



Jessie Uehling is an Assistant Professor of Fungal Biology at Oregon State University. Her research aims to understand evolution of fungal symbioses including fungal bacterial interactions using genomics. By studying interactions between soil fungi and their bacterial endosymbionts (pictured below) and free-living soil bacteria, she has identified functional mechanisms and genomic repercussions of inter-kingdom symbioses. To better understand these symbioses and others, she uses microfluidics, microscopy, computational biology, and systematics to integrate a combination of genomic, transcriptomic, proteomic, metabolomic, and volatonic data. For more information about Jessie's research, please see her website Jessieuehling.com.

In her seminar, titled "Systems Biology Reveals Co-Evolution of Fungi and Their Bacterial Endosymbionts," Jessie will dissect the ubiquity, abundance, and diversity of fungal endosymbionts using the Poplar rhizosphere associate *Mortierella elongata* and its Betaproteobacterial endosymbiont *Mycoavidus cysteinexigens* as a case study.

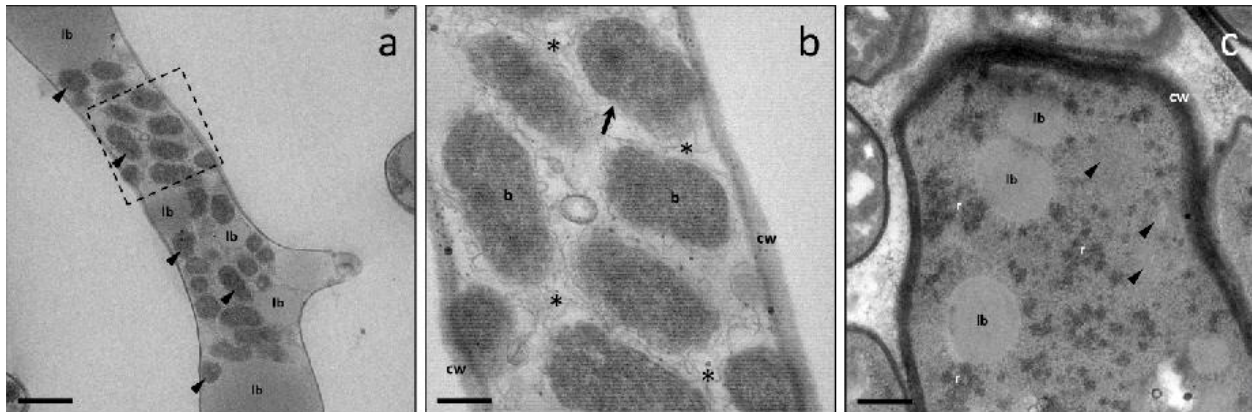


Figure 1. Transmission electron microscopy of wild type (a,b) fungal isolates harboring endobacteria and cured (c) strains of *Mortierella elongata* NVP64