I really enjoyed using this Data Nugget in my AP Biology class this year. We used it to focus on local adaptations and fitness, but it could just as easily be used when talking about any of the other four Big Ideas for the course. The “antifreeze” chemical in the *Arabidopsis* fits well in Big Idea 2 (focusing on cellular structures and functions), comparing survival in different ecosystems can be used in Big Idea 4 (systems and interactions), and you can even make a case for Big Idea 3 (genetic information and expression).

This a big and challenging module. Both parts could easily be used independently of the other. And while it is sometimes tempting to leave a ready-to-go, high quality resource with a substitute, this is **not** a module I would recommend if you aren’t around to support your students. We all used Type B, and students were encouraged to stop and share their progress with a classmate at multiple checkpoints.

The math operations and graphing aren’t unreasonably challenging, but if you haven’t taught standard deviation or standard error to your students, I would recommend using Type A or B for this module. I actually used this early enough in the semester to use the activity as our introduction to those techniques.

When I next use this module, I might use the first part of the Data Nugget as an example when discussing examples of evolutionary mechanisms, and then have students complete the 2nd half of the Data Nugget as an activity. Next year, I will also be adding some research on heat-shock genes in *Drosophila* published by Lindsey Fallis during her work at Kansas State University. As an NSF GK-12 Fellow, she recreated her lab research with students at the high school I was teaching at, and the study has many similarities to *Arabidopsis* study in this module. We’ll read one of the papers published from her research (http://digital.bl.fcen.uba.ar/download/paper/paper_00166707_v139_n10_p1331_Fallis.pdf)