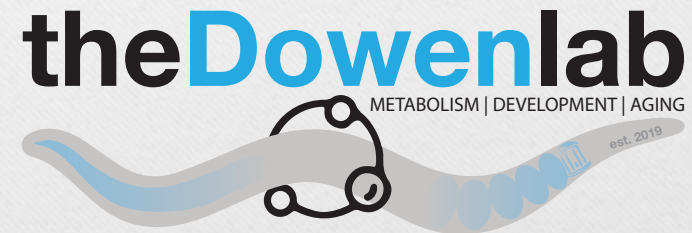


# Role of SKN-1 in mediating CEH-60 transcriptional activity in oxidative stress response in *C. elegans*

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# Research Question

- My research question concerns of a particular protein called SKN-1 in *C. elegans* that plays a central role in detoxification against oxidative stress. On the other hand, CEH-60 is another protein that opposes the SKN-1 by repressing such detoxification genes.
- Oxidative stress occurs when there is an excess of oxidative species in our body and we can't get rid of it fast enough. Such stress can damage cells, proteins, and DNA, contributing to aging.
- With *C. elegans*, a model organism frequently used for genetic studies, I explored how these proteins interact with each other to help the worms survive under oxidative stress.
- My research question matters because it contributes to our current understanding of how animals respond to stress on a molecular level. By building on to such knowledge, this research helps us discover the underlying process of aging and metabolic diseases such as cancer, diabetes, and obesity.



## Results and Impacts

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- My results suggest that the *skn-1* gene in the intestines of *C. elegans* does not play a direct role in CEH-60 activity of repressing detoxification.
- This is an important finding for the research community, because it suggests that the protein CEH-60 serves its function in a different way than previously thought.
- To the general public, this particular finding may not seem very important, but by intriguing more questions and directing future studies, it will help better understand the metabolic processes in our bodies, which is related to many diseases and aging.