Benvenuto Annual Award Recipients

E mil J. Freireich, M.D. 1999	Ronald A. 2012
Emil Frei, M.D. 2000	Victor R. 2013
Fi Li Loo, D.Phil.	Frank Mc
2001	2014
Sidney Wallace, M.D.	James P. A
2002	2015
Jaffer Ajani, M.D.	Levi A. Ga
2003	2016
David Farquhar, Ph.D.	Jennifer A
2004	2017
William G. Dunphy, Ph.D. 2008	Bert W. O 2018
Fony Hunter, Ph.D.	Alfred L. (
2009	2019
F erid Murad, M.D., Ph.D.	Guillermi
2010	2021
Michael B. Kastan, M.D., Ph.D. 2011	Steven Ros 2022 Joseph Sch



Making Cancer History*

DePinho, M.D. Ambros, Ph.D Cormick, Ph.D., F.R.S. Allison, Ph.D. arraway, M.D., Ph.D. . Doudna, Ph.D. Malley, M.D. Goldberg, Ph. D. ina (Gigi) Lozano, Ph.D. senberg, M.D., Ph.D. hlessinger, M.D., Ph.D. 2023

Benvenuto Memorial Lecture

2024

featuring

Dr. Craig M. Crews

PROTACs and Targeted Protein Degradation: A New Therapeutic Modality

Great strides have been made in identifying disease-causing proteins that should be targeted pharmaceutically. However, more than 70% of the proteome is not currently pharmaceutically vulnerable due to the lack of an inhibitor binding pocket. Fortunately, current clinical trials are demonstrating the potential of PROTACs as a novel therapeutic modality, which will hopefully expand the oncology Drug Target Space in the coming years.

Wednesday, March 13, 2024



Making Cancer History®



JOHN A. BENVENUTO, PH.D.

Born in Detroit, Michigan on January 30, 1944, John A. Benvenuto, received a Bachelor of Science degree in chemistry from Wayne State University. He went on to attend West Virginia University in Morgantown, West Virginia, earning a Master of Science degree and a Doctor of Philosophy degree, both in chemistry. Dr. Benvenuto joined The University of Texas MD Anderson Cancer Center in 1973 and received postgraduate training in Medicinal Chemistry and Pharmacology in the Department of Developmental Therapeutics under Ti Li Loo, D.Phil., D.Sc. In 1975, he became a member of the MD Anderson faculty. Additionally, he was a faculty member of The University of Texas Graduate School of Biomedical Sciences in Houston.

Widely recognized in the scientific community for his expertise in clinical and biochemical pharmacology, Dr. Benvenuto published extensively on the mechanism of action of anticancer drugs. He was a member of the American Chemical Society, the American Association of Cancer Research, the American Society of Pharmacology and Experimental Therapeutics, the American Association for the Advancement of Science, the World Health Organization International Agency for Research on Cancer, Alpha Chi Sigma and Sigma Xi.

In 1986, Dr. Benvenuto learned he was afflicted with a metastatic carcinoid tumor. Through the efforts of staff at MD Anderson and his own indomitable spirit, Dr. Benvenuto made a miraculous recovery and returned to work in 1987. He continued to work full time until his death on December 22, 1996 – nearly 10 years later.

Often in pain and discomfort as he battled systemic cancer in the last years of his life, Dr. Benvenuto never complained. Indeed, his major concern was for the welfare of his friends and colleagues. A man of great dignity and personal warmth, Dr. Benvenuto left a lasting impression on all who knew him; his tremendous courage and unwavering optimism are an inspiration. Dr. Benvenuto's family and friends designed this lectureship as a tribute to perpetuate his memory. CRAIG M. CREWS, PH.D.

r. Craig Crews is the John C. Malone Professor of MCDB and professor of Chemistry and Pharmacology at Yale University. He graduated from the University of Virginia with a B.A. in Chemistry and received his Ph.D. from Harvard University in Biochemistry. On the faculty at Yale since 1995, his laboratory has developed the use of small molecules to control intracellular protein levels. In 2003, he co-founded Proteolix, Inc., whose proteasome inhibitor, Kyprolis[™] received FDA approval for the treatment of multiple myeloma. The Crews' lab is also credited with founding the field of 'Targeted Protein Degradation' drug development technology, i.e., PROTACs, which has the potential to target currently 'undruggable' disease causing proteins. In 2013, Dr. Crews launched the New Haven-based biotech venture, Arvinas, Inc., which is testing the first PROTACbased drugs in clinical trials for prostate and breast cancer. Since then he had founded two additional biopharmas, Halda Therapeutics and Siduma Therapeutics. Dr. Crews has received numerous awards and honors, including the Ehrlich Award for Medicinal Chemistry (2014), a NIH R35 Outstanding Investigator Award (2015), the AACR Award for Outstanding Achievement in Chemistry in Cancer Research (2017), the Khorana Prize from the Royal Society of Chemistry (2018), the Pierre Fabre Award for Therapeutic Innovation (2018), the Pharmacia-ASPET Award for Experimental Therapeutics (2019), the Heinrich Wieland Prize (2020), the Scheele Prize (2021), an honorary doctoral degree from the Technische Universität Dortmund, Germany (doctor rerum naturalium honoris causa) (2021), the Connecticut Medal of Technology (2022), the inaugural Bristol Myers Squibb Award in Enzyme Chemistry (2023), the Gabbay Prize (2023), the Kimberly Prize (2024) and the IUPAC-Richter Prize (2024).