



# Genome Sciences Seminar

Wednesday, 5.19.21 | 3:30 | held remotely

<https://depts.washington.edu/gstrestrc/remote.htm>

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## Dr. Elçin Unal

Associate Professor

Department of Molecular and Cell Biology

UC Berkeley

## “LUTI mRNAs: a fresh perspective on gene regulation”

### The Unal Lab:

We study the principles that control the nuclear and cytoplasmic integrity of gametes.

We are interested in understanding the principles and regulation of meiotic differentiation. This process, also known as gametogenesis, is a dynamic and tightly regulated developmental program. Upon commitment, a progenitor cell undergoes DNA replication and recombination followed by two consecutive meiotic divisions and cellular remodeling to form haploid gametes; the mature germ cells necessary for the propagation of sexually reproducing organisms. A fundamental question is how the fitness of gametes is ensured during their production such that they contain the appropriate nuclear and cytoplasmic content to make healthy progeny. Using budding yeast sporulation as a model system, my lab addresses this question in two different contexts: First, in the context of meiosis, with the aim of understanding how the dynamic gene expression program of meiosis controls specialized events such as stepwise chromosome segregation. Second, we study gametogenesis in the context of aging, with the aim of understanding how gamete formation promotes cellular rejuvenation and how quality control pathways mediate organelle segregation and protein homeostasis during gamete formation.

<http://www.unal-and-brar-labs.org/unal-research>

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Questions? Contact Brian Giebel at [bgiebel@uw.edu](mailto:bgiebel@uw.edu) or visit the Seminar website at <http://www.gs.washington.edu/news/seminars.htm>

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