

NOTABLE CANCER CENTER MEMBER

Jane Winter, MD



As unlikely as it may seem, her passion for ballet helped shape the career of Jane Winter, MD. As an intern at the University of Chicago, Winter planned to become a cardiologist, but had a last minute change of “heart” and decided to specialize in hematologic malignancies. Her plans to do a cardiology fellowship in New York no longer made sense, but she still had hopes of living in Manhattan. “My goal in life at that time,” she admits, “was a subscription to the New York City Ballet.” Her best friend from medical school was a resident at Columbia-Presbyterian Medical Center and told the brand new head of hematology / oncology about Winter. Winter’s friend was exhorted to “Bring her—tomorrow!”, her fellowship began and the ballet subscription became a reality.

Winter, a professor in the division of hematology/oncology at Northwestern’s Feinberg School of Medicine, came to work at the Lurie Cancer Center in 1981, to complete her fellowship, and has been here ever since. She recalls that there were only five faculty members in the division of hematology. Her lab focused initially on making monoclonal antibodies to try to distinguish large cell lymphoma from other lymphomas. “I first got into transplantation because I had made complement-fixing monoclonal antibody reagents to lymphoma-associated antigens that we wanted to use clinically. The antibodies could be used to purge lymphoma cells from the harvested marrow of patients who were to undergo high-dose chemotherapy followed by

autotransplant, with the patient's own plasma acting as the source of complement. Subsequently, a transplant program was developed at Northwestern that Winter directed for more than a decade. Throughout those years Winter continued her research, concentrating on what we now call translational studies and clinical trials. She spent many years collaborating with colleagues in the Department of Biochemical Engineering and Cell and Molecular Biology on the *ex vivo* expansion of granulocyte and megakaryocyte progenitors.

Winter has done a significant amount of her prognostic indicator work with Eastern Cooperative Oncology Group (ECOG), investigating biologic correlates of clinical outcomes in the large, phase III, US Intergroup trials.. This work has been in collaboration with Drs. John Reed at the Burnham Institute in La Jolla and Dr. Randy Gascoyne at the British Columbia Cancer Agency. "The major concept is that new therapies may change prognostic indicators, meaning our systems for deciding who will or won't benefit from treatment have to be reevaluated every time a new therapeutic strategy is introduced. Also, new therapies may have the greatest impact on well-defined subsets of patients within a very heterogeneous category of disease.

Lymphomas are especially heterogeneous--and we need to look carefully at which groups we're affecting. Our research has revealed a lot about the biology of the disease; from a seemingly simplistic study of prognostic indicators in a large group of patients we learned that not everyone with diffuse, large B-cell lymphoma benefits from rituximab, or so we think, and that the benefits are specific to subgroups. Now we can work backwards, question why this is the case, what it tells us about the biology of the disease and how that information might help us develop new therapies for select subgroups of patients. That's exciting." An update of this work will be presented in a plenary session at the upcoming international lymphoma meetings in Lugano, Switzerland. Winter's clinical focus is on novel therapies including radio-immunotherapy in the context of stem cell transplantation, lymphoma vaccines and novel combinations of targeted therapies.

An active member of the American Society of Hematology (ASH), Winter was one of the two chairs for this year's Education Program for the society's annual meeting and the "Highlights of

ASH" program. Additionally, she sits on the hematology subspecialty board of the American Board of Internal Medicine (ABIM) where she is one of eight doctors who collaborate to write the hematology qualifying exam.