

# The Biological and Biomedical Joint Seminar Series

(Hosted by the departments of Molecular & Cellular Biology, Chemistry & Biochemistry, Cellular & Molecular Medicine, and Plant Sciences)

**“Is sexual reproduction a Eukaryotic adaptation to prevent genomes that have lost genes to faulty DNA break repair from being passed on to the next generation? or **Why the Pachytene Checkpoint?**”**

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Tuesday March 21<sup>st</sup>, 2023 @ 11AM

<https://arizona.zoom.us/j/86797226172>

Passcode: MCBSeminar

Hosted By: Keith Maggert (MCB)



I will present a new hypothesis for how sexual reproduction creates a filter which selectively culls genomes that have lost genes due to faulty double-strand DNA break repair and favors transmission to the next generation of genomes that retain the intact parental organization. The same mechanism, reacting to specific accidental genome reorganizations, can be expected to initiate the partitioning of one species into two, and then to progressively drive adaptive speciation without requiring separation of the incipient species nor population bottlenecks and genetic drift.  
PMC8998493

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