

2018 CCUBC Undergraduate Paper Award

Yonathan Uriel

Simon Fraser University, Burnaby B.C

[The fly factor phenomenon is mediated by interkingdom signaling between bacterial symbionts and their blow fly hosts \(PDF\)](#)

Yonathan Uriel completed a Bachelor of Science at Simon Fraser University, BC in 2017, where he majored in molecular biology and biochemistry and minored in biology. In 2016, Yonathan was awarded an Undergraduate Student Research Award from NSERC, which allowed him to join the lab of Dr. Gerhard Gries as a research assistant. Under the supervision of Dr. Gries, Yonathan designed and ran experiments on the black blow fly, *Phormia regina*, and the microbes living in their gut.



These experiments demonstrated that blow flies use their gut bacteria to communicate by regurgitating onto food sources, and that the diversity of bacteria on a food source gives flies information about its quality. These results were published in the journal *Insect Science* in 2018 in the article "The fly factor is mediated by interkingdom signalling between bacterial symbionts and their blow fly hosts". Yonathan has since joined the lab of Dr. Gries as a Masters of Pest Management student, and is currently studying polyphenism in the green peach aphid.