

# GDCB SEMINAR

4:10-5 p.m.

Tuesday, April 27, 2021

## Mechanisms that influence splicing decisions

**Abstract:** RNA splicing is an enigmatic and essential step in eukaryotic gene expression that is catalyzed by a complex of protein and RNAs called the spliceosome. Among the many outstanding questions about splicing are:

- How does the spliceosome know where an intron is?
- How are specific short and information poor sequences at the sites of RNA catalysis selected with such high fidelity?
- Where do introns come from?

In particular, I will focus on the mechanism of branchpoint recognition by the U2 snRNP, a key step in the process that restricts selection of the 3' splice site, a process that is disrupted in certain cancers. I will also entertain some relatively undeveloped hypotheses to explain emerging results that link transcription and pre-mRNA competition to splicing regulation, and if there is time will describe our effort to observe the birth of new introns.

**Host:** Stephen Howell, Charles F. Curtiss Distinguished Professor



**Manuel Ares, Jr.**  
University of California,  
Santa Cruz

Professor of Molecular, Cell and  
Developmental Biology

**Join meeting:**

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