Materials List for:

## An Experimental and Bioinformatics Protocol for RNA-seq Analyses of Photoperiodic Diapause in the Asian Tiger Mosquito, *Aedes albopictus*

Monica F. Poelchau<sup>1</sup>, Xin Huang<sup>1</sup>, Allison Goff<sup>1</sup>, Julie Reynolds<sup>2</sup>, Peter Armbruster<sup>1</sup>

Correspondence to: Monica F. Poelchau at mpoelchau@gmail.com, Peter Armbruster at paa9@georgetown.edu

URL: https://www.jove.com/video/51961

DOI: doi:10.3791/51961

## **Materials**

Name	Company	Catalog Number	Comments
Incubator - Model 818	Thermo-Scientific	3751	120 V
Controlled environment room	Thermax Scientific	N/A	Walk-in controlled environment room built to custom specifications by Thermax Scientific Products. A larger alternative to an incubator. http://thermmax.com/
Cool Fluorescent bulb	Philips	392183	4 W
Petri Dish 100 mm x 20 mm	Fisher	08-772-E	
Filter Paper 20.5 cm	Fisher	09-803-6J	
9.5 L Bucket	Plastican	Bway Products	http://www.bwayproducts.com/ sites/portal/plastic-products/plastic- open-head-pails/117
Utility Fabric-Mosquito Netting White	Joann	10173292	http://www.joann.com/utility- fabric-mosquito-netting- white/10173292.html
Orthopedic stockings	Albahealth	23650-040	product no. 081420
Organic Raisins	Newman's Own	UPC: 884284040255	
Oviposition cups (brown)	Fisher Scientific	03-007-52	The product is actually an amber 125 ml bottle that we saw the top off of.
Recycled Paper Towels	Seventh Generation	30BPT120	
Modular Mates Square Tupperware Set	Tupperware		http://order.tupperware.com/pls/ htprod_www/coe\$www.add_items
Glass Grinder	Corning Incorporated	7727-2	These Tenbroeck tissue grinders break the eggs and release RNA into the TRI Reagent.
TRI Reagent	Sigma Aldrich	T9424	Apply 1 ml TRI Reagent per 50-100 mg of tissue. Caution — this reagent is toxic.
TURBO DNA-free	Ambion/Life Technologies	AM1907	This kit generates greater yield than traditional DNase treatment followed by phenol/chloroform cleanup, and it is simpler to use.
RNaseZap	Ambion/Life Technologies	AM9782	Apply liberally on the bench surfaces and any equipment that might be in contact with the RNA samples. The solution is slightly alkaline/corrosive, can cause irritation and is harmful when swallowed.
2100 Bioanalyzer	Agilent Technologies	G2939AA	Place up to 12 RNA samples on one chip.

<sup>&</sup>lt;sup>1</sup>Department of Biology, Georgetown University

<sup>&</sup>lt;sup>2</sup>Insect Physiology Lab, EEOB, The Ohio State University

Hemotek Membrane Feeder	Hemotek	5W1	This system provides 5 feeding stations that can be used simultaneously. Includes PS5 Power Unit and Power cord; 5 FUI Feeders + Meal Reservoirs and O-rings; Plastic Plugs, Hemotek collagen feeding membrane; Temperature setting tool; and Plug extracting tool. The company's mailing address is: Hemotek Ltd; Unit 5 Union Court; Alan Ramsbottom Way; Great Harwood; Lancashire, UK; BB6 7FD; tel: +44 1254 889 307.
Digital Thermometer and Probe	Hemotek	MT3KFU	MicroT3 thermometer and KFU probe. This is used to set the temperature of each FUI feeding unit.
Chicken Whole Blood, non-sterile with Sodium Citrate	Pel-Freez Biologicals	33130-1	The 500 ml of blood were frozen and stored in 20 ml aliquots at -80 °C for up to 1 year. Thaw blood at room temperature for at least 1 hr before using.