



2020 Ragai Ibrahim Award for Best Student Paper

Honorable mention: Samuel Livingston University of British Columbia

A PhD Candidate in the Botany Department at UBC (Dr. Lacey Samuels' group), Samuel Livingston was the co-first author of the manuscript "Cannabis Glandular Trichomes Alter Morphology and Metabolite Content during Flower Maturation" published in the Plant Journal in 2019. This paper focuses on understanding the developmental origins of trichome types in Cannabis and how this affects their relative concentration of medically important compounds. Using quantitative image analysis approaches that he developed, Sam discovered that the majority of sessile trichomes develop into stalked trichomes on the cannabis flowers. Uncovering the unique properties of these specialized trichomes will provide opportunities for molecular breeding and targeted engineering of this medically important plant.