## Shedding light: nutritional and defensive interactions in ecologically important photosynthetic symbioses

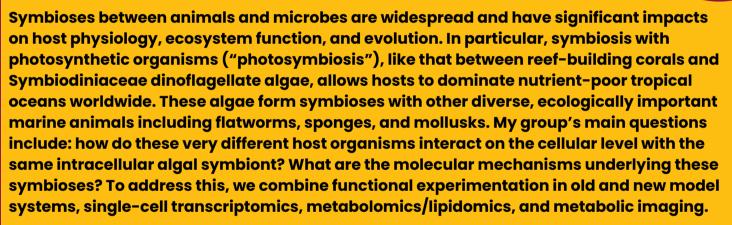
Tuesday February 21st, 2023

> 1 pm PT, 2 pm MT, 3 pm CT, 4 pm ET

WCPH classroom 460 - Arizona State University Tempe Campus

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Specifically in this talk, I will discuss recent work on two marine photosymbioses: cnidarians and acoel flatworms. We have previously used the model sea anemone Aiptasia and corals to reveal the importance of sterol lipid transfer from symbiont to host cnidarians. In my group, we are also establishing the acoel flatworm Waminoa as a new model for photosymbiosis. Using MALDI-mass spec imaging, we find that sterol transport also occurs in this symbiosis, and hypothesize this could be a common currency across photosymbioses. We are also applying single-cell RNA sequencing in the coral Acropora and flatworm Waminoa to understand and compare the molecular processes in symbiont-containing cells. Overall the aim of our work is to understand globally widespread and evolutionarily important photosymbioses and their response to environmental change.



Can't attend in-person? Join via Zoom using the link or scanning the QR code below:

https://asu.zoom.us/j/82609477674? pwd=VW0xdlZKRjZWSWVDL1kyc21ld3RXZz09





