



24/7 Automated Data Collection

KEY FEATURES:

- ✓ Automatically track & quantify worm movement
- ✓ Long-term, consistent data acquisition
- ✓ No user bias, no tedious training

WMicroTracker provides the capability to measure the locomotor activity of small animals cultured in multiwell plates.

This system is designed for high-throughput screening assays to evaluate the biological effects of potential compounds/drugs, RNAi/morpholino, as well as for mutant phenotyping studies in *C. elegans*.

- ✓ Load your experimental parameters and walk away. Your data will be ready for you at the end of the programmed time.
- ✓ Perform live worm assays for several weeks at a time with high reproducibility.

KEY APPLICATIONS:

- ✓ Mutant & Toxicity Screening
- ✓ Drug screening
- ✓ Aging and healthspan
- ✓ Chemotaxis & path tracking on agar
- ✓ Oxidative stress



Original Design by PhylumTech

We offer 2 configurations of the WMicroTracker instrument.

- ✓ WMicrotracker One allows you to get fast measurements of the locomotor activity and viability of a worm population placed in liquid environment on 96-well or 384-well plates.
- ✓ WMicrotracker Arena allows you to get detailed measurements of motion and viability, including path tracking, distance and speed measurements. Compatible with solid culture media such as agar.



"I have been using the WMicroTracker every day for the past 5 years. My data is always consistent and I never had any issues with the platform or the software. I am confident in my team's data, regardless of who the experimenter is."

Alex Parker, Department of Neuroscience, University of Montreal,

Request a quote or demo at support@nemamatrix.com

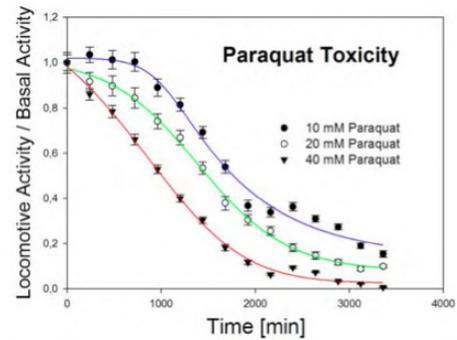


Figure 1. Toxicity assay. The dose-response effect of oxidative stress on worm locomotor activity over time can be observed. Worms were exposed to a reactive oxygen species (ROS) generating compound. Each concentration was tested four times, using 30-70 animals per well in a 96-well plate.

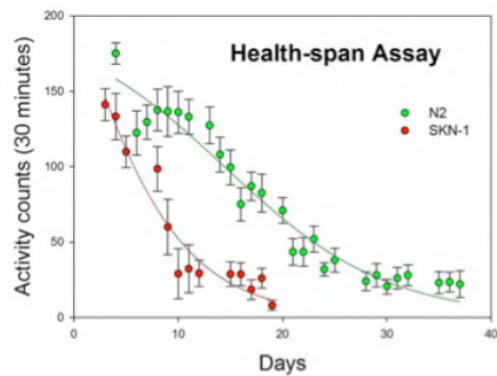


Figure 2. Lifespan assay. The decreased lifespan of skn-1 mutants can be observed. Samples were recorded for 1 hour once per day, four times per condition.

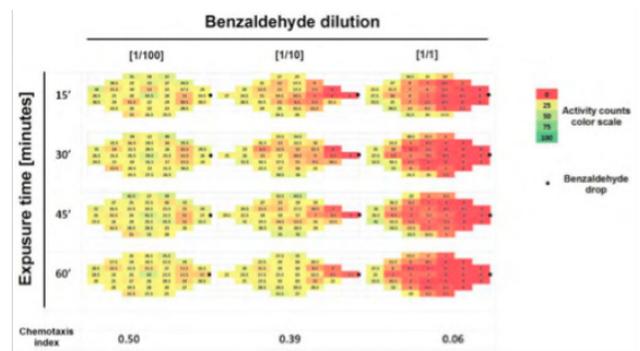


Figure 3. Chemotaxis Assay. Worm chemotaxis toward benzaldehyde was automatically recorded. Three concentrations of benzaldehyde were placed on an agar substrate in a multiwell plate, using 30-70 animals per well.