



# Genome Sciences Seminar

Wednesday, 4.27.22 | 3:30 | Foege Auditorium

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

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## Dr. Thelma Madzima

Assistant Professor

University of Washington, Bothell

## “Epigenetic & abiotic stress mediated transcriptional regulation in maize plants”

The long-term goal of my research program is to understand how epigenetic mechanisms facilitate responses to abiotic stress in plants.

I use maize (*Zea mays*) as my predominant organism of study. Maize is an essential agronomical crop; important to global agriculture and the United States economy. Maize yield can be significantly affected by environmental, abiotic stress factors such as drought, salinity, cold, UV-B radiation and nutrient deficiency. The impact of environmental stress can significantly affect global food security and the U.S. economy.

I use molecular, genetics and genomics approaches to understand stress response mechanisms at the transcriptional level. I am specifically interested in how *epigenetic* mechanisms, associated with modifications to chromatin, regulate plant stress response. Understanding the fundamental mechanisms of epigenetic responses to environmental stress factors will be useful in improving agricultural productivity.

<http://thelmamadzima.squarespace.com/>

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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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