

# WOMEN EXECUTIVES IN SCIENCE & HEALTHCARE



**Elizabeth L. Travis, Ph.D. FASTRO**

Elizabeth L. Travis is the Associate Vice President for Women Faculty Programs, Mattie Allen Fair Professor in Cancer Research and Professor in the Departments of Experimental Radiation Oncology and Pulmonary Medicine at The University of Texas MD Anderson Cancer Center. As an internationally recognized scientist, she is known for her work on complications of treatment, particularly pulmonary fibrosis, with the goal of developing treatments for survivors of their cancers which has had, and continues to have, a transformational impact on our understanding of the effects of radiation on normal tissues. In her leadership role as Associate Vice President (AVP) for Women Faculty Programs at MD Anderson Cancer Center, she is a consummate advocate for women faculty members and is committed to furthering their academic careers by ensuring they are appointed to high profile committees and leadership positions, by leading institutional policy change to address obstacles that interfere with women's success, and by providing career guidance to countless women faculty.

Dr. Travis received her Ph.D. degree in Experimental Pathology from the Medical University of South Carolina in 1976. That same year, she accepted a post doctoral position at the Gray Laboratory in the U.K. until 1979, when she returned to the United States as a Cancer Expert at the National Cancer Institute. Dr. Travis accepted a position in 1982 as Associate Professor in the Department of Experimental Radiotherapy at The University of Texas MD Anderson Cancer Center, as well as a faculty member at The Graduate School of Biomedical Sciences. She was promoted to Professor in the Department of Experimental Radiation Oncology in 1988, received her endowed position as Mattie Allen Fair Professor in Cancer Research in 1997, and has held a joint appointment as Professor in the Department of Pulmonary Medicine since 2003. Dr. Travis is a graduate of the Executive Leadership in Academic Medicine program (ELAM, 2000) and Rice Executive Leadership Development Program (1992).

### Achievements in Science

Dr. Travis is an innovative scientist who enjoys a well-earned international reputation. Trained as an experimental pathologist, she has made significant contributions to our understanding of the effects of radiation on normal tissues in her 25 years in the field. Her pioneering work, conducted during her post-doctoral year, in developing a non-invasive method for measuring breathing rate in mice as an indicator of radiation damage remains a standard technique for assessing lung injury not only in the radiation field but in the pulmonary research community as well. In addition, seminal work on volume effects in the lung (1994-1995) generated a renewed research interest in this area with results that were relevant to the treatment of thoracic malignancies with radiation. She has defined genetic components of the mouse irradiation damage response, delineated differences between acute and chronic effects of radiation pulmonary damage, and developed novel assays for biomarkers of lung injury, which are now utilized not only in experimental radiation research, but also in clinical radiation oncology departments. Her more recent research focuses on the genetic basis of

lung fibrosis, identifying novel genes, which are risk factors for this late sequelae. Her research and influence spawned a generation of scientists to study pulmonary radiation effects.

Dr. Travis' research extends to almost every normal tissue with seminal publications on each. A landmark paper published almost two decades ago on the role of bone marrow in radiation induced bowel complications continues to be regularly cited in papers published in high impact journals such as *Science*. Dr. Travis has searched tirelessly for protectors of normal tissue damage and molecular markers for intervention. Her work on treatment related complications is increasingly important as therapeutic improvements produce more long term survivors whose cancer may be cured but who suffer progressive, insidious, and chronic complications in the unavoidably treated normal tissues.

#### Achievements in Leadership and Advocacy for Women

Dr. Travis' lifelong dedication to advancing women leaders in academic medicine and science is as remarkable as her research accomplishments. Throughout her scientific career at MD Anderson, Dr. Travis has been an advocate for women in medicine and science not only in her institution but on the national and international scene.

Advocacy for women faculty began early in her career with her appointment to a small group of faculty charged with examining gender equity with respect to faculty salaries, rank, tenure, time to promotion, and endowed positions. Over the years, she has continued to work in various capacities to advance professional opportunities for women faculty and was a founding member of the Women and Faculty Administrators Organization. In her various leadership appointments, she has exhibited unwavering support for women faculty through mentorship, policy development, and commitment to improving the institutional environment necessary to recruit and retain women in academic medicine.

In November 2007, MD Anderson established the Office of Women Faculty Programs and appointed Dr. Travis as AVP. As an accomplished scientist, she was in a unique position to develop and implement initiatives dedicated to the recruitment, retention and advancement of women faculty. In these 5 years, Dr. Travis has spearheaded two policy changes that support the recruitment and retention of women faculty leaders, edited and published Legends and Legacies: Personal journeys of women physicians and scientists at M.D. Anderson Cancer Center and established and secured endowment for the Margaret L. Kripke Award recognizing an individual who has made significant contributions to the advancement and promotion of women in cancer research and cancer science. In 2012, Dr. Nancy Hopkins was the fourth recipient of this distinguished award. In addition, Dr. Travis has implemented a full slate of programming that includes professional development, mentoring, and recognition for women in science and medicine. Most recently, her office facilitated a half-day program, Build Your Career to Success, a workshop for early career women faculty at MD Anderson Cancer Center. This program was designed and taught by MDACC women faculty who previously attended AAMC/GWIMS career development workshops and ELUMs. With an emphasis on data, Dr. Travis leads the way in creating a fact based institutional view of the status of women faculty at MD Anderson and is committed to building an academic framework encompassing gender issues and organizational change. These data are reported out in "Metrics Matter" which sits on the WFP website. Dr Travis is a PI on a multi-institutional grant from the NIH, Gatekeeper and Gender Schemas.

In addition to her academic and leadership achievements at MD Anderson, Dr. Travis has made significant contributions to the professional advancement of thousands of women scientists and physicians around the world through her service to and leadership of several professional organizations. She served as President of the Radiation Research Society and was the first Radiobiologist elected to the Board of Directors of ASTRO. She launched the Women in Radiation Research Organization within the Radiation Research Society and as President, she established the Marie Curie Research Award in 1999 for an outstanding trainee either male or female in Radiation Research. As Chair of the Gordon Conference on Radiation Oncology (2005) and Program Chair for the International Radiation Research Society (2007), she brought gender balance to programs that were previously dominated by men. She has served on the council and served as 2009-2010 Chairperson for AACR-Women in Cancer Research. In these positions, she initiated, developed, and implemented three leadership development workshops for the AACR- Women in Cancer Research in 2004, 2005 and 2008. In 2009, she was elected to serve as regional representative and board member of the Society for Executive Leadership in Academic Medicine (SELAM) and serves as an elected member of the Steering Committee for the Association of American Medical Colleges – Group on Women in Medicine and Science (AAMC-GWIMS).

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In recognition of her accomplishments, Dr. Travis has received multiple awards including the International Conference on Radiation Biology's 2010 Award of Excellence and the Association of American Medical College's Women in Medicine Leadership Development Award in 2009 and the American Association of Cancer Research-Women in Cancer Research Distinguished Women Scientist Award in 2007. In 2007, she was appointed as a fellow of the American Society of Radiation Oncology (ASTRO) for her contributions to that society and to radiation sciences. In 2001, Dr. Travis was named a Distinguished Alumna by Indiana University of Pennsylvania, where she completed her undergraduate degree.