

William Noderer

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Graduate Institution: Stanford University

Location: Stanford CA

Graduate Discipline: Chemical Engineering

Hometown: Macungie PA

Research Interests:

High-dose exposure to ionizing radiation (IR) has been shown to lead to an array of pathologies including an increased risk of cancer. However, there is no empirical evidence linking low-dose IR to a similar elevated risk of cancer. The effects of low-dose IR have been estimated by linearly extrapolating from the effects of high-dose IR. This linear approximation would be inappropriate if cells have a fundamentally different response to high-dose IR and low-dose IR. This project investigates the discontinuous behavior of the p53 pathway in response of high-dose and low-dose IR. The findings of this project are anticipated to help policy makers assess the cancer related risks of low-dose IR.

About me:

I am a second year Chemical Engineering PhD student at Stanford University working in Cliff Wang's group. Our lab aspires to understand the fundamental mechanisms of cancer progression. We develop genetic tools to control dynamic gene expression and measure phenotypic outcomes. Working with mammalian cells has been frustrating at times, but it is ultimately rewarding when it works.

Outside of the lab, I am an avid hiker and backpacker. I have tried to take advantage of the Bay Area's numerous nature preserves and state parks. In addition, I am an amateur homebrewer and am a founding member of the Stanford Brewing Club.



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