2018 Edamame Coding Ability Scale, Chart 1 I can determine the quality of a shotgun metagenome assembly 92% 8% 8% 92% Pre Post I can evaluate the quality of raw sequencing data Pre Post 8% I can find and move files on a computer using terminal 35% 4% 65% 96% Pre Post I can independently execute the steps of microbial AMPLICON metagenomic analysis 73% 12% Pre Post 88% I can make informed choices for analysis parameters for AMPLICON analysis in mothur 96% 8% Pre 4% 92% Post I can move data from at least one other program into R 31% 69% 100% Pre Post 0% I can search for public datasets relevant to my own project Pre 50% 50% 100% Post 0% I can think through the steps of a sequencing analysis from start to finish 27% Pre 73% 96% Post 4% I can use an R package to analyze data 73% 92% Pre 27% 8% Post I CANNOT process and quality control shotgun metagenome unless someone helps 92% Pre 8% 22% 78% Post I know how to map reads in metagenome analysis Pre 8% 83% 92% Post I understand the differences between unassembled and assembled shotgun metagenomic data Pre Post 8% I understand the limitations of unassembled and assembled shotgun metagenomic data 92% 12% 8% 88% Pre Post I understand what a k-mer is Pre

