



SAN DIEGO'S NATIONAL CANCER INSTITUTE - DESIGNATED CANCER CENTERS



C3 / Pedal the Cause 2016

“Epigenetic Basis of Platinum Drug-resistance in Ovarian Cancer”

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Abstract:

The majority of patients treated for ovarian cancer receive platinum-based chemotherapy, but 85 percent of patients who initially responded will eventually relapse with a recurrent tumor that is resistant to treatment. Platinum drug resistance is a serious clinical problem affecting thousands of patients every year. With the modern tools of precision medicine and genomics, scientists now have a chance to better understand how tumor cells adapt to and escape the treatment. PEDAL15 funding will allow scientists to apply an experimental system developed to obtain platinum sensitive and resistant cells that have an identical DNA sequence. Scientists will evaluate why tumors can rapidly adapt to treatment and become resistant. This research is likely to predict why certain ovarian tumors are more likely to become resistant and how soon. It may also lead to the identification of therapies to prevent or delay the onset of platinum resistance.