Enabling mobility for small wireless devices is challenging, but this is an area where nature excels. While man-made robots at these sizes are fundamentally limited by battery energy density small insects like bees can fly for hours. This talk presents my recent work on bio-integrative systems that seek to piggyback on the capabilities of live insects for mobility. This includes Living IoT, a first of its kind platform to include sensing, computation, backscatter communication, and localization in a package small enough to fly on the back of a live bumblebee. We design more complex sensing systems like wireless cameras that are still small enough to be carried by a live beetle, and how these technologies can be adapted to track invasive “murder” hornets.