

Supplemental Text

EA Hay and R Parthasarathy, *Performance of convolutional neural networks for identification of bacteria in 3D microscopy datasets* (2018)

Supplemental Figure Caption

Figure S1. Examples of agreement and disagreement in bacterial classification. (a) Two example volumes in which all humans classified the object as a bacterium; (b) Two example volumes in which all humans classified the object as noise; (c) Two example volumes in which 50% humans classified the object as a bacterium, and 50% as noise. As in Figure 1, these are xy -, xz -, and yz - projections of the 3D volumes (top to bottom), with the images spanning $4.5\ \mu\text{m}$ in x and y , and $8.0\ \mu\text{m}$ in z . Please note that all 21000 manually classified image volumes, along with labels, are made available for the reader.

Supplemental movie caption

Movie S1. A light sheet fluorescence microscopy scan through the anterior “bulb” of a larval zebrafish gut, colonized by *Vibrio* ZWU0020 expressing green fluorescent protein. Each frame is one z -section, with $1\ \mu\text{m}$ spacing.