



The Charles Michener Bee Research Grant 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 fascinating group.

The winner of the 2020 Charles Michener Grant is **Madeleine M. Ostwald** who will receive a \$2,500 grant to support her research. Madeleine received her bachelor's degree in Biological Sciences from Cornell University and a master's degree in Renaissance and Early Modern Studies from the University of Edinburgh. She is currently pursuing a PhD at Arizona State University, in the laboratory of Dr. Jennifer Fewell. The title of her proposed research is, "Dynamic Group Membership in Carpenter Bees Tracked via RFID Technology." Madeleine's preliminary data suggest that the carpenter bee, *Xylocopa varipuncta*, may form dynamic non-kin social groups through nest-switching. Such nest switching could both advance a female's position in the reproductive queue and reduce competition with kin. With the Michener Grant, Madeleine will develop an RFID tracking system to continuously monitor nest membership across the bee's active season. Her project represents the first RFID tracking study of a non-eusocial bee and will provide a link between the behavioral and genetic data she has already collected for *X. varipuncta*. The awards committee wishes to recognize her extensive work in the field and laboratory to develop a persuasive and well-contextualized proposal. Madeleine's project aims to add to a growing body of work on sociality in non-kin groups in bees, and we agree that her work on *X. varipuncta* will be an important contribution to the field.

Sincerely,

The Awards Committee:

Christina L. Kwapich, Jürgen Liebig (Co-Chairs)

Rachelle Adams, Kaitlin Baudier, Sarah Bengston, Floria Mora-Kepfer Uy