

measured by one or more connected DEnMs. Additionally, the user may indicate a time-window to view historical sensor information, such as the last 24 hours. In our laboratory we find using these 24 hr readouts to be very useful in verifying new lighting-regime programs were initiated correctly, and there were no unexpected incubator faults that occurred overnight.

Figure 2. Screenshot of the settings window of the DEnM_Visualizer program demonstrating that the program can display the live data from multiple DEnMs (in this example, from units numbered 10, 11, and 14) and can display historical readings of a user-defined length.

DEnM_Visualizer is an open-source project and can be downloaded at https://github.com/samrund/
DEnM_Visualizer. It is written in Python and has been tested on both Windows and Mac operating systems. The GitHub page has detailed installation instructions.

References: Cavanaugh, D.J., J.D. Geratowski, J.R. Wooltorton, J.M. Spaethling, C.E. Hector, X. Zheng, E.C. Johnson, J.H. Eberwine, and A. Sehgal 2014, Cell 157: 689-701; Dunlap, J.C., J.J. Loros, and P.J. Decoursey 2004, *Chronobiology: Biological Timekeeping*, Sinauer Associates, Sunderland Mass.; Rund, S.S.C., S.J. Lee, B.R. Bush, and G.E. Duffield 2012, J. Insect Physiol. 58: 1609-1619.



An efficient, practical, and reliable yeast shaker for *Drosophila melanogaster* culture.

<u>Garcia, Jan</u>. Biology Department, Skidmore College, Saratoga Springs, NY 12866 USA; email: <u>jgarcia1@skidmore.edu</u>.

A few grains of dry yeast is beneficial to the establishment of new fruit fly cultures, but too much can result in the surface of the food being overgrown by the yeast. It is difficult to pour consistently a few grains

of dry yeast into multiple new vials from an open container, and adding them by hand is slow. To overcome this problem, I have developed a "yeast shaker." The yeast shaker is made by using a dissecting needle to perforate the tip of a microcentrifuge tube only one time (Figure 1). This yeast shaker is simple to use. A single shake typically drops two to five grains. This simple method is fast, reliable, consistent, and inexpensive.

Figure 1. Dry yeast shaker (right), dissecting needle used to perforate the microcentrifuge tube (left), and five grains of yeast ejected by a single strong shake.

