Acknowledgements

This work was supported by the San Diego Zoo Wildlife Alliance and the Ocelots Grants Program.

We would like to thank San Diego Zoo Safari Park staff, Jake Shepard, Amanda Lussier, Matt Gelvin, Kim Shuler, Charlie Hyde, Katie Becker, Jillian King, Lance Aubrey, Jonnie Capiro, Jill Van Kempen, Marco Zeno, Scott Smith, Weston Popichak, Todd Schwenk, and South African National Parks staff, Leana Rossouw, for assistance in sample collection. We would also like to thank Wiebke Hoffman and Regina Kramer of Tiergarten Schönbrunn for their assistance in sample collection for optimization of phytoestrogen incubations.

For sample analysis, we thank members of the Dorrestein Lab, especially Michael Meehan and Kelly Weldon for assistance in untargeted mass spectrometry, the Knight Lab, especially Gregory Humpheries, and Mackenzie Bryant for access to laboratory equipment and assistance, the Suen Lab, including Garret Suen, Andrew Steinberger and Joseph Skarlupka for assistance with sequencing, Division of Microbial Ecology members Alessandra Riva, Fatima Pereira, Aida Kadunic, and Markus Schmid for their assistance in phytoestrogen incubations and analysis, and Mississippi State Chemical Laboratory staff, Ashli Brown, Darrell Sparks, Ashley Meredith, Christina Childers, and Magan Green, for their assistance in targeted mass spectrometry. We also thank all members of the San Diego Zoo Wildlife Alliance's Wild Microbiomes group, Reproductive Sciences Team, Recovery Ecology Team, the Dorrestein Lab, the Knight Lab, and the Division of Microbial Ecology's Gut Group for their insightful discussions and support.