

```

rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 0, 'width': 0.5, 'max': 0.5}
thresh_target: {'target': 5, 'width': 1, 'min': 3, 'max': 7}
burst_peak_frequency: {'target': 0.3333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_osc: {'target': 100, 'width': 5, 'min': 75}

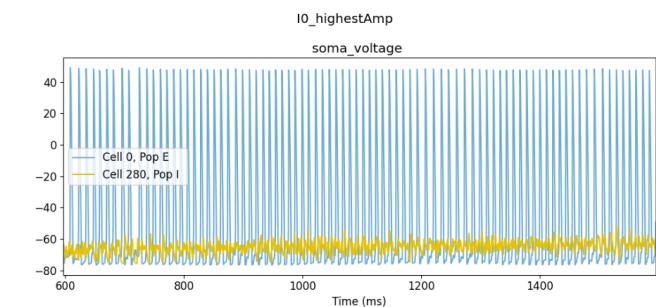
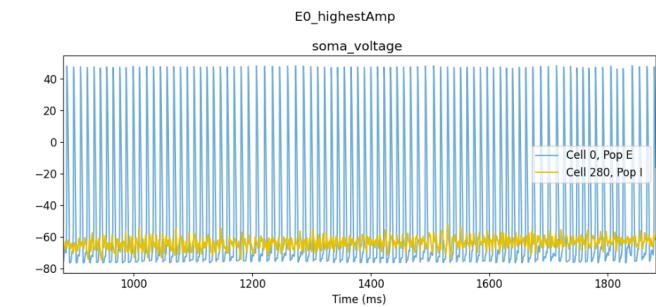
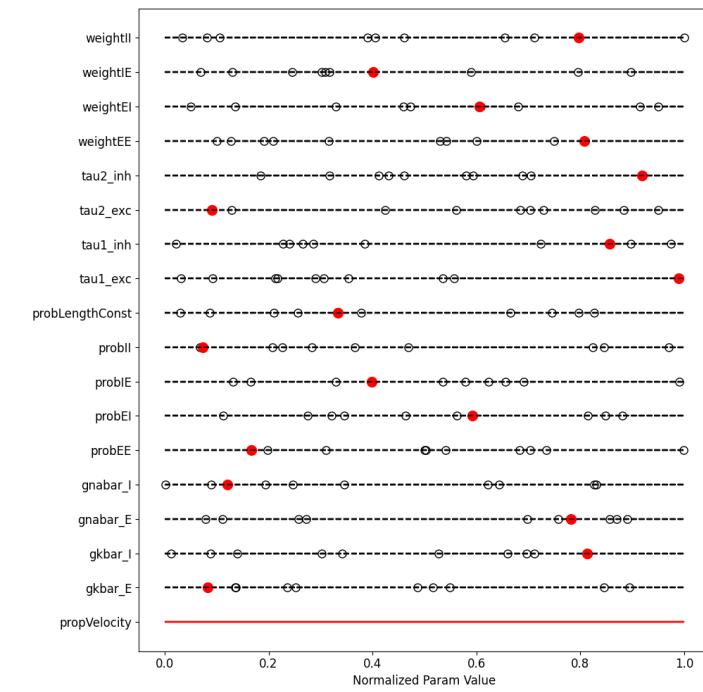
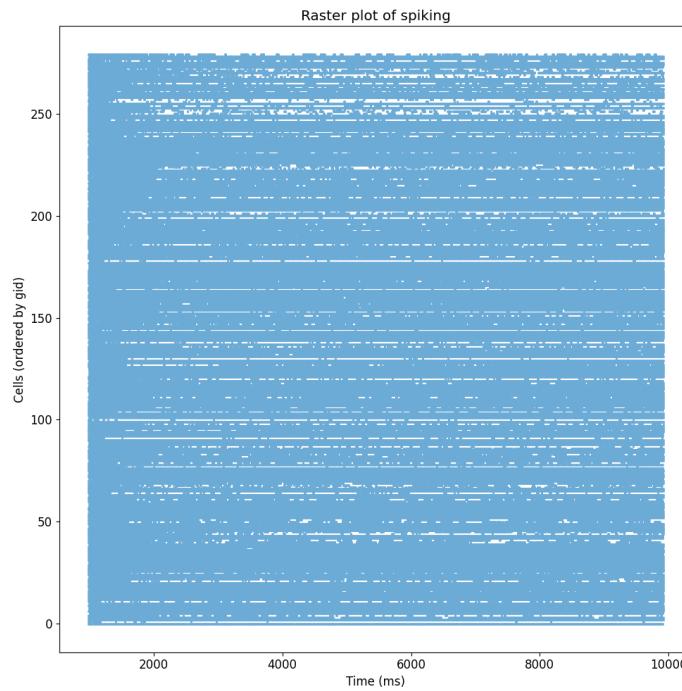
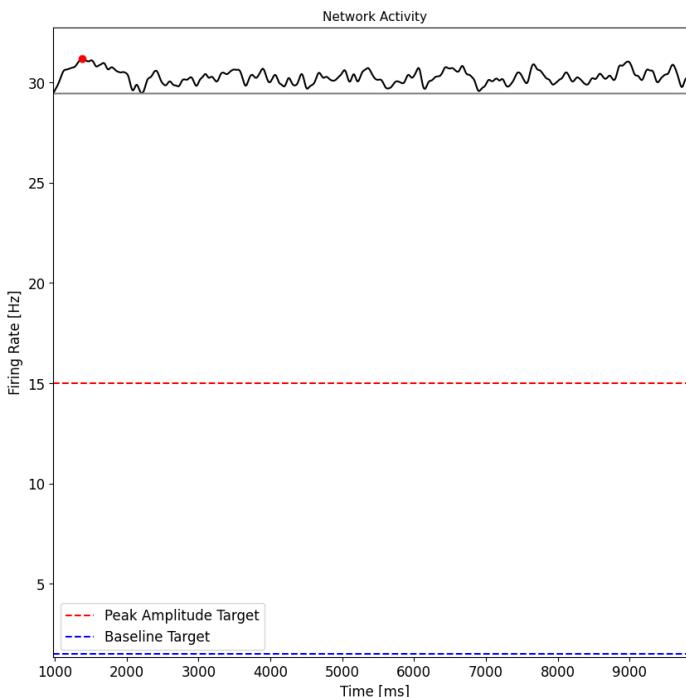
```

```

burstAmp_Fitness: {'Value': 1.7396263621297976, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10078105316200554, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 30.275536292137314, 'Fit': 1000}
slopeFitness: {'Value': -6.914208686345368e-05, 'Fit': 1.000138293735424}
thresh: {'Value': 29.445419484333915, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 89.36329588014982, 'Fit': 8.392519924640974}
E_rate_fitness: {'Value': 75.96428571428572, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 778.8214064687086
average_scaled_fitness: 778.5999758262984

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240429_Run2_debug_node_run/gen_0/gen_0_cand_96_data.json

SimLabel: gen_0_cand_96

Generation Rank: 0/10

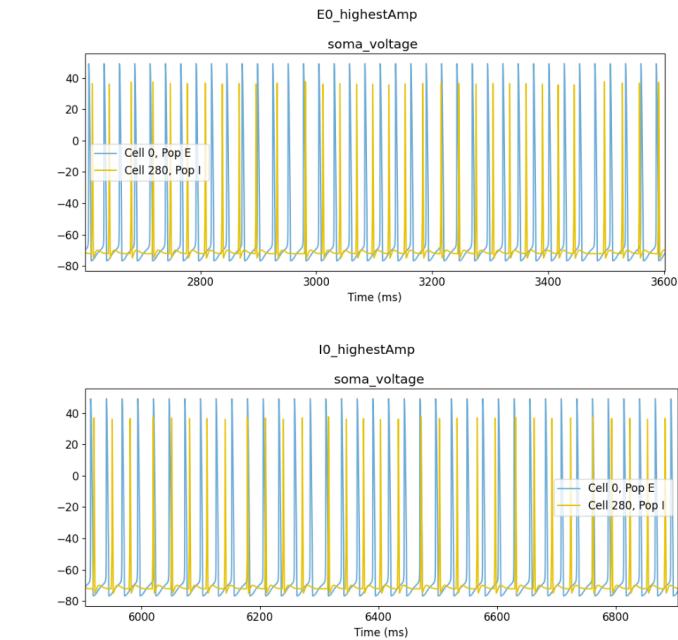
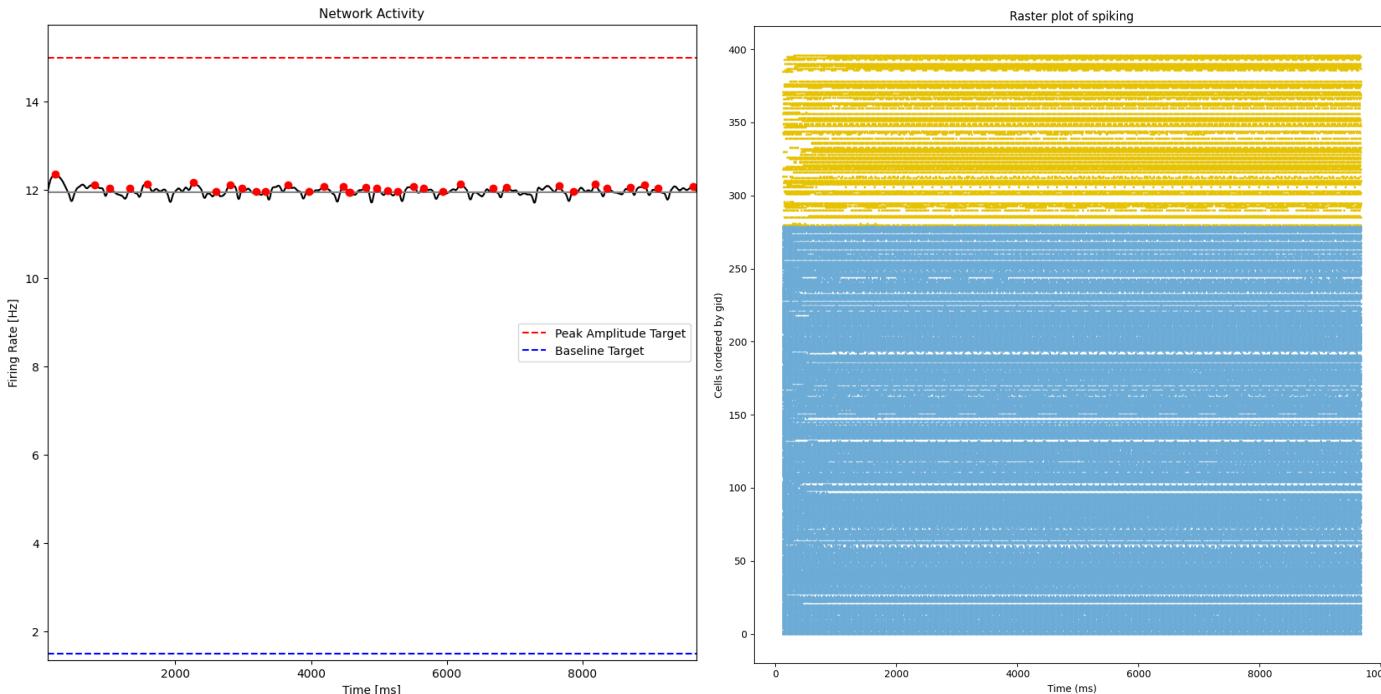
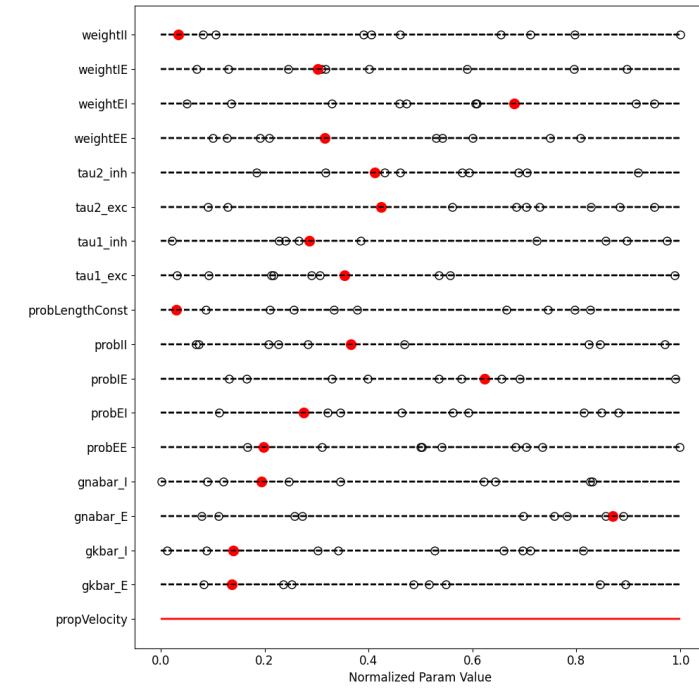
```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 0, 'width': 0.5, 'max': 0.5}
thresh_target: {'target': 5, 'width': 1, 'min': 3, 'max': 7}
burst_peak_frequency: {'target': 0.3333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_osc: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.10585220380824444, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 3.6175710594315245, 'Fit': 1000}
IBI_fitness: {'Value': 276.1764705882353, 'Fit': 3.915769821262388}
baseline_fitness: {'Value': 11.983729053907524, 'Fit': 1000}
slopeFitness: {'Value': -3.528293105939317e-05, 'Fit': 1.0000705683519477}
thresh: {'Value': 11.951453804562878, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 95.64891222805701, 'Fit': 2.387430192945888}
E_rate_fitness: {'Value': 36.416666666666664, 'Fit': 1000}
I_rate_fitness: {'Value': 15.435185185185185, 'Fit': 4.290835552601959}
maxFitness: 1000
average_fitness: 556.8437895705736
average_scaled_fitness: 556.4001584248887
```

binSize: 7.5

gaussianSigma: 30.0

thresholdBurst: 1.0



```

rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 0, 'width': 0.5, 'max': 0.5}
thresh_target: {'target': 5, 'width': 1, 'min': 3, 'max': 7}
burst_peak_frequency: {'target': 0.3333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_osc: {'target': 100, 'width': 5, 'min': 75}

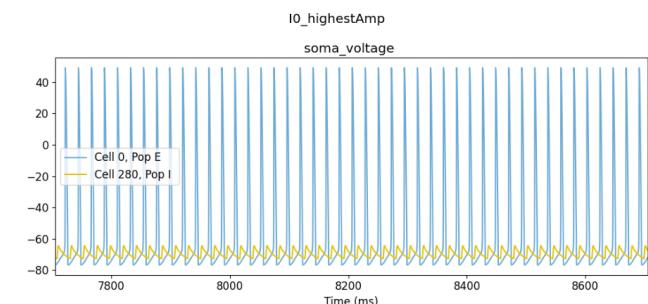
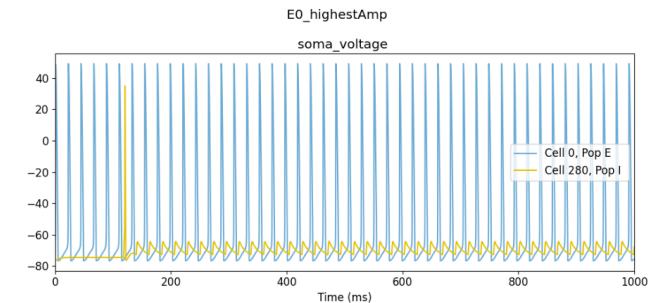
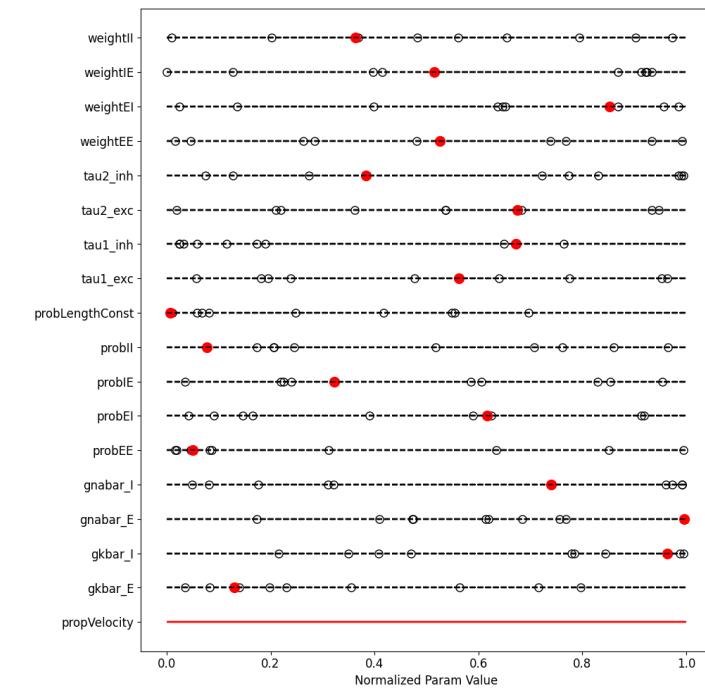
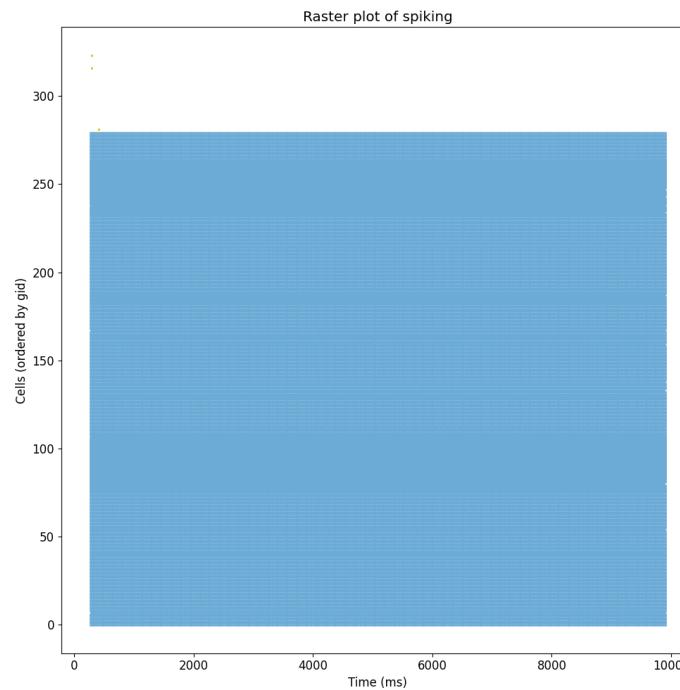
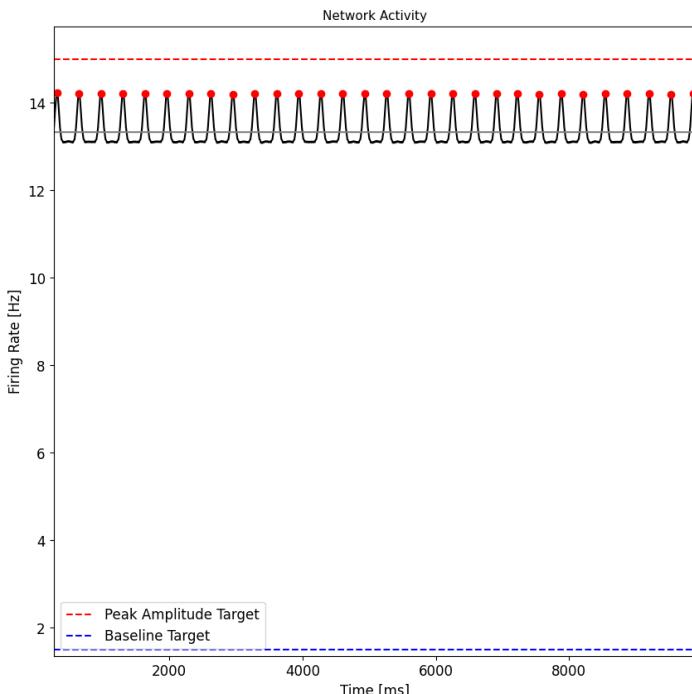
```

```

burstAmp_Fitness: {'Value': 0.8792256764911538, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 3.0280090840272518, 'Fit': 1000}
IBI_fitness: {'Value': 329.2241379310345, 'Fit': 3.8014784059775275}
baseline_fitness: {'Value': 13.358850060433744, 'Fit': 1000}
slopeFitness: {'Value': 5.394536506407579e-07, 'Fit': 1.0000010789078833}
thresh: {'Value': 13.33050297983658, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 96.40449438202248, 'Fit': 2.0525873588268344}
E_rate_fitness: {'Value': 47.80952380952381, 'Fit': 1000}
I_rate_fitness: {'Value': 0.25925925925925924, 'Fit': 1000}
maxFitness: 1000
average_fitness: 667.4282296493014
average_scaled_fitness: 667.0953246147426

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



```

rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 0, 'width': 0.5, 'max': 0.5}
thresh_target: {'target': 5, 'width': 1, 'min': 3, 'max': 7}
burst_peak_frequency: {'target': 0.3333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_oscil: {'target': 100, 'width': 5, 'min': 75}

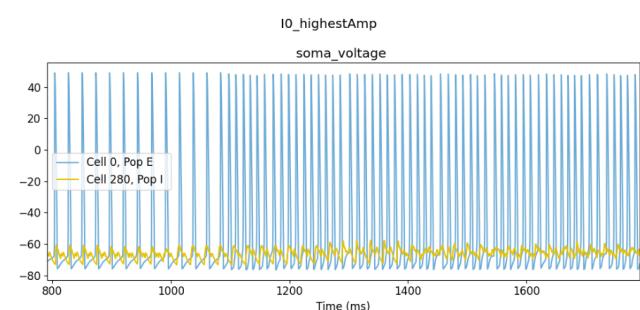
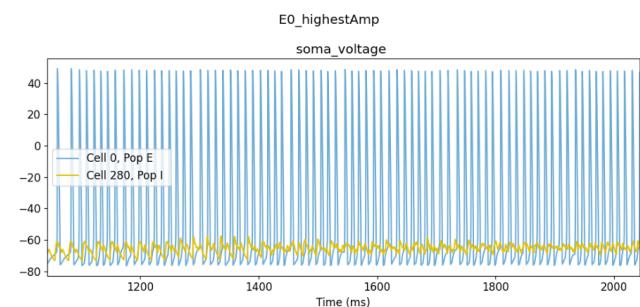
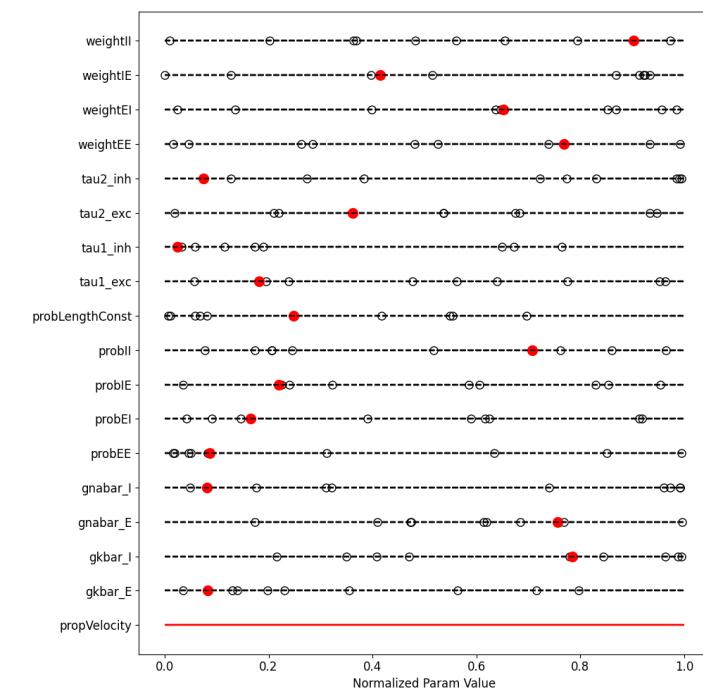
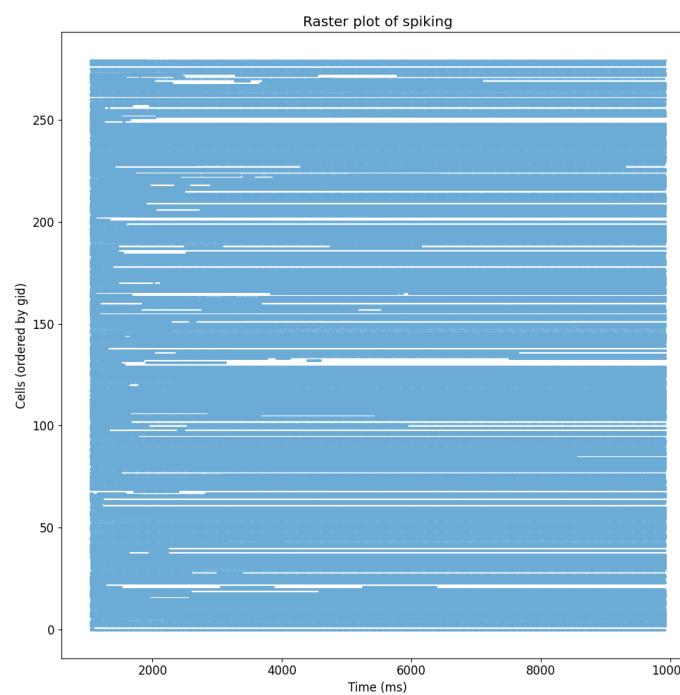
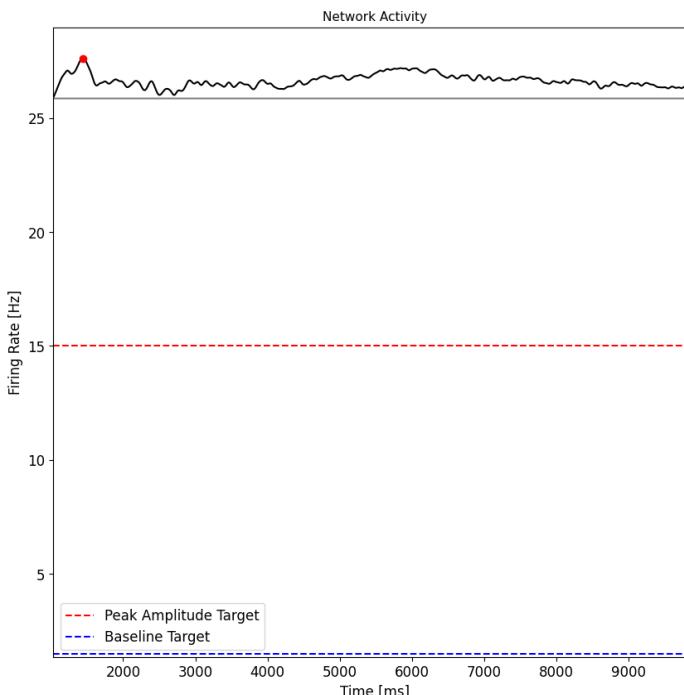
```

```

burstAmp_Fitness: {'Value': 1.7408663989291782, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10070493454179255, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 26.633145824683307, 'Fit': 1000}
slopeFitness: {'Value': -3.7208287968222124e-05, 'Fit': 1.0000744193449185}
thresh: {'Value': 25.856674214570457, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 88.91385767790261, 'Fit': 9.181847750778108}
E_rate_fitness: {'Value': 64.51587301587301, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 778.9091024633469
average_scaled_fitness: 778.6877737672033

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



```

rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 0, 'width': 0.5, 'max': 0.5}
thresh_target: {'target': 5, 'width': 1, 'min': 3, 'max': 7}
burst_peak_frequency: {'target': 0.3333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_osc: {'target': 100, 'width': 5, 'min': 75}

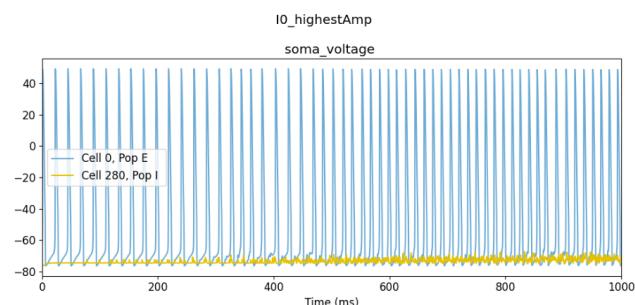
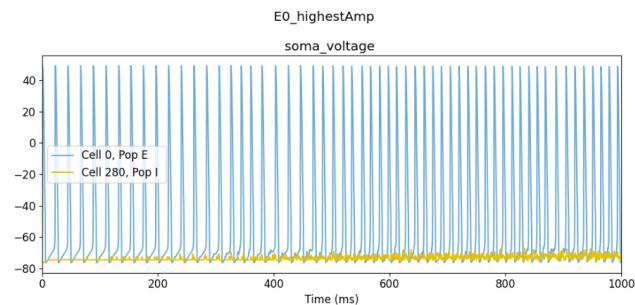
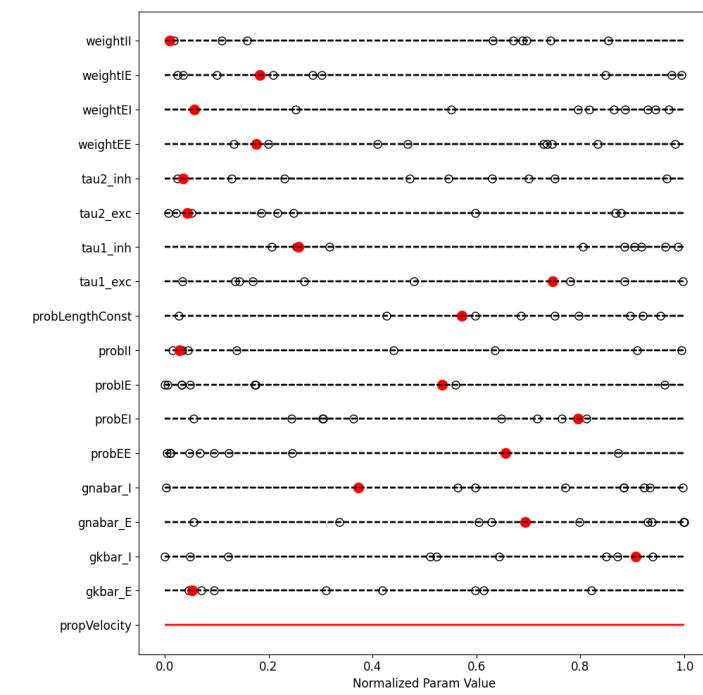
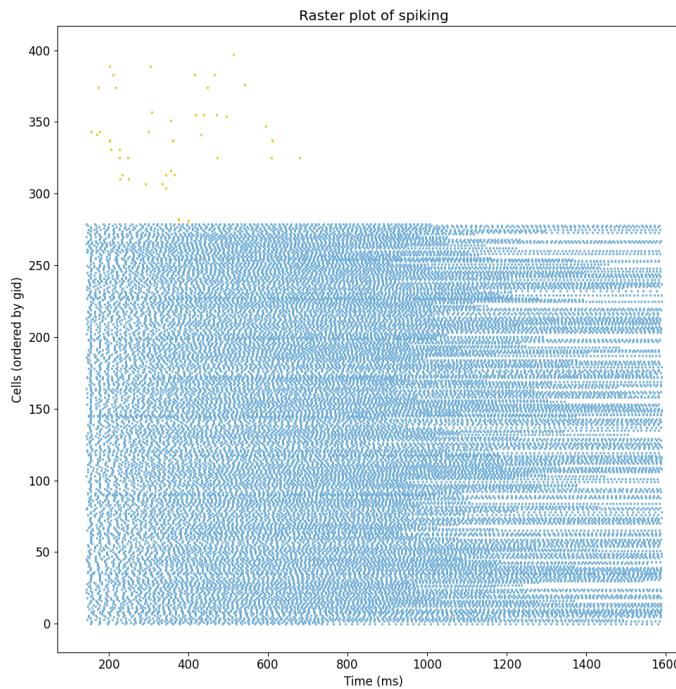
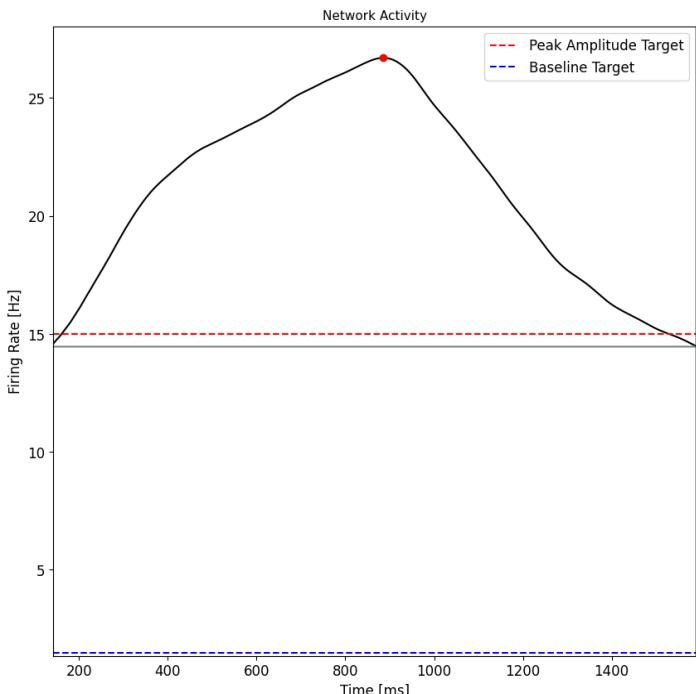
```

```

burstAmp_Fitness: {'Value': 12.240665544670017, 'Fit': 3.9735791102595153}
burst_peak_frequency_fitness: {'Value': 0.6289308176100629, 'Fit': 5.891937586728052}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 21.052958890908293, 'Fit': 1000}
slopeFitness: {'Value': -0.020495598528793443, 'Fit': 1.0418429342217588}
thresh: {'Value': 14.458495000416123, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 14.531835205992511, 'Fit': 1000}
E_rate_fitness: {'Value': 79.9484126984127, 'Fit': 1000}
I_rate_fitness: {'Value': 0.4166666666666663, 'Fit': 1000}
maxFitness: 1000
average_fitness: 667.8785955145788
average_scaled_fitness: 667.532216303278

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240429_Run2_debug_node_run/gen_2/gen_2_cand_59_data.json

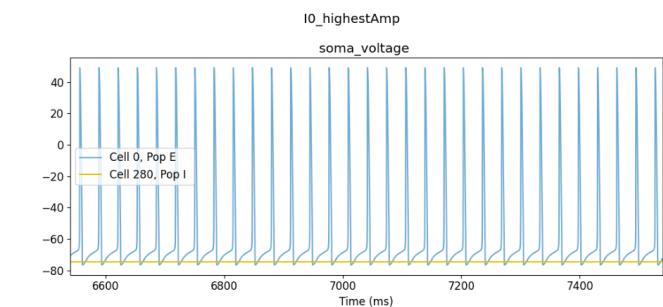
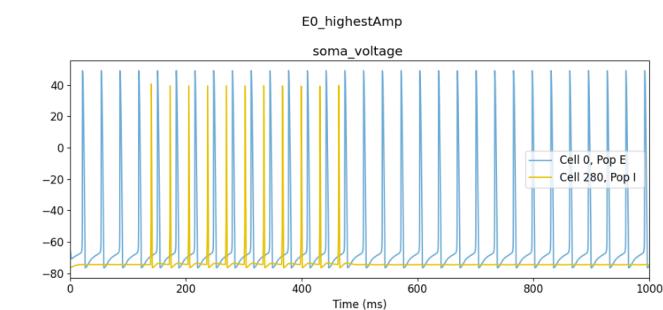
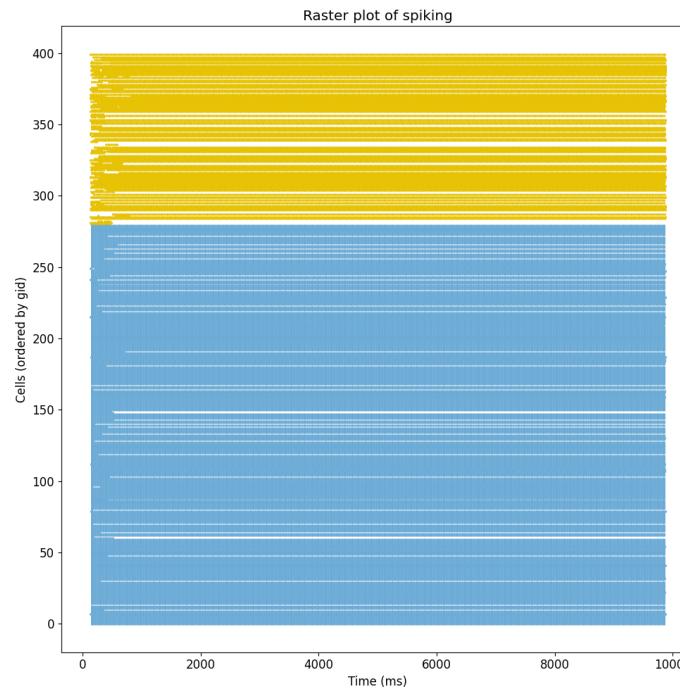
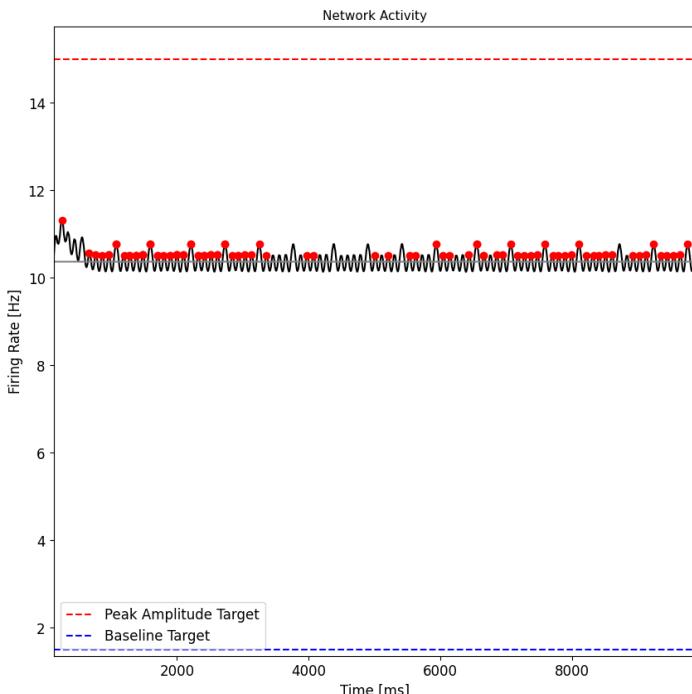
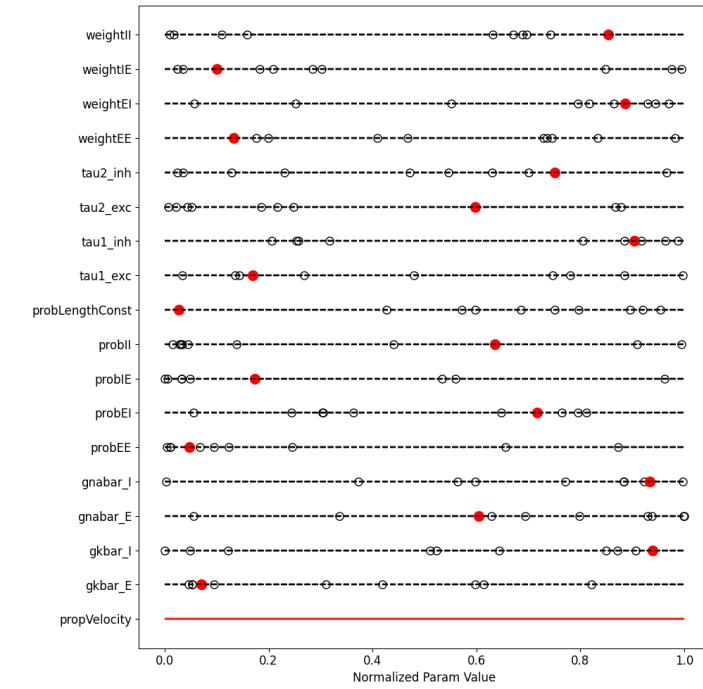
SimLabel: gen_2_cand_59

Generation Rank: 2/10

```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 0, 'width': 0.5, 'max': 0.5}
thresh_target: {'target': 5, 'width': 1, 'min': 3, 'max': 7}
burst_peak_frequency: {'target': 0.3333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_osc: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.20494101339347462, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 9.212857504429259, 'Fit': 1000}
IBI_fitness: {'Value': 106.75, 'Fit': 50.21735010016753}
baseline_fitness: {'Value': 10.39083341369117, 'Fit': 1000}
slopeFitness: {'Value': -9.320898634524385e-05, 'Fit': 1.0001864353496006}
thresh: {'Value': 10.367509786519165, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 97.67267267267268, 'Fit': 1.592755389000704}
E_rate_fitness: {'Value': 28.44047619047619, 'Fit': 1000}
I_rate_fitness: {'Value': 22.48148148148148, 'Fit': 2.1209240192281644}
maxFitness: 1000
average_fitness: 561.6590239937495
average_scaled_fitness: 561.2201623520291
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240429_Run2_debug_node_run/gen_2/gen_2_cand_70_data.json

SimLabel: gen_2_cand_70

Generation Rank: 0/10

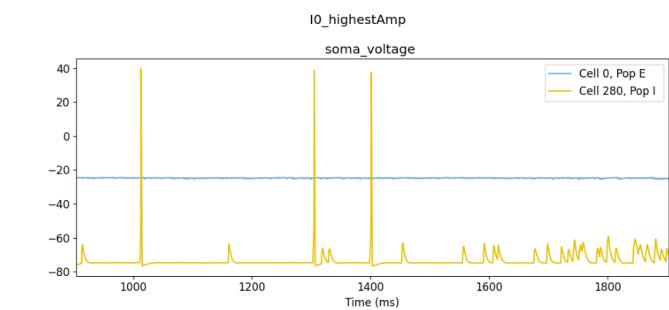
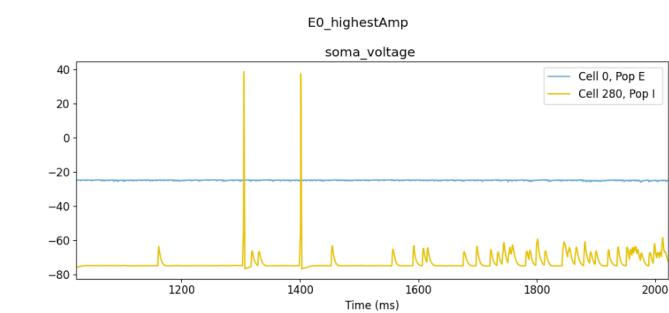
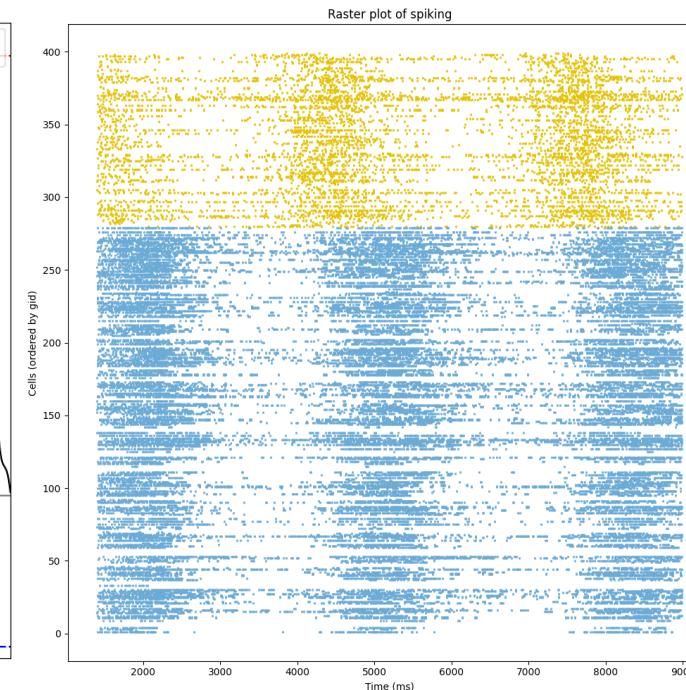
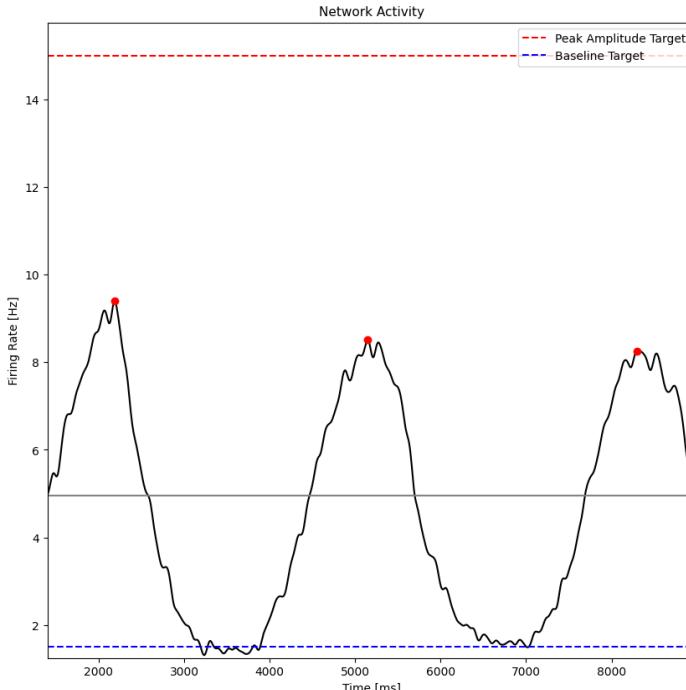
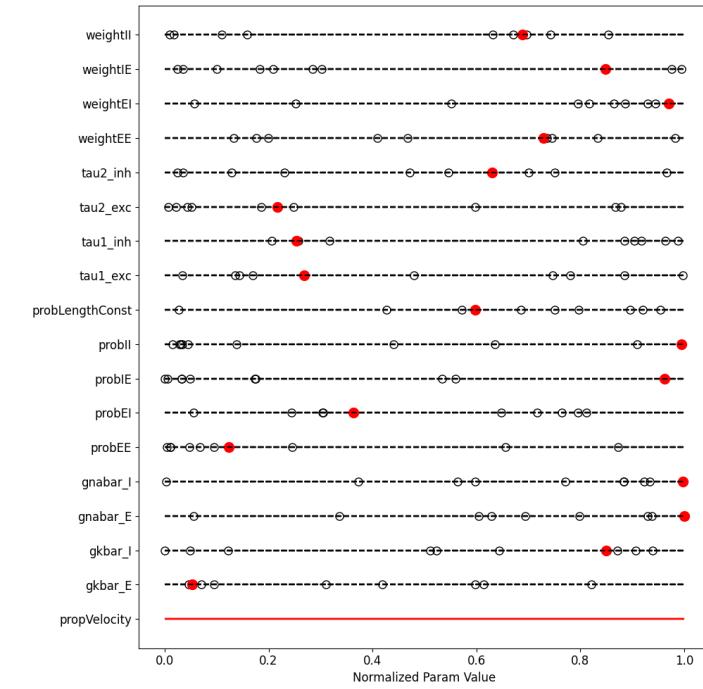
```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 0, 'width': 0.5, 'max': 0.5}
thresh_target: {'target': 5, 'width': 1, 'min': 3, 'max': 7}
burst_peak_frequency: {'target': 0.3333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_osc: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 3.761054088956605, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.33361134278565474, 'Fit': 1.001669448694389}
IBI_fitness: {'Value': 3056.25, 'Fit': 1.0523444194851552}
baseline_fitness: {'Value': 4.759094750927645, 'Fit': 1000}
slopeFitness: {'Value': 0.00011648951375730002, 'Fit': 1.000233006169236}
thresh: {'Value': 4.956282409366429, 'Fit': 1.0446872837510583}
sustain_oscillation_fitness: {'Value': 75.88014981273409, 'Fit': 124.45821504632488}
E_rate_fitness: {'Value': 2.4444444444444446, 'Fit': 7.555095393791001}
I_rate_fitness: {'Value': 15.435185185185185, 'Fit': 4.290835552601959}
maxFitness: 1000
average_fitness: 237.82256446120195
average_scaled_fitness: 237.05944613748366
```

binSize: 7.5

gaussianSigma: 30.0

thresholdBurst: 1.0



Data Directory: /NERSC/output/240429_Run2_debug_node_run/gen_2/gen_2_cand_75_data.json

SimLabel: gen_2_cand_75

Generation Rank: 1/10

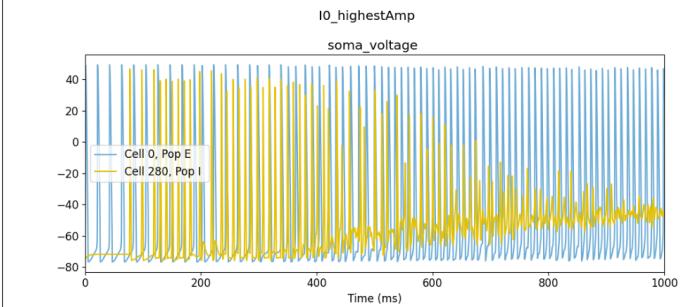
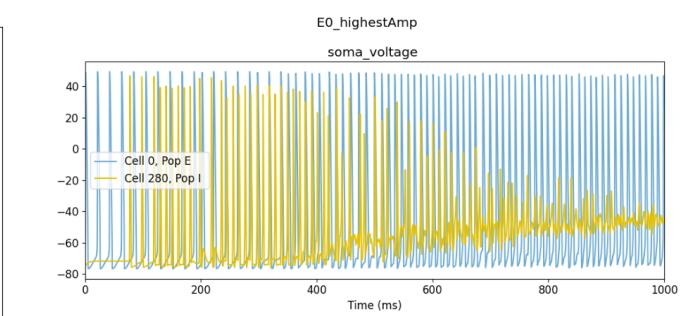
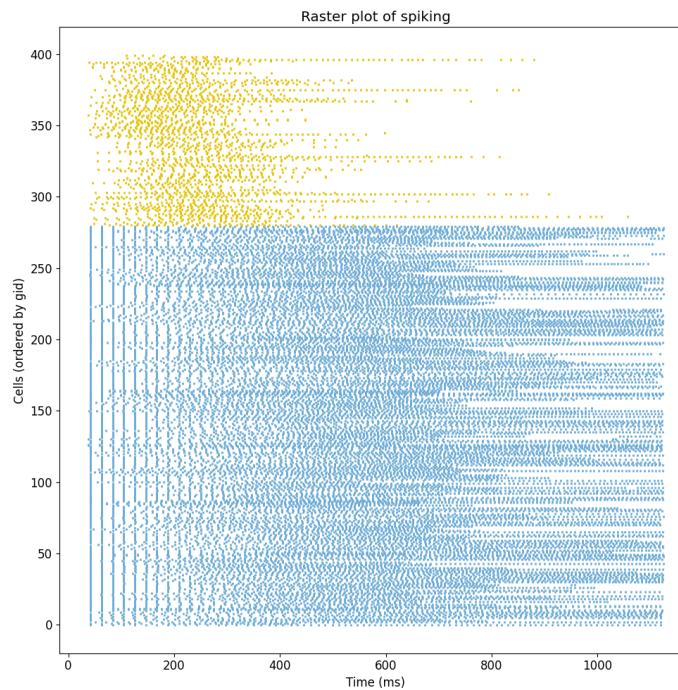
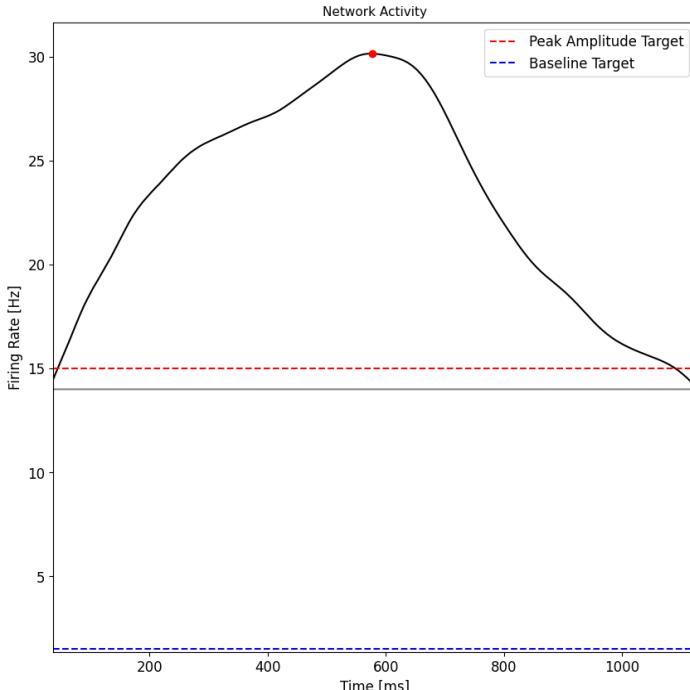
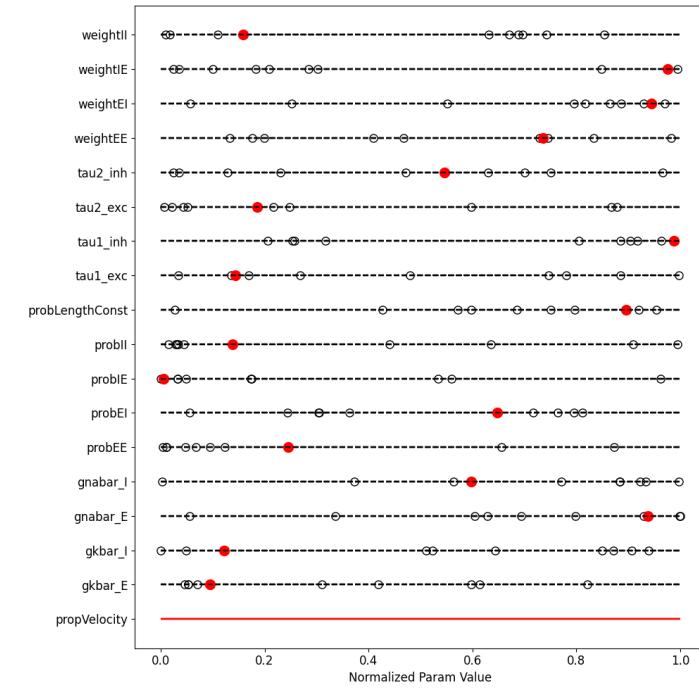
```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 0, 'width': 0.5, 'max': 0.5}
thresh_target: {'target': 5, 'width': 1, 'min': 3, 'max': 7}
burst_peak_frequency: {'target': 0.3333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_osc: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 16.14736403059937, 'Fit': 1.7747898389034267}
burst_peak_frequency_fitness: {'Value': 0.8888888888888888, 'Fit': 28.03162489452614}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 23.017611214138725, 'Fit': 1000}
slopeFitness: {'Value': -0.04299436790932267, 'Fit': 1.089794052598143}
thresh: {'Value': 13.990960132881025, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 10.936329588014981, 'Fit': 1000}
E_rate_fitness: {'Value': 79.96428571428571, 'Fit': 1000}
I_rate_fitness: {'Value': 19.694444444444446, 'Fit': 2.8026224147283285}
maxFitness: 1000
average_fitness: 559.2998701334172
average_scaled_fitness: 558.8190737839072
```

binSize: 7.5

gaussianSigma: 30.0

thresholdBurst: 1.0



Data Directory: /NERSC/output/240429_Run2_debug_node_run/gen_3/gen_3_cand_31_data.json

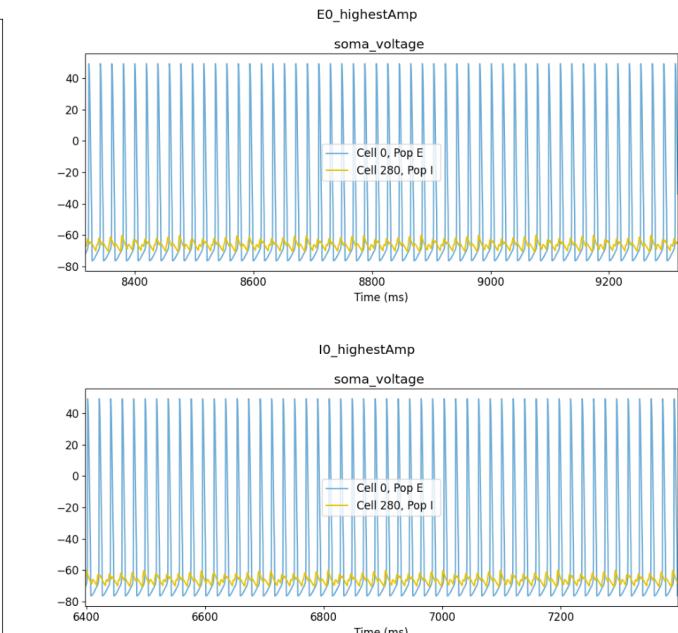
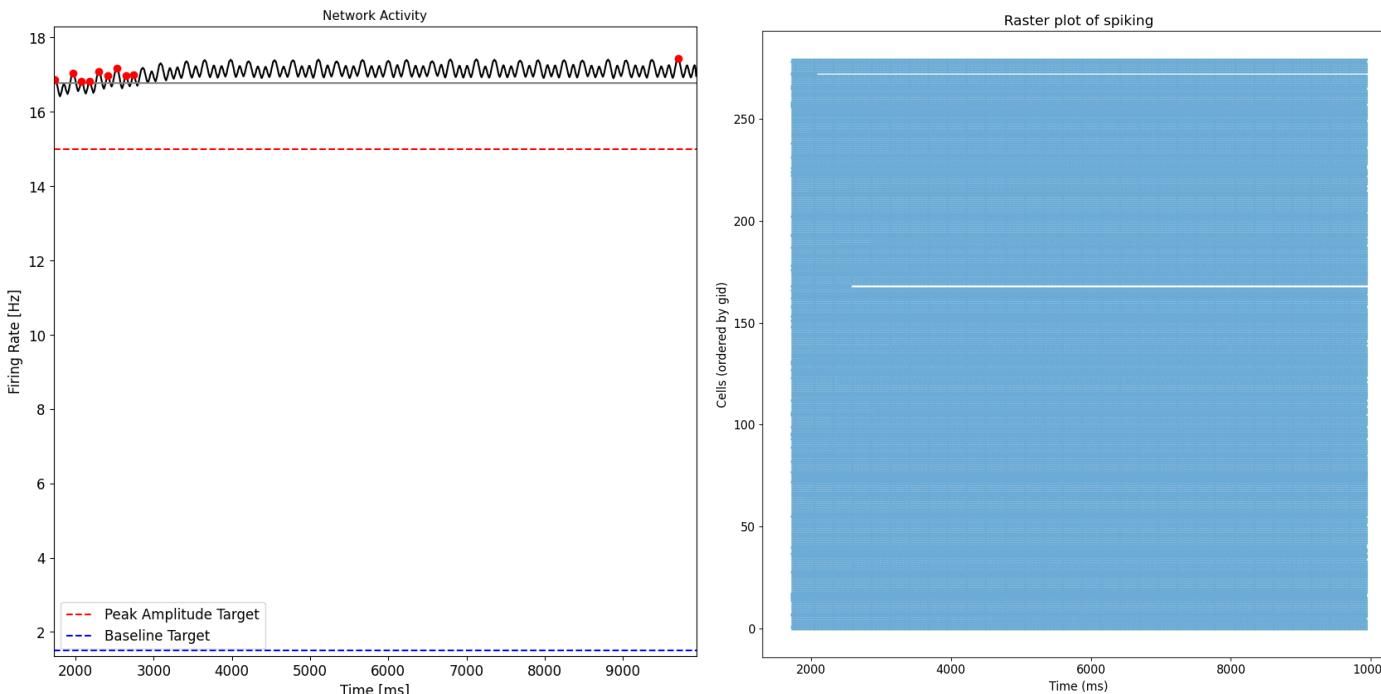
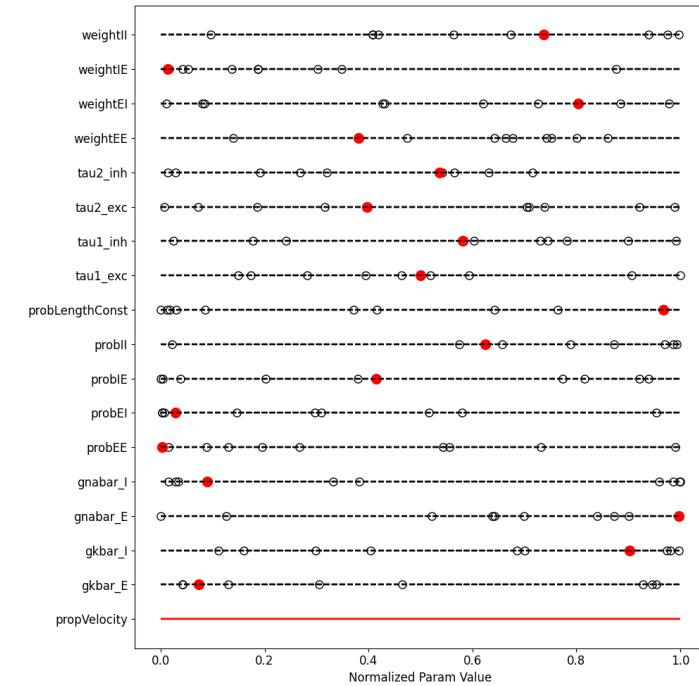
SimLabel: gen_3_cand_31

Generation Rank: 0/10

```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 0, 'width': 0.5, 'max': 0.5}
thresh_target: {'target': 5, 'width': 1, 'min': 3, 'max': 7}
burst_peak_frequency: {'target': 0.333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_osc: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.24756888048338438, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 1.0062893081761006, 'Fit': 56.69782493462815}
IBI_fitness: {'Value': 885.833333333334, 'Fit': 114.85131148077666}
baseline_fitness: {'Value': 17.08211969735091, 'Fit': 1000}
slopeFitness: {'Value': 0.00025046279902471143, 'Fit': 1.0005010510822288}
thresh: {'Value': 16.774697572392547, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 82.17228464419476, 'Fit': 35.3586504544811}
E_rate_fitness: {'Value': 53.162698412698404, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 578.6564764356631
average_scaled_fitness: 578.234499609212
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



```

rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 0, 'width': 0.5, 'max': 0.5}
thresh_target: {'target': 5, 'width': 1, 'min': 3, 'max': 7}
burst_peak_frequency: {'target': 0.3333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_osc: {'target': 100, 'width': 5, 'min': 75}

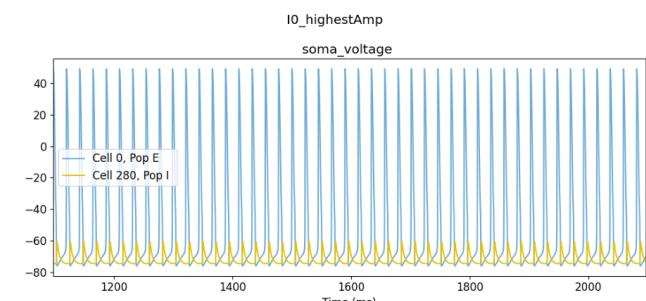
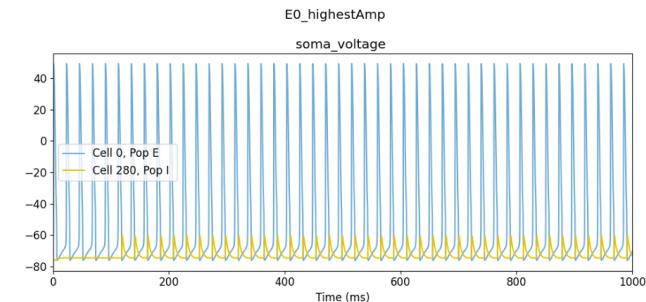
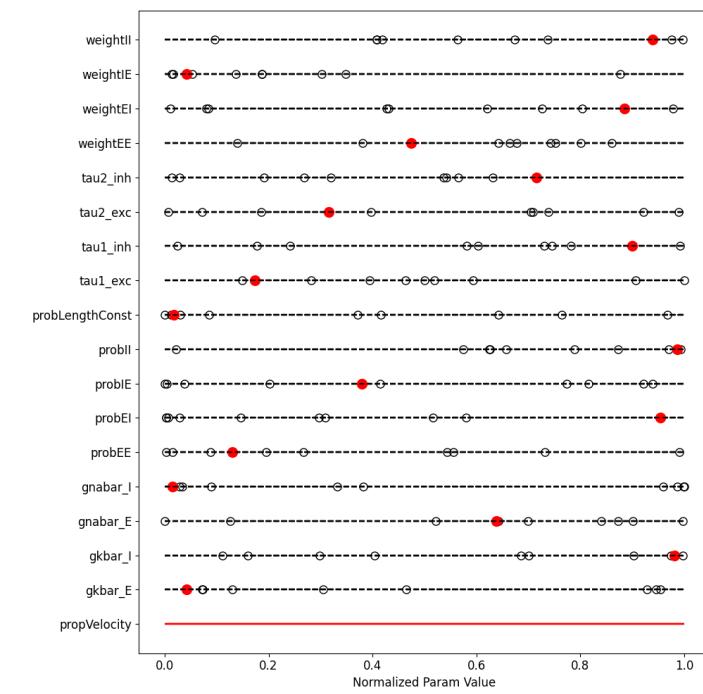
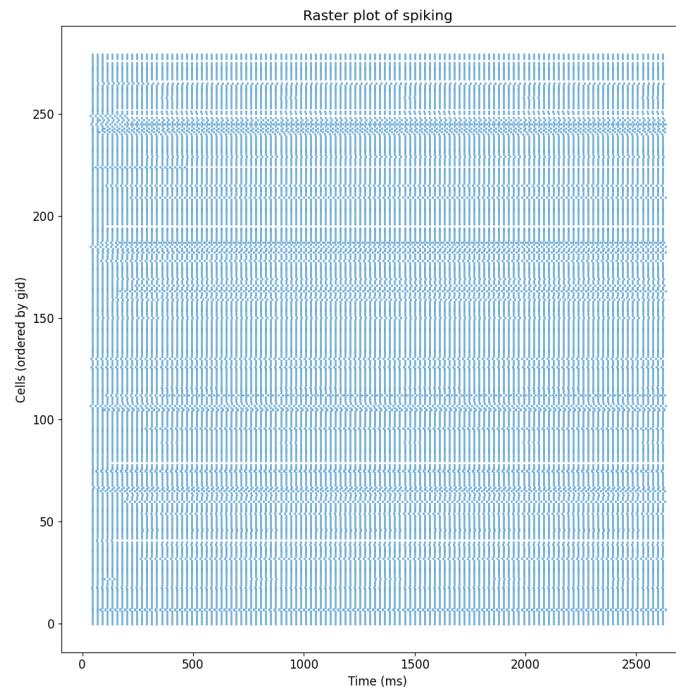
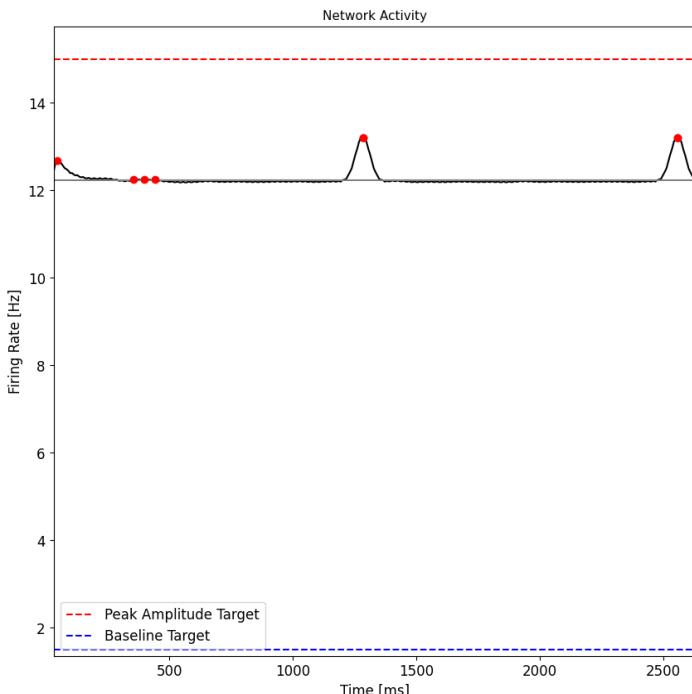
```

```

burstAmp_Fitness: {'Value': 0.6688774126470878, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 4.178537511870846, 'Fit': 1000}
IBI_fitness: {'Value': 251.25, 'Fit': 8.604753347024879}
baseline_fitness: {'Value': 12.27440051128883, 'Fit': 1000}
slopeFitness: {'Value': 0.00016479315659014818, 'Fit': 1.0003296406327167}
thresh: {'Value': 12.23069007715358, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 26.06741573033708, 'Fit': 1000}
E_rate_fitness: {'Value': 43.74206349206349, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 778.8450092208508
average_scaled_fitness: 778.623559805987

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



```

rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 0, 'width': 0.5, 'max': 0.5}
thresh_target: {'target': 5, 'width': 1, 'min': 3, 'max': 7}
burst_peak_frequency: {'target': 0.3333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_osc: {'target': 100, 'width': 5, 'min': 75}

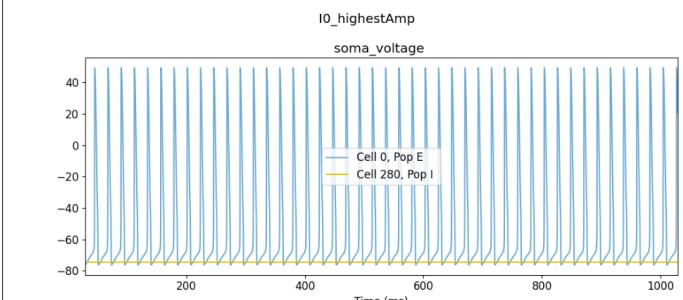
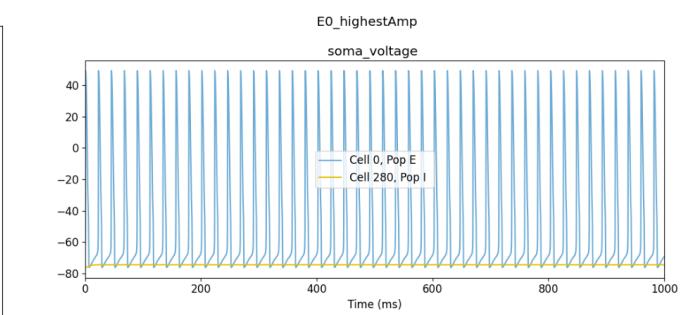
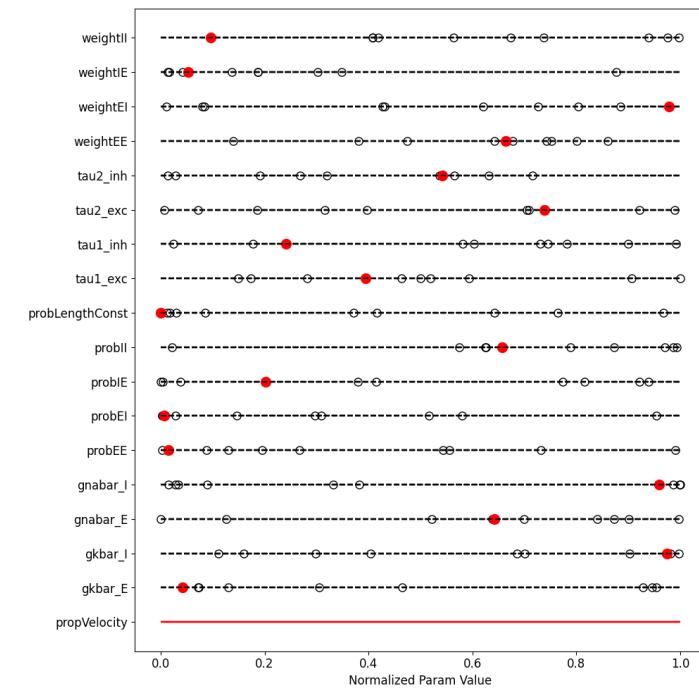
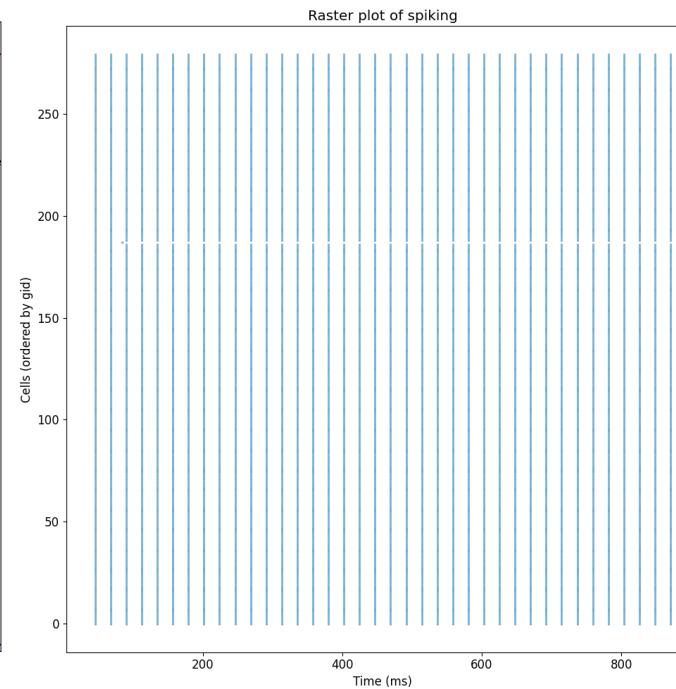
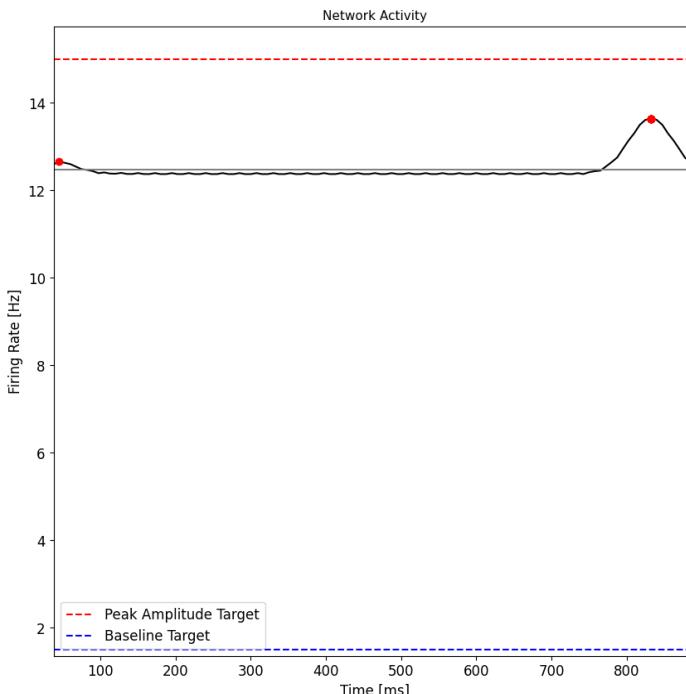
```

```

burstAmp_Fitness: {'Value': 1.0741538896922627, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 13.445378151260504, 'Fit': 1000}
IBI_fitness: {'Value': 71.5909090909091, 'Fit': 4.349081051138679}
baseline_fitness: {'Value': 12.497303537245303, 'Fit': 1000}
slopeFitness: {'Value': 0.004095864992931317, 'Fit': 1.0082253740107854}
thresh: {'Value': 12.468480890240247, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 8.620689655172415, 'Fit': 1000}
E_rate_fitness: {'Value': 44.285714285714285, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 778.3730340472388
average_scaled_fitness: 778.14935860134

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240429_Run2_debug_node_run/gen_4/gen_4_cand_70_data.json

SimLabel: gen_4_cand_70

Generation Rank: 0/10

```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 0, 'width': 0.5, 'max': 0.5}
thresh_target: {'target': 5, 'width': 1, 'min': 3, 'max': 7}
burst_peak_frequency: {'target': 0.333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_osc: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.1577428746018512, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 9.487761796618722, 'Fit': 1000}
IBI_fitness: {'Value': 105.40322580645162, 'Fit': 4.252136911814228}
baseline_fitness: {'Value': 13.427243672755074, 'Fit': 1000}
slopeFitness: {'Value': 7.180642461093308e-06, 'Fit': 1.000014361388046}
thresh: {'Value': 13.396279441625218, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 98.35205992509364, 'Fit': 1.390395188462777}
E_rate_fitness: {'Value': 48.03174603174603, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 667.4047273846294
average_scaled_fitness: 667.0717943977161
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0

