigenetics and Disease"

Host: Paul Lieberman

Keystone Symposia on Epigenetics and Human Disease, Seattle, WA

Banbury Center conference on "Enhancers and Enhanceropathies", Cold Spring Harbor, NY

Genome Architecture in Cell Fate & Disease Gordon Conference, Hong Kong Univ. Science/Technology

Cold Spring Harbor Laboratory course on Chromatin, Epigenetics and Gene Expression

American Association for Cancer Research 2017 Annual Meeting, Washington DC

8th Barossa Signaling meeting, Adelaide, Australia

ASIP 2017 Annual Meeting at Experimental Biology, Chicago, IL

NIEHS/NIH Symposium on Stem Cells & Epigenetics, National Institutes of Health

Abcam Annual Meeting on Epigenetic Regulatory Pathways, Seoul, Korea

Mechanisms of Eukaryotic Transcription, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

University of Georgia, Department of Biochemistry, Athens, Ga

#### 2016

Boehringer Ingelheim, Department of New Therapeutic Concept Discovery, Vienna, Austria Host: Manfred Koegl

St. Jude Children's Research Hospital Annual Biomedical Symposium, Memphis, TN Host: Charles Mullighan and Martine Roussel

Genentech, San Francisco, CA

Host: Andrew Chan

Baylor College of Medicine, Houston, TX

Host: Bert O'Malley

University of Texas, Institute for Cellular and Molecular Biology, Austin, Tx

Host: Blerta Xhemalce

Northwestern University, Department of Molecular Biosciences, Evanston, IL

Host: Jason Brickner

Texas Woman's University, Department of Biology, Dallas, TX

Host: Christopher Brower

University of Nebraska Medical Center, Department of Biochemistry and Molecular Biology

Host: Kelly Miguel Trujillo

IRCM distinguished lecture series, Montreal, Canada

Host: François Robert

Deutsche Forschungsgemeinschaft, Germany

Host: Beate Oftadeh

Northwestern University School of Medicine, Department of Cell and Molecular Biology, Chicago, IL

Host: Dileep Varma

University of Illinois, Department of Pharmacology, Chicago, IL

4th Max Planck Society Freiburg Epigenetics Meeting, Freiburg, Germany

Keynote Lecturer, ASBMB Symposium on Transcriptional Regulation by Chromatin and RNA Polymerase II, Snowbird, UT

Cell Symposia: Transcriptional Regulation in Development and Disease, Chicago, IL

Keystone Symposia on Epigenetic and Metabolic Regulation of Aging and Aging-Related Diseases, Santa Fe, New Mexico

Cold Spring Harbor Laboratory Meeting on Epigenetics and Chromatin, Cold Spring Harbor, NY

Keystone Symposia on Chromatin and Epigenetics, British Columbia, Canada

Society for Developmental Biology, Epigenetics in plant and animal development, Boston, MA

CSHL, Chromatin, Epigenetics and Gene Expression course, Cold Spring Harbor, NY

Keystone Symposia on Nuclear Receptors/Metabolism, Transcription and Disease, Snowbird, Utah

2016 Midwest Chromatin and Epigenetics Meeting (MCEM) Grand Rapids, MI

Cold Spring Harbor Asia meeting on "Chromatin, Epigenetics and Transcription" Cold Spring Harbor, NY

Annual Meeting of the American Association for Cancer Research, New Orleans, LA.

Miami Epigenetic Symposium, Miami, FL

Co-organizer, Keystone Symposia on Non-coding RNAs/Enhancer Malfunction in Cancer, Santa Fe, New Mexico

Co-organizer, EMBL Transcription and Chromatin meeting, Heidelberg, Germany

#### <u>2015</u>

Yale University School of Medicine, Department of Pathology

Host: Qin Yan

Harvard Medical School and ABCAM Cancer Epigenetics meeting

Host: Johnathan Whetstine

University of Pennsylvania, Children's Hospital of Philadelphia

Host: Carolyn A. Felix

University of Chicago School of Medicine

Host: Yingming Zhao

Washington University School of Medicine, Department of Genetics

Host: Todd E. Druley

The Van Andel Institute

Host: Peter Jones

University of Ottawa Cancer Center Distinguish Lecture Series

Host: Jeff Dilworth

Genentech Lecture Series

Host: Bob Yauch

University of Colorado, Department of Chemistry and Biochemistry, Boulder Colorado

Host: James Goodrich

Tumor Cell Biology Lecture series, Northwestern University School of Medicine

Host: Leonidas Platanias

MD Anderson and ABCAM Epigenetics Meeting

Host: Sharon Dent

University of Wisconsin, McArdle Laboratory for Cancer Research, Cancer Biology Seminar

Host: Wei Xu

University of Chicago, IL, Department of Molecular Biology

Host: Max Frolov

Cincinnati Children's Hospital, Cincinnati, Ohio

Host: Harinder Singh

Texas Women University Lecture Series in Biochemistry

Host: Christopher Brower

Loyola University Chicago, Oncology Research Institute Lecture Series

Host: Nancy J. Zeleznik-Le

Genentech 2015 SRB Meeting

Cold Spring Harbor Laboratory Gene Expression Course

Cold Spring Harbor Laboratory, Mechanisms of Eukaryotic Transcription meeting

Barcelona 4D-Cell Fate/Epigenetics meeting, Barcelona, Spain

Keystone Symposium on Epigenetics and Cancer, Keystone Colorado

2015 Midwest Yeast Meeting

Abcam Chromatin Meeting, Grand Cayman Island

Co-organizer, FASEB Transcription, Chromatin and Epigenetics Meeting, Palm Beach, Florida

Keynote Lecturer, European Association for Cancer Research - Basic Epigenetic Mechanisms in Cancer, Berlin, Germany

Keynote Lecturer for the 2015 meeting of The Genetics Society of Korea, Seoul, Korea

#### 2014

Institute Curie, Section de recherché, Paris

Host: Allison Bardin

Ottawa Hospital Research Institute

Host: Jeffrey Dilworth

University of Pennsylvania Symposium on Epigenetics and Cancer

Host: Kenneth Zaret

Genentech

Host: Vishva Dixit

The University of Tokyo, Institute of Molecular and Cellular Biosciences

Host: Katsuhiko Shirahige

National Institute of Biological Sciences, Beijing, China

Host: Bing Zhu

Saint Louis University Cancer Center, St. Louis, MO

Host: Joel Eissenberg

MD Anderson Cancer Center, Department of Biochemistry and Molecular Biology

Host: Min Gyu Lee

The 9th 3R (Replication, Recombination and Repair) symposium, Gotemba, Japan

Gordon Conference on Chromatin Structure and Function, Waltham, MA

Oslo Epigenetics Symposium, Oslo, Norway

American Association for Cancer Research, annual meeting, San Diego, CA

Keystone Symposium on Chromatin Mechanisms and Cell Physiology, Oberstdorf, Germany

Recent sightings in the epigenetic landscape: A symposium celebrating Danny Reinberg's 60<sup>th</sup> birthday celebration, NYU, NY

Lamarck, Landmarks and Landscapes: frontiers in epigenetics, Institute Pasteur, Paris

ASBMB Symposium on Transcriptional Regulation: Chromatin and RNA Polymerase II, UT

Cold Spring Harbor Laboratory meeting on Chromatin and Epigenetics, Cold Spring Harbor, NY

Co-organizer, EMBL Transcription Meeting, Heidelberg, Germany

### <u>2013</u>

Celebration of Watson's 60th Anniversary of Double Helix, Cold Spring Harbor Laboratory, NY

Keynote Speaker, Dutch Biochemical Society Symposium on Chromatin and Disease, Netherlands

Keynote Speaker, The Israeli Society for Developmental Biology, Eilat, Israel

Keynote Speaker, Mayo Clinic Epigenetics to Practice Conference, Rochester, MN

Harvard SOM and the Dana-Farber Cancer Institute, Seminars in Oncology lecture Host: Thomas Look

UCSF Helen Diller Family Comprehensive Cancer Center

Host: David Toczyski

Live Webinar on "Why histone modifications matter in health and disease" with Jay Bradner Host: *Nature Methods* and *Nature Biotechnology* 

Columbia University Medical Center, NY Host: Adolfo Ferrando and Laura Pasqualucci

Piramal HealthCare Limited, SEP Mumbai, India

University of Michigan, Department of Pathology Host: Greg Dressle

Mayo Clinic, Rochester, MN

Host: Zhiguo Zhang

Institute of Molecular and Cell Biology (IMCB), A\*STAR

Host: Wanjin Hong, Executive Director A\*STAR

Cancer Science Institute of Singapore Host: Daniel G. Tenen and Fu Xin-Yuan

University at Buffalo (SUNY), Buffalo, NY

Host: Steve Fliesler

University of Texas Southwestern Medical Center at Dallas, Cecil H. and Ida Green Center

Host: W. Lee Kraus

Research Institute for Microbial Diseases, Osaka University, Osaka, Japan

Host: Hodaka Fujii

Director's Lecturer, University of New Mexico Cancer Center, Albuquerque, NM Host: Cheryl Willman and Mary Ann Osley

University of Illinois, Department of Cell and Developmental Biology, Urbana-Champaign Host: Supriya G. Prasanth

6th Biennial Workshop on Clinical Translation of Epigenetics in Cancer Therapy, Asheville, NC

EMBO Conference on Chromatin and Epigenetics, Heidelberg, Germany

TRR81 symposium: "Chromatin Changes in Differentiation and Malignancies" The Netherlands

2013 FASEB Conference, "Transcription, Chromatin and Epigenetics" Nassau, Bahamas

Global Technology Community, 3rd Cancer Epigenetics Conference, San Francisco, CA Abcam Chromatin Meeting, Grand Cayman Island

Lorne Genome Conference, Lorne Australia

Cold Spring Harbor Conference, "Mechanisms of Eukaryotic Transcription"

Third AACR International Conference on Frontiers in Basic Cancer Research, Maryland

Sanford-Burnham Medical Research Institute 35th Annual Symposium, "Epigenetics: Developments and Disease" San Diego, CA

Organizer, Keystone Symposium on Epigenetic Marks and Cancer Drugs, Santa Fe, NM

#### **2012**

Stanford University Medical Center, Department of Genetics, Stanford, CA

Host: Anne Brunet

Fred Hutchinson Cancer Research Center, Clinical Research Division Seminar Series

Host: Irv Bernstein

St. Jude Children's Research Hospital, Memphis, TN

**Host: James Downing** 

Institute for Advanced Study, Princeton University, Princeton, NJ

Host: Arnold Levine

Rutgers, The State University of New Jersey Dept. Molecular Biology & Biochemistry

Host: Thomas Kusch

Cold Spring Harbor Laboratory, Lab-wide seminar series

Host: Chris Vakoc

Banbury Center of Cold Spring Harbor Laboratory meeting on Transcription and Cancer

Hosts: Jim Watson and Rick Young

The Gladstone Institutes/UCSF, San Francisco, CA

Host: The Graduate Students

Bristol-Myers Squibb, Department of Oncology

Host: Susan Wee

University of Virginia School of Medicine, Charlottesville, VA

Host: Dan Burke

University of Pennsylvania Cancer Center

Host: Shelley Berger

Keynote Lecturer, Annual Retreat, Molecular Oncology Program, University of Colorado Cancer Center

Host: Joaquin Espinosa

University of Montreal School of Medicine, Montreal, Quebec, Canada

Host: Dindial Ramotar

Cell Signaling Technology, Danvers, MA

Host: Christopher Fry

Twenty-Seventh Aspen Cancer Conference, Aspen, Colorado

Sanford Burnham Medical Research Institute at Lake Nona, Florida

Max-Planck Institute's Epigenetics Meeting, Freiburg, Germany

CSH-Asia meeting on "Epigenetics, Chromatin, and Transcription" Suzhou, China

XIX. Wilsede Meeting "Modern Trends in Human Leukemia and Cancer," Hamburg Germany

Cold Spring Harbor Laboratory Epigenetics Meeting

Chromatin Gordon Research Conference, Il Ciocco, Italy

Keystone Symposia on Epigenomics/Chromatin Dynamics, Keystone, Colorado

Keystone Symposium on Eukaryotic Transcription, Snowbird, Utah

EMBO Conference on Gene Transcription in Yeast, St. Feliu de Guixols, Spain

FASEB Transcriptional Regulation During Growth, Differentiation, and Development, Snowmass, Colorado

Co-organizer, ASBMB Transcription/Chromatin meeting, Snowbird, Utah

Co-organizer, EMBL Transcription meeting, Heidelberg, Germany

The Salk Institute Host: Inder Verma

Rockefeller University

Host: Alexander Tarakhovsky

Genentech, Inc. Host: Vishva Dixit

Ipsen Foundation Symposium on "Epigenetics and Cancer" Walvis Bay, Namibia

Keynote Lecturer, Spetses Summer School on Chromatin & Systems Biology, Spetses Island, Greece

Keynote Lecturer, Centre for Molecular Medicine and Therapeutics Symposium, University of British Columbia, Vancouver, B. C.

Columbia University, Department of Biology

Host: James Manley

Co-organizer with Vytas Bankaitis, Gordon Conference on "Signal Transduction Within The Nucleus" Ventura, CA

Institute Jacques Monod, Paris, France

Host: Catherine Dargemont

University of Glasgow, Institute of Cancer Science, Scotland

Host: Adam West

University of Virginia School of Medicine, Department of Biochemistry

Host: Dan Burke

Institut de Génétique et de Biologie Moléculaire et Cellulaire (IGBMC)

Host: Olivier Pourquie, Laszlo Tora

Promega Corporation, Madison, WI

Host: Martin Rosenberg and Danette Hartzell

Institute Curie, Section de recherché, Paris

Host: Genevieve Almouzni

Cold Spring Harbor Laboratory, Mechanisms of Eukaryotic Transcription Meeting, Cold Spring Harbor, NY

Medical College of Georgia, Augusta, Georgia

Host: Dorothy Tuan

Novartis Science Board, China Novartis Institute, Shanghai, China William Guy Forbeck Research Foundation Symposium on Epigenetics, Hilton Head Island, SC Keystone Symposia on Histone Code: Fact or Fiction? Midway, Utah

International Society for Experimental Hematology - 40th Annual Scientific Meeting, Vancouver, BC

University of Pennsylvania Cancer Epigenetics Symposium

Transcriptional Mechanisms, and Systems Biology, Michigan State University, MI

Symposium on Chromatin changes in differentiation and malignancies, Giessen, Germany

FASEB Conference on Hematologic Malignancies, Saxtons River VT

Starr Cancer Consortium Retreat, Cold Spring Harbor, NY

Salk Institute Cell Cycle Meeting, San Diego, CA

1st Canadian Conference on Epigenetics, Ontario, Canada

Penn State Summer Symposium on "Chromatin and Epigenetic Regulation of Transcription" University Park, PA

Abcam Chromatin Meeting, Aruba

FASEB Conference on Epigenetics, Chromatin, and Transcription, Snowmass, CO

The H Foundation Symposium for Basic Sciences, Northwestern University, Chicago, IL

# **2010**

Harvard Medical School, Dana-Farber Cancer Institute, Boston, MA Lecturer for the Seminars in Oncology series

Host: Alan D. D'Andrea

University of California San Diego, Department of Cellular and Molecular Medicine, CA Host: Bing Ren and Xiang-dong Fu

Department of Physiological Chemistry, University Medical Centre Utrecht, Netherlands

The Oktoberfest-Lecture, Department of Molecular Biology, Ludwig Maximilians Universitat, München, Germany

Host: Peter Becker

Keynote address at University of Kansas Cancer Center

Host: Kapil Bhalla

The Netherlands Cancer Institute, Amsterdam, Netherlands

Host: Reuven Agami & Fred van Leeuwen

Université Libre de Bruxelles, Belgium

Host: François Fuks

UNC Lineberger Comprehensive Cancer Center

Host: Bernard Weissman

Institute of Molecular and Cell Biology (IMCB), Singapore

Host: Ernesto Guccione

The Netherlands Cancer Institute, Amsterdam, Netherlands

Host: The graduate students

Department of Genetics and Microbiology, University of Pavia, Italy

Host: Andrea Mattevi

University of Michigan, Symposium on Epigenetics

Host: Raymond Trievel

5th Ubiqiutin Conference, MD Anderson Cancer Center, Houston, TX

Keystone Symposium " Dynamics of Eukaryotic Transcription during Development," Big Sky, Montana

FASEB Yeast Chromosome Structure, Replication and Segregation Conference, Carefree, Arizona

Epigenetic/Chromatin session for the Chilean Cell Biology Society, Santiago, Chile Chromatin Modifications Session for 2010 ASBMB Annual Meeting, Anaheim, CA

Chromatin Gordon Research Conference, Bryant University, RI

Co-organizer with Jerry Workman, "Epigenetics in Drosophila: Mechanisms and Regulations" sponsored by the Stowers Institute for Medical Research

Organizer, ASBMB sponsored meeting on Transcription and Chromatin, Lake Tahoe, CA

#### <u>2009</u>

Harvard Medical School, Massachusetts General Hospital Cancer Center, Boston, MA Host: Johnathan R. Whetstine

New York University School of Medicine, Frontiers in Pharmacology seminars, New York, NY Host: Herbert Samuels

Columbia University College of Physicians & Surgeons Department of Biochemistry and Molecular Biophysics, New York, NY

Host: Alla Grishok

University of California, San Francisco, Department of Biochemistry.

Host: Nevan Krogan

The Wistar Institute Host: Ramin Shiekhattar University of Florida, Department of Biochemistry and Molecular Biology, Gainesville, FL Host: Suming Huang

University of Massachusetts Medical School, Department of Biochemistry and Molecular Pharmacology Worcester, MA

Host: The Graduate Student Association

The FibroGen, Inc., San Francisco, CA

Host: David Liu

University of Texas, Department of Chemistry and Biochemistry, Arlington, Texas

Host: S. Mandal

Opening Lecture for the new Center for Gene Regulation, Pennsylvania State University

Host: Joseph Reese/Frank Pugh

Fox Chase Cancer Center Host: Jonathan Chernoff

EMBL Conference on Chromatin and Epigenetics, Heidelberg, Germany

Naito Symposium on Transcriptional Control and RNA, Sapporo Japan

Co-organizer, Gordon Research Conference, Signal Transduction within the Nucleus, Four Points Sheraton Harbortown Ventura, CA

4<sup>th</sup> Biennial Workshop on the Clinical Translation of Epigenetics in Cancer Therapy Coral Gables, Florida

American Association for Cancer Research Basic Science/Clinical Interface: Pathways to Progress" Denver, Colorado

4th Annual HBGS Symposium, Helsinki, Finland

Gordon Research Conference on Enzymes, Coenzymes and Metabolic Pathways, Waterville Valley, New Hampshire

50th Advances in Enzyme Regulation Symposium, University of Bologna, Italy

Epigenetics: Regulating the Genome in Development and Disease, American Society of Nephrology, San Diego, CA

Abcam Chromatin, Structure and Function Conference, Costa Rica

#### **2008**

Max-Planck Institute for Biochemistry, Munich, Germany

Host: The graduate students

Max-Planck-Institute for Immunobiology, Freiburg, Germany

Host: Robert Schneider

Children's Mercy Hospitals, Department of Pediatrics, Kansas City, MO

Host: Alan S Gamis

University of Kansas Medical Center, Department of Pathology, Kansas City, KS

Host: Patrick Fields

Distinguished Alumni Lecture, University of Oklahoma Health Sciences Center, Oklahoma City, OK

Host: The graduate students

AACR Special Conference: Ubiquitin and Cancer, San Diego, CA

Epley Institute for Research, University of Nebraska Medical Center, Omaha, NE

Host: Angie Rizzino

European Molecular Biology Laboratory (EMBL), Heidelberg, Germany

Host: Asifa Akhtar

Lecturer in the Stohlman Scholar Symposium of the Leukemia and Lymphoma Society Kansas City, MO

Host: Danesh Moazed

Fourth International Conference on Ubiquitin, Ubiquitin-Like Proteins, and Cancer, Houston, TX

51st Annual Meeting & Conference of the Canadian Society of Biochemistry, Molecular and Cellular

Biology"Epigenetics and Chromatin Dynamics" Banff, Alberta, CA

8th European Molecular Biology Laboratory (EMBL) Transcription Meeting, Heidelberg, Germany

A meeting on Post-translational Modifications & Chromatin, Gurdon Institute,

Cambridge, UK

NIH/NIDDK Symposium "Dynamic Epigenome and homeostatic regulations in health and disease" Bethesda,

MD

Gordon Conference on Chromatin Structure and Function, Barga, Italy

Midwest yeast meeting, Northwestern University, Evanston, IL

FASEB Conference on Transcriptional Regulation during Cell Growth, Differentiation, and Development

Snowmass Village, CO

MSU Summer Symposium on Transcriptional Regulation/Systems in Biology, Lansing, MI

Co-chair, Dynamic Epigenome and Homeostaic Regulations, National Institute of Health

Organizer, ASBMB sponsored meeting on Transcription and Chromatin, Lake Tahoe, CA

Co-organizer with Leanne Weidemann and Jay Hess, Stowers Institute meeting on MLL, Kansas City, MO

Organizer with Shelley Berger and Ramin Shiekhattar, Banbury Meeting on Epigenetics, Cold Spring Harbor,

NY

Beckman Research Institute of City of Hope, Duarte, CA

Host: The Graduate Students

Max Planck Institute for Molecular Genetics, Berlin, Germany

Host: Ann Ehrenhofer-Murray

Department of Biochemistry, University of Georgia, Athens, GA

Host: Biochemistry Graduate Students Association

Department of Biochemistry, Washington State University, Pullman, WA

Host: John Wyrick

Washington University School of Medicine, Radiation Oncology, St. Louis MO

Host: Tej Pandita

Department of Biochemistry, University of Kansas Medical Center, Kansas City, KS

Host: Joseph D. Fontes

Burnham Institute for Medical Research, La Jolla, CA

Host: Ze'ev Ronai

Department of Biochemistry, Tufts University School of Medicine, Boston, MA

Host: Ananda Roy

Department of Biochemistry, University of Alabama, Birmingham, AL

Host: Hengbin Wang

Medical Collage of Georgia, Center for Cancer Research, Augusta, GA.

Host: Douglas Miller

Gordon Conference on Signal Transduction within the Nucleus Ventura, CA

Frontiers in Epigenetics and Chromatin Signaling, Toronto, Canada

Opening Lecturer 21st Symposium of the Protein Society, Boston, MA

Annual Symposium of the Centre for Genomic Regulation, Genomic Regulation: Executing the Code,

Barcelona, Spain

Penn State Summer Symposium on chromatin research, Penn State University, University Park, PA

2nd Meeting on Chromatin: Assembly and Inheritance of Functional States, München, Germany

4th Abcam meeting on Chromatin Structure and Function, Antigua

Harvard Medical School, Massachusetts General Hospital Cancer Center, Boston, MA Host: The students/postdoctoral fellows of MGH Cancer Center

Department of Pharmacology and Cancer Biology, Duke University Medical Center Durham, NC Host: Dennis Thiele

Department of Molecular Oncology, University of Chicago, Chicago, IL Host: Stephen Kron

Department of Pharmacology, University of Wisconsin, Madison, WI Host: Randal Tibbetts

Department of Molecular Genetics, Boston University School of Medicine Boston, MA Host: Vassilis Zannis

Oncology Research Program, Amgen Inc. Thousand Oaks, CA Host: Rick Kandall

Department of Biomedical Sciences, Florida State University Medical Center Tallahassee, FL. Host: Akash Gunjan

Department of Biochemistry, Penn State University, University Park, PA Host: David Gilmour

Department of Cancer Biology, Cleveland Clinic Lerner College of Medicine Cleveland Clinic Foundation Cleveland, OH Host: Paul DiCorleto

Department of Biochemistry, M. D. Anderson Cancer Center, Houston, TX Host: William Klein

Department of Biochemistry, University of Rochester Medical Center, Rochester, NY Host: Mike Bulger

Stowers Institute for Medical Research, Kansas City, MO Host: Robb Krumlauf

Herman B Wells Lecturer, Indiana University School of Medicine, Indianapolis, IN Host: David Skalnik

National Cancer Institute, Laboratory of Receptor Biology and Gene Expression Host: Tom Misteli/Gordon Hager

Program in Molecular Biology, Memorial Sloan-Kettering Cancer Center, New York, NY Host: Stewart Shuman

Department of Biochemistry, University of California in Los Angeles (UCLA), Los Angeles, CA. Host: Steven Smale

Amgen Lecturer, Annual Meeting of the American Society for Biochemistry and Molecular Biology, National Meeting in conjunction with FASEB, San Francisco, CA

Third International Conference: Ubiquitin, Ubiquitin-like proteins, and Cancer, MD Anderson Cancer Center, Houston, TX

American Society for Biochemistry and Molecular Biology, National Meeting in conjunction with FASEB, San Francisco, CA

United Kingdom Chromatin Meeting, Manchester, UK

7<sup>th</sup> European Molecular Biology Laboratory (EMBL) Transcription Meeting, Heidelberg, Germany

Gene Expression Course, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY Speaker and Session Chair, Gordon Conference on Chromatin Structure and Function, Barga, Italy

Abcam Chromatin Meeting, Punta Canca, Dominican Republic

Organizer, ASBMB sponsored meeting on Transcription and Chromatin, Kiawah Island, Charleston, SC

## 2005

Huntsman Cancer Institute, University of Utah, Salt Lake City, UT

Host: Bradley Cairns

Department of Biochemistry, University of Illinois, Chicago, IL

Host: Maxim Frolov

Department of Pharmacology, Washington University School of Medicine, St. Louis, MO

Host: Kerry Kornfeld

Department of Biochemistry, Southern Illinois University Medical Center, Carbondale, IL

Host: Sukesh Bhaumik

Gene Expression Course, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

Host: The Gene Expression Course

Department of Molecular Microbiology, Saint Louis University Medical Center, St. Louis, MO

Host: John Tavis

The Kaplan Lecture, Department of Biochemistry, University of Kentucky, Lexington, KY

Host: The graduate students

Department of Biochemistry and Molecular Genetics, Charlottesville, VA

Host: Patrick Grant

Department of Biochemistry, Emory University School of Medicine, Atlanta, GA

Host: Danny Reines

Department of Biochemistry, Michigan State University, East Lansing, MI

Host: David Arnosti

Johns Hopkins University, Department of Molecular Genetics, Baltimore, MD

Host: Jef Boeke

Department of Pathology, University of Michigan, Ann Arbor, MI

Host: Jay Hess

Symposium on Epigenetics, Johns Hopkins University School of Medicine, Baltimore, MD

Cold Spring Harbor Laboratory, Systems Biology: Global Regulation of Gene Expression, Cold Spring Harbor, NY

University of Virginia, Symposium on Chromatin and Transcription, Charlottesville, VA

Gordon Conference on The Molecular and Genetic Basis of Cell Proliferation, New London, NH

Alan Kaplan Minisymposium on Transcription and Cancer, University of Kentucky

Speaker and Session Chair, Abcam Chromatin Meeting, Nassau, Bahamas

Cold Spring Harbor meeting on Transcription, CSH, NY

Organizer, Abcam sponsored Meeting on Chromatin and Cancer, St. Louis, MO

Speaker and Session Chair, Keystone Symposium on Chromatin, Snowbird, UT

#### 2004

Department of Pathology and Medicine, Yale University School of Medicine, New Haven, CT

Host: Archibald Perkins

The Abramson Cancer Center, The University of Pennsylvania

Host: Jay Hess

Department of Biochemistry, University of Missouri, Columbia, MO

Host: Susan Deutscher

Department of Biochemistry, University of California Santa Cruz, Santa Cruz, CA

Host: Grant Hartzog

Mount Sinai School of Medicine, Derald H. Ruttenburg Cancer Center, New York, NY

Host: Ze'ev Ronai

Department of Cell Biology, University of Texas, Southwestern Medical Center, Dallas, TX

Host: Kim Orth

Gene Expression Course, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY UCLA Cancer Center, Los Angeles, CA

Host: Steven Smale

Organizer, ASBMB sponsored meeting on Chromatin and RNA Polymerase II in Transcriptional Regulation, Granlibakken, Lake Tahoe, CA

Gordon Research Conference on Chromatin Structure & Function, Tilton, NH

Abramson Cancer Center, the Hematological Malignancies Conference, University of Pennsylvania

Transcription section of the annual ASBMB Meeting in Boston, MA
The Second International Conference, Ubiquitin, Ubiquitin-like proteins, and Cancer, MD Anderson Cancer Center

Session Chair, AbCam Organized Meeting on Chromatin Structure and Function, Cancun, Mexico AbCam Organized Meeting on Chromatin Structure and Function, Cancun, Mexico

FASEB sponsored Meeting on Transcription, Saxton River, VT

Stohlman Scholar Symposium for the Annual Leukemia & Lymphoma Society, Denver, CO

#### **2003**

Department of Cancer Biology, Massachusetts General Hospital, Harvard Medical School, Boston, MA. Host: Andrea McClatchey

Department of Biochemistry, Laval University and University of Quebec, Quebec, Canada Host: Jacques Cote

Department of Biochemistry, University of California in Los Angeles (UCLA), Los Angeles, CA. Host: Michael Carey and Steven Smale

Department of Radiation Oncology, Washington University, St. Louis, MO Host:Tej Pandita

Gene Expression Course, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY Host: The Gene Expression Course

Department of Biophysics and Physiology, University of Iowa, Iowa City, IA Host: Scott Moye-Rowley

Department of Biochemistry, University of Arkansas School of Medicine, Little Rock, AR Host: Wayne Wahls

National Cancer Institute, Bethesda, MD

Host: Rohinton Kamakaka

International Genomic Proteomic Conference, Fargo, ND

Cold Spring Harbor Course in Eukaryotic Gene Expression

Marie Curie Institute, Oxted, London

Cold Spring Harbor Laboratory, Mechanisms of Eukaryotic Transcription Meeting, Cold Spring Harbor, NY

American Society of Biochemistry and Molecular Biology national meeting in San Diego, CA

Gordon Research Conference on Molecular and Genetic Basis of Cell Proliferation

Keystone Meeting on Chromatin and Transcription, Santa Fe, NM

#### <u>2002</u>

The Institute for Cellular and Molecular Biology, The University of Texas at Austin, Austin, TX. Host: Alan Lambowitz

The Best Institute, The University of Toronto School of Medicine, Toronto, Canada Host: Nevan Krogan

Keynote Lecturer for the American Cancer Society Fundraiser, St. Louis, MO Host: ACS Heartland Chapter

Section of DNA Biology, National Cancer Institute, Bethesda, MD Host: David Levens

Wistar Institute, University of Pennsylvania, Philadelphia, PA Host: Ramin Shiekhattar

University of Colorado, Department of Biochemistry, Denver, CO Host: Biochemistry Students

University of California, Irvine Department of Medicine, Irvine, CA Host: Rainer Brachmann

Co-Organizer of the ASBMB "Satellite Meeting" on Transcriptional Regulatory Mechanisms

# <u>2001</u>

Yale University, Department of Molecular Biophysics and Biochemistry, New Haven, CT Host: Joan and Tom Steitz

Department of Biochemistry, Pennsylvania State University, State College, PA. Host: David Gilmour

Department of Biochemistry, Michigan State University, East Lansing, MI Host: Zack Burton

Department of Biochemistry, The Best Institute and the University of Toronto, Toronto, Canada Host: Al Edwards

The Stowers Institute for Medical Research, Kansas City, MO Host: Joan Conaway

Keynote Lecturer for Annual American Cancer Society Employee Meeting, Kansas City, KS Host: ACS Heartland chapter

ASBMB National Meeting Orlando, FL Keystone Symposia on Mechanisms of Eukaryotic Transcriptional Regulation

#### **Publications (selected from over 200 manuscripts)**

- Wang, L., and Shilatifard, A. (2019) UTX mutations in human cancer. Cancer Cell 35,168-176.
- Zhao, Z., and Shilatifard, A. (2019) Epigenetic modifications of histones in cancer. Genome Bio. 20, 245.
- Pan, J., McKenzie, Z. M., D'Avino, A. R., Mashtalir, N., Lareau, C. A., St Pierre, R., Wang, L., <u>Shilatifard</u> <u>A.</u>, Kadoch C. (2019) The ATPase module of mammalian SWI/SNF family complexes mediates subcomplex identity and catalytic activity-independent genomic targeting *Nature Genetics* 51, 618-626
- Piunti, A., Smith, E. R., Morgan, M.A.J., Ugarenko, M., Khaltyan, N., Helmin, K.A., Ryan, C.A., Murray, D.C., Rickels, R.A., Yilmaz, B.D., Rendleman, E.J., Savas, J.N., Singer, B.D., Bulun, S.E., **Shilatifard A.** (2019) CATACOMB: An endogenous inducible gene that antagonizes H3K27 methylation activity of Polycomb repressive complex 2 via an H3K27M-like mechanism. *Sci Adv.* 5, eaax2887
- Zhao, Z., Wang, L., Volk, A. G., Birch, N. W., Stoltz, K. L., Bartom, E. T., Marshall, S. A., Rendleman, E. J., Nestler, C. M., Shilati, J., Schiltz, G. E., Crispino, J. D., and **Shilatifard, A.** (2019) Regulation of MLL/COMPASS stability through its proteolytic cleavage by taspase1 as a possible approach for clinical therapy of leukemia. *Genes Dev* 33, 61-74
- Zhao, Z., Wang, L., Bartom, E., Marshall, S., Rendleman, E., Ryan, C., Shilati, A., Savas, J., Chandel, N., Shilatifard, A. (2019) β-Catenin/Tcf7l2-dependent transcriptional regulation of GLUT1 gene expression by Zic family proteins in colon cancer. *Sci Adv.* 5, eaax0698
- Liang, K., Smith, K. R., Aoi, Y., Stoltz, K. L., Katagi, H., Woodfin, A. R., Rendleman, E. J., Marshall, S. A., Murray, D. C., Wang, L., Ozark, P. A., Mishra, R. K., Hashizume, R., Schiltz, G. E., and **Shilatifard, A.** (2018) Targeting processive transcription elongation through SEC disruption for Myc cancer therapy. *Cell* 175, 766-779
- Qu, Q., Takahashi, Y. H., Yang, Y., Hu, H., Zhang, Y., Brunzelle, J. S., Couture, J. F., Shilatifard, A\*., Skiniotis, G\*. (2018) Structure and Conformational Dynamics of a COMPASS Histone H3K4 Methyltransferase Complex. *Cell* 174,1117-1126 \*Co-corresponding authors
- Wang, L., Zhao, Z., Ozark, P. A, Fantini, D., Marshall, S. A, Rendleman, E. J., Cozzolino, K. A., Louis, N., He, X., Morgan, M. A., Takahashi, Y. H., Collings, C. K, Smith, E. R., Ntziachristos, P., Savas, J. N., Zou, L., Hashizume, R., Meeks, J. J., and **Shilatifard A**. (2018) Resetting the epigenetic balance of Polycomb and COMPASS function at enhancers for cancer therapy. *Nature Medicine* 2018 Jun;24(6):758.
- Cao, K., Collings, C. K., Morgan, M. A., Marshall, S. A., Rendleman, E. J., Ozark, P. A., Smith, E.R., **Shilatifard,** A. (2018) An Mll4/COMPASS-Lsd1 epigenetic axis governs enhancer function and pluripotency transition in embryonic stem cells. *Science Adv.* Jan 31;4(1): eaap8747
- Liang, K., Volk A. G., Haug, J. S., Marshall, S. A., Woodfin, A. R., Bartom, E. T., Gilmore, J. M., Florens, L., Washburn, M. P., Sullivan, K, D., Espinosa, J, M., Cannova, J., Zhang, J., Smith, E, R., Crispino, J. D., and **Shilatifard, A.** (2017) Therapeutic targeting of MLL degradation pathways in MLL-rearranged leukemia. *Cell* 168, 59-72.

- Chen, F. X., Xie, P., Collings, C. K., Cao K., Aoi, Y., Marshall, S. A., Rendleman, E. J., Ugarenko, M., Ozark, P. A., Zhang, A., Shiekhattar, R., Smith, E. R., Zhang, M. Q., and <u>Shilatifard, A.</u> (2017) PAF1 Regulation of Promoter-Proximal Pause-Release via Enhancer Activation. *Science* 357,1294-1298.
- Piunti, A., Hashizume, R., Morgan, M. A., Bartom, E. T., Horbinski, C. M., Marshall, S. A., Rendleman E. J., Ma, Q., Takahashi, Y. H., Woodfin, A. R., Misharin, A. V., Abshiru, N. A., Lulla, R. R., Saratsis, A. M., Kelleher, N. L., James, D. A., and **Shilatifard, A.** (2017) Heterotypic nucleosome associated BET bromodomain proteins and Polycomb as therapeutic targets in diffuse intrinsic pontine gliomas. *Nature Medicine* 23, 493-500.
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- Hu, D., Gao, X., Cao, K., Morgan, M, A., Mas, G., Smith, E. R., Volk, A. G., Bartom, E. T., Crispino, J, D., Di Croce L., and **Shilatifard, A.** (2107) Not All H3K4 methylations are Created Equal: Mll2/COMPASS Dependency in Primordial Germ Cell Specification. *Mol Cell* 65, 460-475.
- Wang L., Collings C. K., Zhao Z., Cozzolino K. A., Ma Q., Liang K., Marshall S. A., Sze C. C., Hashizume R., Savas J. N., and <u>Shilatifard A. (2017)</u> A cytoplasmic COMPASS is necessary for cell survival and triplenegative breast cancer pathogenesis by regulating metabolism. *Genes Dev* 31, 2056-2066.
- Morgan M. A. J., Rickels R. A., Collings C. K., He X., Cao K., Herz H. M., Cozzolino K. A., Abshiru N. A., Marshall S. A., Rendleman E. J., Sze C. C., Piunti A., Kelleher N. L., Savas J. N., and **Shilatifard A.** (2017) A cryptic Tudor domain links BRWD2/PHIP to COMPASS-mediated histone H3K4 methylation. *Genes Dev* 31, 2003-2014.
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- Cao K, Collings C. K., Marshall S. A., Morgan M. A., Rendleman E. J., Wang L., Sze C. C., Sun T., Bartom E. T., and <u>Shilatifard A.</u> (2017) SET1A/COMPASS and shadow enhancers in the regulation of homeotic gene expression. *Genes Dev* 31, 787-801.
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- Rickels, R., Hu, D., Collings, C., Piunti, A., Woodfin, A., Mohan, M., Herz, H-M., Kvon, E., and **Shilatifard, A.** (2016) An Evolutionary epigenetic mark of polycomb response elements implemented by Trx/MLL/COMPASS. *Mol Cell*, 63(2):318-28.
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- Luo, Z., Gao, X., Lin, C., Smith, E.R., Marshall, S., Swanson, S.K., Florens, L., Washburn, M.P., **Shilatifard, A.** (2015) Zic2 Is an Enhancer-Binding Factor Required for Embryonic Stem Cell Specification. *Mol Cell* 57, 685–694.
- Morgan, M.A., Shilatifard, A. (2015) Chromatin Signature of Cancer. Genes Dev. 29, 238-249.
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- Rickels, R., and Shilatifard, A. (2013) A Histone Modifier's Ill-Gotten Copy Gains. Cell 154, 477-479.
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- Hu, D., Gao, X., Morgan, M.A., Herz, H.M., Smith, E.R., and **Shilatifard, A.** (2013). The MLL3/MLL4 branch of the COMPASS family is a major H3K4 monomethylase at enhancers. *Mol Cell Biol* 33, 4745-4754.
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<b>Teaching</b>	
2003-2017	Instructor, Gene Expression Course, Cold Spring Harbor Laboratory
2012-2014	Gene Expression Module, Graduate Program, Stowers Institute
1998-2000	BBS 801, Special Topics in Biochemistry and Molecular Biology
1998-2006	BBS 501, Section Director for the Nucleic Acid Biology section of core program. Presented three lectures in the five-lecture section. (Ranked top 5% lecturer by first-year graduate students.) St. Louis University Medical School
2000-2003	Ten lectures on Nucleic Acid Metabolism for the first-year medical school curriculum. (Ranked in top 10 by the medical students.) St. Louis University Medical School
2001-2002	Co-organizer for wet laboratory course for first-year graduate curriculum. Course includes over sixty lectures/laboratory practices for first-year graduate students in core program.
<b>Department</b>	al and University-Wide Services at Saint Louis University Medical Center
2011-2014	Chairman, Rotation Committee for the Stowers Institute Graduate Program
1998-2006	Organizer of Biochemistry and Molecular Biology Journal Club
1998-2006	Organizer of Department of Biochemistry Seminar Series
1998-2006	Member of Promotions Committee, Graduate Curriculum Committee, and Departmental Instrumentation Committee within Department of Biochemistry, Saint Louis University School of Medicine
1998-1999	Member of Faculty Search Committee for Department of Biochemistry, Saint Louis University School of Medicine
1999-2004	Member of Graduate Curriculum Committee for core graduate program within the Medical Center, Saint Louis University School of Medicine
2004-2005	Member of Dean's Committee for Cancer Center Director Search, Saint Louis University School of Medicine
2006	Member of Dean's Committee for the selection of the Chair for the Department of Medicine,

Saint Louis University School of Medicine