

Materials List for:

# An Assay for Measuring the Effects of Ethanol on the Locomotion Speed of *Caenorhabditis elegans*

Andrew G. Davies<sup>1,2</sup>, GinaMari G. Blackwell<sup>1,2</sup>, Richard C. Raabe<sup>1</sup>, Jill C. Bettinger<sup>1,2</sup>

<sup>1</sup>Department of Pharmacology and Toxicology, Virginia Commonwealth University

<sup>2</sup>VCU Alcohol Research Center, Virginia Commonwealth University

Correspondence to: Jill C. Bettinger at [jcbettinger@vcu.edu](mailto:jcbettinger@vcu.edu)

URL: <https://www.jove.com/video/52681>

DOI: [doi:10.3791/52681](https://doi.org/10.3791/52681)

## Materials

Name	Company	Catalog Number	Comments
C. elegans strains	Caenorhabditis Genetics Center		
60 x 15 mm Petri plates, triple vented	Greiner Bio-One	628161	Other plate brands will suffice.
NGM agar	Various		NaCl (3 g/L), agar (17 g/L), peptone (2.5 g/L), 1 ml cholesterol (5 mg/ml in ethanol), 1 ml (1 M) MgSO <sub>4</sub> , 1 ml (1 M) CaCl <sub>2</sub> , 25 ml (1 M) KPO <sub>4</sub> , pH=6, 975 ml H <sub>2</sub> O
Forceps	Various		e.g., Fisher Scientific #10300
37 °C Incubator	Various		For drying agar
Digital balance	Various		For determining plate weights and agar volume
Copper rings	Plumbmaster	STK#35583 (48 cap thread gasket)	1.6 cm inner diameter, 1.8 cm outer diameter copper rings
100% ethanol	Various		
Parafilm M	Bemis	PM996	
CCD camera	QImaging	RET-4000R-F-M-12	This camera has a large field of view.
Stereomicroscope with C-mount and 0.5X objective	Leica	MZ6	Discontinued model, M60 is current equivalent.
Light source	Schott	A08923	3"x3" backlight for even illumination across the field of view
Imaging and tracking software	Media Cybernetics	ImagePro-Plus v6.0-6.3	Newer versions of the software have tracking functions.