

**New Jersey State Commission on Cancer Research
LAY ABSTRACT OF RESEARCH PROJECT**

NAME OF PRINCIPAL INVESTIGATOR/PROGRAM DIRECTOR: **Haiyan Qi**

Project Title: **The Mechanism of tumor cell killing by telomeric G-quadruplexes**

Description: **To understand how G-quadruplexes induce tumor cell death.**

New anticancer agents with novel mechanisms of action are urgently needed in the clinic. Our recent studies have suggested that telomeric G-quadruplexes are potential new anticancer agents whose mechanism of tumor cell killing is unknown. Our proposed studies will establish the molecular mechanism of tumor cell killing by telomeric G-quadruplexes, and provide foundation for future exploration of G-quadruplexes as new anticancer agents. Successful development of the new anticancer agents will certainly benefit New Jersey citizens.