

Title: "Epigenomic Insights into Cancer Treatment Resistance: Implications for Chemotherapy and Radiation Therapy"

Epigenomic modifications are critical drivers of cancer treatment resistance, particularly in the context of chemoresistance in ovarian cancer. Integrative epigenomic analyses have identified key regulatory elements that contribute to treatment failure, offering insights into the mechanisms underlying therapy resistance. Recent advancements in epigenome editing tools and new applications for machine learning present new opportunities for targeted or more personalized therapeutic interventions. This presentation will explore the implications of these findings in radiation therapy, highlighting the potential for personalized treatment strategies based on a deeper understanding of the epigenetic landscape, with the goal of improving patient outcomes.

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