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Dr. John H. Werren Department of Biology University of Rochester Rochester, NY 14627

Dear Jack,

I am very excited to hear that you are seeking funding to sequence the *Nasonia* genome. The sequence information will be useful in studies of the genetics of some of the behaviors that I study in *Nasonia*, e.g., associative learning, sex ratio control, and death feigning. Sequencing work holds particular promise for understanding the genetics of behaviors because most natural variation in behavior involves multiple alleles and multiple loci.

Understanding the genetic mechanisms of the death feigning behavior in *Nasonia* could have both medical and agricultural relevance. Death feigning in *Nasonia* looks like a seizure, suggesting a relationship to epilepsy and other seizure disorders in humans. In addition, death feigning may be related to tonic immobility, a stress response to handling in livestock. In addition, the sequence information might provide insights into genetic mechanisms of sex ratio control, which could lead to genetic manipulations for more female biased sex ratios in parasitoids used in biological control of agricultural pests. A more female-biased sex ratio should increase pest control because it is the females that kill the pests through their oviposition and feeding.

Sincerely,

Bettin King

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