



CANCER PREVENTION & RESEARCH  
INSTITUTE OF TEXAS

Award ID:  
R1005

Project Title:  
Recruitment of Rising Stars

Award Mechanism:  
Recruitment of Rising Stars

Principal Investigator:  
Tyler, Jessica

Entity:  
The University of Texas M.D. Anderson Cancer Center

Lay Summary:

Our current and future research focus stems from our published and unpublished work on how and why chromatin is assembled and disassembled during transcription, replication, and repair and the implications for the human diseases of cancer and aging. The histone components of chromatin that carry epigenetic information are the most highly conserved proteins in all nature. This enables us to use a variety of eukaryotic systems to discover and study novel mechanisms of epigenetic regulation. Our studies to date have used the powerful combination of yeast genetics, cell biology, biophysics, biochemistry, structural biology and genomic approaches. We will continue to utilize this comprehensive range of approaches, together with high throughput sequencing technologies, in order to gain novel mechanistic insights into the fundamental genomic processes and to establish the physiological relevance of our findings.