

1 Bioinformatics Services and Training:

We estimate 10 person hours in Year 1, 20 hours in Year 2, and 30 hours in Year 3. Cost is \$ 52 per person hour = \$520 in Year 1 and 1040 in Year 2 and 1560 in Year 3. The time estimated is based on previous experience performing (genome assembly, transcriptome assembly, BLAST analyses and comparative analyses). The majority of the person hours will be spent on training of the graduate student in the first year using the data from (*Seriola lalandi*), with an estimated A hours per week for B weeks. In the following two years the number of hours required for training will be reduced as the student will be able to work more independently.

2 Compute time:

An estimated \$6880 will cover the estimated compute time required of to complete the project (19657 cpu hours at \$ 0.35 per cpu hour), divided over three years. The amount of compute time will increase as the graduate student becomes more competent in his or her bioinformatics abilities. Thus, we estimate 10 % of the cost for compute time will be in Year 1 (\$1966), 30 % in Year 2 (\$5897) and the remaining 60% in Year 3 (\$11794).