2020 Ragai Ibrahim Award for Best Student Paper

Winner: Mina Ghahremani
Queen's University

Dr. Mina Ghahremani received her PhD from the Department of Biology at Queen's University (Dr. William Plaxton's group). She is the first authors of a manuscript entitled: "A glycoform of the purple acid phosphatase AtPAP26 co-purifies with a mannose-binding lectin (AtGAL1) secreted by phosphate starved Arabidopsis" published in 2019 in Plant Cell Environment. In this manuscript, Mina used mass spectrometry and functional genomics to characterize secreted isoforms of Purple acid phosphatases (PAPs) in inorganic phosphate (Pi) metabolism. Mina's found that secreted PAP glycoforms, lectins, and phosphotyrosylated proteins have a role in plant Pi starvation responses. Understanding plant Pi uptake is essential to reduce the use of phosphate fertilizers, which can have negative environmental consequences.