



The Charles Michener Bee Research Grant, as our newest IUSSI student award, supports graduate student research on the biology of bees, defined broadly as the *Anthophila*. The award will be given to the IUSSI-NAS graduate student member whose research has the greatest potential to make a substantive contribution to our understanding of the biology of this group. It is given annually to a student whose proposed research promises the best contribution to contribute to our understanding towards bee biology.

The winner of the 2019 Charles Michener Grant is **Margaret (Maggie) Shanahan**, who will receive a \$1,000 grant to support her research. Maggie is a member of the IUSSI and currently a PhD student at University of Minnesota, under the direction of Dr. Marla Spivak. Her Bachelor's degree in Biology is from the University of Puget Sound, in Tacoma, WA. Her Michener Grant proposal is entitled "Resin Use as a Form of Social Immunity in Stingless Bees." It was selected from a field of highly competitive applications, making the Awards Committee's work quite challenging. Her research is firmly rooted in a goal to further develop a deep understanding of stingless bee biology, and includes outcomes of general relevance to understanding bee biology, along with practical applications for effective bee management. She hypothesizes that the resin-rich batumen found in hives is a key contributor to social immunity in tree-nesting stingless bees, and that nesting substrate affects its construction.

She will examine colonies found in either rough, hollow logs or smooth, wooden boxes for the amount of resin collected and to assess overall colony health, and will then test the role of this resin in colony acute responses to a social immune challenge. She has a passion for bee research and education, brings global experience and perspective from work on 5 different continents, and is also actively involved in outreach activities that broaden participation of underrepresented groups in STEM. The Awards Committee found Maggie's proposal to be the most straightforward and well-reasoned. The success of this proposal will help to provide basic knowledge of the importance of plant resins to stingless bees, which contributes to our understanding of why many bee populations are in decline and how these declines can be addressed.

IUSSI-NAS Awards Committee

Rebecca Clark, Hongmei Li-Byarlay, and Juliana Rangel Posada (Co-Chairs)

Kaitlin Mari Baudier, Sarah Bengston, Christina Kwapich, and Juergen Liebig