#!/bin/bash

### Prodigal for HPC ###

# Location: MonARCH

# Inputs: fasta nt assemblies (folder)

# Requires prodigal

# Note that previously this was run as an array

# so some redundant code

script\_name="prodigal-m\_job.sh"

inp\_dir="../MAGs/"

op\_dir="./Mackay\_MAGs/"

ext=".fa"

if [ ! -d ${op\_dir} ]

then

mkdir ${op\_dir}

fi

#Remove existing script

if [ -f $script\_name ]

then

command rm $script\_name

fi

#Make and run prodigal script

cat << 'EOF' >> $script\_name

#!/bin/bash

#SBATCH --mail-type=END,FAIL

#SBATCH --mail-user=laura.woods1@monash.edu

#SBATCH -c 4

#SBATCH --time=4:00:00

#SBATCH --partition=short

#SBATCH --job-name prodigal-m

module load prodigal

EOF

cat << EOF >> $script\_name

inp\_dir="${inp\_dir}"

op\_dir="${op\_dir}"

ext="${ext}"

EOF

cat << 'EOF' >> $script\_name

for item in ${inp\_dir}/\*${ext}

do

sample\_name=$(basename ${item} ${ext})

if [[ ! -s ${op\_dir}/${sample\_name}.faa ]]

then

echo "COMMAND prodigal -a ${op\_dir}/${sample\_name}.faa -d ${op\_dir}/${sample\_name}.fna -i ${item} -f gff -o ${op\_dir}/${sample\_name}.gff -p meta -q"

prodigal -a ${op\_dir}/${sample\_name}.faa -d ${op\_dir}/${sample\_name}.fna -i ${item} -f gff -o ${op\_dir}/${sample\_name}.gff -p meta -q

else

echo "${sample\_name} already complete--thanks!"

fi

done

EOF

chmod +x $script\_name

sbatch $script\_name