

2023 Leading Edge of Cancer Research Symposium

hosted by

MD Anderson

Thursday, Nov. 16 | Friday, Nov. 17

MDAnderson.org/ResearchSymposium



THE UNIVERSITY OF TEXAS

MDAnderson
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Making Cancer History®

GOAL

The purpose of the Leading Edge of Cancer Symposium is to discuss scientific ideas, share knowledge and seek opportunities for collaboration amongst the leading cancer researchers from across the globe.

This symposium will discuss emerging concepts across the breadth of cancer research including New Frontiers in Cancer Genomics; Immunity, Inflammation, and Cancer; Advances in Technology and Computational Approaches for Spatially Resolved Tumor Multi-Omics; and Emerging Technologies for Cancer Therapeutics

Among our outstanding speakers at the symposium are 2023 Ernst W. Bertner Memorial Awardee, **Paul Mischel, M.D.** (Stanford University), 2023 Wilson S. Stone Memorial Awardee, **Andrea Schietinger, Ph.D.** (Memorial Sloan Kettering Cancer Center), and 2023 Heath Memorial Awardee, **Kevan Shokat, Ph.D.** (University of California San Francisco and Berkeley).

The Symposium begins Thursday morning and will end Friday afternoon.

EVENT LEADERSHIP

2023 Symposium Co-Chairs



Andrea Viale, M.D.
Symposium Chair
Associate Professor
Genomic Medicine



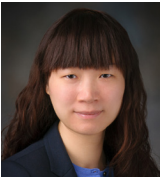
Kadir Akdemir, Ph.D.
Assistant Professor
Neurosurgery



Betty Kim, M.D., Ph.D.
Professor
Neurosurgery



Shabnam Shalapour, Ph.D.
Assistant Professor
Cancer Biology



Wenyi Wang, Ph.D.
Professor
Bioinformatics and Computational Biology



Giulio Draetta, M.D., Ph.D.
Executive Sponsor
Senior Vice President
Chief Scientific Officer

Eva Kelly, Program Manager, Office of the Chief Scientific Officer

9 a.m.

Symposium Opening and Welcome

Giulio Draetta, M.D., Ph.D.

Senior Vice President, Chief Scientific Officer

MD Anderson Cancer Center

Andrea Viale, M.D.

Associate Professor, Genomic Medicine

MD Anderson Cancer Center

9:10 a.m.

SESSION I: NEW FRONTIERS IN CANCER GENOMICS**Chair: Kadir Akdemir, Ph.D., MD Anderson Cancer Center**Don W. Cleveland, Ph.D., *University of California San Diego*Sohrab Shah, Ph.D., *Memorial Sloan Kettering Cancer Center*Elisa Oricchio, Ph.D., *École Polytechnique Fédérale de Lausanne*Jesse Dixon, M.D., Ph.D., *Salk Institute for Biological Studies*

11:15 a.m.

Break

11:30 a.m.

Keynote Address: Ernst W. Bertner Memorial Award**Lecture and Presentation**Paul Mischel, M.D., *Stanford University*

12:30 p.m.

Lunch and Poster Session

1:30 p.m.

SESSION II: IMMUNITY, INFLAMMATION, AND CANCER**Chair: Shabnam Shalapour, Ph.D., MD Anderson Cancer Center**Douglas R. Green, Ph.D., *St. Jude Children's Research Hospital*Florian R. Greten, M.D., *Frankfurt Cancer Institute*Steven Pollard, Ph.D., *University of Edinburgh*Melissa Hirose Wong, Ph.D., *Oregon Health & Science University*

3:35 p.m.

Break

3:45 p.m.

Keynote Address: Wilson S. Stone Memorial Award**Lecture and Presentation**

Andrea Schietinger, Ph.D.

Memorial Sloan Kettering Cancer Center

4:35 p.m.

Closing Remarks

Eyal Gottlieb, Ph.D.

Vice President, Research

MD Anderson Cancer Center

4:40-6 p.m.

Reception and Poster Session

- 9 a.m.** **Symposium Opening and Welcome**
Andrea Viale, M.D.
Associate Professor, Genomic Medicine
MD Anderson Cancer Center
- 9:05 a.m.** **SESSION III: ADVANCES IN TECHNOLOGY AND COMPUTATIONAL APPROACHES FOR SPATIALLY RESOLVED TUMOR MULTI-OMICS**
Chair: Wenyi Wang, Ph.D., MD Anderson Cancer Center
Peter Kharchenko, Ph.D., *Harvard University*
Elham Azizi, Ph.D., *Columbia University*
Ben Raphael, Ph.D., *Princeton University*
Rong Fan, Ph.D., *Yale University*
- 11:10 a.m.** **Break**
- 11:30 a.m.** **Keynote Address: Heath Memorial Award Lecture and Presentation**
Kevan Shokat, Ph.D., *University of California San Francisco*
- 12:30 p.m.** **Lunch and Short Talk Presentations**
- 2 p.m.** **SESSION IV: EMERGING TECHNOLOGIES FOR CANCER THERAPEUTICS**
Chair: Betty Kim, M.D., Ph.D., MD Anderson Cancer Center
Darrell Irvine, Ph.D., *Massachusetts Institute of Technology*
Wen Jiang, M.D., Ph.D., *MD Anderson Cancer Center*
Jeffrey Hubbell, Ph.D., *The University of Chicago*
Dennis Discher, Ph.D., *University of Pennsylvania*
- 4:05 p.m.** **Poster and Short Talk Awards**
- 4:10 p.m.** **Closing remarks**
Giulio Draetta, M.D., Ph.D.
Senior Vice President, Chief Scientific Officer
MD Anderson Cancer Center

Andrea Viale, M.D.
Associate Professor, Genomic Medicine
MD Anderson Cancer Center



The Ernst W. Bertner Memorial Award

The Ernst W. Bertner Memorial Award is conferred annually on a physician or scientist who has made distinguished contributions to cancer research. It is the oldest award conferred by The University of Texas MD Anderson Cancer Center and is presented at the annual symposium on cancer research.

Established in 1950, the award honors the late Ernst William Bertner, M.D., who was the first acting director of MD Anderson and first president of the Texas Medical Center. The award is made possible by a gift from the former Bertner Foundation, now the Ernst W. Bertner Endowment at St. Luke's Episcopal Hospital. It is sustained by MD Anderson.

The bronze medallion for the award symbolizes the twin goals of cancer research: prevention and cure. The hands of Hygeia emerge from a star to hold a bowl from which the serpent, ancient symbol of medical wisdom, is fed. The goddess Hygeia, daughter of Aesculapius, Greco-Roman god of medicine, represents hygiene and prevention of disease. The star denotes both the State of Texas and the Texan for whom the award is named.

The Ernst W. Bertner Memorial Award

Paul Mischel, M.D.

Paul Mischel, M.D., is professor and vice chair for research in Pathology at Stanford Medicine, and an institute scholar in Sarafan ChEM-H, Stanford University. His laboratory has made a series of seminal discoveries that have identified a central role for extrachromosomal DNA in cancer development, progression, accelerated tumor evolution and drug resistance. These findings, published in *Science*, *Nature*, and *Nature Genetics*, have provided a new understanding of the fundamental mechanisms of oncogene amplification and the spatial organization of altered tumor genomes, launching a new area of cancer research that links circular architecture with tumor pathogenesis. Mischel leads Team eDyNAmiC, which was awarded one of the \$25M Cancer Grand Challenges Awards from CRUK and the National Cancer Institute, to tackle the extrachromosomal DNA grand challenge. Mischel's lab has also uncovered actionable metabolic co-dependencies that are downstream consequences of oncogene amplification, including in the highly lethal brain cancer glioblastoma, that are poised for therapeutic exploitation. He is a National Academy of Medicine member, an American Society for Clinical Investigation elected fellow and past-president, an American Association of Physicians fellow and an American Association for the Advancement of Science fellow. Mischel is also a co-founder of Boundless Bio., Inc.



The Wilson S. Stone Memorial Award

The Wilson S. Stone Memorial Award was created in 1971 to recognize young researchers who have made outstanding contributions to biomedical sciences in the United States. The award honors the late Wilson S. Stone, Ph.D., a brilliant researcher and educator who helped develop the sciences within The University of Texas System.

The award is presented at the annual symposium on cancer research sponsored by The University of Texas MD Anderson Cancer Center.

The Wilson S. Stone Memorial Award

Andrea Schietinger, Ph.D.

Andrea Schietinger, Ph.D., is an associate member of the Immunology Program at the Sloan Kettering Institute. As a basic scientist and tumor immunologist, she has spent her career addressing fundamental, clinically relevant questions in cancer immunology. Her studies have led to several seminal discoveries on the creation of tumor antigens and the molecular programs associated with immune dysfunction in the context of tumors. Specifically, her lab aims to understand when, why, and how immune cells become unresponsive to tumors, utilizing genetic cancer mouse models that mimic cancer development in patients. She has established numerous collaborations with leading clinicians at the institution and beyond to apply the insights from mouse models to human disease. More recently, her lab has been interested to understand how immune cells destroy tissues during the onset of autoimmunity and has revealed startling new insights on the immune regulatory mechanisms driving autoimmune diseases. Her lab now aims to apply those insights for innovative therapeutic reprogramming approaches for the treatment of cancers. Schietinger's awards include the NIH Director's New Innovator Award, the inaugural Lloyd Old STAR Award from the Cancer Research Institute, the AAI BD Biosciences Investigator Award from the American Association of Immunologists, and the AACR Irving Weinstein Foundation Distinguished Lectureship Award.



The Heath Memorial Award

The Heath Memorial Award honors those who have made outstanding contributions to cancer patient care through the clinical application of basic cancer knowledge. The award is conferred annually by The University of Texas MD Anderson Cancer Center at the annual symposium on cancer research.

The late William W. Heath, a former chairman of The University of Texas System Board of Regents and past American ambassador to Sweden, and his wife, Mavis, established the award in 1965 in memory of Mr. Heath's brothers Guy H. and Dan C. The name of a third brother, Gilford G., was added after his death three years later.

The medallion for the Guy H., Dan C., and Gilford G. Heath Memorial Award symbolizes the care and protection of the cancer patient through the services of the physician, supported by research. Two central figures on the face of the medallion represent the physician tending his patient. Below the figures is the tree of life. To the left above them is the alpha superimposed on the omega, representing the continuing role of the physician in the care of his patients from birth to death. To the right of the figures is the retort, indicating the prominent part played by research in the physician's role as healer. All the figures and symbols emerge from the artist's interpretation of the sun, which represents life itself.

The Heath Memorial Award

Kevan Shokat, Ph.D.

Kevan Shokat, Ph.D., is a professor and vice-chair of the of Cellular and Molecular Pharmacology at the University of California, San Francisco, and a professor of chemistry at the University of California, Berkeley. He studies two of the most critical types of regulatory enzymes in the body – kinases and GTPases – both of which are key to directing cell activity. Shokat develops novel chemical tools to decipher how these enzymes interact with other proteins and contribute to cell signaling networks, under both normal and diseased conditions. A deeper understanding of kinases and GTPases and how they coordinate cell-cell communication may lead to more effective therapeutics for diseases such as cancer, Parkinson's, and other forms of immune dysfunction. He is a recipient of the Sjoberg Prize, the Howard Vollum Award, the NAS Award for Scientific Discovery, the AACR Award for Outstanding Achievement in Chemistry in Cancer Research, the Samuel Waxman Cancer Research Foundation Breakthrough Science Award, the Alfred Bader Award in Bioinorganic Chemistry, the Mark Foundation ASPIRE Award, the Frank H. Westheimer Prize and many other awards. He is a member of the National Academy of Sciences, the National Academy of Medicine and the American Academy of Arts and Sciences.

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