

Abstract Submitted  
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**Evolution of radiation resistance in a complex microenvironment<sup>1</sup>**

SO HYUN KIM, Ehwa Womans University, ROBERT AUSTIN, Princeton University, MONAL MEHTA, ATIF KAHN, Cancer Institute of New Jersey — Radiation treatment responses in brain cancers are typically associated with short progression-free intervals in highly lethal malignancies such as glioblastomas. Even as patients routinely progress through second and third line salvage therapies, which are usually empirically selected, surprisingly little information exists on how cancer cells evolve resistance. We will present experimental results showing how in the presence of complex radiation gradients evolution of resistance to radiation occurs.

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Robert Austin  
Princeton University

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