IUSSI

NORTH AMERICAN SECTION

2013 Nutting Research Grant Announcement

The winner of the 2013 William L. and Ruth D. Nutting Research Grant for basic termite biology is **Erin Cole**. Erin was chosen from among four applicants, and will receive a $2,500 grant to support her proposed research project. Erin is a member of the NAS-IUSSI and graduated with a B.S. degree from Muhlenberg College in 2010. She is currently pursuing a Ph.D. in ecology and evolutionary biology under the direction of Dr. Rebeca Rosengaus at Northeastern.

In her proposed project "Transgenerational Immunity in the Dampwood Termite *Zooterompsis angusticollis,"* Erin asks if parents of this termite species respond to pathogenic pressures during mating and oogenesis by increasing the immunocompetence and survival of their offspring. She hypothesized that parents will differentially provision their offspring depending on their own immunological state, and that both maternal and paternal transgenerational effects influence pathogen susceptibility of their progeny. Erin plans to infect termite parents with a soil bacterium *Serratia marcescens* and measure their effects on egg volume, antibacterial activity, and changes in egg metabolites such as glucose, glycogen, uric acid, and etc.

Although the other candidates for the grant had very strong proposals, Erin's well-organized research plan was regarded as the most compelling and has the broadest importance in our understanding of sociobiology and ecological immunology, and was the top choice of the selection committee (Nan-Yao Su, James Traniello, Edward Vargo, Xuguo Zhou, and Colin Brent).