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Using *Gromphadorhina portentosa*, the Giant Madagascar Hissing Cockroach, as a Model Organism in the Biology Laboratory

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The American Cockroach (*Periplaneta americana*) has been the standard model insect in biology laboratories for decades. Here we present the Giant Madagascar Hissing Cockroach, *Gromphadorhina portentosa*, as a novel model organism. This Malagasy cockroach is a low maintenance, inexpensive, non-federally regulated invertebrate organism that requires minimal bench space. Laboratory exercises employing the Malagasy roach present students with an opportunity to study the intricacies of anatomy and principles of physiology. This roach's considerable size (about 8 cm length) provides for ease of visualization and dissection. Textbook knowledge of organ systems, especially respiratory and nervous, is reinforced using *G. portentosa*. Students learn valuable techniques like respirometry and extracellular electrophysiological recordings. Taken together, *G. portentosa* makes a new and versatile model insect for use in undergraduate courses with laboratories from General Biology to Animal Physiology.

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