Drug screening

1. Rinse Synchronized worms from plates using buffer.
2. Count number of worms in 10 μL, and adjust volume to get 50 worms / 100 μL. Add food source if necessary.
3. Transfer 90 μL of worm solution to a 96-well flat-bottom microplate and let worms settle for 1 hour.
4. Measure (basal) activity using the WMicrotracker for at least 30 minutes.
5. Add reagent of interest to desired final concentration.
6. Resume measurements for at least 30 minutes.

What you measure: activity score = number of times the LED beams were disrupted by worms in each well, averaged per time bin.

Movement score of swim-deficient worms treated with various drugs. Papaverine and promethazine correct the impaired movement of unc-44(e362).

Movement score average over 600 minutes in nmr-2(ok3324) mutants relative to DMSO controls.

Schmeisser et al., 2017

Get more information about the WMicrotracker