



2021-2022 Sustainable Campus Fund Innovation Research Project Proposal Winners

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Project: Functional Diversification of *FLOWERING LOCUS T (FT)*-like Genes in Pooideae Grasses

LAY SUMMARY

This project aims to engage in research on sustainability through the exploration of grass genetics. As climate change progresses, and the human population continues to grow, agricultural practices must be improved to increase crop yields more sustainably. Overall, understanding the natural evolution of grasses, especially traits related to flowering, can help optimize agricultural production both economically as well as ecologically. More specifically, we aim to understand if the diversification of FT-like genes can explain shifts in how annual versus perennial plant flowering responds to devernialization. The results of the research will be a critical jumping-off point for developing perennial crops with well-understood flowering regimes. This work aligns with the SCF mission of increasing sustainable practices at UVM and will undoubtedly further our understanding of how to create a more regenerative future of agriculture.

Cited: [Student Awards | The Graduate College | The University of Vermont \(uvm.edu\)](#)