Scientific Advisory Committee (SAC)

Phillip A. Sharp, PhD – Chair
Institute Professor
David H. Koch Institute for Integrative Cancer Research
Massachusetts Institute of Technology
Cambridge, MA

Phillip A. Sharp is an Institute Professor (highest academic rank) at the Massachusetts Institute of Technology and member of the Department of Biology and the Koch Institute for Integrative Cancer Research. He joined the Center for Cancer Research (now the Koch Institute) in 1974 and served as its director for six years, from 1985 to 1991, before taking over as head of the Department of Biology, a position he held for the next eight years. He was founding director of the McGovern Institute, a position he held from 2000 to 2004. His research interests have centered on the molecular biology of gene expression relevant to cancer and the mechanisms of RNA splicing.

His landmark work in 1977 provided the first indications of "discontinuous genes" in mammalian cells. The discovery fundamentally changed scientists' understanding of gene structure and earned Sharp the 1993 Nobel Prize in Physiology or Medicine. Sharp has authored over 410 papers. He is an elected member of the National Academy of Sciences, the Institute of Medicine, the American Academy of Arts and Sciences, the American Philosophical Society, and the Royal Society, UK. Among his many awards are the Gairdner Foundation International Award, the Lasker Basic Medical Research Award, and the National Medal of Science. His long list of service includes the presidency of the AAAS (2013) and Chair of the Scientific Advisory Committee of the SU2C Project, AACR. A native of Kentucky, Sharp earned a BA degree from Union College, Barbourville, KY, and a PhD in chemistry from the University of Illinois, Champaign-Urbana. Sharp is a co-founder of Biogen and Alnylam Pharmaceuticals Inc.

Elizabeth H. Blackburn, PhD – Vice Chair
Professor Emerita, Department of Biochemistry and Biophysics
University of California San Francisco
San Francisco, CA

Elizabeth H. Blackburn is the Morris Herzstein Professor Emerita in the Department of Biochemistry and Biophysics at the University of California, San Francisco and President Emerita of the Salk Institute for Biological Studies. Blackburn earned a Bachelor of Science and a Master of Science at the University of Melbourne, Australia, and earned her PhD from the University of Cambridge in England. She went on to do her postdoctoral study in molecular and cellular biology at Yale University, and in 1978 joined the faculty of the University of California, Berkeley in the Department of Molecular Biology. In 1990, she moved to the Department of Microbiology and Immunology at University of California, San Francisco (UCSF), where she served as Department Chair from 1993 to 1999.

For the majority of her career, Blackburn has been investigating the structure and roles of telomeres. Her pioneering and innovative research has included the development of an anti-cancer therapy that forces cells with active telomerase to make errors during telomere synthesis, effectively triggering cellular suicide. More recently, she has been applying her insights into telomere biology toward understanding the life experiences and social influences that affect human telomeres and associated disease risks, including cancer risks and progression. One goal is to modulate telomere biology in healthy and at-risk people to reduce such risks.

Throughout her career, Blackburn has been recognized with many prestigious awards, including the 2009 Nobel Prize in Physiology or Medicine, the Lasker Award, AACR-Pezcoller Foundation International Award for Cancer Research, General Motors Cancer Research Foundation Alfred P. Sloan Award, AACR-G.H.A. Clowes Memorial Award, American Cancer Society Medal of Honor, 26th Annual Bristol-Myers Squibb Award for Distinguished Achievement in Cancer Research, Albany Medical Center Prize in Medicine and Biomedical Research, the Eli Lilly Research Award for Microbiology and Immunology, and more. She was named California Scientist of the Year in 1999, and one of TIME Magazine's 100 Most Influential People in 2007. She served as the 1998 President of the American Society for Cell Biology, and the 2010-11 President of the American Association for Cancer Research. Blackburn is an elected Fellow of the National Academy of Sciences, the Academy of Medicine, the American Academy of Arts and Sciences, the Royal Society of London, the American Academy of Microbiology, the American Philosophical Society and the American Association for the Advancement of Science.

Raymond N. DuBois, MD, PhD – Vice Chair
Dean, College of Medicine
Professor, Departments of Biochemistry and Medicine
Medical University of Southern Carolina
Charleston, SC

Raymond N. DuBois, MD, PhD, is an internationally renowned expert for his studies on the molecular and genetic basis for colorectal cancer. His laboratory examines the molecular mechanisms by which inflammation and inflammatory mediators affect tumor development and serve as targets for cancer prevention.

DuBois was named Dean of the College of Medicine at the Medical University of South Carolina (MUSC) in March 2016. Prior to his role as Dean, DuBois served as the Executive Director of the Biodesign Institute at Arizona State University with a joint appointment as Professor of Medicine in the Mayo College of Medicine. Before that (2007-2012) he served as the Provost and Executive Vice President at The University of Texas MD Anderson Cancer Center in Houston. Previously he directed Vanderbilt's Division of Gastroenterology, Hepatology and Nutrition, and served as Director of the Vanderbilt-Ingram Cancer Center.

DuBois is an internationally renowned cancer researcher and leader in the cancer community. He is known for elucidating a key role of prostaglandins (PGs) and other inflammatory mediators in colorectal cancer, which facilitated clinical trials targeting this pathway in humans for cancer prevention. His work also confirmed the existence of a novel tumor suppressor gene in the PG pathway (15-PGDH) in colon cancer which is responsible for inactivation of PGE2. His research revealed that prostaglandins in the tumor microenvironment increase immune tolerance and resistance to therapy.

DuBois a Fellow of the American Association for the Advancement of Science and the American Association for Cancer Research (AACR) Academy, Past President of the AACR, the Southern Society for Clinical Investigation, and the International Society for Gastrointestinal Cancer. He was also inducted as a member of the American Clinical and Climatological Association, the Royal College of Physicians in London, the Association of American Physicians and the American Society for Clinical Investigation. He also currently serves on the AACR Academy leadership council.

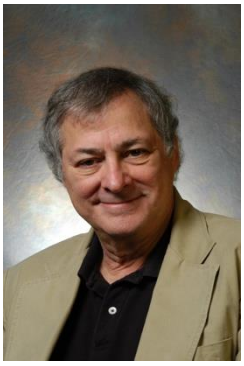
During his career as a physician-scientist, DuBois has published over 150 peer reviewed research articles, more than 60 review articles, 25 book chapters, and three books. His work has been cited

over 55,000 times as of 2018 according to Google Scholar. He is a co-inventor of a method to identify and prevent cellular genes needed for viral growth and cellular genes that function as tumor suppressors in mammals. His research has been continuously funded from the NIH and other agencies/foundations for the past 25 years.

DuBois earned a bachelor's degree from Texas A&M University and a doctoral degree from The University of Texas Southwestern Medical Center in Dallas. He obtained a medical degree from The University of Texas School of Medicine in San Antonio, followed by an Osler Medicine internship and residency, and a gastroenterology fellowship at the Johns Hopkins Hospital in Baltimore.

Lee J. Helman, MD – Vice Chair
Director, Osteosarcoma Institute
Adjunct Professor of Clinical Pediatrics, Cancer and Blood Disease Institute, Children's Hospital of Los Angeles and University of Southern California Keck School of Medicine
Los Angeles, CA

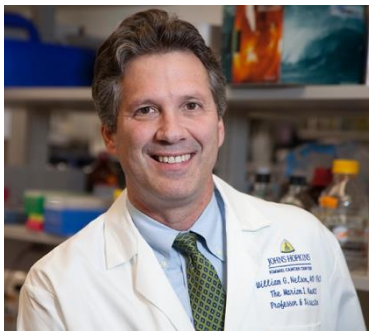
Lee J. Helman, MD, is the Director of the Osteosarcoma Institute. Dr. Helman has been studying the biology and caring for pediatric patients with sarcomas for over thirty years. He has also trained many investigators in the field of pediatric sarcomas. He spent 30 years at the NCI in various leadership positions, and recently spent 3 years at Children's Hospital Los Angeles as head of research in the Cancer and Blood Disease Institute, where he remains an adjunct professor. He is currently focusing on improving outcomes in osteosarcoma.



Arnold J. Levine, PhD – Vice Chair
Professor Emeritus, School of Natural Sciences, Biology
Institute for Advanced Study and Cancer Institute of New Jersey
Princeton, NJ

Arnold Levine is a leader in cancer research. In 1979, Levine was one of the co-discoverers of the p53 protein. The p53 gene and its protein are central players in our present day understanding of cancers. This discovery has generated more than 60,000 publications. In 1989, Levine's group demonstrated that the wild type p53 gene and protein functioned as a tumor suppressor, preventing transformation by oncogenes. This observation changed the direction of the field.

The research paths of the Levine group provide clear evidence that the p53 pathway plays a central role in the prevention of human cancers and that polymorphic variations in components of the pathway can influence individual responses to environmental mutagens, age of cancer onset, sexual dimorphisms in cancers, response to therapy and survival times, all for a gene whose mutations cause the most common genetic alterations in cancers. This research helped to uncover the genetic origins of cancer and focus drug discovery on a rational path to treat cancers.



William G. Nelson, MD, PhD – Vice Chair
Director, Sidney Kimmel Comprehensive Cancer Research
Johns Hopkins University
Baltimore, MD

William G. Nelson, MD, PhD, is the Marion I. Knott Director and Professor of Oncology and Director of the Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins University in Baltimore, MD. Nelson directs a translational research laboratory focused on discovering new strategies for prostate cancer treatment and prevention and manages a clinical practice focused on developing these new treatment and prevention approaches in early "proof-of-principle" prostate clinical trials.

Nelson is a recognized leader in translational cancer research. He was one of three co-chairs of the National Cancer Institute's Translational Research Working Group, which worked to re-engineer translational cancer science across the nation.

Julian Adams, PhD
Gamida Cell
Boston, MA

Julian Adams, PhD, has more than 30 years of experience in drug discovery and development with a strong focus on cancer research. In 2018 Adams joined Gamida Cell as CEO and Chairman, and serves Clal Biotechnology Industries as its Scientific Advisor. He was previously Chief Scientific Officer and President of Research and Development at Infinity Pharmaceuticals. Prior to joining Infinity in 2003, Adams was the senior vice president of drug discovery and development at Millennium Pharmaceuticals, where he headed multiple global drug discovery and development programs, including the successful Velcade® (bortezomib) program. Adams also held senior positions in research and development at LeukoSite (acquired by Millennium) and at ProScript, as well as in medicinal chemistry at Boehringer Ingelheim, where he is credited with discovering Viramune® (nevirapine) for HIV.

Julian has received many awards, including the 2012 Warren Alpert Foundation Prize for his role in the discovery and development of bortezomib, the 2012 C. Chester Stock Award Lectureship from Memorial Sloan-Kettering Cancer Center, and the 2001 Ribbon of Hope Award for Velcade® from the International Myeloma Foundation. He is an inventor on more than 40 patents and has authored over 100 papers and book chapters in peer-reviewed journals.

Adams received his B.S. from McGill University and his PhD from the Massachusetts Institute of Technology. He also received a Doctor of Science, honoris causa, from McGill University in 2012.

Carlos L. Arteaga, MD
UT Southwestern Harold C. Simmons
Comprehensive Cancer Center
Dallas, TX

Carlos L. Arteaga is the Director of the Harold C. Simmons Comprehensive Cancer Center and Associate Dean of Oncology Programs at UT Southwestern Medical Center.

Arteaga earned his medical degree at the University of Guayaquil in Ecuador. He trained in internal medicine and medical oncology at Emory University and the University of Texas Health Science Center at San Antonio. He joined Vanderbilt University Medical Center in 1989, where he held the Donna S. Hall Chair in Breast Cancer Research and served at the Vanderbilt-Ingram Cancer Center (VICC) as Director of the Center for Cancer Targeted Therapies, the Director of the Breast Cancer Program, and the Associate Director for Translational/Clinical Research until 2017, when he joined UT Southwestern.

Arteaga has more than 300 publications in the areas of oncogenes and breast tumor initiation and progression, development of targeted therapies and biomarkers of drug action and resistance, and investigator-initiated clinical trials in breast cancer. His research is or has been funded by the National Cancer Institute (NCI), CPRIT, the American Cancer Society, the Department of Defense Breast Cancer Research Program, Stand Up To Cancer (SU2C), and the Susan G. Komen for the Cure and Breast Cancer Research foundations.

During his career, Arteaga has received several awards, including the American Association for Cancer Research-Richard and Hinda Rosenthal Award, the American Cancer Society Clinical Research Professor Award, the Gianni Bonadonna Award from the American Society of Clinical Oncology, the Brinker Award for Scientific Distinction from the Susan G. Komen Foundation, the 2015 Prize for Scientific Excellence in Medicine from the American-Italian Cancer Foundation, and the Clinical Investigator Award from the U.S. Department of Veteran Affairs.

He is an elected Fellow of the American Association for the Advancement of Science, a Fellow of the American Association for Cancer Research Academy, an elected member of both the American Society for Clinical Investigation and the Association of American Physicians, and member of the Susan G. Komen Scientific Advisory Board. He also serves on the advisory boards.

Alan Bernstein, PhD
Canadian Institute for Advanced Research
Toronto, Ontario

Alan Bernstein is President of the Canadian Institute for Advanced Research (CIFAR), Canada's global research institute. From 2008-2011, Bernstein was the executive director of the Global HIV Vaccine Enterprise, an international alliance of researchers and funders charged with accelerating the search for an HIV vaccine.

Previously, he served as the founding president of the Canadian Institutes of Health Research (2000-2007), Canada's federal agency for the support of health research. In that capacity, he led the transformation of health research in Canada. After receiving his PhD from the University of Toronto, and following postdoctoral work in London, Bernstein joined the Ontario Cancer Institute (1974-1985). In 1985, he joined the new Samuel Lunenfeld Research Institute in Toronto, was named Associate Director in 1988 and then Director of Research (1994-2000).

Internationally known for his contributions to our understanding of the molecular basis of cancer, Bernstein has made extensive contributions to the study of stem cells, hematopoiesis and cancer. He chairs or is a member of advisory and review boards in Canada, the US, UK and Italy. Bernstein has received numerous awards and honourary degrees for his contributions to science, including the 2008 Gairdner Wightman Award, induction into the Canadian Medical Hall of Fame, and the Henry G. Friesen International Prize in Health Research. He is a Senior Research Fellow of Massey College, received the Order of Ontario in 2018 and was appointed an Officer of the Order of Canada in 2002.

John D. Carpten, PhD
Institute of Translational Genomics,
Keck School of Medicine of University of Southern California
Los Angeles, CA

John D. Carpten, PhD, is an internationally recognized expert in genome science, and possesses unique training in multiple disciplines including germline genetics for disease risk and predisposition, somatic cancer genomics, health disparities research, cell biology, functional genomics, and precision medicine.

Dr. Carpten earned his Ph.D. from the Ohio State University in 1994 with a focus on human genetics. He then went on to complete a postdoctoral fellowship at the National Human Genome Research Institute, NIH, Bethesda, in Cancer Genetics, where he was later promoted to the tenure track in 2000. Then in 2003, Dr. Carpten accepted a position to become Division Director, Division of Integrated Cancer Genomics, at the Translational Genomics Research Institute (TGen), Phoenix, AZ. Later, in 2012 he was promoted to the position of Deputy Director of Basic Research for TGen. In 2016 he was recruited by the University of Southern California Keck School of Medicine, to build and chair a new Department and Institute of Translational Genomics.

Dr. Carpten's primary research program centers around the development and application of cutting edge genomic technologies and bioinformatics analysis in search of germ-line and somatic alterations that are associated with cancer risk and tumor characteristics, respectively. A major focus of Dr. Carpten's research has been related to prostate cancer genetics. He was a lead author on the first genome wide scan for hereditary prostate cancer genes (Science. 1996 Nov 22;274(5291):1371-4.), and the identification of HOXB13 as the first true hereditary prostate cancer gene (New England Journal of Medicine. 2012 Jan 12;366(2):141-9.). His group has also discovered a number of single nucleotide polymorphisms, which confer increased risk of developing prostate cancer (Journal of the National Cancer Institute. 2007 Dec 19;99(24):1836-44.). Furthermore, he has played a critical role in prostate cancer cell biology studies (Nat Genet. 2004 Sep;36(9):979-83.), and prostate cancer tumor genome profiling studies (Genome Res. 2011 Jan;21(1):47-55.).

Dr. Carpten has also been an early pioneer in the understanding the role of biology in disparate cancer incidence and mortality rates seen among underrepresented populations. Through his leadership, the African American Hereditary Prostate Cancer Study (AAHPC) Network was conceived. This study has become a model for genetic linkage studies in underrepresented

populations and led to the first genome wide scan for prostate cancer susceptibility genes in African Americans (Prostate. 2007 Jan 1;67(1):22-31.).

Dr. Carpten has received research funding awards from various sources to support his research including NIH, Prostate Cancer Foundation, Susan G. Komen for the Cure, Multiple Myeloma Research Foundation, and a number of pharmaceutical companies. Dr. Carpten has co-authored over 160 publications in scientific journals that include Science, Nature, Nature Genetics, Genome Research, Cancer Research, Molecular Cancer Research, Cancer Cell, and the New England Journal of Medicine.

Judy E. Garber, MD, MPH
Dana-Farber Cancer Institute
Boston, MA

Judy Garber is the Director of the Center for Cancer Genetics and Prevention at Dana-Farber Cancer Institute and a Professor of Medicine at Harvard Medical School. She also consults with the Pediatric Cancer Genetic Risk Program at Dana-Farber/Boston Children's Cancer and Blood Disorders Center. Garber conducts research in clinical cancer genetics, with a special focus in the genetics of breast cancer. She has played a major role in the development of national guidelines in cancer genetics. She is also a leader in research into the characteristics and treatment of triple negative or basal-like breast cancer, the most common form in women with BRCA1 mutations. Her translational research focuses on the evaluation of novel agents targeting DNA repair defects in breast cancer, including PARP inhibitors for treatment and prevention of breast cancer and other BRCA-associated cancers.

Richard B. Gaynor, MD
Neon Therapeutics
Cambridge, MA

Richard Gaynor joined Neon Therapeutics in 2016 as President of Research and Development. Prior to joining Neon, Gaynor was Senior Vice President of global product development and medical affairs at Lilly Oncology. In total, he spent 15 years in senior roles at Lilly Oncology where he led preclinical and early clinical research, directed the biomarker and research groups, and served on key company portfolio review committees.

Gaynor began his career in academia, spending nine years on the faculty at UCLA School of Medicine followed by 11 years on the faculty at the University of Texas Southwestern Medical School, including serving as the Chief of the Division of Hematology-Oncology and Director of the Simmons Cancer Center. In 2002, he moved to Eli Lilly, where he began his industry career overseeing both oncology drug discovery and early clinical development. Gaynor chaired the Lilly Oncology Research and Development Committee and helped oversee a variety of collaborations, including with Bristol-Myers Squibb, Merck, AstraZeneca and GE. He is the author of nearly 150 publications and has served on numerous boards and committees, including several with the AACR, the Stand Up To Cancer Scientific Advisory Committee, the MD Anderson Moon Shots Advisory Board, the Damon Runyon Cancer Research Foundation and Accelerating Cancer Cures. Gaynor holds an MD from the University of Texas Southwestern Medical School and, following his residency in internal medicine there, he completed fellowship training in hematology-oncology at the UCLA School of Medicine.

Laurie H. Glimcher, MD
Dana-Farber Cancer Institute
Boston, MA

Laurie H. Glimcher, MD, is the President and CEO of the Dana-Farber Cancer Institute, Director of the Dana-Farber/Harvard Cancer Center, and the Richard and Susan Smith Professor of Medicine at Harvard Medical School. Previously, she was the Stephen and Suzanne Weiss Dean and Professor of Medicine of Weill Cornell Medicine and Provost for Medical Affairs of Cornell University. Dr. Glimcher is a distinguished immunologist, widely renowned for her research discoveries in immunology, critical for both the development of protective immunity and for the pathophysiologic immune responses underlying autoimmune, infectious, and malignant diseases. Dr. Glimcher speaks nationally and internationally on cancer, immunology, skeletal biology, and translational medicine, and has contributed more than 350 scholarly articles and papers to the medical literature.

Dr. Glimcher is a Member of the National Academy of Sciences, a Fellow of the American Academy of Arts and Sciences, a Member of the American Philosophical Society, a Member of the National Academy of Medicine, and the former President of the American Association of Immunologists. She is a member of the Cancer Research Institute, Prix Galien, Parker Institute for Cancer Immunotherapy, Repare Therapeutics, Abpro Therapeutics and Kaleido BioSciences, Inc. Scientific Advisory Boards, the Lasker Award Jury, the American Association for Cancer Research, the Association of American Cancer Institutes, and the American Society of Clinical Oncology. She is the co-founder of Quentis Therapeutics. She previously served on the Board of Directors of the Bristol-Myers Squibb, and is currently on the Corporate Board of Directors of GlaxoSmithKline and the Waters Corporation.

Dr. Glimcher is the recipient of many awards and honors, including the American Association of Immunologists Lifetime Achievement Award; the Indiana University School of Medicine's Steven C. Beering Award for outstanding research contributions to advancement of biomedical or clinical science; and the L'Oréal-UNESCO Award for Women in Science all in 2018; and in 2017, the 2017 George M. Kober Medal and the Award for Distinguished Research in the Biomedical Sciences from the Association of American Medical Colleges (AAMC).
Dr. Glimcher is a magna cum laude graduate of Radcliffe College, and holds an MD degree cum laude from Harvard Medical School.

Nancy F. Goodman
Kids v Cancer
Washington, DC

Nancy Goodman is Founder and Executive Director of Kids v Cancer, a nonprofit that was lead advocate and author of two Federal laws to incentivize and require pharmaceutical companies to develop drugs for children. The Creating Hope Act pediatric priority review voucher program, passed into law in 2012 as 12 U.S.C. 360ff, established a market-based incentive, a voucher, for companies to develop drugs expressly for children with pediatric rare diseases, including pediatric cancers. Over $1.2 billion in vouchers have been traded since the establishment of the program. The RACE for Children Act, which amends the Pediatric Research Equity Act (PREA), 21 U.S.C. 355c, was passed into law in 2017, authorizes the FDA to require companies developing cancer targeted therapies to undertake pediatric studies when the molecular targets of the drugs are substantially relevant to pediatric cancers.

Kids v Cancer was selected by Fast Company Magazine as top ten most innovative non-profits in 2016 and won the Peter Drucker Nonprofit Innovation Award in 2015. Nancy was awarded the Rare Disease Legislative Advocates Rare Disease Award and The One Hundred: top cancer leaders by Massachusetts General Hospital. She serves the National Cancer Institute Board of Scientific Counselors.

Nancy's son, Jacob, died of a pediatric brain cancer when he was ten. Nancy is a graduate of the University of Chicago Law School, Harvard Kennedy School of Government and University of Pennsylvania.

William N. Hait, MD, PhD
Janssen, Pharmaceutical Companies of Johnson & Johnson
Trenton, NJ

William N. Hait is Global Head, Johnson & Johnson External Innovation, a unit that comprises Johnson & Johnson Innovation (Innovation Centers, J-Labs and the Johnson & Johnson Development Corporation), Johnson and Johnson Lung Cancer Initiative, and the World Without Disease Accelerator. In this role, he leads the mission to source innovation from wherever it originates, accelerate the filling of R&D pipelines in all of the J&J sectors, drive the creation of cross-sector R&D programs with a focus on prevention, interception and cures, and ensure the future by getting out ahead of potentially disruptive technologies.

Hait joined Johnson & Johnson in 2007 and was the Global Therapeutic Area Head, Oncology, from 2009 to 2011. He served as Global Head, Janssen R&D from 2011 through 2017.

Before joining J&J, he was the founding Director of The (Rutgers) Cancer Institute of New Jersey, which he led to receive the National Cancer Institute's highest designation of Comprehensive Cancer Center in 2002. From 1993 to 2007 he was Professor of Medicine and Pharmacology and Associate Dean for Oncology Programs at the University of Medicine and Dentistry of New Jersey — Robert Wood Johnson Medical School.

After earning his B.A. from the University of Pennsylvania, Hait received his MD and PhD (Pharmacology) cum laude from the Medical College of Pennsylvania, where he was elected to Alpha Omega Alpha. He joined the Yale University School of Medicine faculty in 1984 and became Associate Professor of Medicine and Pharmacology, Chief of the Division of Medical Oncology, Associate Director of the Yale University Comprehensive Cancer Center, Director of the Breast Cancer Unit and Co-Director of the Lung Cancer Unit. Hait is Board Certified in Internal Medicine and Medical Oncology.

Hait devoted his time to numerous advisory and editorial boards. He was Editor-in-Chief of Clinical Cancer Research and Associate Editor of Cancer Research, served as President of the American Association for Cancer Research from 2007 – 2008 and currently serves as Treasurer. He has served on various committees for the American Association of Cancer Research (Chair, Clinical Cancer Research Committee), the American Society of Clinical Oncology, the Association of American Cancer Institutes (Board of Directors), the National Cancer Institute Board of

Scientific Advisors and was founding Chairman of the Executive Management Committee of Stand Up to Cancer. He currently is a member of the Rutgers Cancer Institute of New Jersey Director's Advisory Board, Board of External Advisors for the Dana Farber/Harvard Cancer Center, the Stand Up to Cancer Scientific Advisory Board, The Board of Directors of Research America! and the Vanderbilt University Biomedical Science Advisory Board.

William G. Kaelin, Jr., MD
Dana-Farber Cancer Institute
Boston, MA

William G. Kaelin, Jr., is a Professor at the Dana-Farber Cancer Institute in Boston, MA. He received his medical degree from Duke University in 1982 and was a house officer in internal medicine at Johns Hopkins Hospital. He went on to become a medical oncology clinical fellow at the Dana-Farber Cancer Institute and a postdoctoral fellow in the laboratory of David Livingston, where he began his studies of tumor suppressor proteins. He became an independent investigator at Dana-Farber Cancer Institute in 1992 as a James S. McDonnell Scholar and became a Howard Hughes Medical Institute investigator in 1998. Kaelin is also a Professor in the Department of Medicine at Dana-Farber Cancer Institute and Brigham and Women's Hospital, Senior Physician at Brigham and Women's Hospital, and Associate Director for Basic Research at the Dana-Farber/Harvard Cancer Center.

Kaelin's research interests have focused on tumor suppressor genes and the normal functions of the proteins they encode. The long-term goal of his work is to lay the foundation for the development of new anticancer therapies based on the functions of specific tumor suppressor proteins. His studies of tumor suppressor genes linked to hereditary forms of cancer have uncovered molecular pathways that are important in non-hereditary cancers and have accelerated the development of new treatments for kidney cancer.

Kaelin is an elected member of the Institute of Medicine and has served on numerous boards and committees, including the American Association for Cancer Research's Board of Directors and the NCI Board of Scientific Advisors. He has received many awards for his work, including the AACR-Richard and Hinda Rosenthal Prize for Cancer Research and the Paul Marks Prize for Cancer Research from Memorial Sloan-Kettering Cancer.

Michael B. Kastan, MD, PhD
Duke Cancer Institute
Durham, NC

Michael B. Kastan, MD, PhD, is the William and Jane Shingleton Professor of Pharmacology and Cancer Biology and Professor of Pediatrics at Duke University and serves as the Executive Director of the Duke Cancer Institute. He earned MD and PhD degrees from the Washington University School of Medicine and did his clinical training in Pediatrics and Pediatric Hematology-Oncology at Johns Hopkins. He was a Professor of Oncology, Pediatrics, and Molecular Biology at Johns Hopkins prior to becoming Chair of the Hematology-Oncology Department and later Cancer Center Director at St. Jude Children's Research Hospital, before moving to Duke in 2011. He is a Pediatric Oncologist and a cancer biologist; his laboratory research concentrates on DNA damage and repair, tumor suppressor genes, and causes of cancer related to genetic predisposition and environmental exposures. His discoveries have made a major impact on our understanding of both how cancers develop and how they respond to chemotherapy and radiation therapy and his publications reporting the roles of p53 and ATM in DNA damage signaling are among the most highly cited publications in the biomedical literature of the past two decades. He has received numerous honors for his highly cited work, including election to the National Academy of Sciences, National Academy of Medicine, the American Academy of Arts and Sciences, and receiving the AACR-G.H.A. Clowes Memorial Award for outstanding contributions to basic cancer research. He has served as Chairman of the Board of Scientific Counselors of the National Cancer Institute (NCI), on the Boards of Directors of the American Association for Cancer Research (AACR) and the American Association of Cancer Institutes (AACI), as Editor-in-Chief of the journal Molecular Cancer Research, and as Editor of the textbook Clinical Oncology. He also serves on the scientific advisory board of the V Foundation.

Guillermina (Gigi) Lozano, PhD
Chair, Department of Genetics, Division of Basic Science
University of Texas MD Anderson Cancer Center
Houston, TX

Guillermina (Gigi) Lozano, PhD is a geneticist recognized for her studies of the p53 tumor suppressor pathway, from characterizing p53 as a transcriptional activator to characterizing the physiological importance of Mdm2 and Mdm4 proteins as inhibitors of p53, and the consequences of p53 mutations on tumor development. Lozano was born in East Chicago, Indiana before moving to Texas with her family where she completed undergraduate studies in Biology and Mathematics at Pan American University (now known as the University of Texas Rio Grande Valley). She completed graduate studies at Rutgers University and the University of Medicine and Dentistry of New Jersey, and a post doctoral fellowship at Princeton University. She was hired as an Instructor at The University of Texas MD Anderson Cancer Center in 1987 and rose through the ranks to her current position as chair of the department of Genetics. She was elected a Fellow of the American Association for the Advancement of Science. She received the Minorities in Cancer Research Jane Cooke Wright Lectureship, and Women in Cancer Research Charlotte Friend Lectureship awards both from the American Association for Cancer Research. Dr. Lozano is also the recipient of distinguished alumni awards from both her undergraduate and graduate alma maters. She is a member of the National Academy of Sciences and the National Academy of Medicine.

Tak W. Mak, PhD
University of Toronto, Campbell Family Institute
Toronto, Ontario

Tak W. Mak is the Director of the Campbell Family Institute for Breast Cancer Research at the Princess Margaret Cancer Centre in Toronto. He received a bachelor's of science in biochemistry in 1967 and a master of science in biophysics in 1968 from the University of Wisconsin. He earned his PhD in Biochemistry from the University of Alberta in 1971. He is also senior scientist in the division of Stem Cell and Developmental Biology, Ontario Cancer Institute. Since 1984, he has been a Professor in the Departments of Medical Biophysics and Immunology at the University of Toronto.

Mak co-discovered the t-cell receptor, a key component of the immune system. His research is concentrated on gaining fundamental knowledge of the biology of cells in normal and disease settings, and in particular on the mechanisms underlying immune responses and tumorigenesis. His lab has initiated several complementary programs, many of which have evolved from the production and analysis of genetically engineered mouse strains.

Mak has received several awards and honors for his work. He is a member of the Order of Ontario and was elected as a foreign associate to the National Academy of Sciences in the discipline of immunology in 2002. Mak has received the King Faisal Prize for Medicine, the Gairdner Foundation International Award, the Paul Ehrlich Prize, the Novartis Prize in Immunology, the Killam Prize by the Canada Council for the Arts, and the Sloan Prize of the General Motors Cancer Foundation, and the Robert L. Noble Prize by the National Cancer Institute of Canada.

Andre Nussenweig, PhD
Center for Cancer Research
National Cancer Institute
Washington, DC

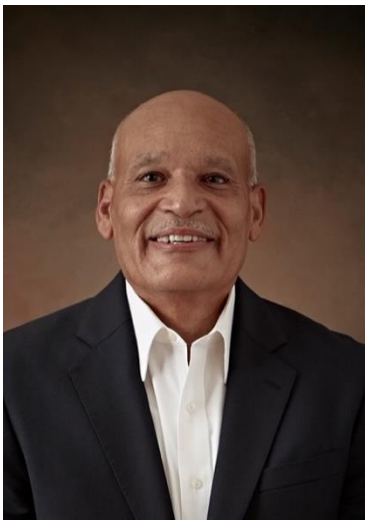
Andre Nussenzweig, PhD BIO Nussenzweig is an NIH Distinguished Investigator, and chief of the Laboratory of Genome Integrity at the National Institute of Health's National Cancer Institute. Nussenzweig is a leading contributor to the study of mechanisms that maintain genomic stability and prevent cancer. His laboratory has elucidated many fundamental features of DNA damage and repair proteins and revealed the critical role they play in both normal and pathogenic states. His studies have emphasized the importance of DNA repair pathways as drivers of specific hematological malignancies and as contributors to chemo-resistance/sensitivity in breast and ovarian cancers. The goal of his program is to use hypothesis-driven approaches to develop therapeutic strategies in the treatment of cancers. Nussenzweig serves on multiple editorial boards and scientific advisory committees, including Stand Up To Cancer.

Roderic I. Pettigrew, PhD, MD
Engineering Health & Engineering Medicine
Texas A & M Health Science Center
Bryan, TX

Roderic Ivan Pettigrew, PhD, MD, serves as CEO of Engineering Health (EnHealth) and executive dean for Engineering Medicine (EnMed) at Texas A&M and Houston Methodist Hospital. He was the founding Director of the US National Institute of Biomedical Imaging and Bioengineering (NIBIB) of the NIH (2002-2017), oversaw $5 billion in research investments, and is credited with building it into the signature NIH institute for emerging medical technologies. Under Pettigrew's leadership, NIBIB produced more patents per appropriated dollar than any other institute or federal agency. returning $30 per each $1 invested in research, or 3,000% (five times the already remarkable NIH average of 600%).

His newest undertaking is EnHealth, the world's first initiative to holistically integrate engineering into all of the colleges of a university that are a part of the health care enterprise. EnMed is the first constituent initiative, creating a new school that integrates engineering into medical training to develop a new kind of engineering-minded physician who invents solutions to healthcare problems. An invention is required of each EnMed graduate, who will earn both MD and MEng degrees in four years.

Pettigrew's expertise is in health technologies emerging from the convergence of the life sciences, the physical sciences, and engineering. An MIT graduate (PhD 1977) who finished his medical training at UCSD (1983), he is known internationally for his pioneering work involving four-dimensional imaging of the cardiovascular system using magnetic resonance (MRI). His current knowledge base also includes nanotechnology, regenerative medicine, and point-of-care technologies. He has been elected to membership in the National Academy of Medicine, the National Academy of Engineering, the National Academy of Inventors and the National Academy of Sciences, India. Other awards include the Pierre Galletti Award (highest honor) of the American Institute of Medical and Biological Engineering, the Inaugural Gold Medal of the Academy of Radiology Research, the Distinguished Service Medal of the International Society of Magnetic Resonance in Medicine, the Spirit of the Heart Award of the Association of Black Cardiologists, the Pritzker Distinguished Achievement Award of the Biomedical Engineering Society, and the Gold Medal of the Radiological Society of North America.



Cecil B. Pickett, PhD
Biogen
Cambridge, MA

Cecil B. Pickett is the former President of Research and Development at Biogen Idec, having retired in 2009. Pickett earned his B.S. in biology from California State University at Hayward and his PhD in cell biology from University of California, Los Angeles. Previously, he served as Senior Vice President and President of Schering-Plough Research Institute, the pharmaceutical research arm of Schering-Plough Corporation. Pickett came to Schering-Plough Research Institute from Merck Research Laboratories, Montreal, Canada, and West Point, Pa., where he served as Senior Vice President of Basic Research. During his 15-years at Merck & Co., Pickett held various positions of increasing responsibility, including research fellow, biochemical regulation; associate director, department of molecular pharmacology and biochemistry; director, department of molecular pharmacology and biochemistry; executive director of research at the Merck Frosst Center for Therapeutic Research, Montreal; and vice president of the Center. Pickett is an expert in drug development. During his career, he has overseen all aspects of the internal research and collaboration with partners aimed at developing, manufacturing, and marketing advanced drug therapies and has played an integral role in bringing several large and small molecule candidates into clinical development.

Pickett has published extensively in leading research journals and has been a frequent speaker at scientific symposia and conferences. He has received several major academic awards, appointments and fellowships and serves on a number of scientific committees and editorial boards of medical journals and research organizations. His awards and honors include the UCLA Alumni Association Award for Scholarly Achievement and Academic Distinction; the first Robert A. Scala Award and Lectureship in Toxicology of Rutgers University and the University of Medicine and Dentistry of New Jersey; and the CIIT Centers for Health Research Founders' Award. Pickett served as a member of the U.S. Food and Drug Administration (FDA) Science Board, the Advisory Committee to the Director of the National Institutes of Health and The National Cancer Policy Board of the Institute of Medicine. He was elected to the Institute of Medicine of the National Academy of Sciences in 1993 and is also a member of The American Society for Cell Biology, American Society of Biochemistry & Molecular Biology, American Association for Cancer Research, and American Association for the Advancement of Science.

Arlene Sharpe, MD, PhD
Harvard Medical School
Boston, MA

Arlene Sharpe, MD, PhD is the George Fabyan Professor of Comparative Pathology and Co-Chair of the Department of Microbiology and Immunobiology at Harvard Medical School. She is a member of the Department of Pathology at Brigham and Women's Hospital, an Associate Member at the Broad Institute of MIT and Harvard, Leader of the Cancer Immunology Program at the Dana-Farber/Harvard Cancer Center, and Co-Director of the Evergrande Center for Immunologic Diseases at Harvard Medical School and Brigham and Women's Hospital.

Sharpe earned her A.B. from Harvard University and her MD and PhD degrees from Harvard Medical School. She completed residency training in Pathology at Brigham and Women's Hospital and is board certified in Anatomic Pathology.

Sharpe is a leader in the field of T cell costimulation. Her laboratory has discovered and elucidated the functions of T cell costimulatory pathways, including the immunoinhibitory functions of the CTLA-4 and PD-1 pathways, which have become exceptionally promising targets for cancer immunotherapy. Her laboratory currently focuses on the roles of T cell costimulatory pathways in regulating T cell tolerance and effective antimicrobial and antitumor immunity, and translating fundamental understanding of T cell costimulation into new therapies for autoimmune diseases and cancer. Sharpe has published over 300 papers and was listed by Thomas Reuters as one of the most Highly Cited Researchers (top 1%) in 2014, 2015, 2017 and a 2016 Citation Laureate. She received the William B. Coley Award for Distinguished Research in Tumor immunology in 2014 and the Warren Alpert Foundation Prize in 2017 for her contributions to the discovery of PD-1 pathway.

Laura K. Shawver, PhD
President and CEO, Silverback Therapeutics
San Diego, CA

Laura Shawver is president and chief executive officer of Silverback Therapeutics, utilizing its ImmunoTAC™ platform which pairs antigen binding domains with disease pathway-modulating payloads to create innovative therapies for cancer, virology and fibrosis. She received her doctorate in pharmacology at the University of Iowa in 1984 and did postdoctoral training at the University of Virginia Cancer Center and the department of hematology and oncology at Washington University.

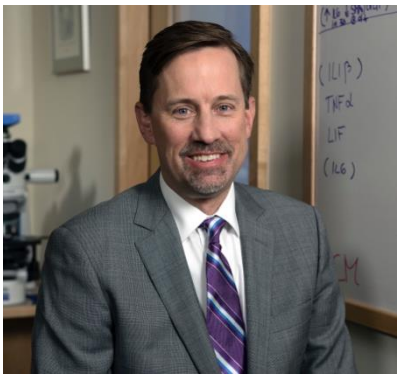
Before joining Silverback, Shawver was president and CEO of Synthorx, Inc utilizing synthetic biology to tune receptor pharmacology of cytokines and extend their half-life for immune-oncology and other serious diseases. Previously, she was CEO of Cleave Biosciences, Phenomix Corporation and president of SUGEN Inc. which focused on kinases and their function in cancer growth and survival. Her work in understanding the role of VEGF receptor in tumor angiogenesis led to the development of a new class of drugs including Sutent™ currently marketed by Pfizer for kidney and stomach cancer. Prior to her employment at SUGEN Inc., Shawver was employed at Berlex Biosciences (formerly Triton Biosciences). Diagnosed with ovarian cancer in 2006, she founded the non-profit organization, The Clearity Foundation which provides access to molecular profiling for women with recurrent and refractory disease to help prioritize treatment options. Shawver is an active member in the American Association for Cancer Research.

Ellen V. Sigal. PhD
Friends of Cancer Research
Washington, DC

Ellen V. Sigal, PhD, is Chairperson and Founder of Friends of Cancer Research (Friends), a think tank and advocacy organization based in Washington, DC. Friends drives collaboration among partners from every healthcare sector to power advances in science, policy and regulation that speed life-saving treatments to patients. During the past 20 years, Friends has been instrumental in the creation and implementation of policies ensuring patients receive the best treatments in the fastest and safest way possible. Sigal is Chair of the inaugural board of directors of the Reagan-Udall Foundation, a partnership designed to modernize medical product development, accelerate innovation and enhance product safety in collaboration with the U.S. Food and Drug Administration. She serves on the Board of the Foundation for the National Institutes of Health, where she chairs its Public Private Partnerships Committee.

In 2010, Sigal was appointed to a six-year term on the Board of Governors of the Patient Centered Outcomes Research Institute (PCORI) as a representative of patients and health consumers. Additionally, in 2016 Sigal was named to Vice President Biden's Cancer Moonshot Blue Ribbon Panel, to the Parker Institute for Immunotherapy Advisory Group and joined the inaugural board of advisors for the George Washington University's Milken Institute of Public Health.

She also holds leadership positions with a broad range of cancer advocacy, public policy organizations and academic health centers including: MD Anderson Cancer Center External Advisory Board, the Duke University Cancer Center Board of Overseers, The Sidney Kimmel Comprehensive Cancer Center Advisory Council, and the Sylvester Comprehensive Cancer Center External Advisory Board.



David A. Tuveson, MD, PhD
Cold Spring Harbor Laboratory
Spring Harbor, NY

David Tuveson completed chemistry at M.I.T., an MD-PhD at Johns Hopkins, medical residency at Brigham and Women's Hospital and a medical oncology fellowship at Dana-Farber/Harvard. While training, Tuveson co-developed KIT inhibitors with George Demetri for gastrointestinal stromal tumors, and Kras-dependent mouse cancer models with Tyler Jacks. At the University of Pennsylvania his lab generated the first mouse models of ductal pancreatic cancer, and at the University of Cambridge they identified new therapies. At Cold Spring Harbor Laboratory they developed organoid models of pancreatic cancer with Hans Clevers, enabling basic discoveries and clinical findings including signatures of "common responders" to chemotherapy. Tuveson is professor and director of Cold Spring Harbor Cancer Center, the chief scientist of the Lustgarten Foundation for Pancreatic Cancer Research, Cancer Center Director and Roy J. Zuckerberg Professor at CSHL, and serves on the Board of Scientific Advisors of the NCI, the Scientific Advisory Committee of Stand Up To Cancer and the Board of Directors of AACR. Awards include the Rita Allen, Waldenstrom and Hamdan.