

The Biological and Biomedical Joint Seminar Series

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

“Ewing and awing at transcription”

Jacob C. Schwartz

Assistant Professor
Chemistry & Biochemistry
The University of Arizona

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ENR2 Room S2I5 @ 11AM

Hosted By: Ted Weinert



RNA-binding proteins do many things in the cell and my lab studies those that have a surprising role in regulating transcription. Understanding this function helps us to fill gaps in our understanding of proteins important to neurodegenerative disease and pediatric cancers. I'll present our work to determine how the protein FUS binds RNA, which is the trigger that unlocks FUS function in the cell. Then, I'll describe our work defining the overlap fo FUS functions with another RNA-binding protein, TDP-43, to explain the roles shared by these proteins in neurodegenerative disease. Last, I'll show the unusual way these proteins act on transcription, forming a cellular granule, and how this process can become hijacked to contribute to the development of Ewing and other sarcomas.

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