



MMI 291 Seminar Series

Current Theme: Interdisciplinary Research
Winter Quarter 2021 – CRN 33311



Friday Seminar – 12:10-1 p.m.

“Understanding the DNA damage response in HIV replication and cure”

Research Interest

The goal of our research is to better understand the lifecycle of lentiviruses such as HIV-1 and HIV-2. We strive to identify and characterize host proteins that regulate lentiviral replication, and to uncover the molecular constraints governing viral evolution and adaptation. We are particularly focused on how DNA repair proteins and pathways can both enhance and inhibit lentiviral replication. We take a unique interdisciplinary approach to study these interactions by combining molecular virology, biochemistry, and evolutionary biology. As HIV represents a major burden to human health, particularly in underserved populations, we hope that our research will contribute to the global fight against this pandemic virus. We are strongly committed to scientific excellence by fostering a diverse, equitable, and inclusive community.

Publications

Fregoso OI, Emerman M. Activation of the DNA Damage Response Is a Conserved Function of HIV-1 and HIV-2 Vpr That Is Independent of SLX4 Recruitment. *mBio*. 2016 Sep 13;7(5). pii: e01433-16. doi: 10.1128/mBio.01433-16. PubMed PMID: [27624129](https://pubmed.ncbi.nlm.nih.gov/27624129/); PubMed Central PMCID: [PMC5021806](https://pubmed.ncbi.nlm.nih.gov/PMC5021806/).

Li D, Lopez A, Sandoval C, Nichols-Doyle R, Fregoso OI. HIV Vpr modulates the host DNA damage response at two independent steps to damage DNA and repress double-strand DNA break repair. *mBio*. 2020 Aug 4;11(4):e00940-20. doi: 10.1128/mBio.00940-20. PMID: 32753492; PMCID: [PMC7407082](https://pubmed.ncbi.nlm.nih.gov/PMC7407082/).

Feb
19



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Mentor Professor
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**Feb. 19, 2021
12:10 – 1 p.m.
ZOOM Meeting**

Medical Microbiology
& Immunology
School of Medicine

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We hope to see you there!