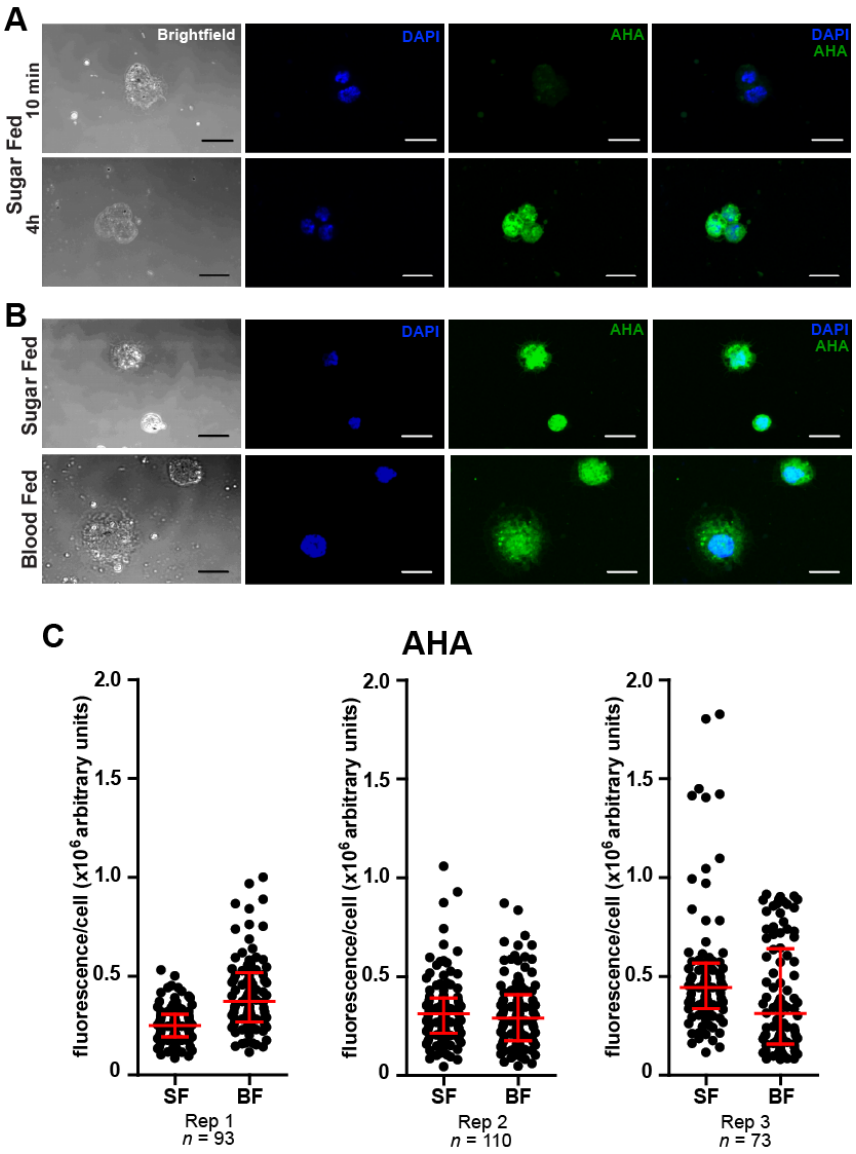

Figure S1. Blood Meal Does Not Alter Directionally Global Protein Levels in Hemocytes

Hemocytes from sugar fed and blood fed females were analyzed for potential blood meal-induced increase in total protein production using FUNCAT. (**A**) Click-it chemistry can be used to assess AHA incorporation and thus metabolic labeling of newly synthesized proteins in *An. gambiae in vivo*. Signal levels are marginal after a ten minute labeling period (top row) and are readily detectable after four hours of exposure to AHA (bottom row). (**B**) Confocal images of representative AHA-labelled hemocytes isolated from sugar fed and blood fed mosquitoes 24h post blood meal. Confocal maximum intensity projections are shown in **A** and **B**, blue, DAPI; green, AHA. Scale bar is 10µm. (**C**) Quantification of AHA incorporation was graphed as median with interquartile range; n = 93, 110, 77. In two out of three replicates, blood feeding led to significant albeit very small fold changes in protein production (Rep 1: 1.48 fold increase; Mann-Whitney U test, P <0.0001; Rep3: 1.39 fold decrease; Mann-Whitney U test, P = 0.001), while no statistically significant changes were observed in the second replicate (Rep 2: 1.07 fold increase; Mann-Whitney U test, P = 0.522).

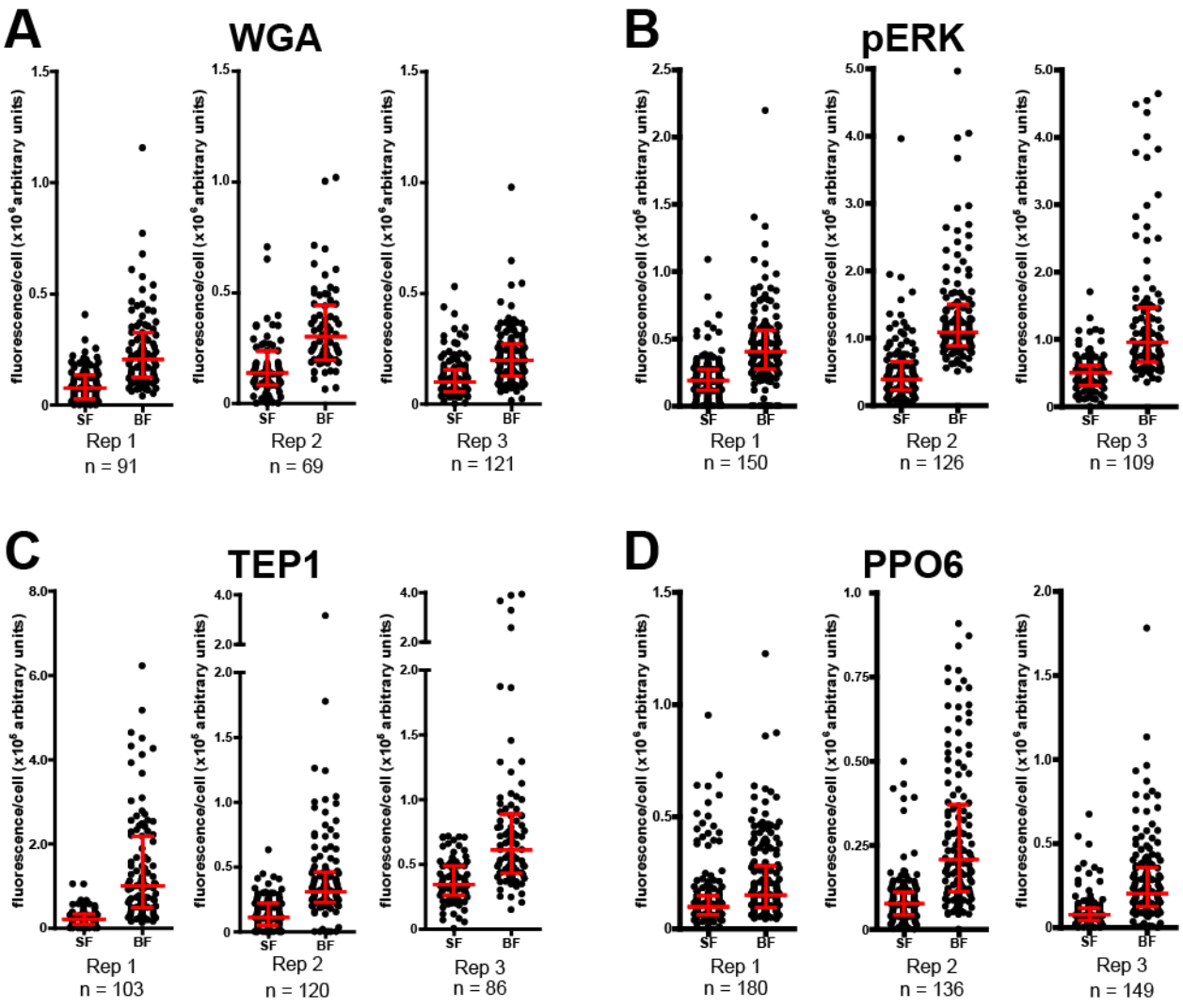

Figure S2. Quantification of Hemocyte Activation

Hemocytes from sugar fed and blood fed females were analyzed for blood meal-induced activation markers. *n* = 91, 69, 121 for WGA (**A**), *n* = 150, 126, and 109 for pERK (**B**), *n* = 103, 120, and 86 for TEP-1 (**C**), and *n* = 180, 136, and 149 for PPO6 (**D**). Quantification of activation markers was done with Image J analysis to obtain relative fluorescence. Hemocyte activation experiments are done with three biological replicates. All are graphed as median with interquartile range and are statistically significantly different (Mann-Whitney U test, $P < 0.0001$).

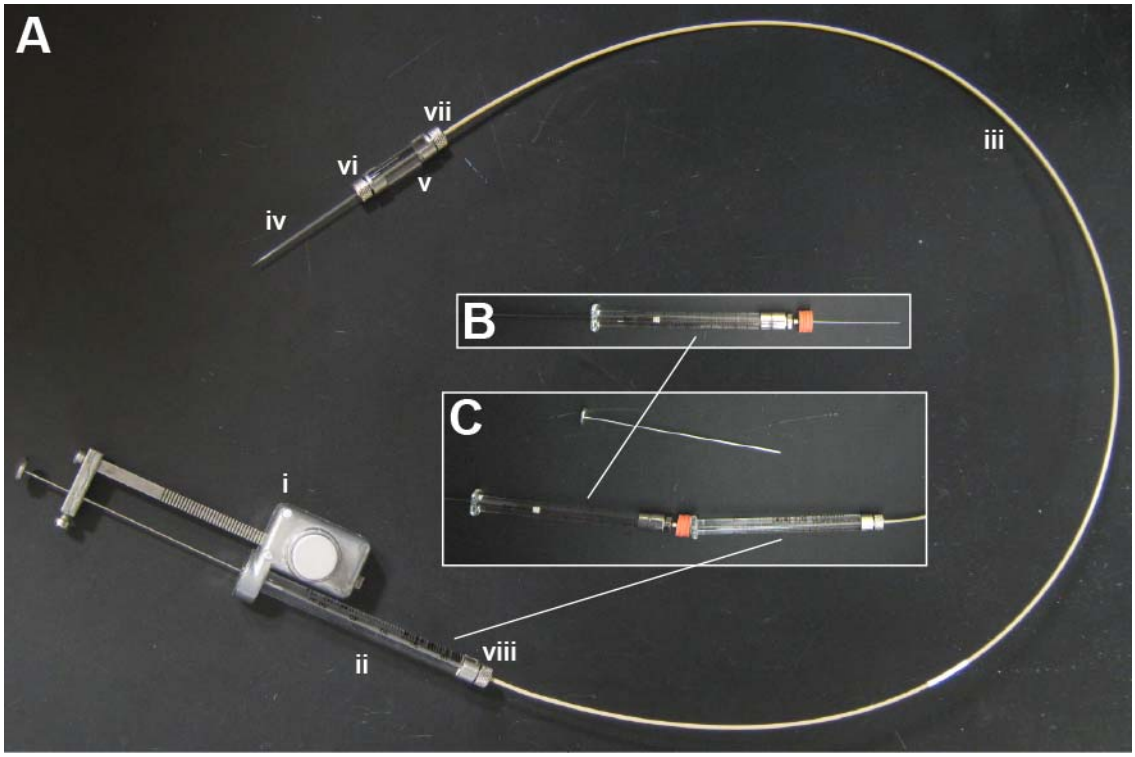

Figure S3. Syringe System Setup for Hemocyte Perfusion

(**A**) Syringe system (Hamilton Company, Reno, NV, USA) for hemocyte perfusion includes the following: (i) dispenser, (ii) 50 µl glass syringe, (iii) PEEK tubing, (iv) pulled glass needle (1mm outer diameter, 0.5mm inner diameter), (v) coupler between tubing and needle, and compression fittings between (vi) needle and coupler [1mm], (vii) coupler and tubing [1/16 inch], and (viii) syringe and tubing [1/16 inch]. (**B**) Priming kit to backfill glass syringe and whole system, process demonstrated in (**C**).