

Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_0/gen_0_cand_25_data.json

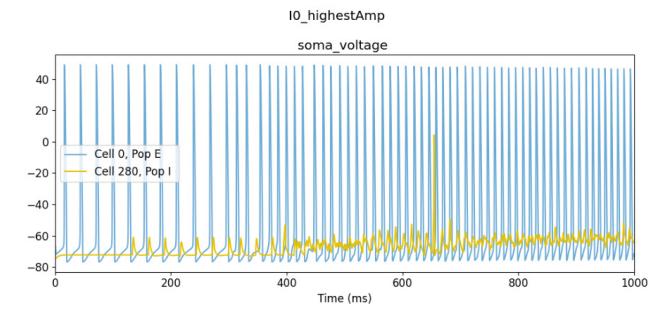
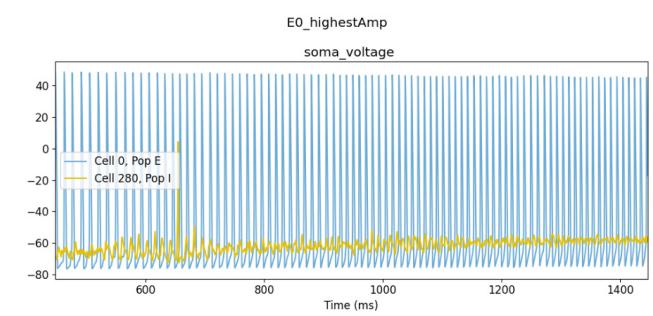
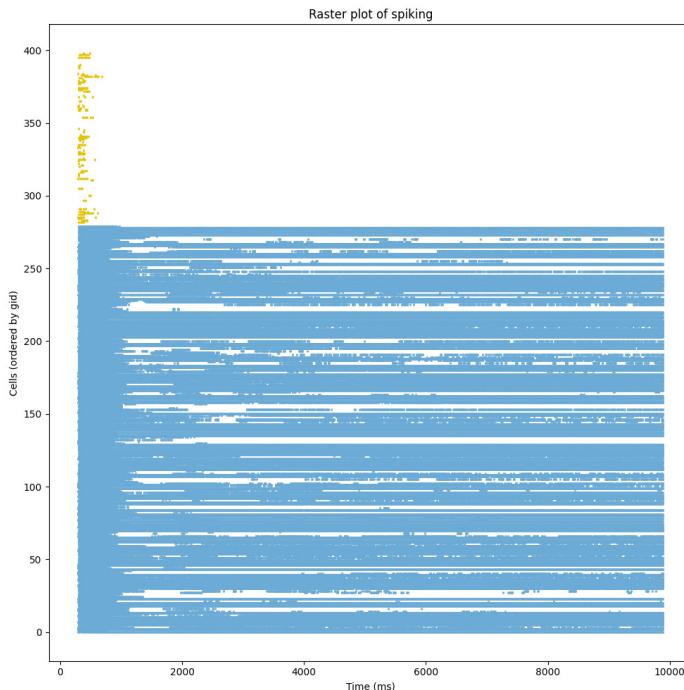
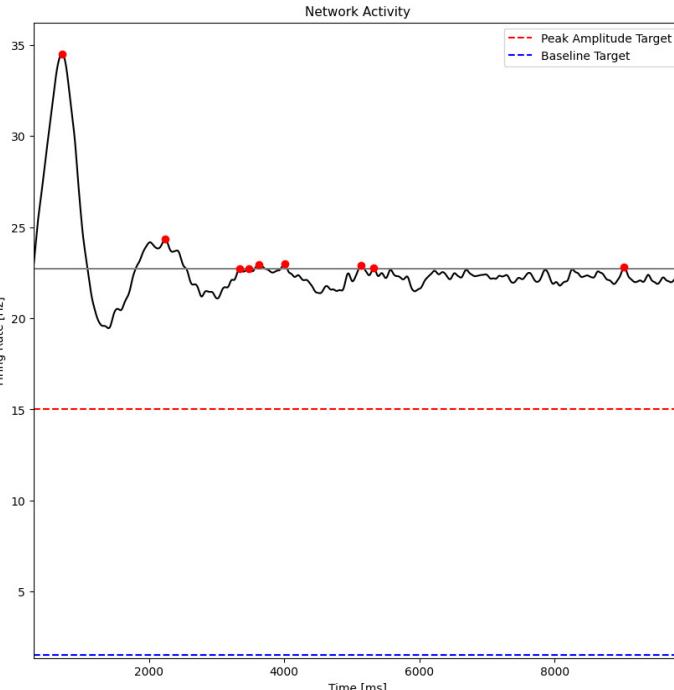
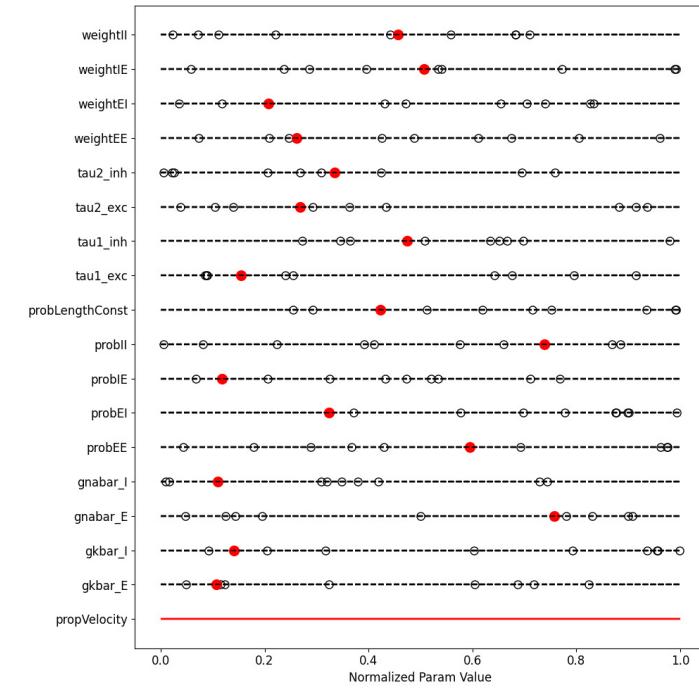
SimLabel: gen_0_cand_25

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 1.4258371895744435, 'Fit': 900.4986883767109}
burst_peak_frequency_fitness: {'Value': 1.0108668182966893, 'Fit': 58.27661568851561}
IBI_fitness: {'Value': 1019.1666666666666, 'Fit': 3.0776363064244205}
baseline_fitness: {'Value': 22.79987554814385, 'Fit': 1000}
slopeFitness: {'Value': -0.0024009845892206255, 'Fit': 1.0048135171093069}
thresh: {'Value': 22.719809313508332, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 96.09902475618904, 'Fit': 2.181897800462028}
E_rate_fitness: {'Value': 95.28571428571428, 'Fit': 1000}
I_rate_fitness: {'Value': 5.333333333333333, 'Fit': 11.783104302817202}
maxFitness: 1000
average_fitness: 441.86919511022666
average_scaled_fitness: 441.3078136494782
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_0/gen_0_cand_39_data.json

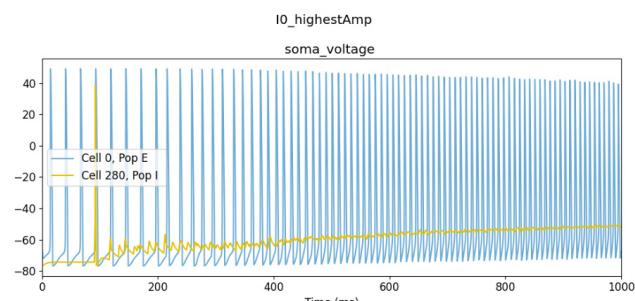
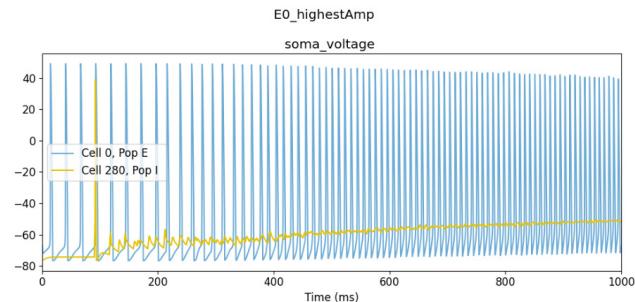
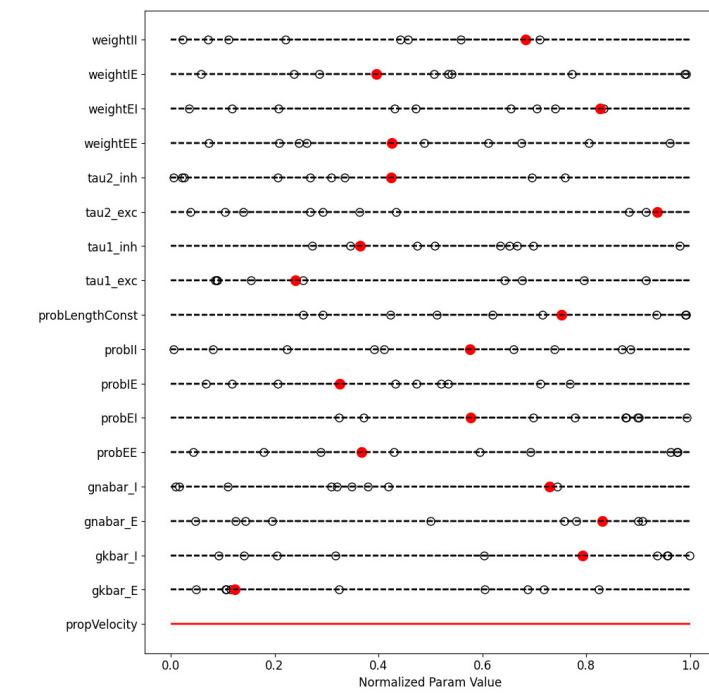
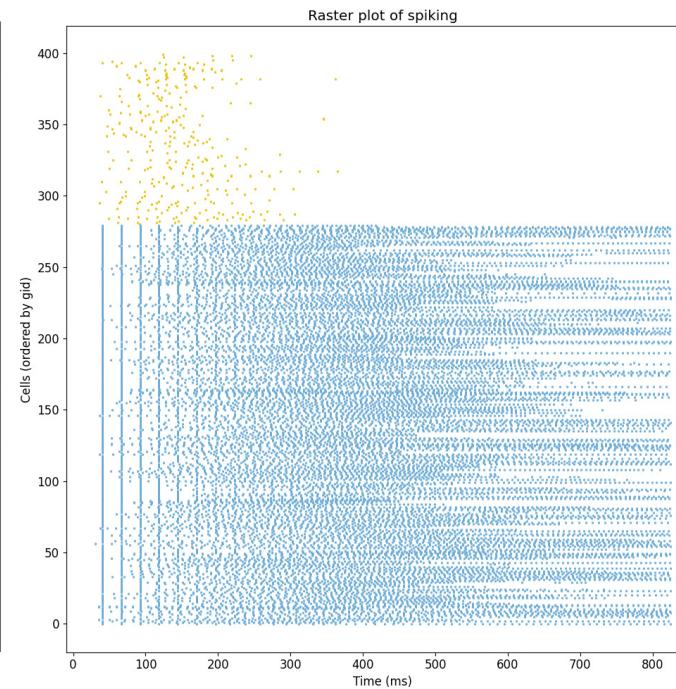
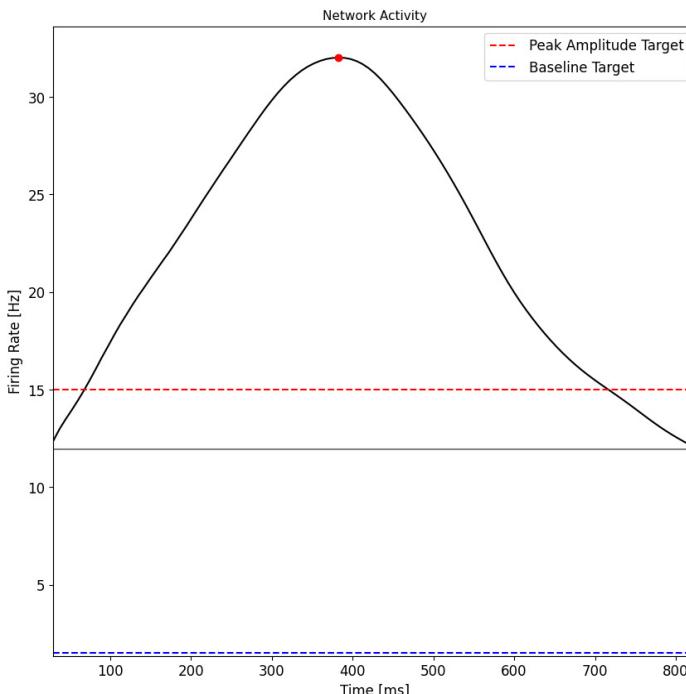
SimLabel: gen_0_cand_39

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': 20.07387708762433, 'Fit': 12.640912073286216}
burst_peak_frequency_fitness: {'Value': 1.2121212121212122, 'Fit': 194.94691148984037}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 22.228506528969927, 'Fit': 1000}
slopeFitness: {'Value': -0.06220354605968441, 'Fit': 1.1324767995530847}
thresh: {'Value': 11.94104201496597, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 8.027006751687923, 'Fit': 1000}
E_rate_fitness: {'Value': 73.27777777777779, 'Fit': 1000}
I_rate_fitness: {'Value': 2.1666666666666665, 'Fit': 16.172840667553782}
maxFitness: 1000
average_fitness: 580.5436823366927
average_scaled_fitness: 580.0681192243214
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_0/gen_0_cand_67_data.json

SimLabel: gen_0_cand_67

Generation Rank: 3/10

```

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}

```

```

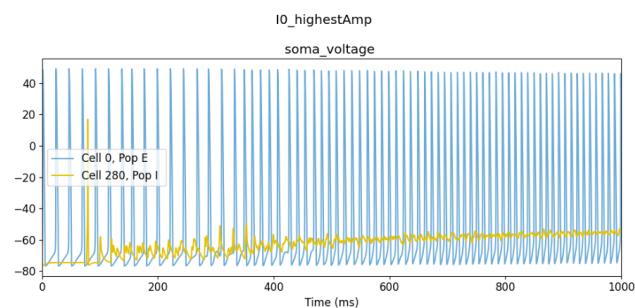
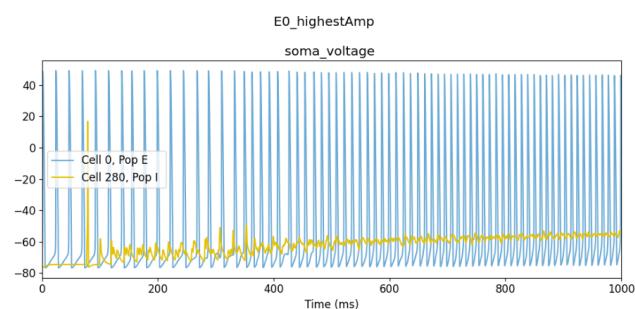
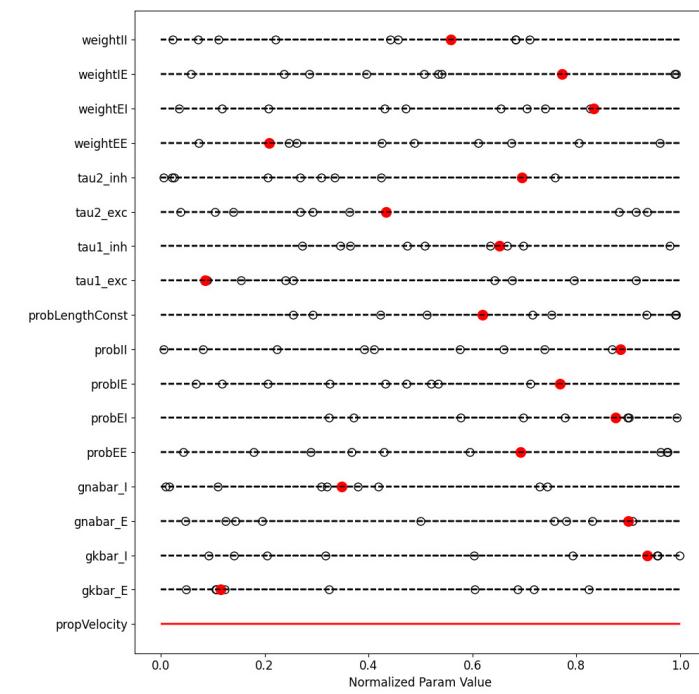
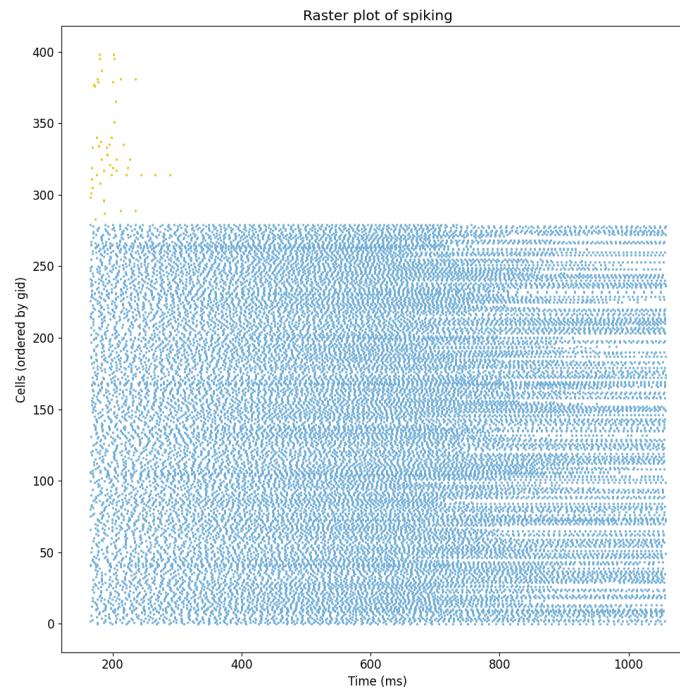
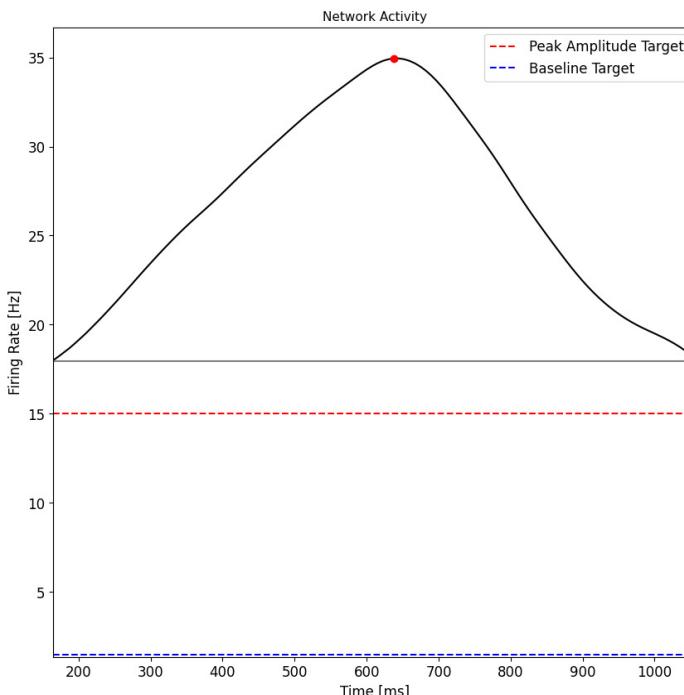
burstAmp_Fitness: {'Value': 17.010596817097927, 'Fit': 2.7327226189581912}
burst_peak_frequency_fitness: {'Value': 0.9456264775413711, 'Fit': 39.39972612935877}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 26.539101042092216, 'Fit': 1000}
slopeFitness: {'Value': -0.008322579579024963, 'Fit': 1.0167844616505204}
thresh: {'Value': 17.933271634422347, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 8.98876404494382, 'Fit': 1000}
E_rate_fitness: {'Value': 93.78571428571429, 'Fit': 1000}
I_rate_fitness: {'Value': 1.537037037037037, 'Fit': 1000}
maxFitness: 1000
average_fitness: 671.4610259122187
average_scaled_fitness: 671.1266325823776

```

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0

```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_0/gen_0_cand_81_data.json

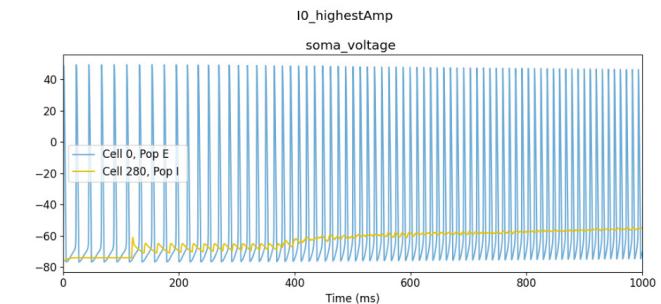
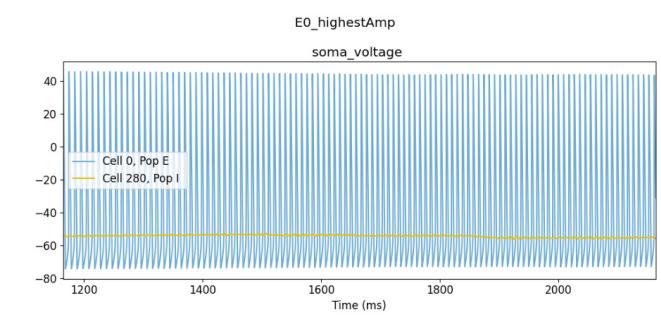
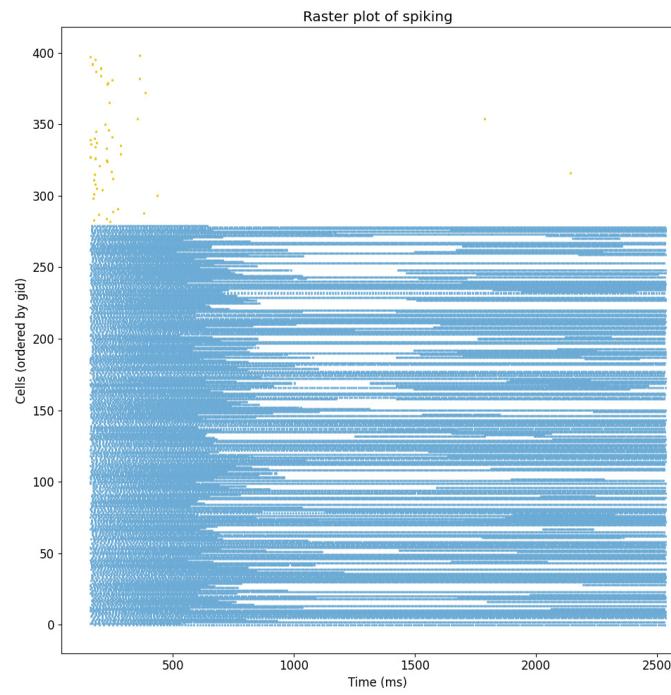
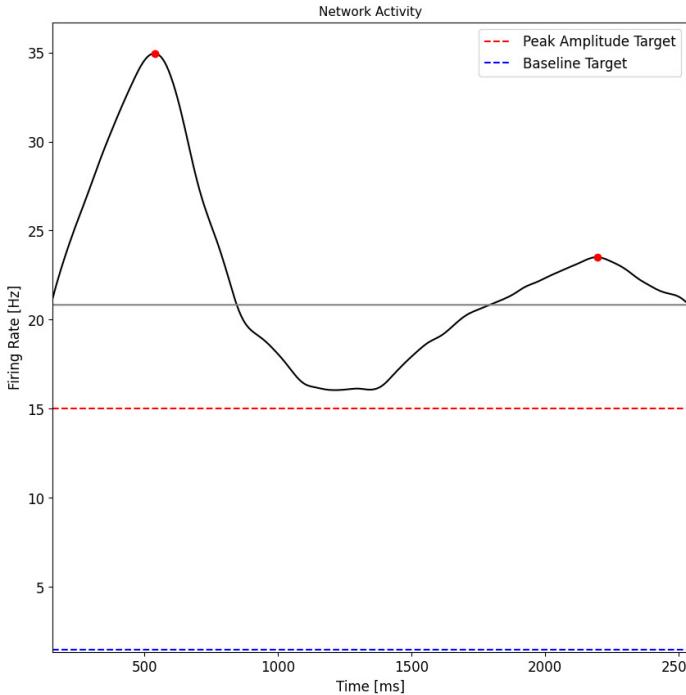
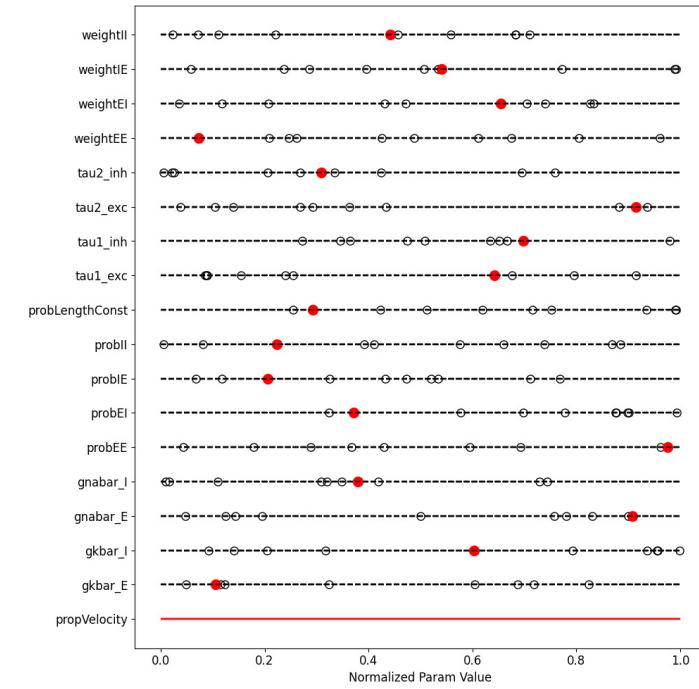
SimLabel: gen_0_cand_81

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 8.395033596956406, 'Fit': 500.7792953692223}
burst_peak_frequency_fitness: {'Value': 0.7889546351084812, 'Fit': 15.390151789242063}
IBI_fitness: {'Value': 1657.5, 'Fit': 1.9566816444670985}
baseline_fitness: {'Value': 22.421410498358036, 'Fit': 1000}
slopeFitness: {'Value': -0.023584818945155423, 'Fit': 1.048299825367828}
thresh: {'Value': 20.831773014091393, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 23.820224719101123, 'Fit': 1000}
E_rate_fitness: {'Value': 95.02380952380952, 'Fit': 1000}
I_rate_fitness: {'Value': 0.6759259259259258, 'Fit': 1000}
maxFitness: 1000
average_fitness: 613.2416031809448
average_scaled_fitness: 612.8357389537014
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_1/gen_1_cand_25_data.json

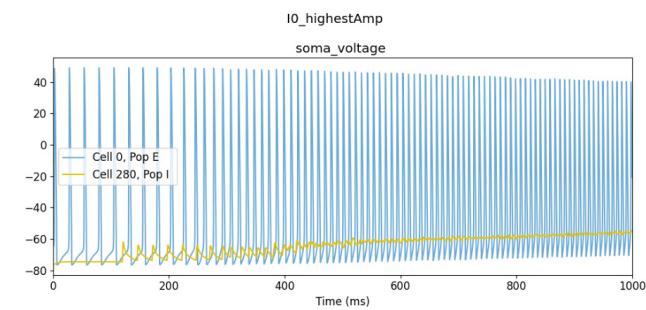
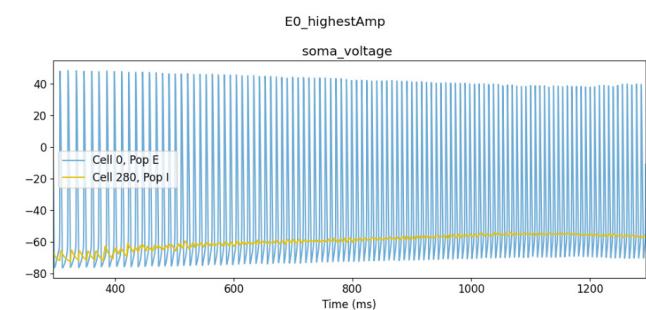
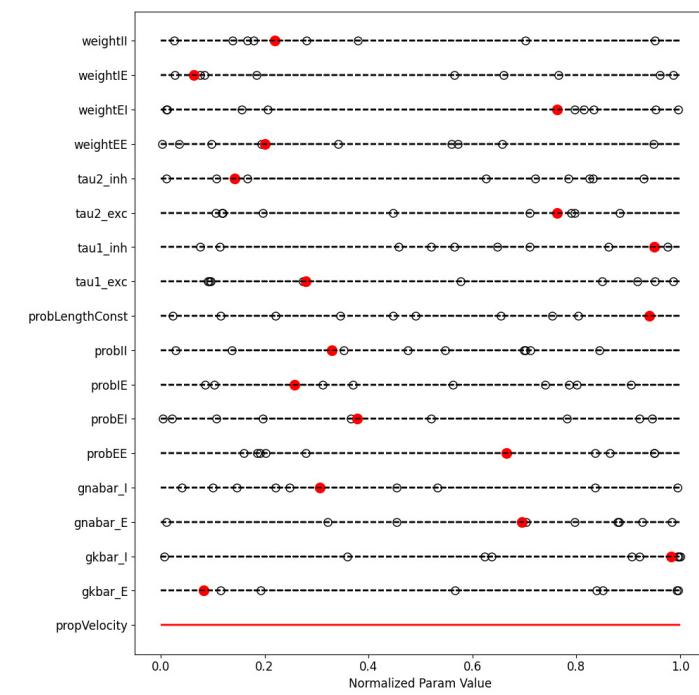
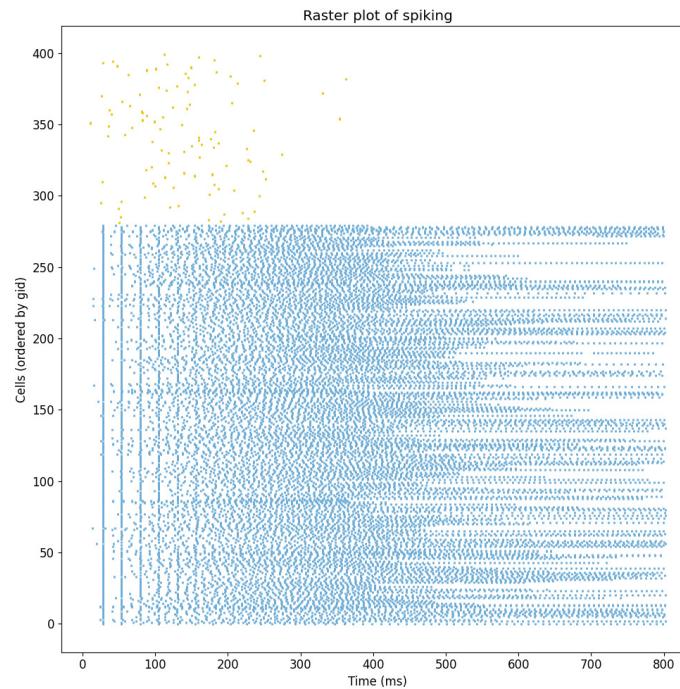
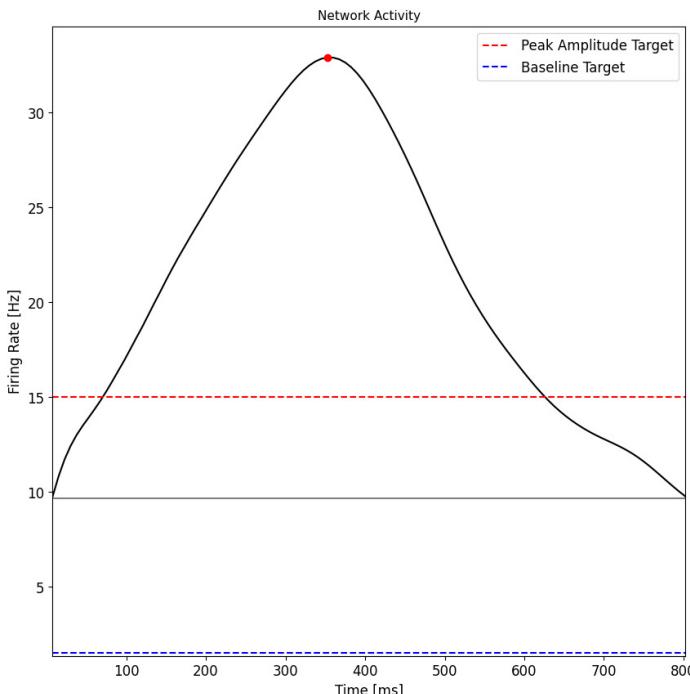
SimLabel: gen_1_cand_25

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 23.227400094187914, 'Fit': 61.17264100077186}
burst_peak_frequency_fitness: {'Value': 1.2461059190031152, 'Fit': 239.04110247276844}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 20.922846702311325, 'Fit': 1000}
slopeFitness: {'Value': -0.07729321953439033, 'Fit': 1.167175163231435}
thresh: {'Value': 9.662042966809272, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 8.014981273408239, 'Fit': 1000}
E_rate_fitness: {'Value': 67.77777777777777, 'Fit': 1000}
I_rate_fitness: {'Value': 0.6203703703703703, 'Fit': 1000}
maxFitness: 1000
average_fitness: 700.1534354040858
average_scaled_fitness: 699.80305298345
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_1/gen_1_cand_58_data.json

SimLabel: gen_1_cand_58

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': 0.333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_osc: {'target': 100, 'width': 5, 'min': 75}

```

```

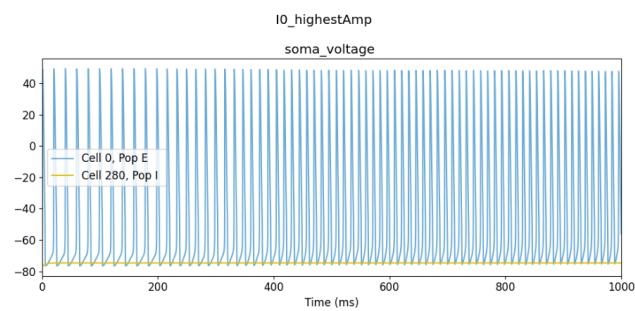
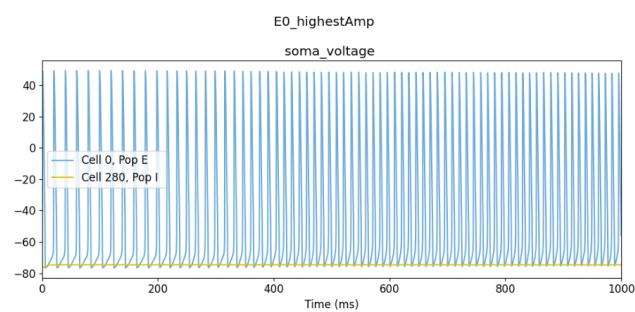
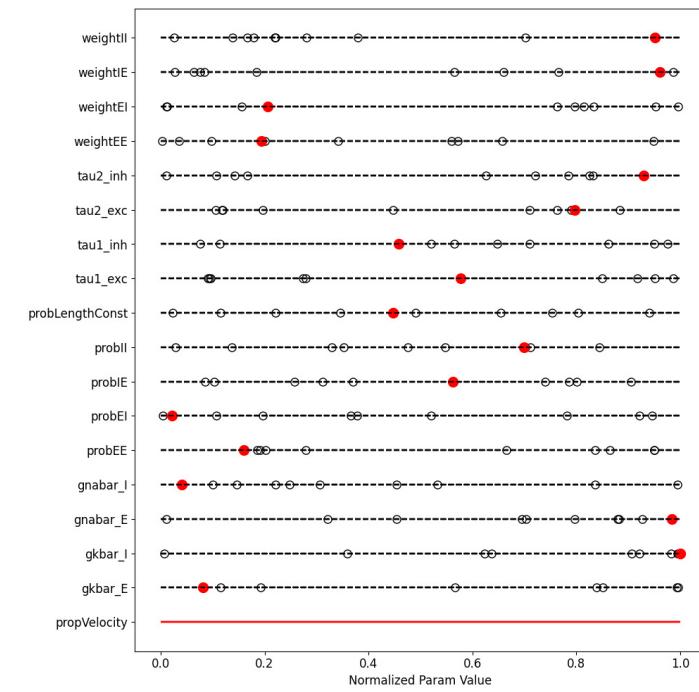
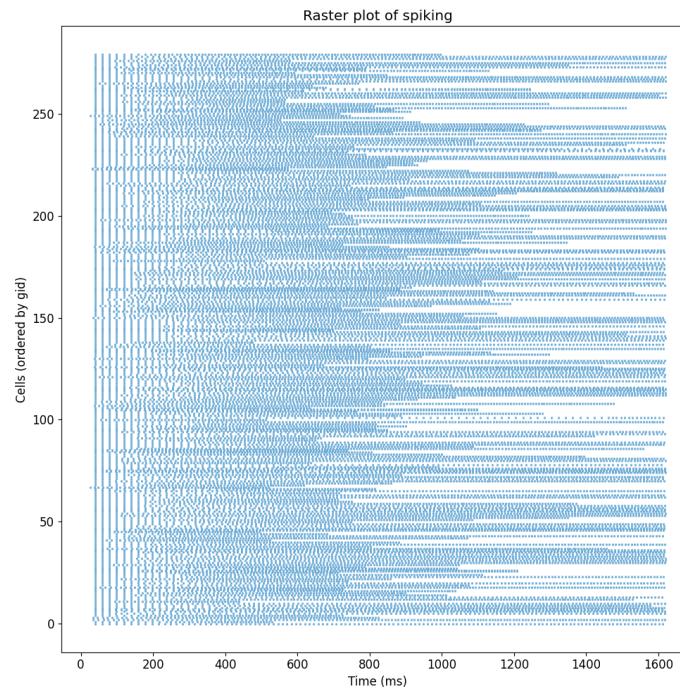
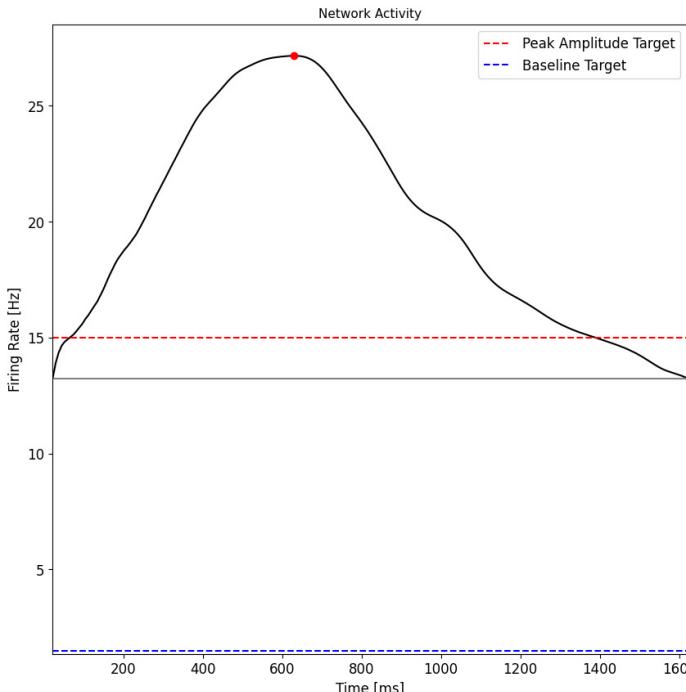
burstAmp_Fitness: {'Value': 13.929197850355084, 'Fit': 1.7081331941041185}
burst_peak_frequency_fitness: {'Value': 0.6172839506172839, 'Fit': 5.494258861570452}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 19.97145178789309, 'Fit': 1000}
slopeFitness: {'Value': -0.035661809259562534, 'Fit': 1.0739287128584132}
thresh: {'Value': 13.228695303899649, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 16.029962546816478, 'Fit': 1000}
E_rate_fitness: {'Value': 82.70238095238096, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 667.5862578631703
average_scaled_fitness: 667.2288854084005

```

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0

```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_1/gen_1_cand_63_data.json

SimLabel: gen_1_cand_63

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_oscil: {'target': 100, 'width': 5, 'min': 75}

```

```

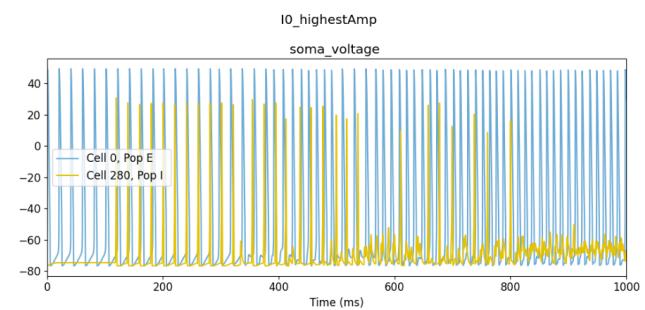
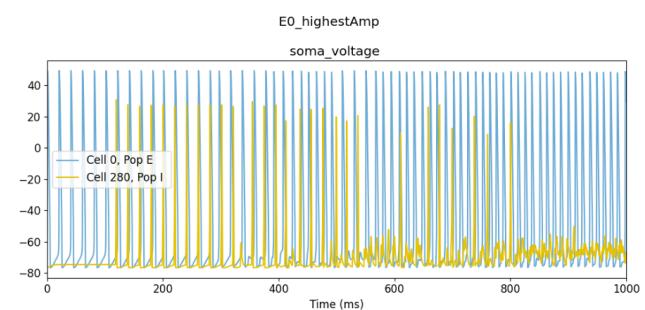
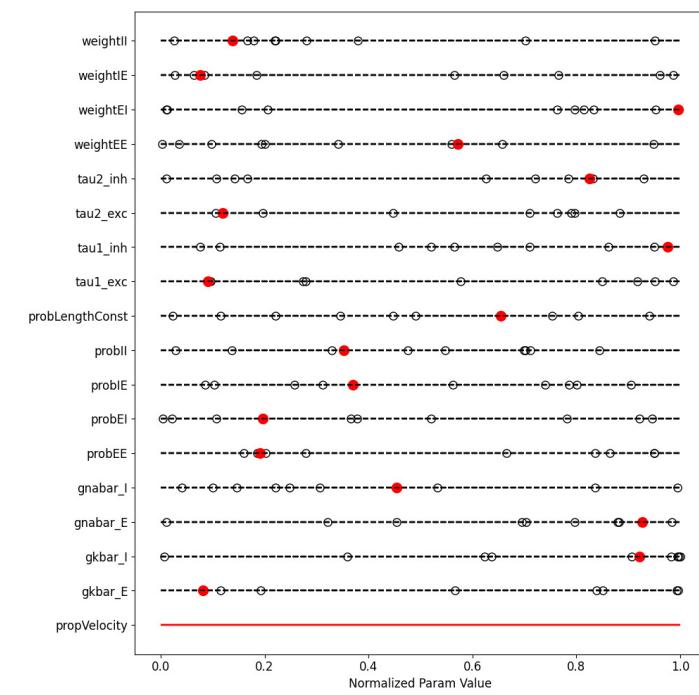
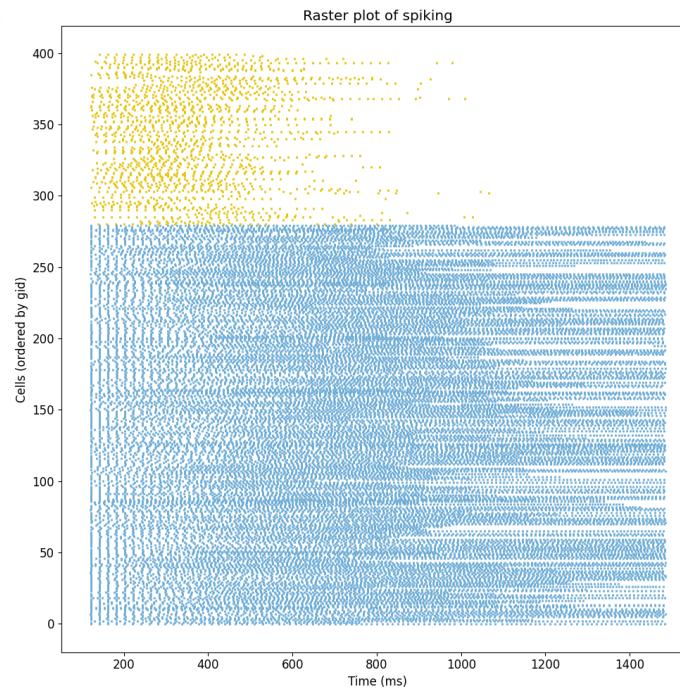
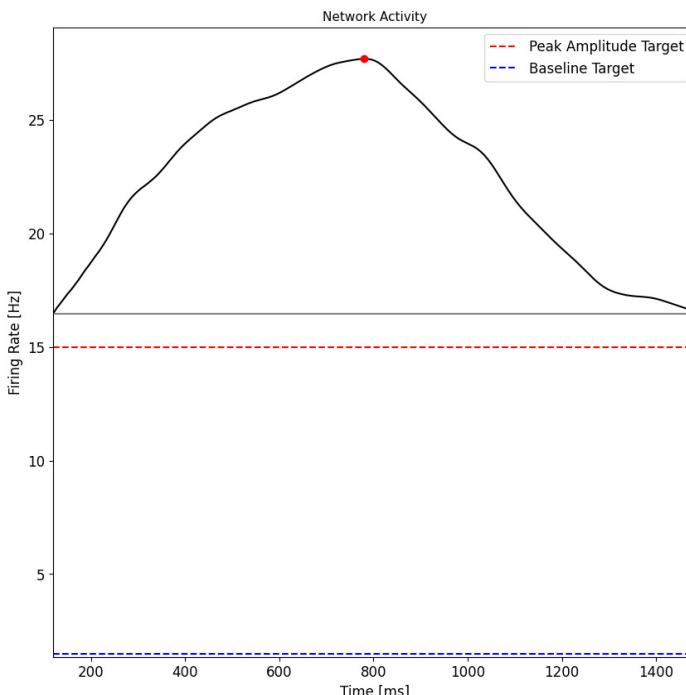
burstAmp_Fitness: {'Value': 11.227924549029712, 'Fit': 6.593192817438292}
burst_peak_frequency_fitness: {'Value': 0.6734006734006733, 'Fit': 7.693717143552359}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 22.459602343448143, 'Fit': 1000}
slopeFitness: {'Value': -0.024063157470755426, 'Fit': 1.0493031896247877}
thresh: {'Value': 16.460233244722104, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 13.707865168539326, 'Fit': 1000}
E_rate_fitness: {'Value': 79.59126984126983, 'Fit': 1000}
I_rate_fitness: {'Value': 16.166666666666668, 'Fit': 3.988173406930107}
maxFitness: 1000
average_fitness: 557.7027096175051
average_scaled_fitness: 557.2381181626488

```

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0

```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_2/gen_2_cand_61_data.json

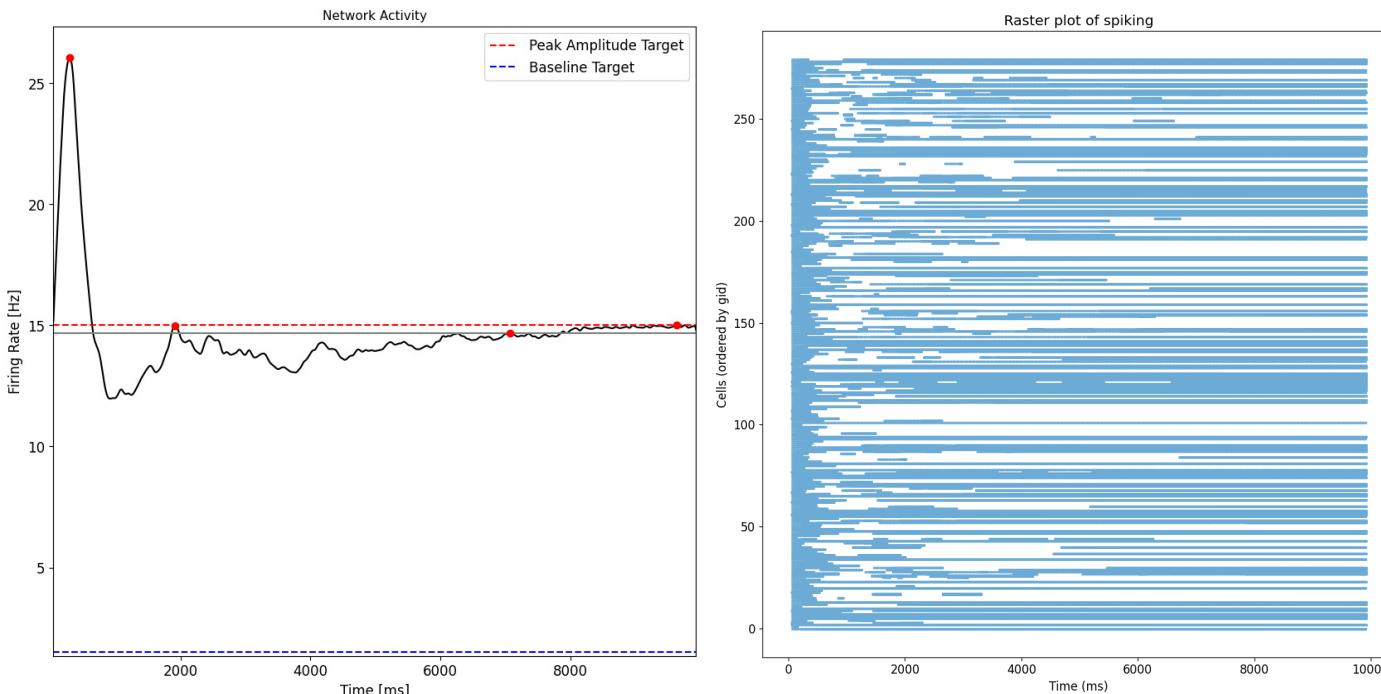
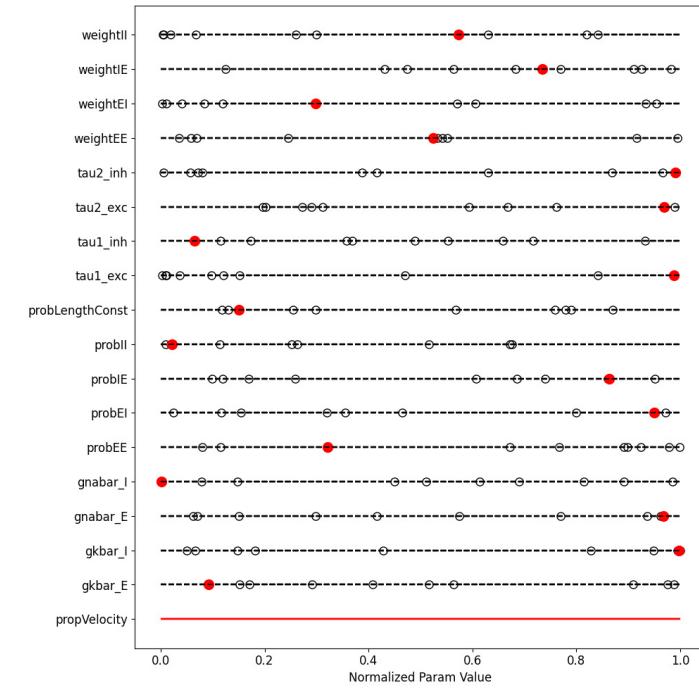
SimLabel: gen_2_cand_61

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': 2.9992658854677496, 'Fit': 751.5425856828518}
burst_peak_frequency_fitness: {'Value': 0.4028197381671702, 'Fit': 1.5172787419474167}
IBI_fitness: {'Value': 3115.0, 'Fit': 334.4122269875836}
baseline_fitness: {'Value': 14.564726154216787, 'Fit': 1000}
slopeFitness: {'Value': -0.000502845167066948, 'Fit': 1.0010061962102286}
thresh: {'Value': 14.672069380501268, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 98.80149812734082, 'Fit': 1.2708683087573514}
E_rate_fitness: {'Value': 65.5, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 565.52710732415
average_scaled_fitness: 565.0917614826113
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_3/gen_3_cand_10_data.json

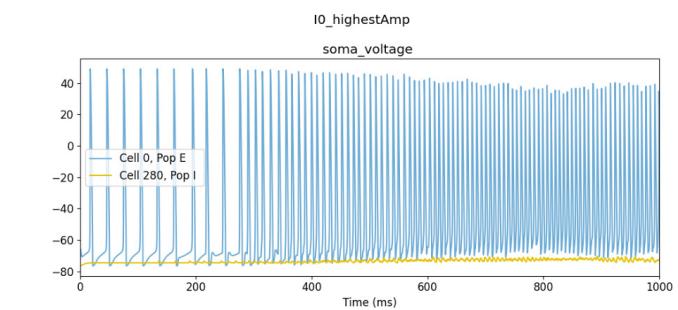
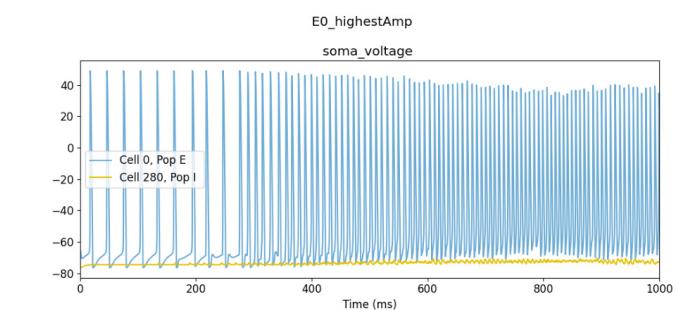
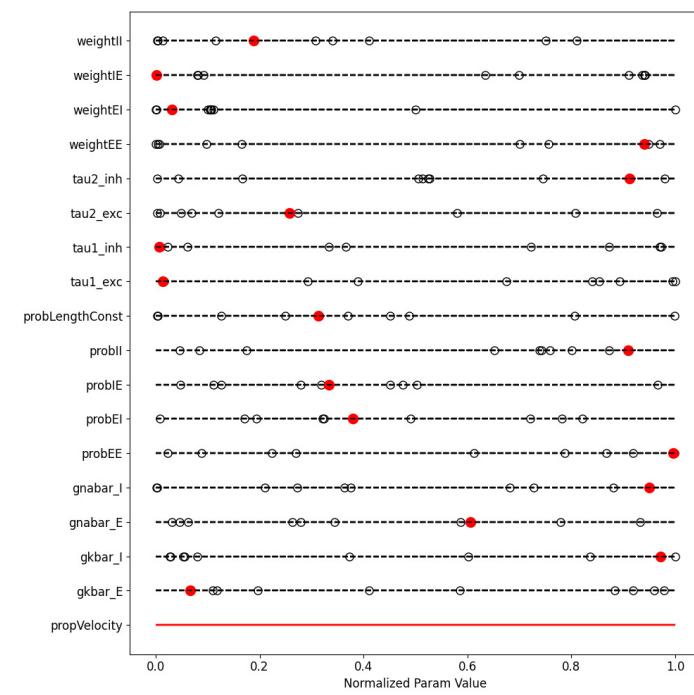
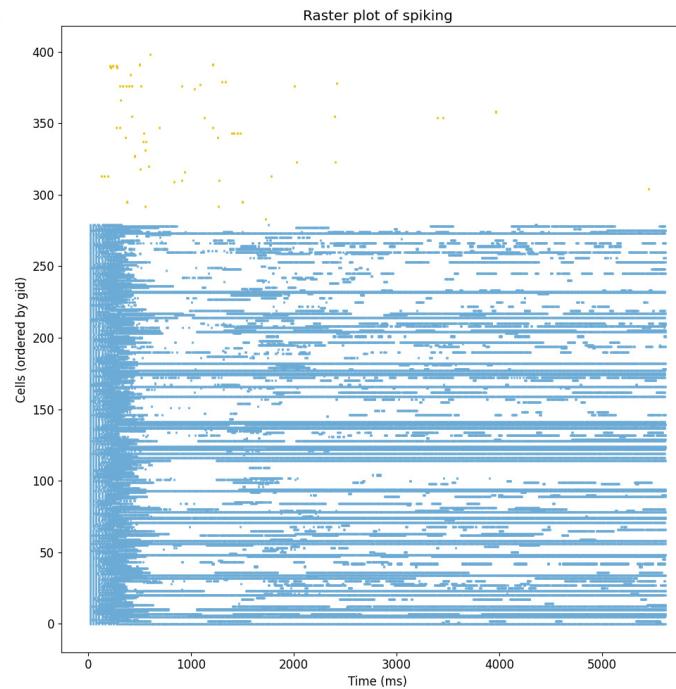
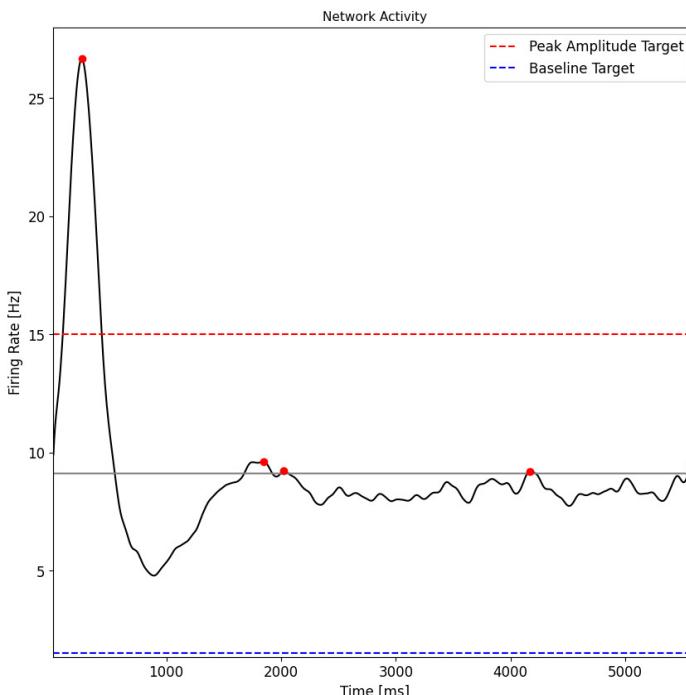
SimLabel: gen_3_cand_10

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 3.7101679412250066, 'Fit': 800.7135990199646}
burst_peak_frequency_fitness: {'Value': 0.8900756564307967, 'Fit': 28.23193936370896}
IBI_fitness: {'Value': 1331.25, 'Fit': 2.4667443339041193}
baseline_fitness: {'Value': 9.08354243716489, 'Fit': 1000}
slopeFitness: {'Value': -0.005240214634838365, 'Fit': 1.0105355413329393}
thresh: {'Value': 9.113710099781768, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 56.114028507126775, 'Fit': 1000}
E_rate_fitness: {'Value': 46.34126984126984, 'Fit': 1000}
I_rate_fitness: {'Value': 0.3333333333333333, 'Fit': 1000}
maxFitness: 1000
average_fitness: 648.0469798065456
average_scaled_fitness: 647.6909589990813
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_3/gen_3_cand_43_data.json

SimLabel: gen_3_cand_43

Generation Rank: 0/10

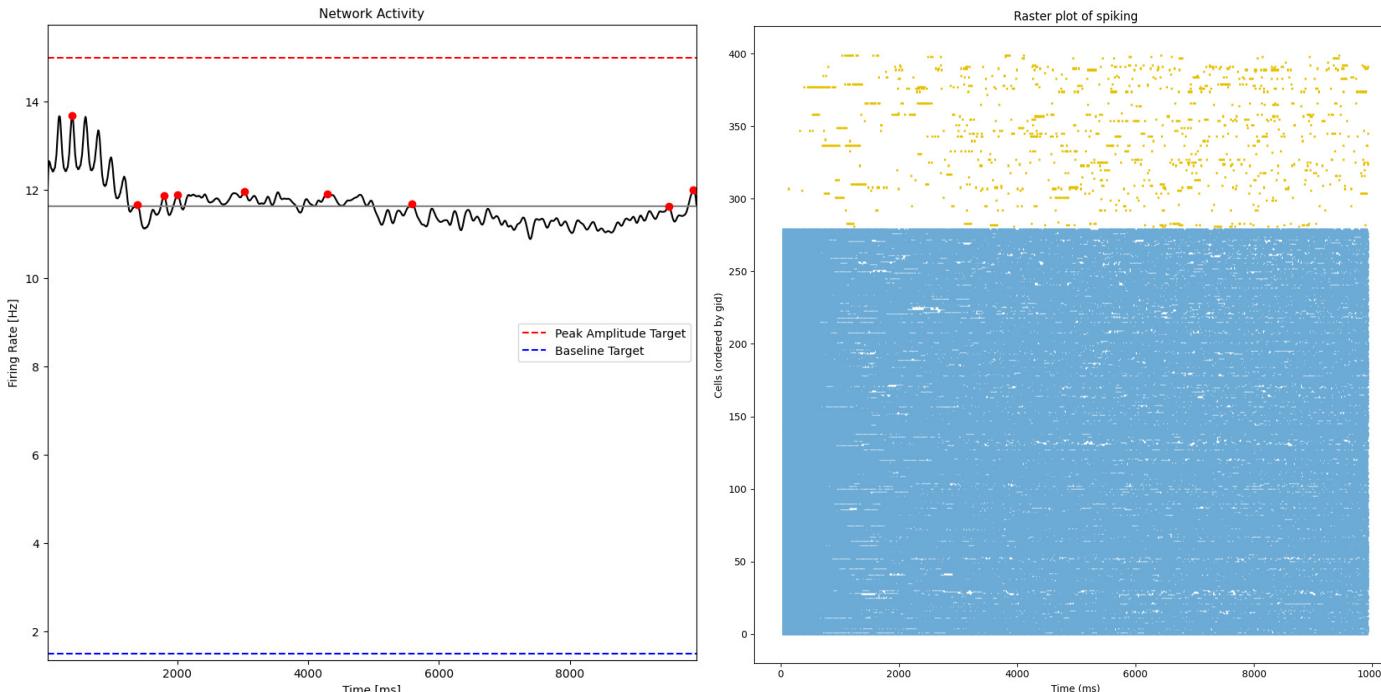
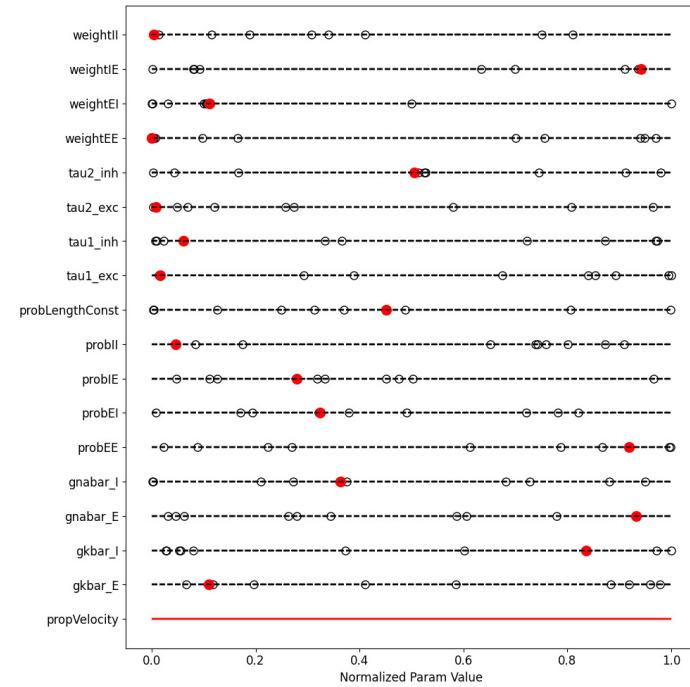
```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.4022978846745631, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.9063444108761329, 'Fit': 31.126715360705443}
IBI_fitness: {'Value': 1185.9375, 'Fit': 2.8919426930312557}
baseline_fitness: {'Value': 11.644933895653862, 'Fit': 1000}
slopeFitness: {'Value': -0.0008810861426438541, 'Fit': 1.001763725823269}
thresh: {'Value': 11.634124584586454, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 99.02621722846442, 'Fit': 1.2150151602748258}
E_rate_fitness: {'Value': 46.079365079365076, 'Fit': 1000}
I_rate_fitness: {'Value': 0.6018518518517, 'Fit': 1000}
maxFitness: 1000
average_fitness: 559.5817152155372
average_scaled_fitness: 559.1400777372451
```

binSize: 7.5

gaussianSigma: 30.0

thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_3/gen_3_cand_62_data.json

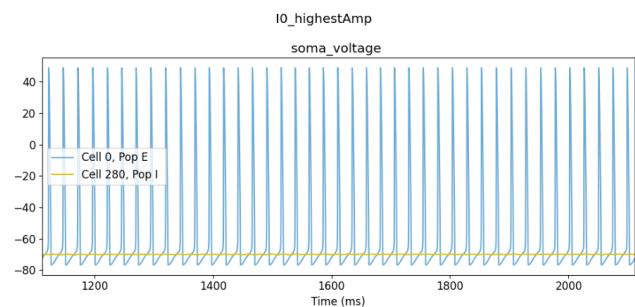
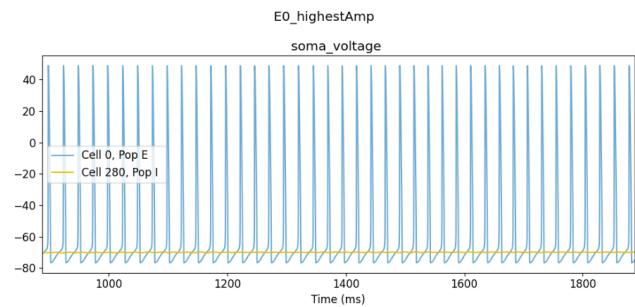
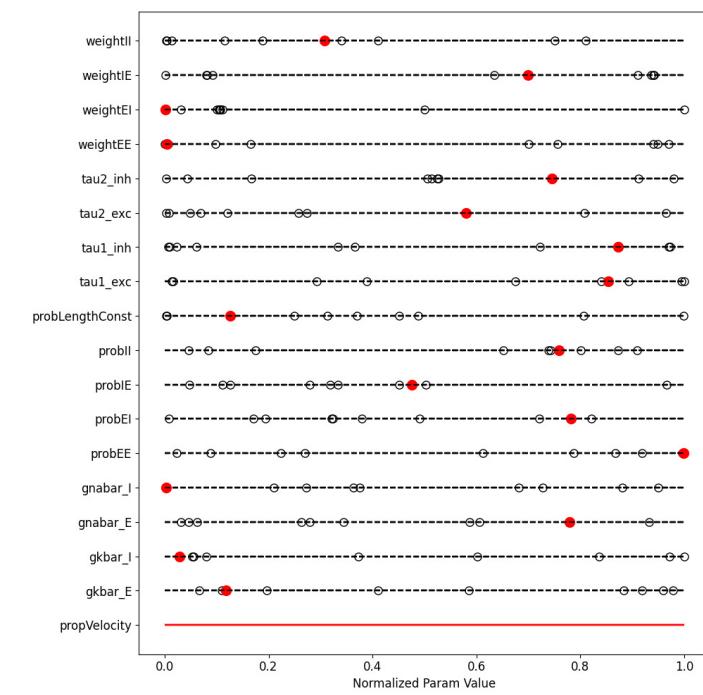
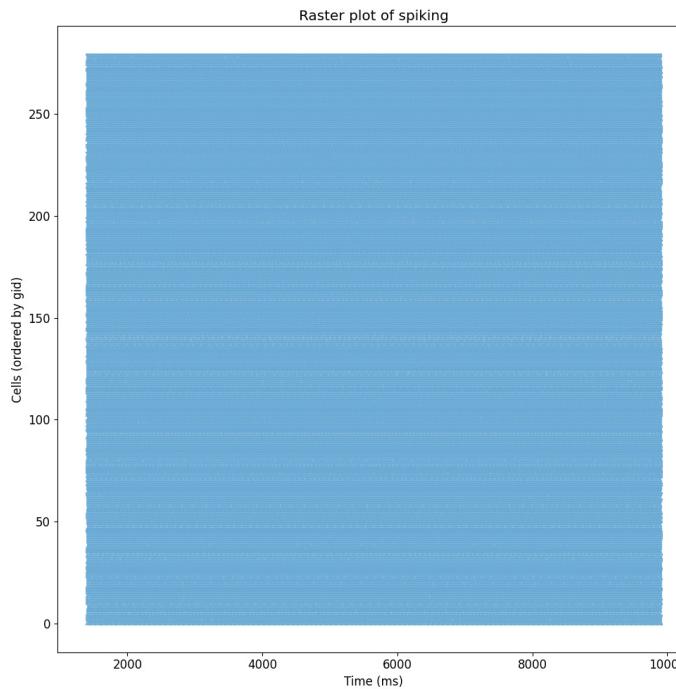
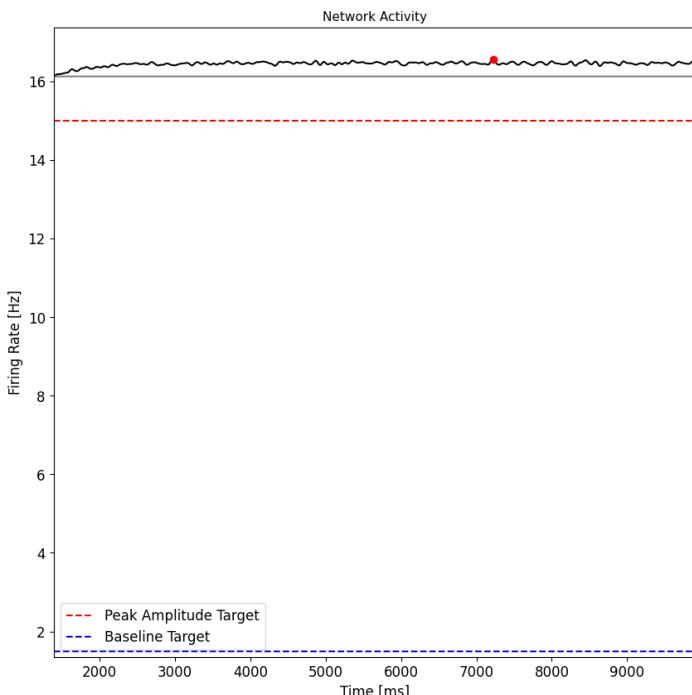
SimLabel: gen_3_cand_62

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.42168727071760514, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10085728693898136, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 16.43830164257586, 'Fit': 1000}
slopeFitness: {'Value': 8.080327540474308e-05, 'Fit': 1.0001616196098515}
thresh: {'Value': 16.119736794156193, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 85.43543543543544, 'Fit': 18.41034827756081}
E_rate_fitness: {'Value': 48.90079365079365, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 779.9345010996856
average_scaled_fitness: 779.7141796768542
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_4/gen_4_cand_73_data.json

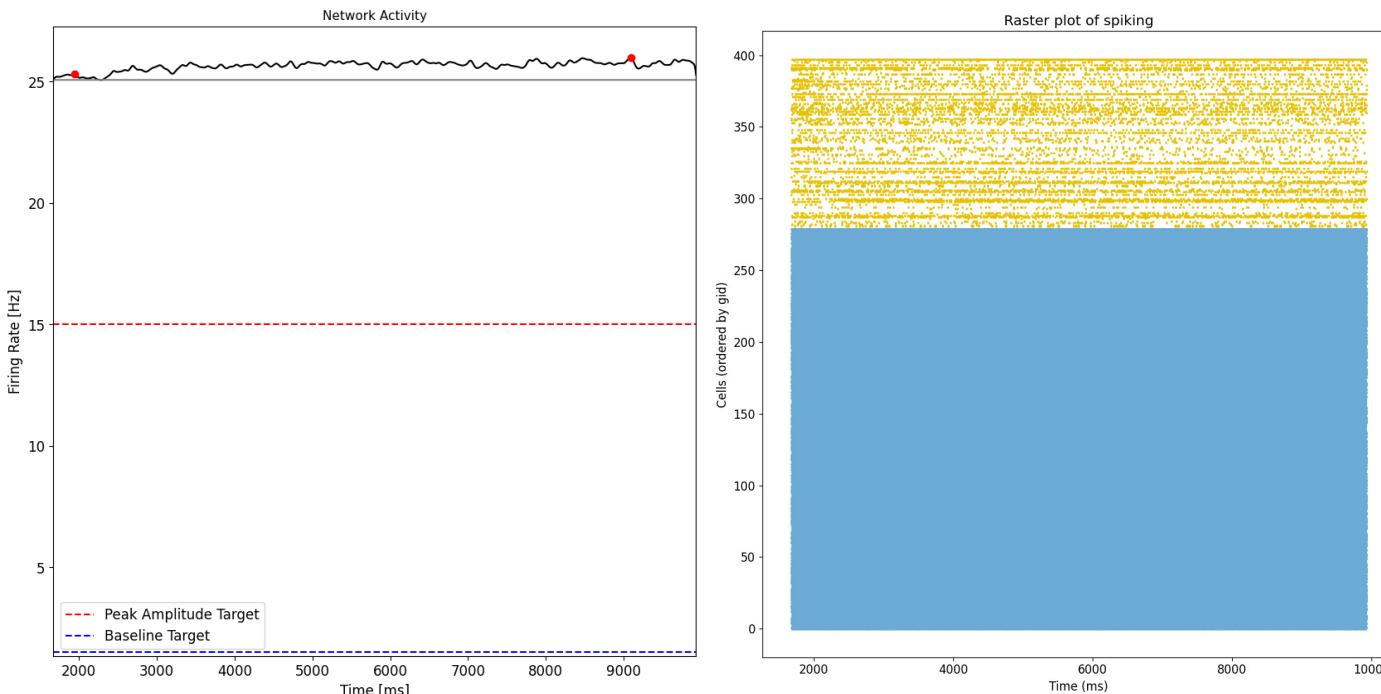
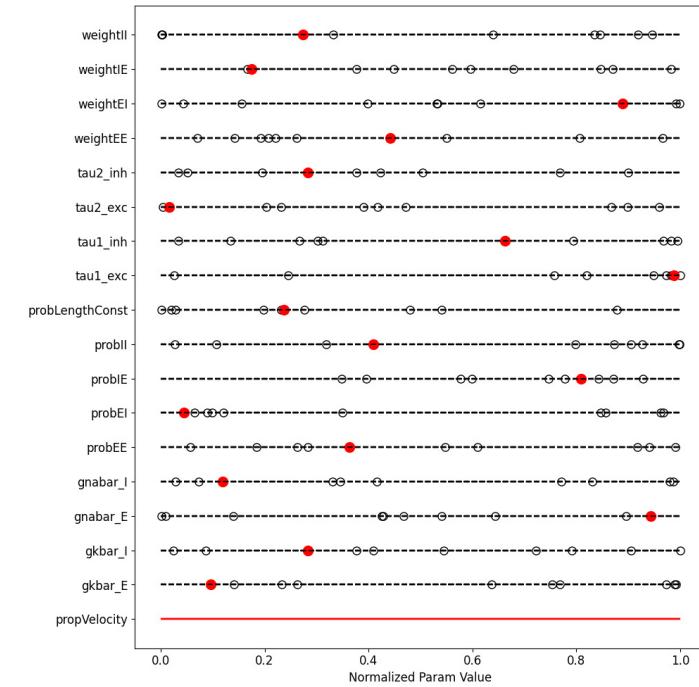
SimLabel: gen_4_cand_73

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.5683830984456417, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.2014098690835851, 'Fit': 1000}
IBI_fitness: {'Value': 7147.5, 'Fit': 1000.0}
baseline_fitness: {'Value': 25.6354524527209, 'Fit': 1000}
slopeFitness: {'Value': 0.00040217284669528237, 'Fit': 1.0008046692661368}
thresh: {'Value': 25.055133252010265, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 82.54681647940075, 'Fit': 32.806829301202995}
E_rate_fitness: {'Value': 68.34523809523809, 'Fit': 1000}
I_rate_fitness: {'Value': 16.537037037037035, 'Fit': 3.843165193804704}
maxFitness: 1000
average_fitness: 670.8500887960304
average_scaled_fitness: 670.5203440178954
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_5/gen_5_cand_5_data.json

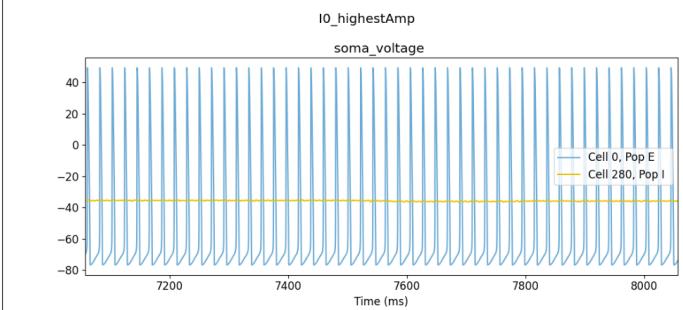
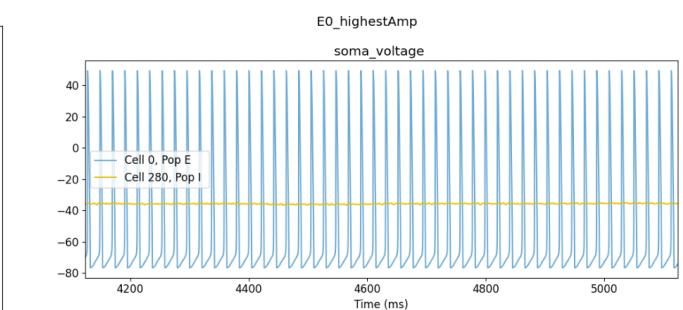
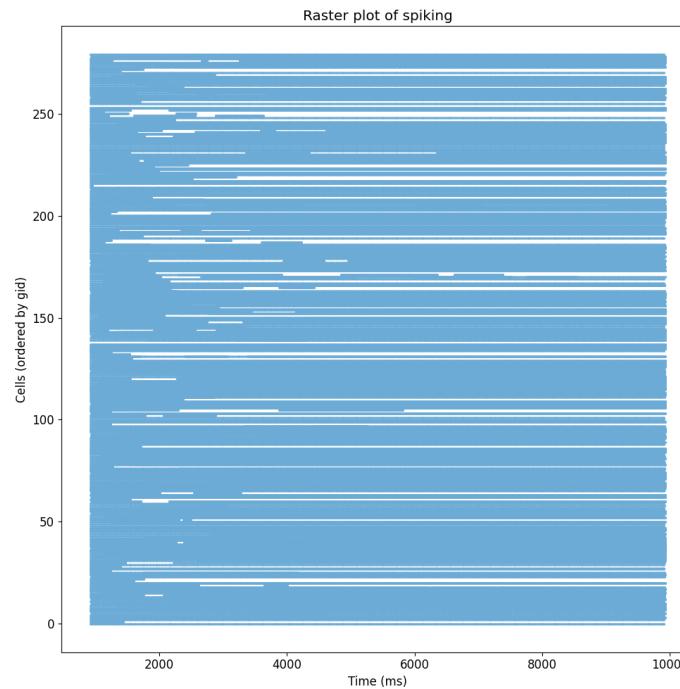
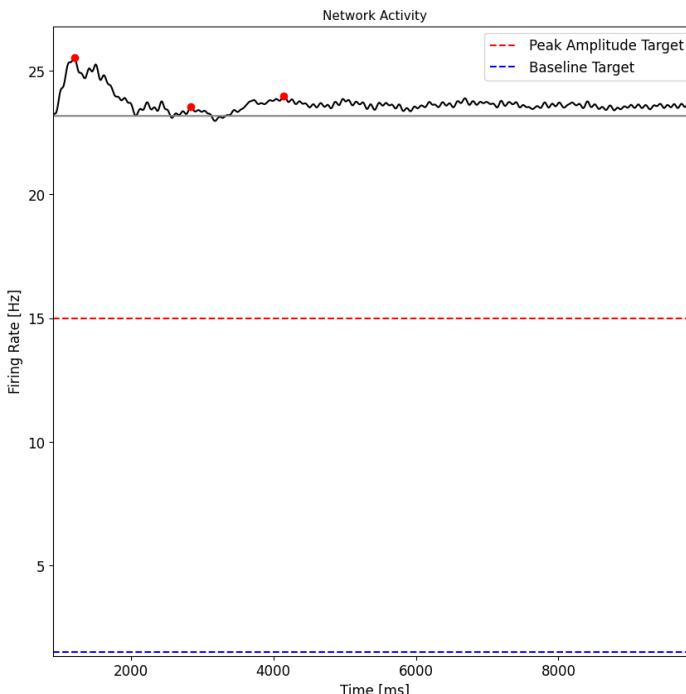
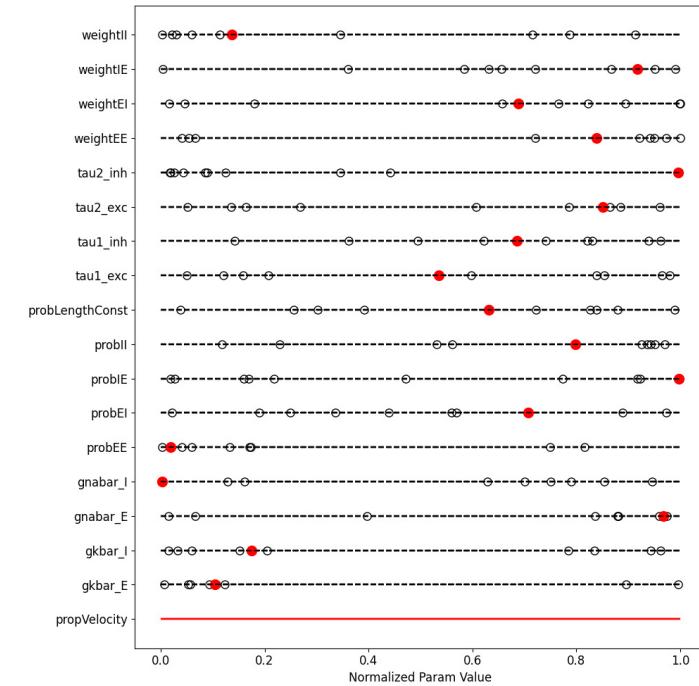
SimLabel: gen_5_cand_5

Generation Rank: 3/10

```
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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 1.17607810891874, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.3021148036253776, 'Fit': 1.2060025084135537}
IBI_fitness: {'Value': 1470.0, 'Fit': 2.156311820088011}
baseline_fitness: {'Value': 23.67947994728316, 'Fit': 1000}
slopeFitness: {'Value': -0.00042008109620215333, 'Fit': 1.000840515227521}
thresh: {'Value': 23.17226163915368, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 90.11235955056179, 'Fit': 7.224861685123041}
E_rate_fitness: {'Value': 66.81746031746032, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 556.8431129476503
average_scaled_fitness: 556.3991392336054
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_5/gen_5_cand_19_data.json

SimLabel: gen_5_cand_19

Generation Rank: 2/10

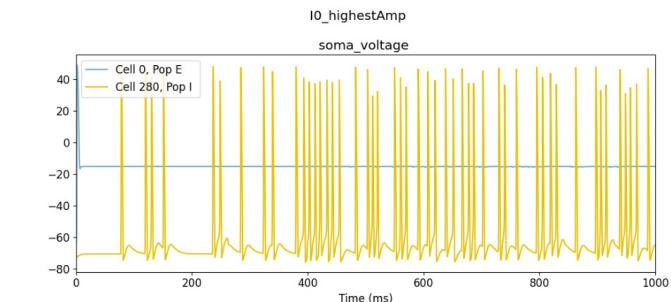
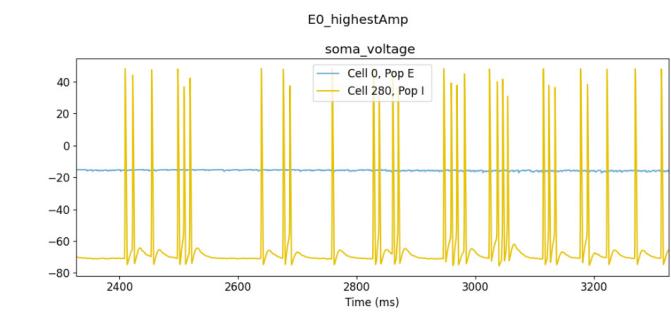
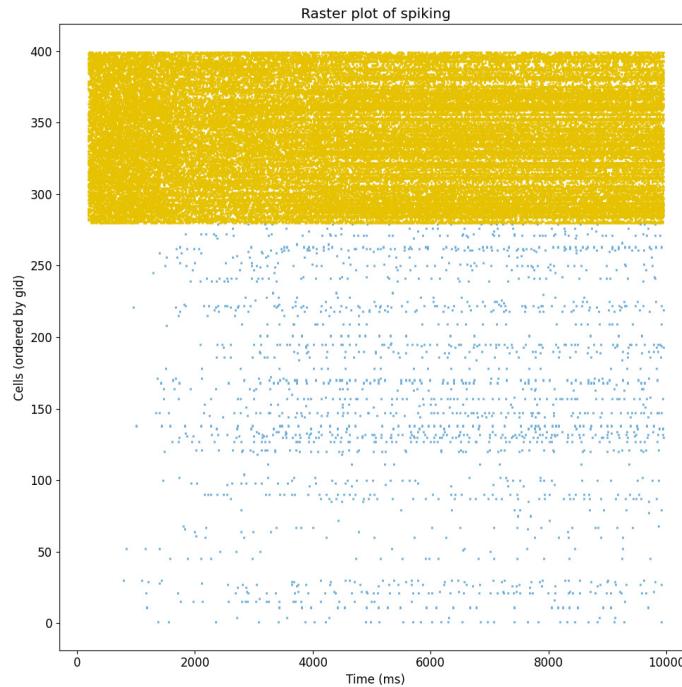
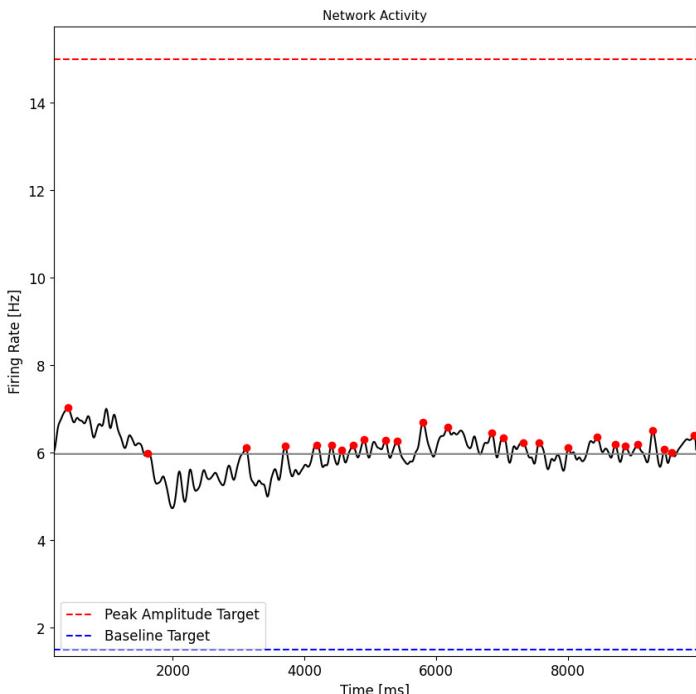
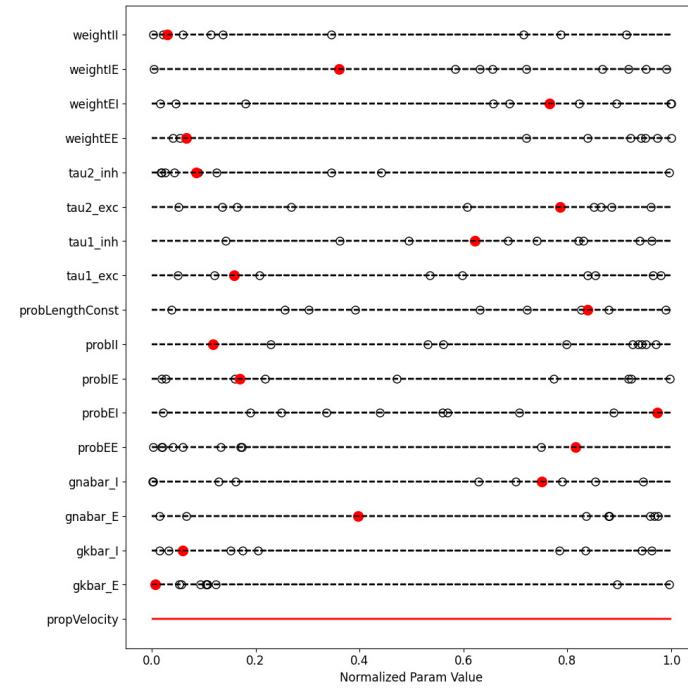
```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.30698028135163846, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 2.6124089424767645, 'Fit': 1000}
IBI_fitness: {'Value': 380.7, 'Fit': 3.747843635529321}
baseline_fitness: {'Value': 5.988100541294636, 'Fit': 1000}
slopeFitness: {'Value': 5.715623667814507e-05, 'Fit': 1.000114319007276}
thresh: {'Value': 5.971147498794758, 'Fit': 0.378648290258081}
sustain_oscillation_fitness: {'Value': 97.60299625468166, 'Fit': 1.615106258203766}
E_rate_fitness: {'Value': 0.011904761904761904, 'Fit': 1000}
I_rate_fitness: {'Value': 54.879629629629626, 'Fit': 12.036731861542894}
maxFitness: 1000
average_fitness: 446.5309382627269
average_scaled_fitness: 446.3212887653655
```

binSize: 7.5

gaussianSigma: 30.0

thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_5/gen_5_cand_25_data.json

SimLabel: gen_5_cand_25

Generation Rank: 7/10

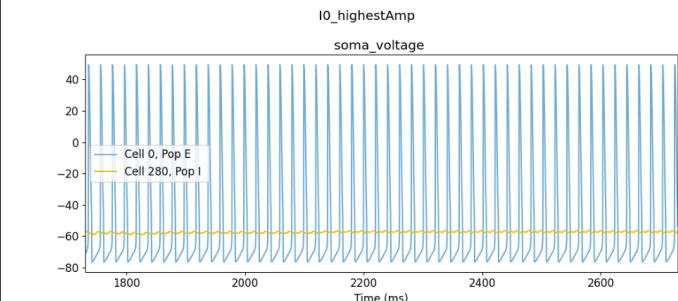
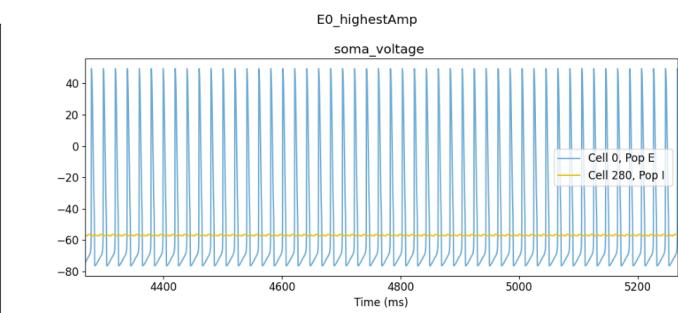
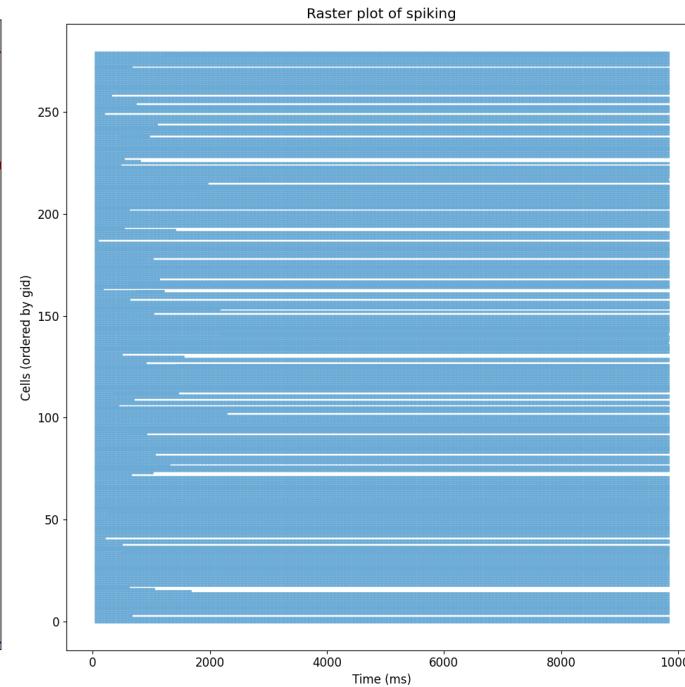
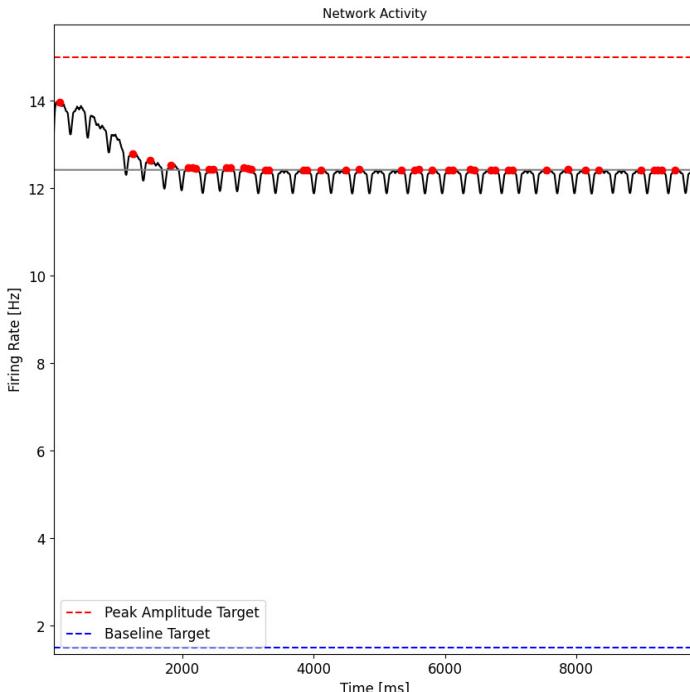
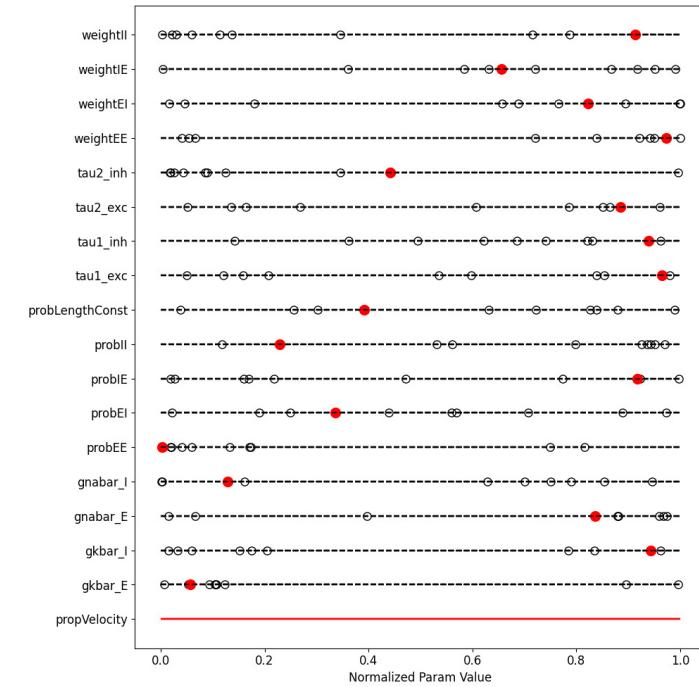
```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.0629837796232179, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 4.373251970505975, 'Fit': 1000}
IBI_fitness: {'Value': 231.07142857142858, 'Fit': 4.0125330195140565}
baseline_fitness: {'Value': 12.439747949124737, 'Fit': 1000}
slopeFitness: {'Value': -0.0006221815809067366, 'Fit': 1.0012451377028895}
thresh: {'Value': 12.421367901437609, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 97.97752808988764, 'Fit': 1.4985446173746855}
E_rate_fitness: {'Value': 48.829365079365076, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 667.3902580860657
average_scaled_fitness: 667.0569004264861
```

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}

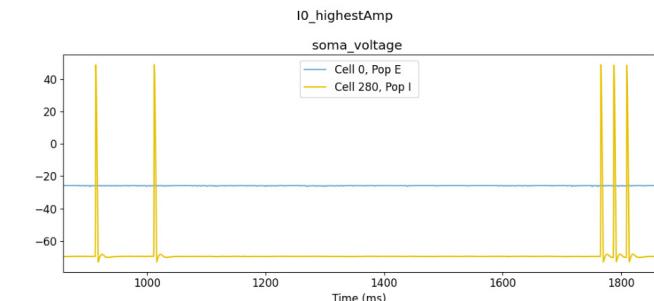
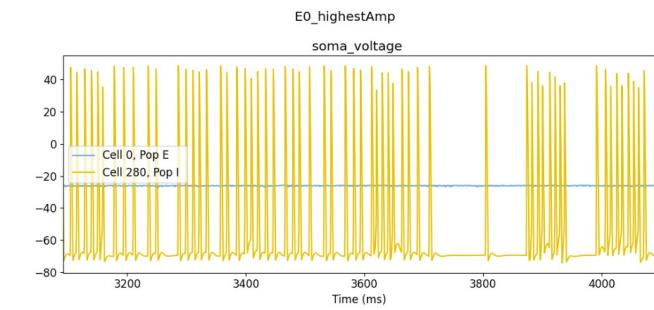
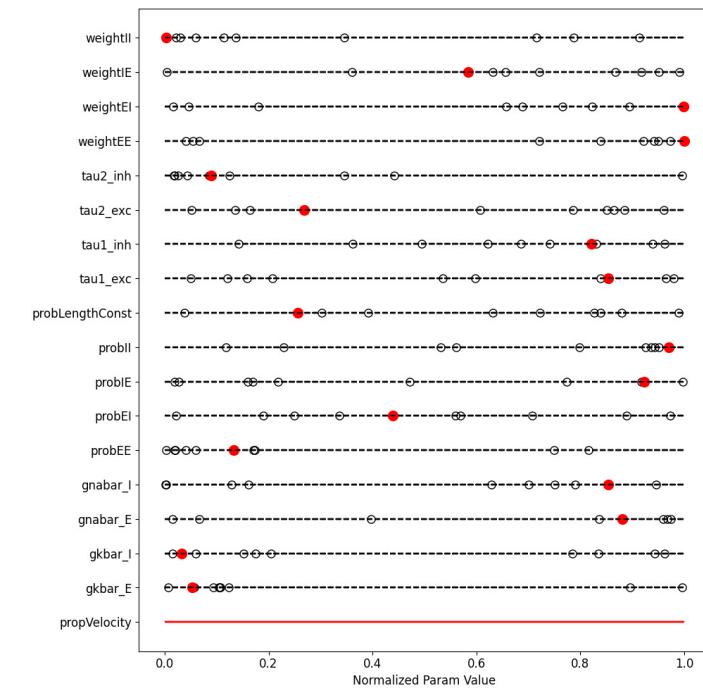
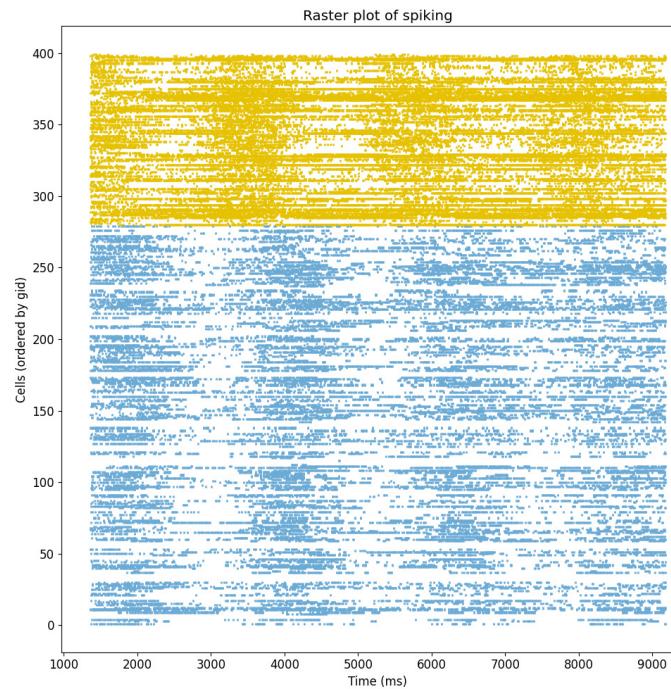
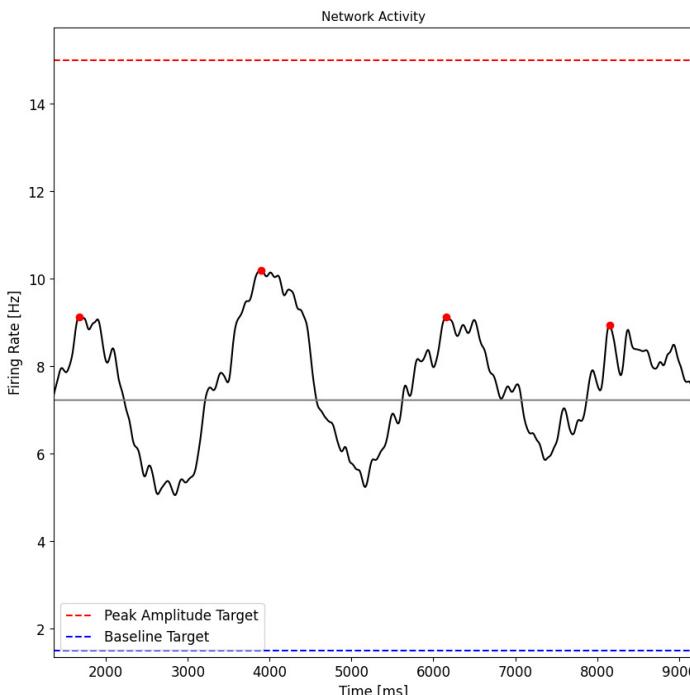
```

```

burstAmp_Fitness: {'Value': 2.1203174364079773, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.4357298474945534, 'Fit': 1.8485084764507018}
IBI_fitness: {'Value': 2160.0, 'Fit': 1.5246496076130907}
baseline_fitness: {'Value': 7.592980296160551, 'Fit': 1000}
slopeFitness: {'Value': 0.0002599365554891534, 'Fit': 1.0005200082684247}
thresh: {'Value': 7.225392102270848, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 78.20224719101122, 'Fit': 78.22197057985548}
E_rate_fitness: {'Value': 1.6428571428571428, 'Fit': 10.410939651403002}
I_rate_fitness: {'Value': 23.25, 'Fit': 1.9640329759698474}
maxFitness: 1000
average_fitness: 343.88562458884013
average_scaled_fitness: 343.2285115738094

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_5/gen_5_cand_42_data.json

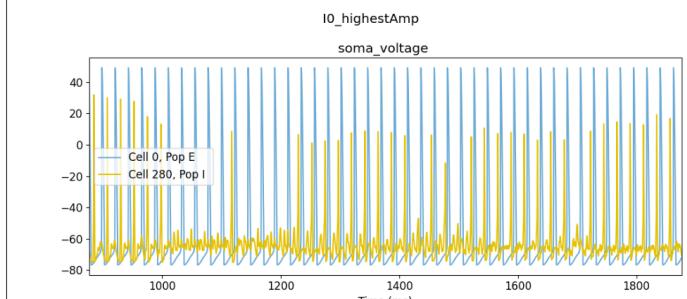
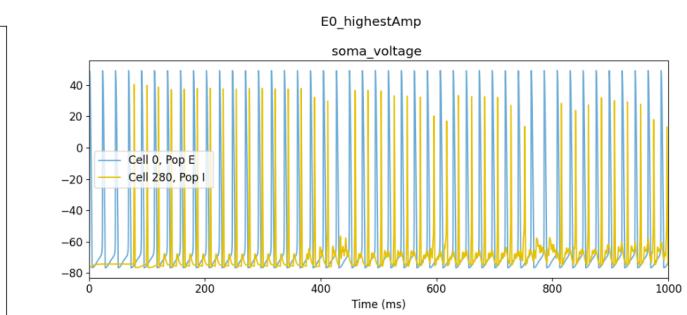
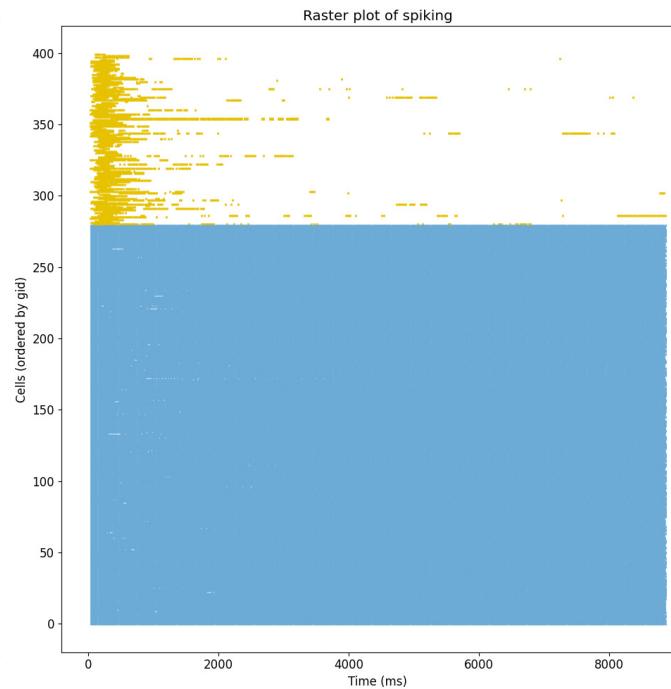
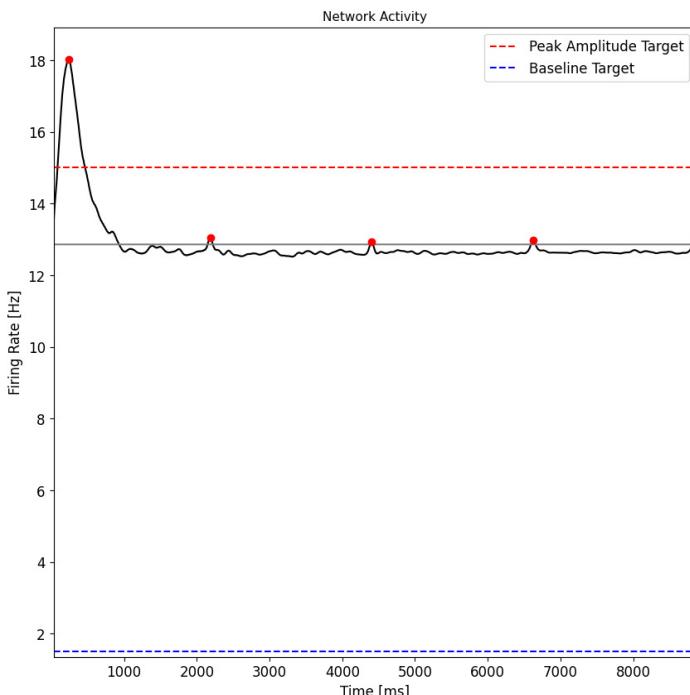
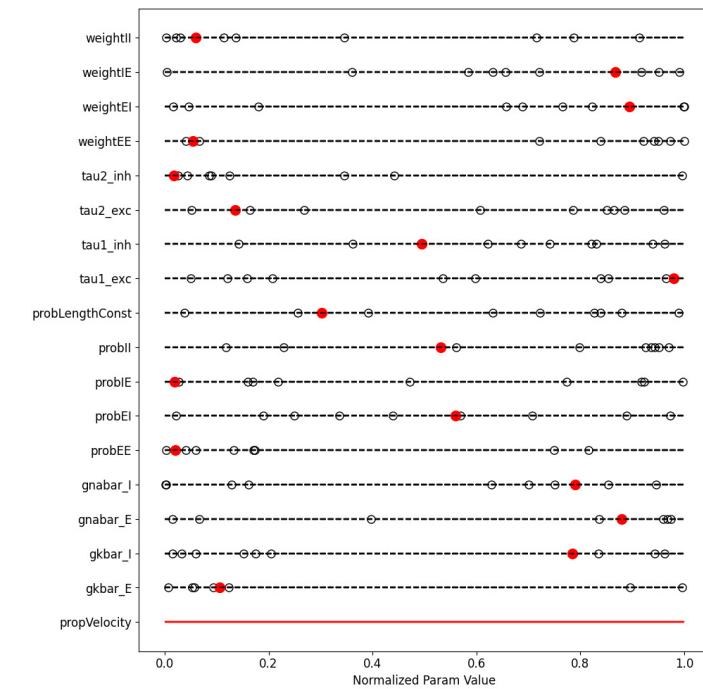
SimLabel: gen_5_cand_42

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 1.1318404859270028, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.5640157924421884, 'Fit': 3.991211243579218}
IBI_fitness: {'Value': 2150.625, 'Fit': 1.5317427690213739}
baseline_fitness: {'Value': 12.887287522991372, 'Fit': 1000}
slopeFitness: {'Value': -0.0011309617022118277, 'Fit': 1.0022644834830374}
thresh: {'Value': 12.860517509600752, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 88.31460674157303, 'Fit': 10.35095360985937}
E_rate_fitness: {'Value': 43.94444444444444, 'Fit': 1000}
I_rate_fitness: {'Value': 21.666666666666668, 'Fit': 2.3009758908928246}
maxFitness: 1000
average_fitness: 446.5752386663151
average_scaled_fitness: 446.0200041919566
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_5/gen_5_cand_61_data.json

SimLabel: gen_5_cand_61

Generation Rank: 4/10

```

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_oscil: {'target': 100, 'width': 5, 'min': 75}

```

```

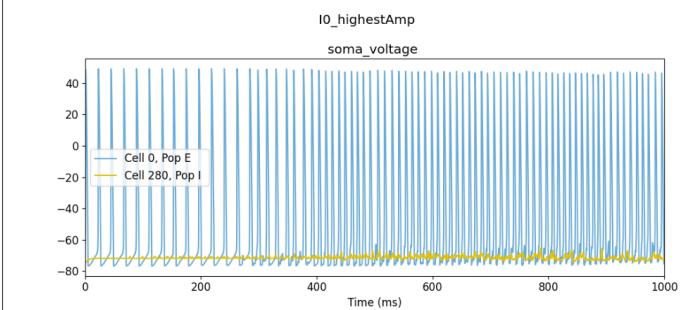
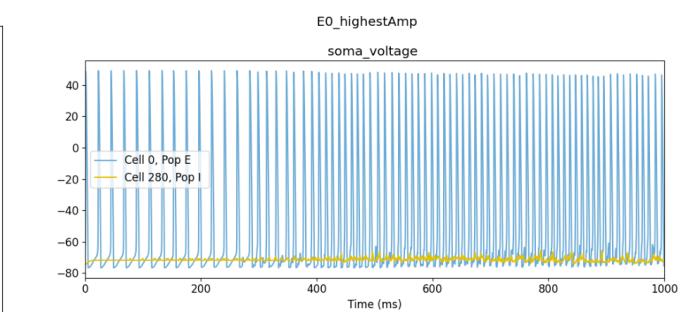
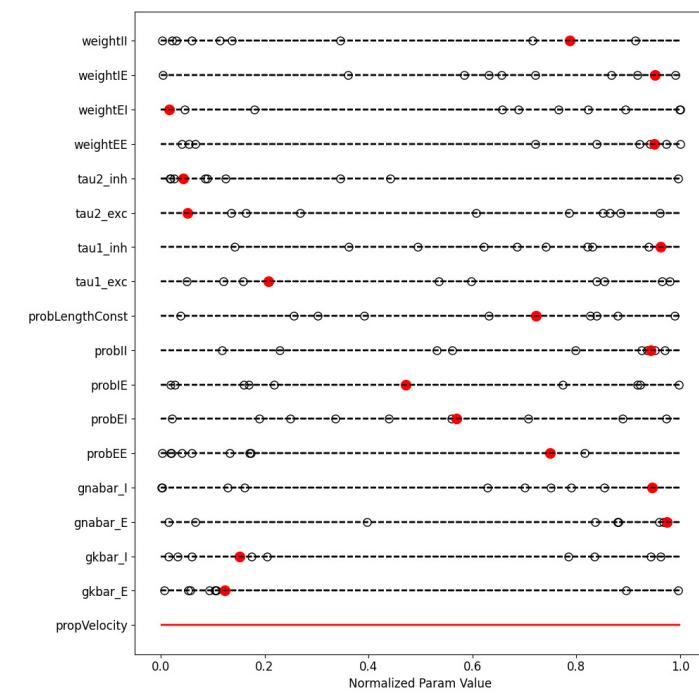
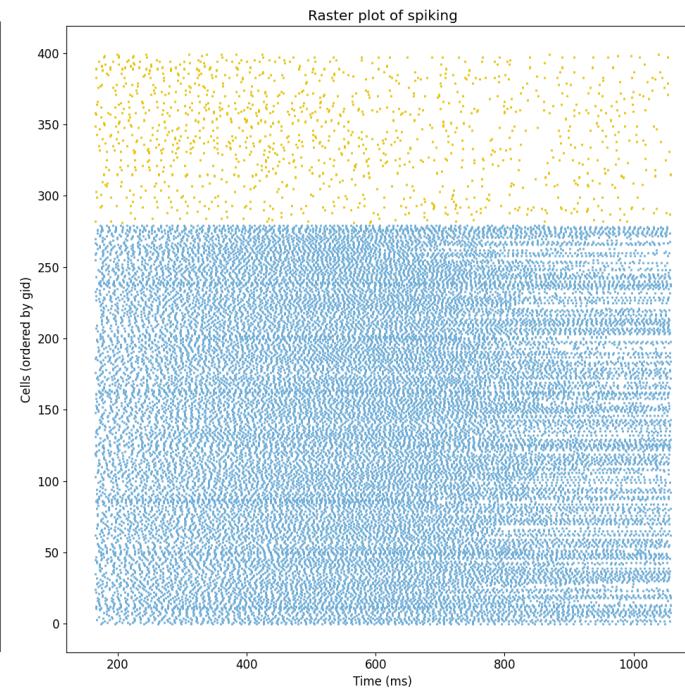
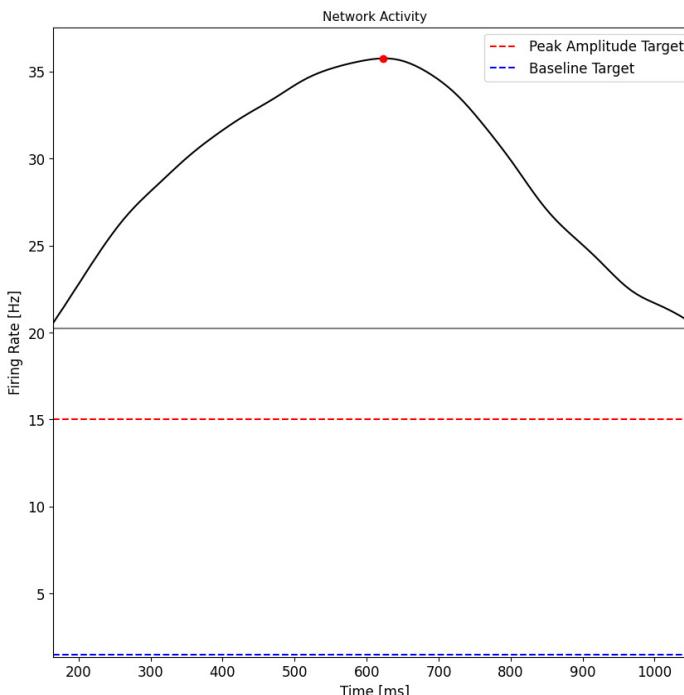
burstAmp_Fitness: {'Value': 15.502576490575265, 'Fit': 1.2856806223064976}
burst_peak_frequency_fitness: {'Value': 0.9456264775413711, 'Fit': 39.39972612935877}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 29.244857099041642, 'Fit': 1000}
slopeFitness: {'Value': -0.03165653186046742, 'Fit': 1.0653603126929885}
thresh: {'Value': 20.25464156016087, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 8.98876404494382, 'Fit': 1000}
E_rate_fitness: {'Value': 98.92857142857143, 'Fit': 1000}
I_rate_fitness: {'Value': 11.935185185185185, 'Fit': 6.088985489047657}
maxFitness: 1000
average_fitness: 560.8710836170451
average_scaled_fitness: 560.4027541577556

```

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0

```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_5/gen_5_cand_79_data.json

SimLabel: gen_5_cand_79

Generation Rank: 5/10

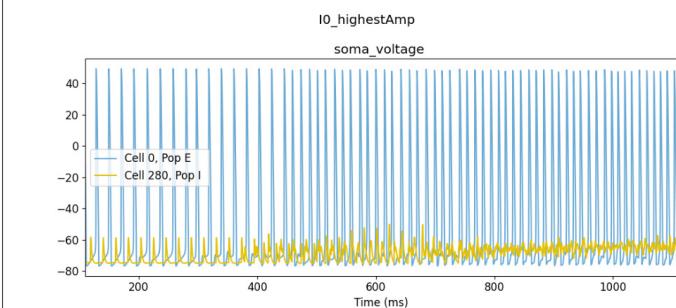
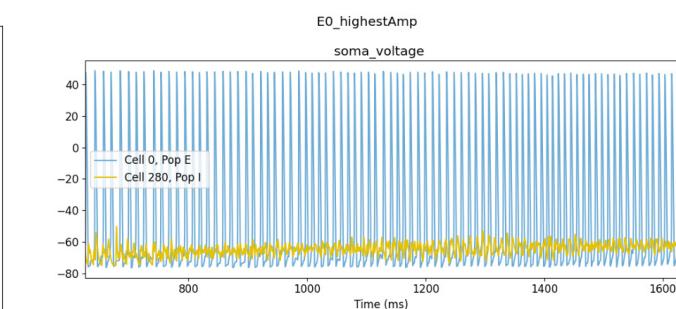
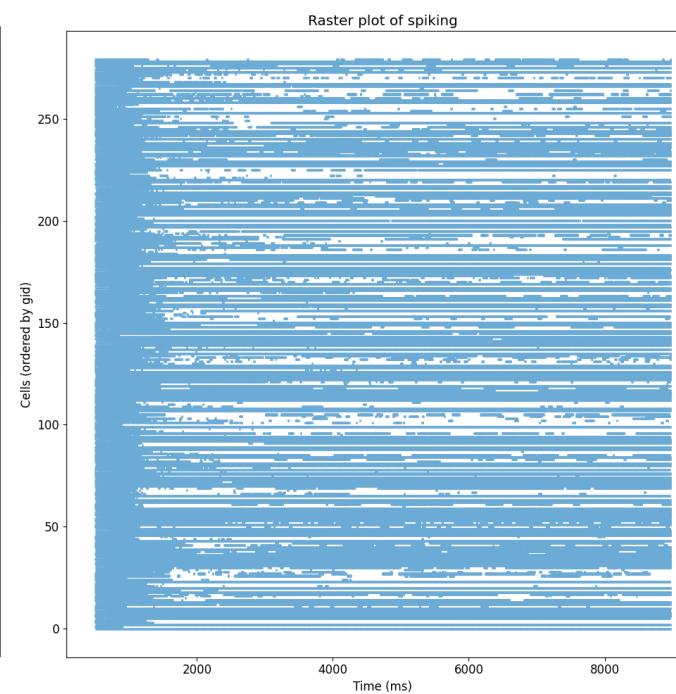
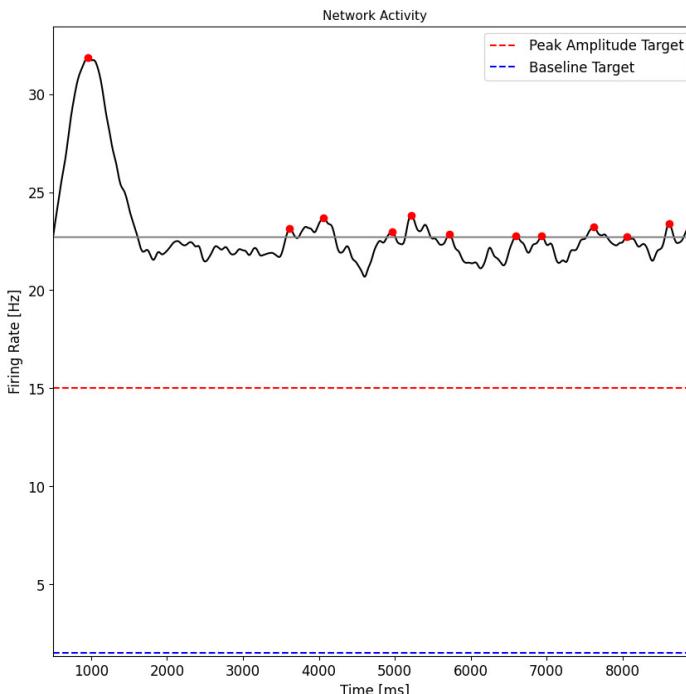
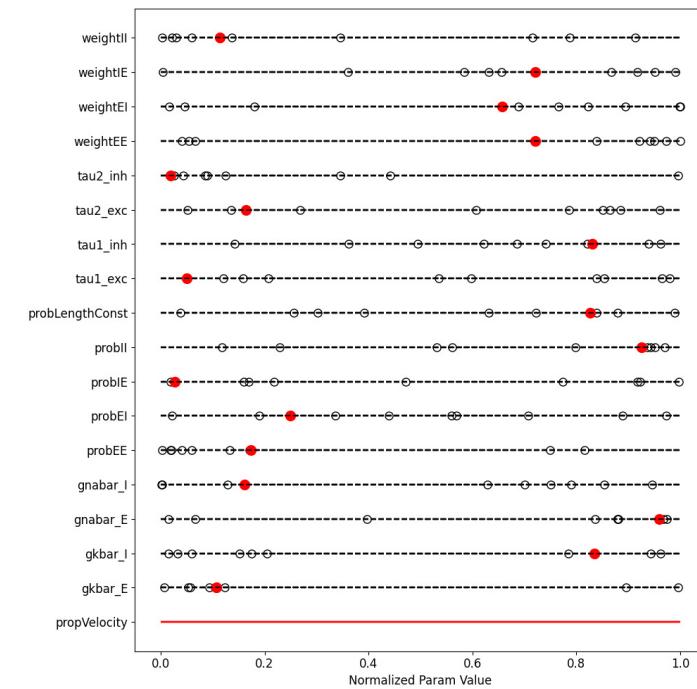
```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 1.1607681002623984, 'Fit': 918.2136115638532}
burst_peak_frequency_fitness: {'Value': 1.3377926421404682, 'Fit': 414.3685738820029}
IBI_fitness: {'Value': 721.3636363636364, 'Fit': 3.2561259123003072}
baseline_fitness: {'Value': 23.017041760439252, 'Fit': 1000}
slopeFitness: {'Value': -0.003173760562873852, 'Fit': 1.0063677093303829}
thresh: {'Value': 22.705419692795097, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 84.6441947565543, 'Fit': 21.56692839809502}
E_rate_fitness: {'Value': 84.03174603174604, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 595.3790674961758
average_scaled_fitness: 594.9714598520136
```

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}

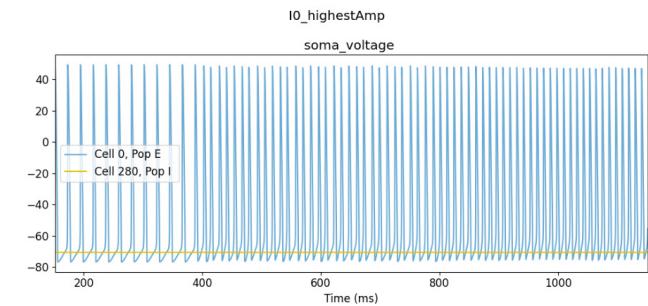
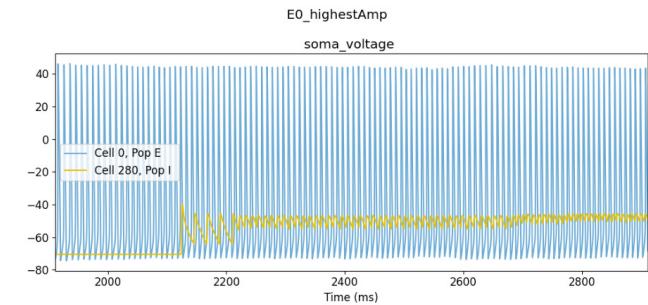
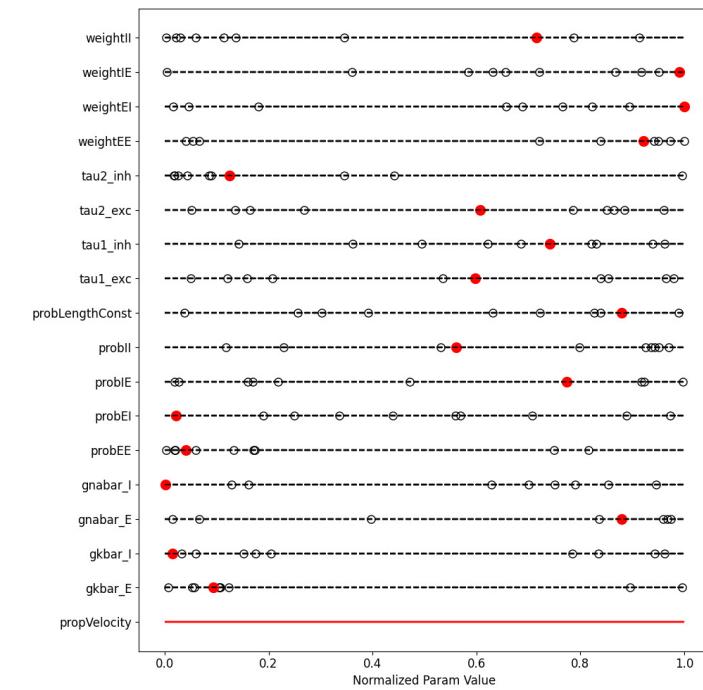
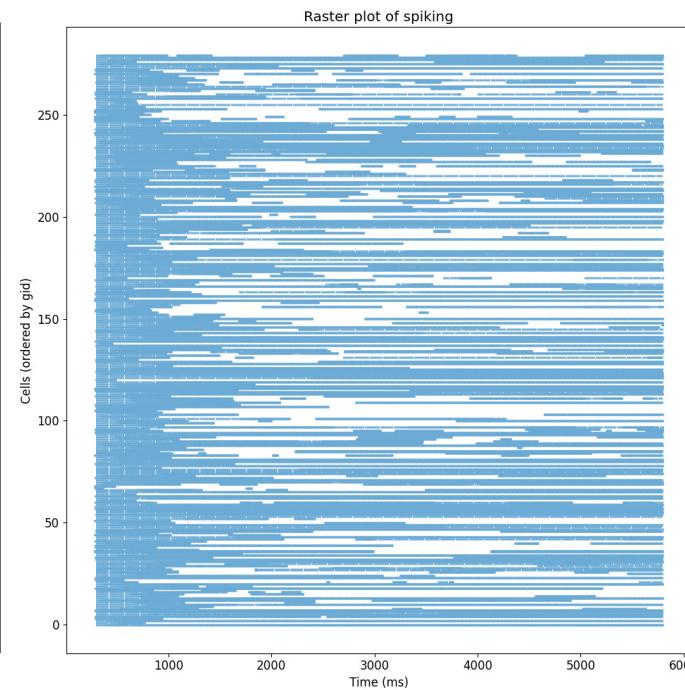
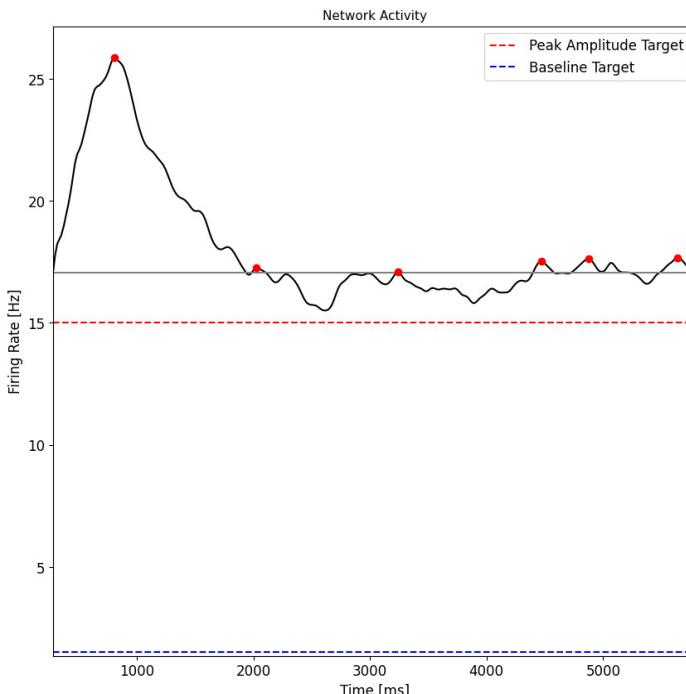
```

```

burstAmp_Fitness: {'Value': 1.7790819438755563, 'Fit': 837.0276746814257}
burst_peak_frequency_fitness: {'Value': 1.034928848641656, 'Fit': 67.32779089132205}
IBI_fitness: {'Value': 966.0, 'Fit': 2.804554219000702}
baseline_fitness: {'Value': 18.099106480927436, 'Fit': 1000}
slopeFitness: {'Value': -0.007718349369041129, 'Fit': 1.0155564600181073}
thresh: {'Value': 17.05843286568384, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 55.1310861423221, 'Fit': 1000}
E_rate_fitness: {'Value': 76.63492063492063, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 656.4639529168629
average_scaled_fitness: 656.1147179972199

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_6/gen_6_cand_4_data.json

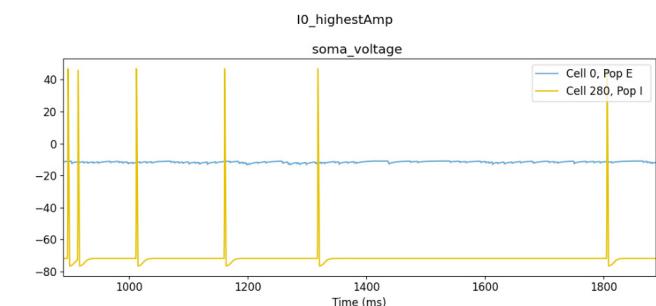
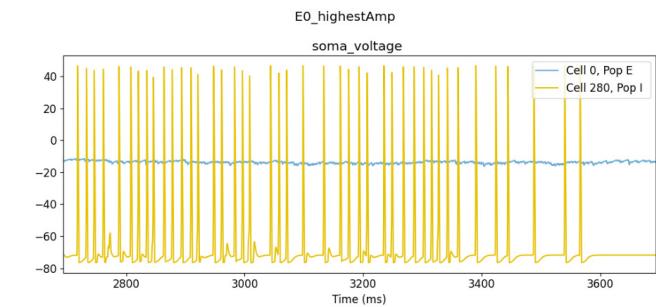
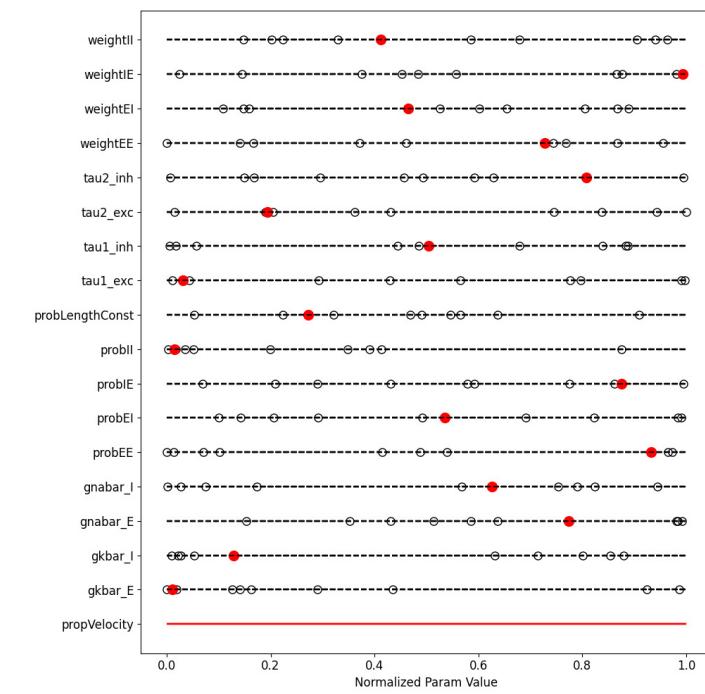
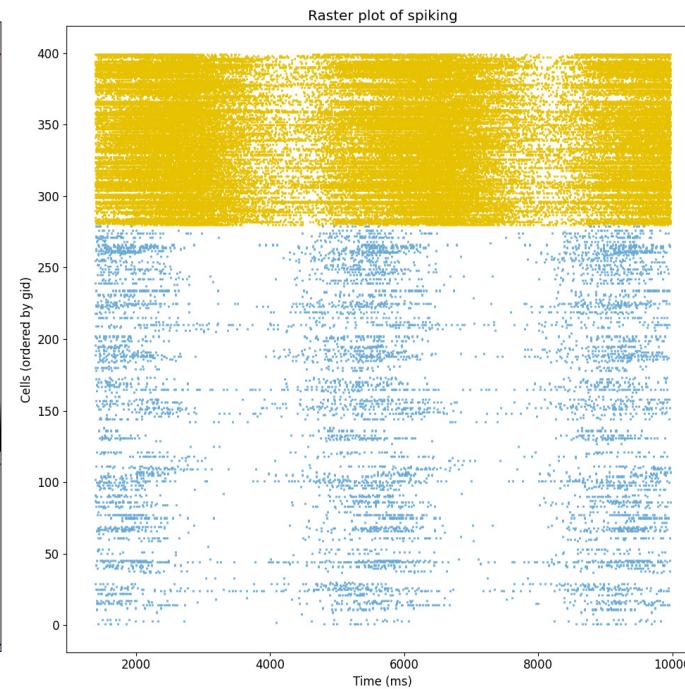
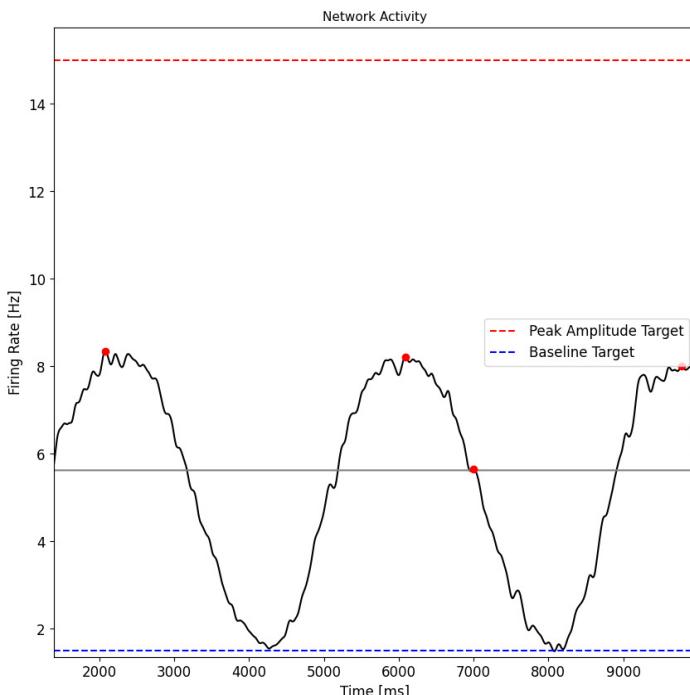
SimLabel: gen_6_cand_4

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 1.933575565088278, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.4010025062656642, 'Fit': 1.5008251210871444}
IBI_fitness: {'Value': 2567.5, 'Fit': 334.6517903874919}
baseline_fitness: {'Value': 5.425694783357251, 'Fit': 1000}
slopeFitness: {'Value': -0.0008331559556403008, 'Fit': 1.0016677009804071}
thresh: {'Value': 5.621073539307177, 'Fit': 0.5373672429718314}
sustain_oscillation_fitness: {'Value': 85.84269662921349, 'Fit': 16.970230707210714}
E_rate_fitness: {'Value': 0.8849206349206349, 'Fit': 1000}
I_rate_fitness: {'Value': 18.416666666666664, 'Fit': 3.1846211486585325}
maxFitness: 1000
average_fitness: 373.0940558120445
average_scaled_fitness: 372.75699596829463
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_6/gen_6_cand_28_data.json

SimLabel: gen_6_cand_28

Generation Rank: 0/10

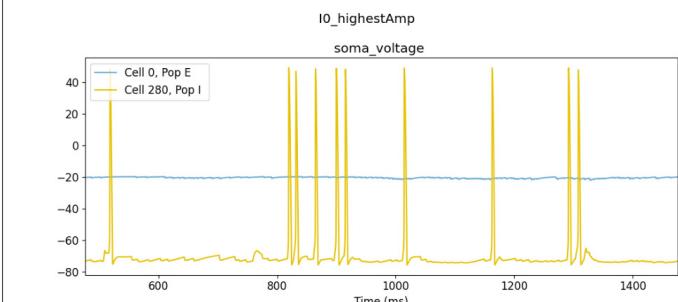
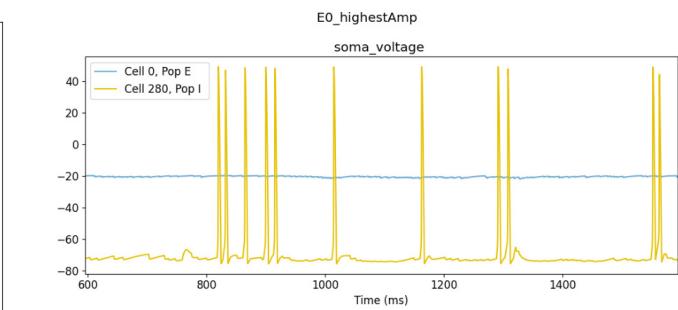
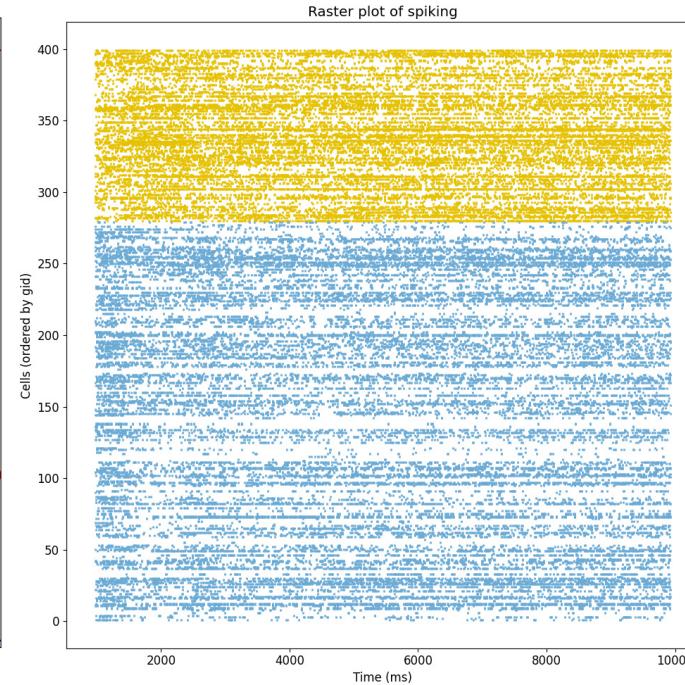
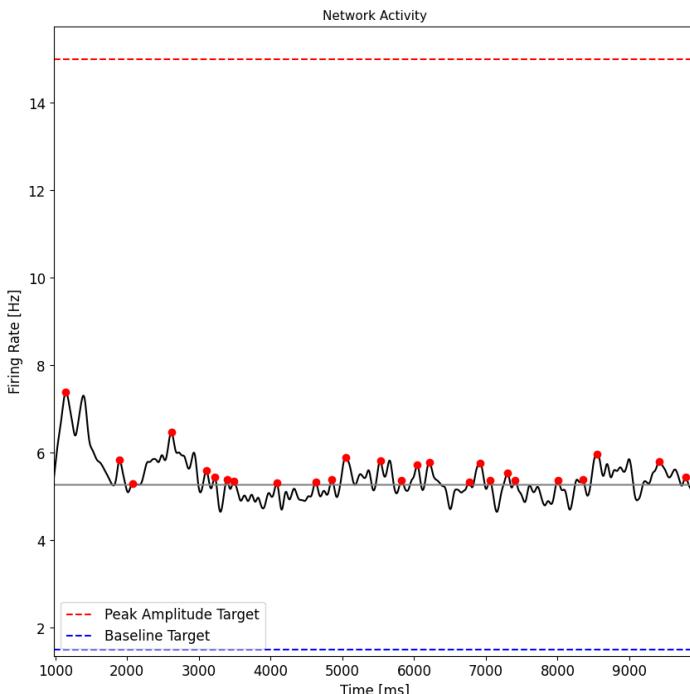
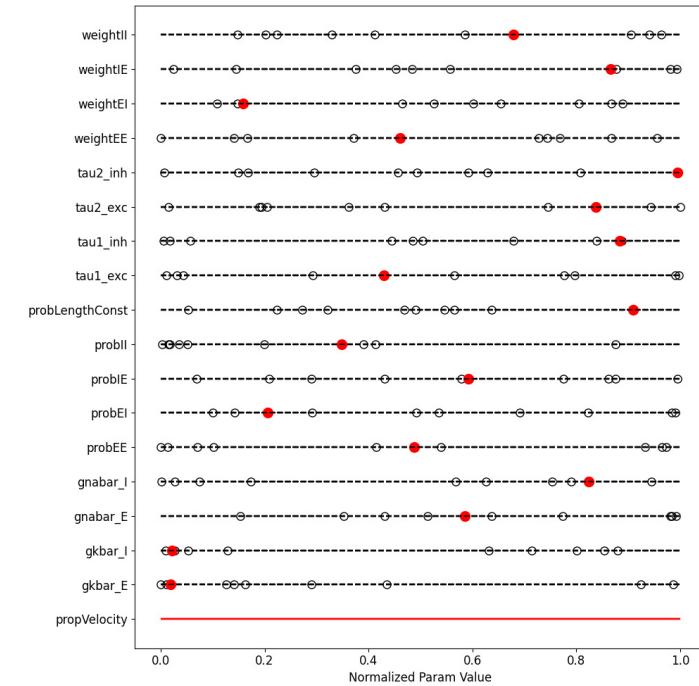
```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.3620546740049522, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 2.719033232628399, 'Fit': 1000}
IBI_fitness: {'Value': 337.5, 'Fit': 3.8068122155014814}
baseline_fitness: {'Value': 5.4216161212262755, 'Fit': 1000}
slopeFitness: {'Value': -0.0004960003047060409, 'Fit': 1.0009924928047558}
thresh: {'Value': 5.265784401301693, 'Fit': 0.7666043885936378}
sustain_oscillation_fitness: {'Value': 89.51310861423221, 'Fit': 8.144788518631392}
E_rate_fitness: {'Value': 4.777777777777778, 'Fit': 2.9709711588854004}
I_rate_fitness: {'Value': 16.98148148148148, 'Fit': 3.6760979569946612}
maxFitness: 1000
average_fitness: 335.59625185904565
average_scaled_fitness: 335.0865262720509
```

binSize: 7.5

gaussianSigma: 30.0

thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_6/gen_6_cand_44_data.json

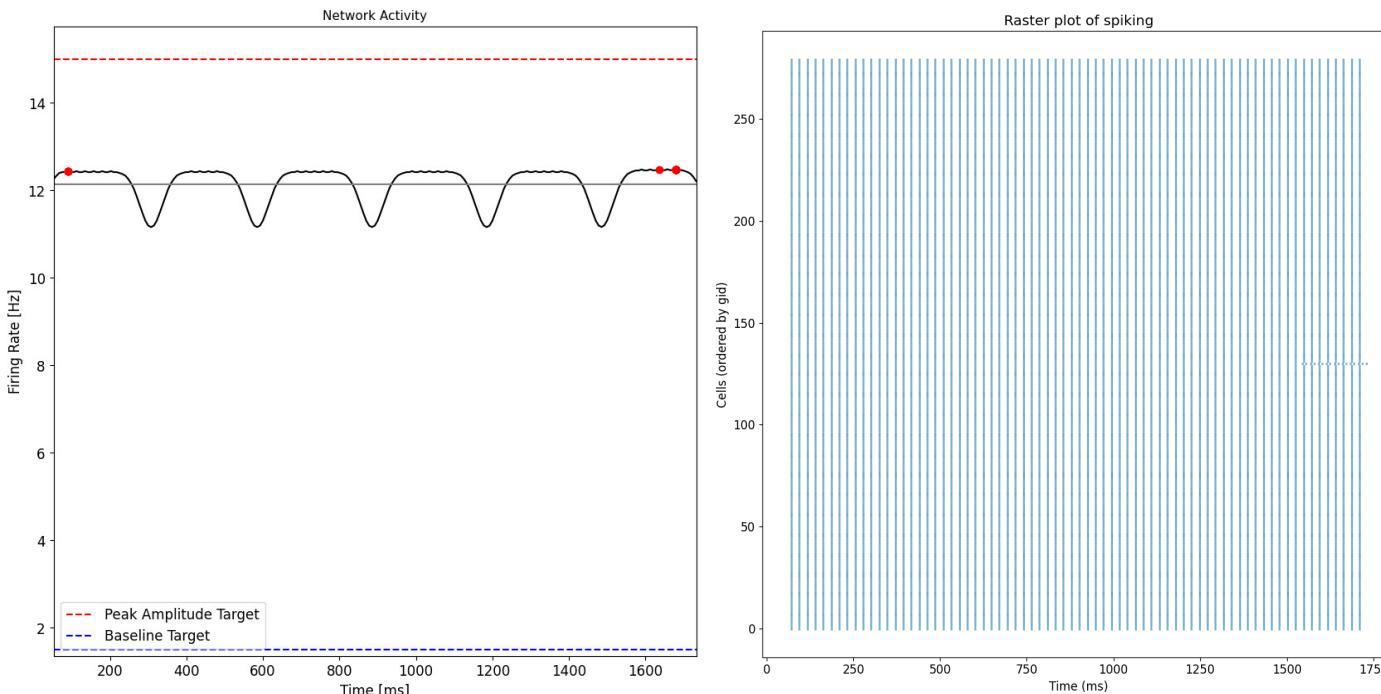
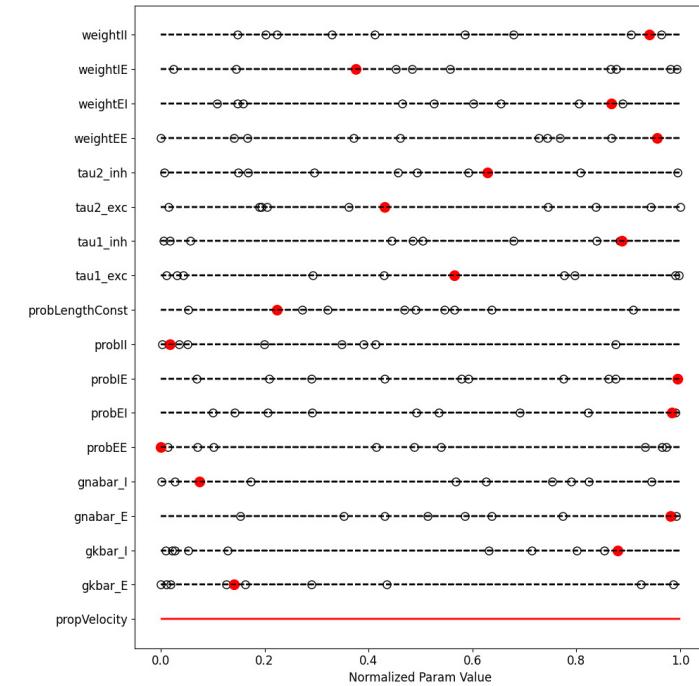
SimLabel: gen_6_cand_44

Generation Rank: 3/10

```
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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.3374781873488449, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 19.624819624819626, 'Fit': 1000}
IBI_fitness: {'Value': 46.818181818182, 'Fit': 4.410299331019709}
baseline_fitness: {'Value': 12.14805078502436, 'Fit': 1000}
slopeFitness: {'Value': 0.00011250589555478367, 'Fit': 1.0002250371081616}
thresh: {'Value': 12.137716604084947, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 16.866566716641678, 'Fit': 1000}
E_rate_fitness: {'Value': 43.33333333333336, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 778.3789471520142
average_scaled_fitness: 778.1570542834027
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_6/gen_6_cand_73_data.json

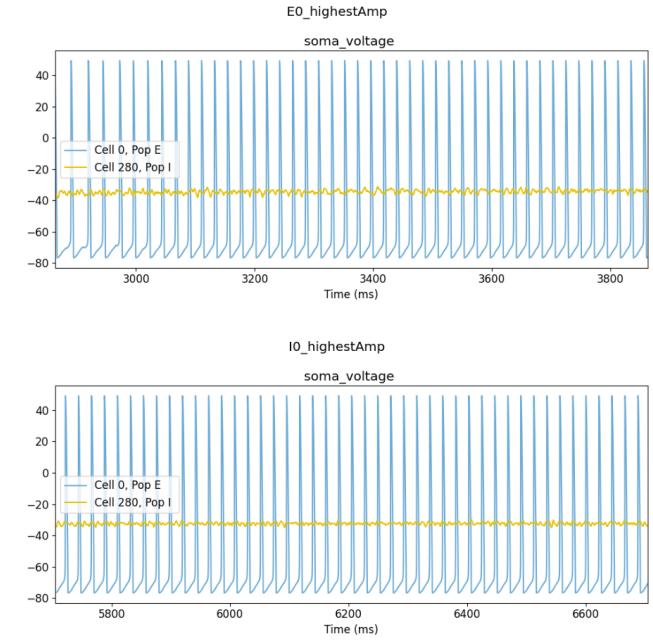
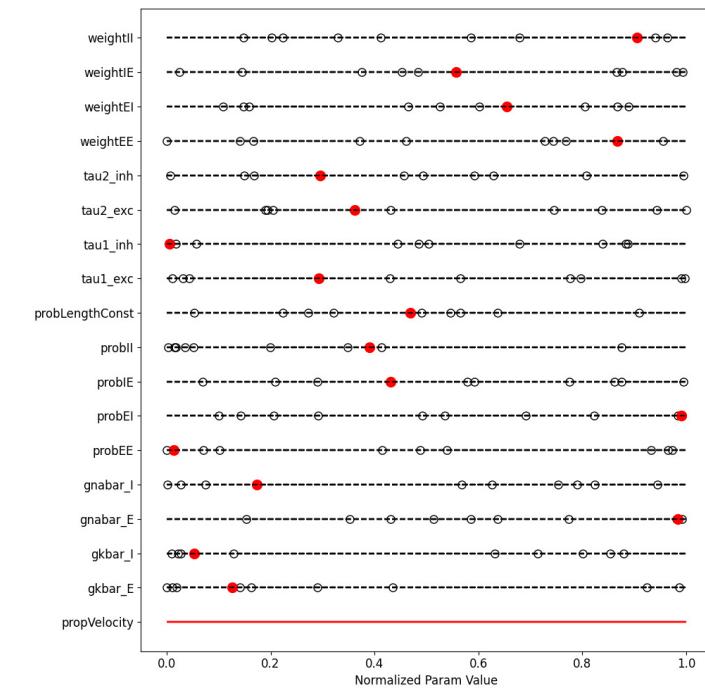
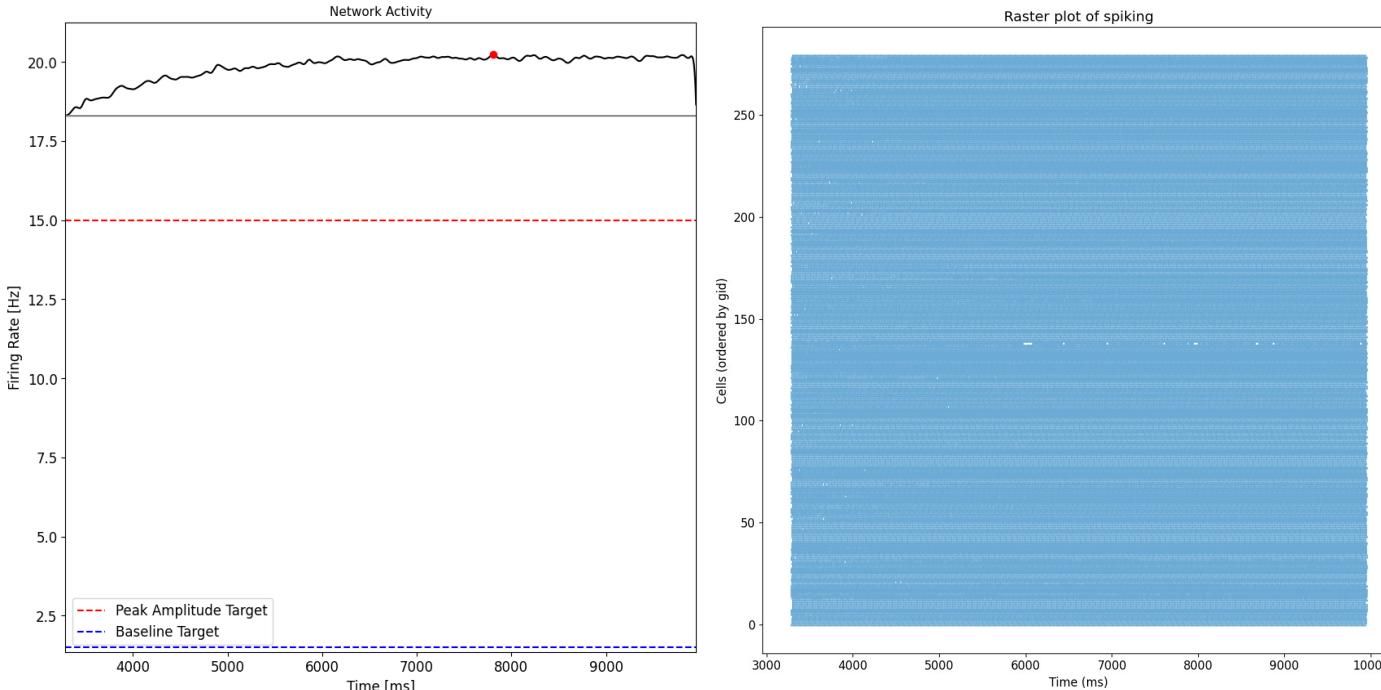
SimLabel: gen_6_cand_73

Generation Rank: 4/10

```
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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 1.9446109147581545, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10047726701833709, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 19.845301406935377, 'Fit': 1000}
slopeFitness: {'Value': 0.0013224236718981433, 'Fit': 1.0026483480381192}
thresh: {'Value': 18.293260562325354, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 66.66666666666666, 'Fit': 1000}
E_rate_fitness: {'Value': 40.37301587301587, 'Fit': 1000}
I_rate_fitness: {'Value': 3.7037037037037037, 'Fit': 13.868632420277079}
maxFitness: 1000
average_fitness: 779.4301423075906
average_scaled_fitness: 779.208766341902
```

```
binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0
```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_6/gen_6_cand_79_data.json

SimLabel: gen_6_cand_79

Generation Rank: 2/10

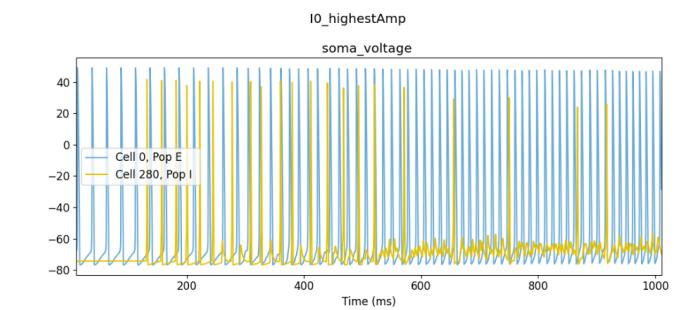
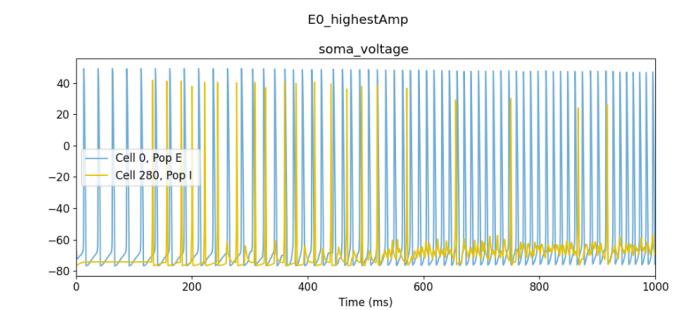
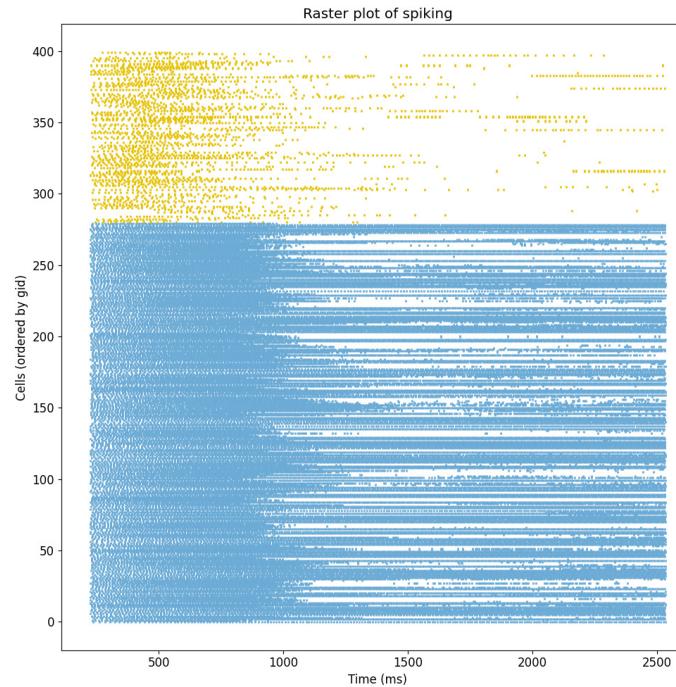
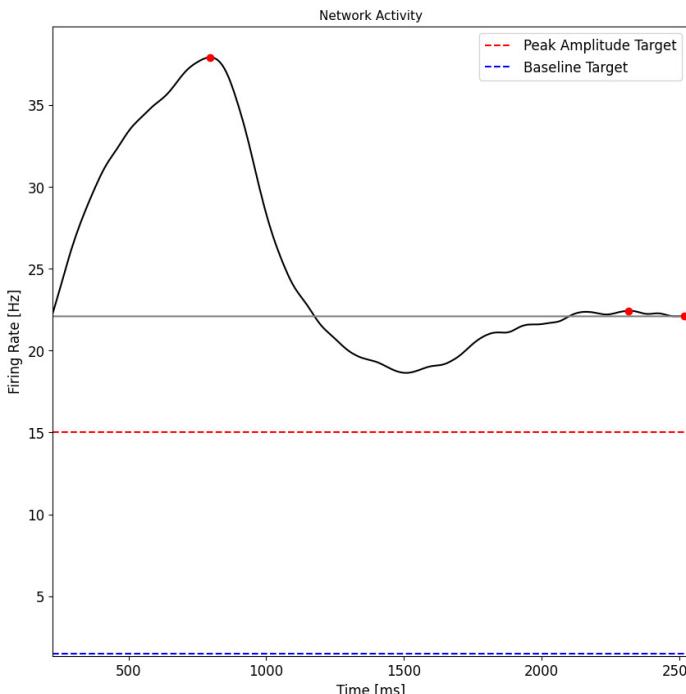
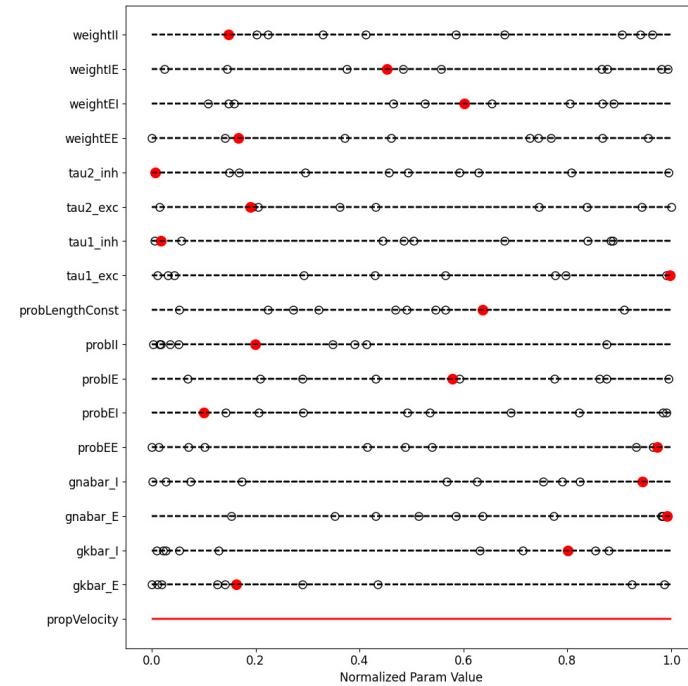
```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 5.391663413785783, 'Fit': 667.1669762955227}
burst_peak_frequency_fitness: {'Value': 1.1834319526627217, 'Fit': 164.11899040289833}
IBI_fitness: {'Value': 862.5, 'Fit': 3.071725682780132}
baseline_fitness: {'Value': 25.229352015083567, 'Fit': 1000}
slopeFitness: {'Value': -0.04615145688970058, 'Fit': 1.0966969763971959}
thresh: {'Value': 22.08844587985426, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 23.1807951987997, 'Fit': 1000}
E_rate_fitness: {'Value': 100.04761904761905, 'Fit': 1000}
I_rate_fitness: {'Value': 23.314814814814817, 'Fit': 1.9513442977440476}
maxFitness: 1000
average_fitness: 537.4895259617047
average_scaled_fitness: 536.9817352307156
```

binSize: 7.5

gaussianSigma: 30.0

thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_7/gen_7_cand_23_data.json

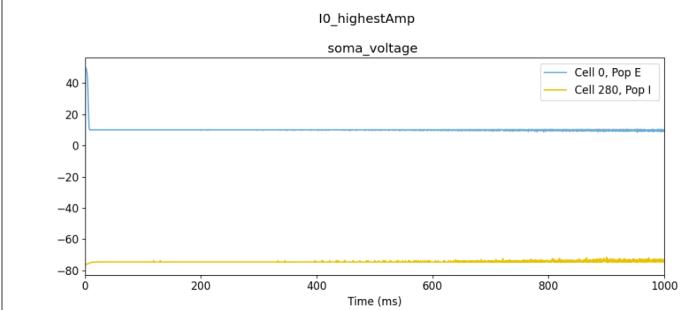
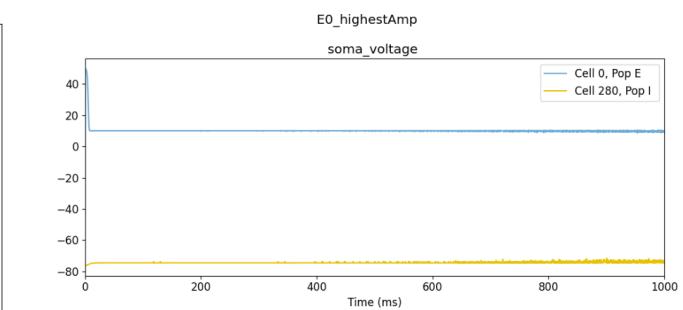
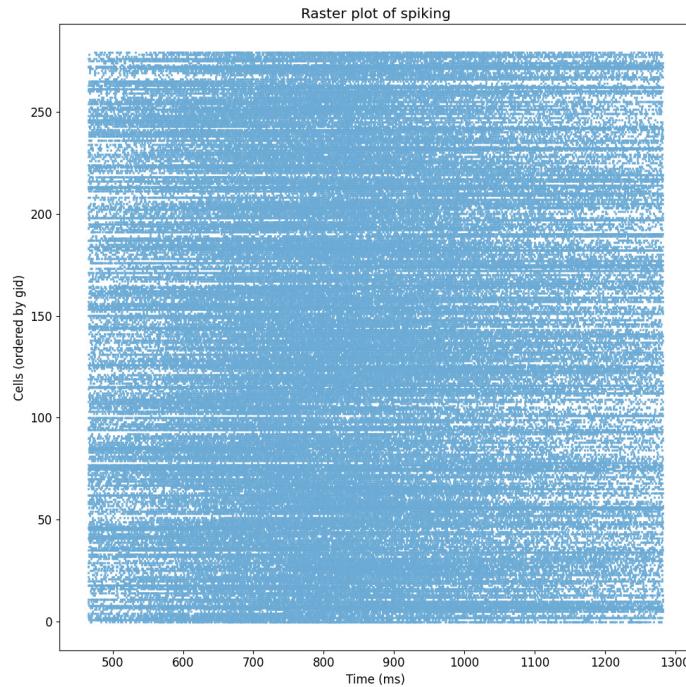
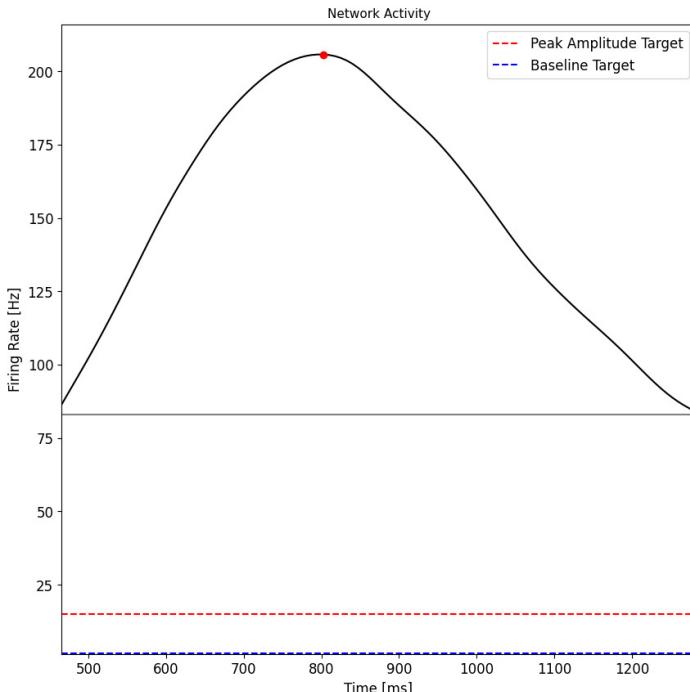
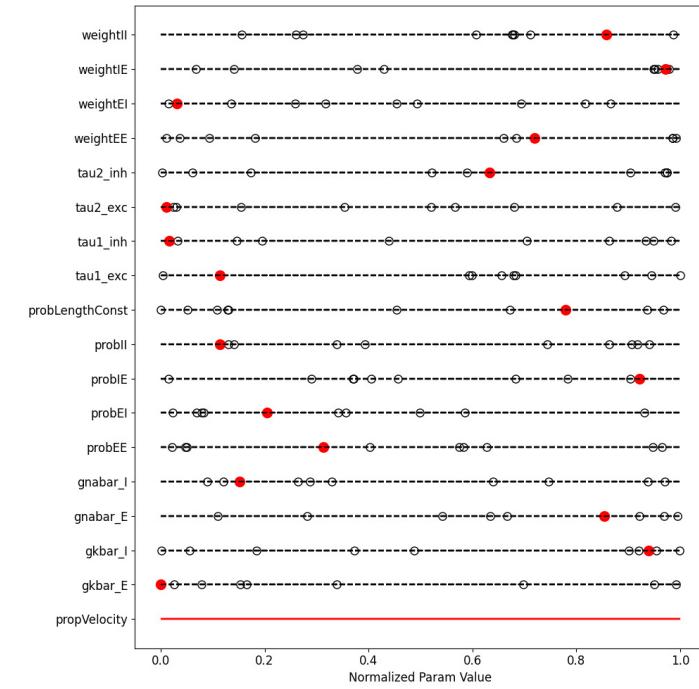
SimLabel: gen_7_cand_23

Generation Rank: 4/10

```
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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 122.67081967790102, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.7797270955165693, 'Fit': 14.561230813637362}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 151.31963648944588, 'Fit': 1000}
slopeFitness: {'Value': -0.40538972052197225, 'Fit': 2.249660781435647}
thresh: {'Value': 83.0620068499191, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 8.239700374531834, 'Fit': 1000}
E_rate_fitness: {'Value': 406.6111111111111, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 779.6456546216747
average_scaled_fitness: 779.1488143708312
```

```
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}

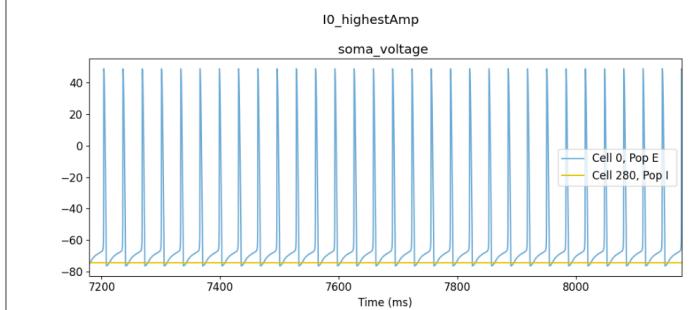
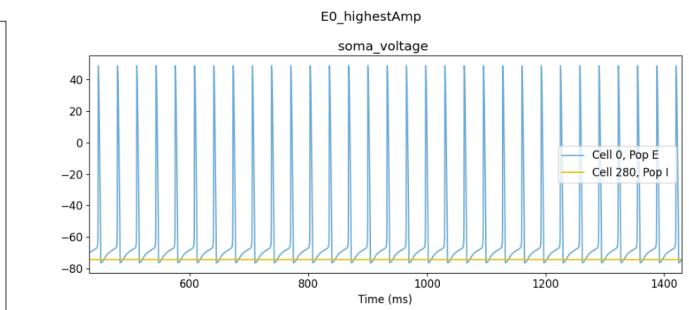
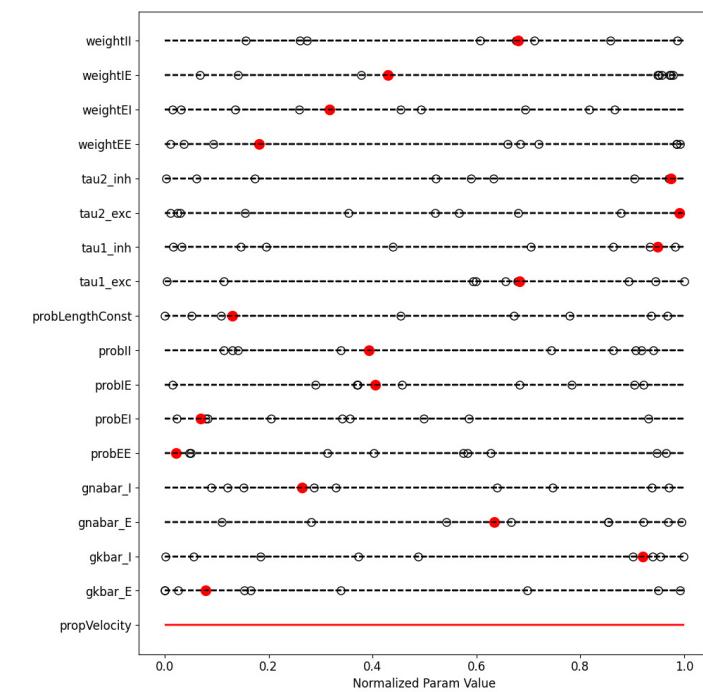
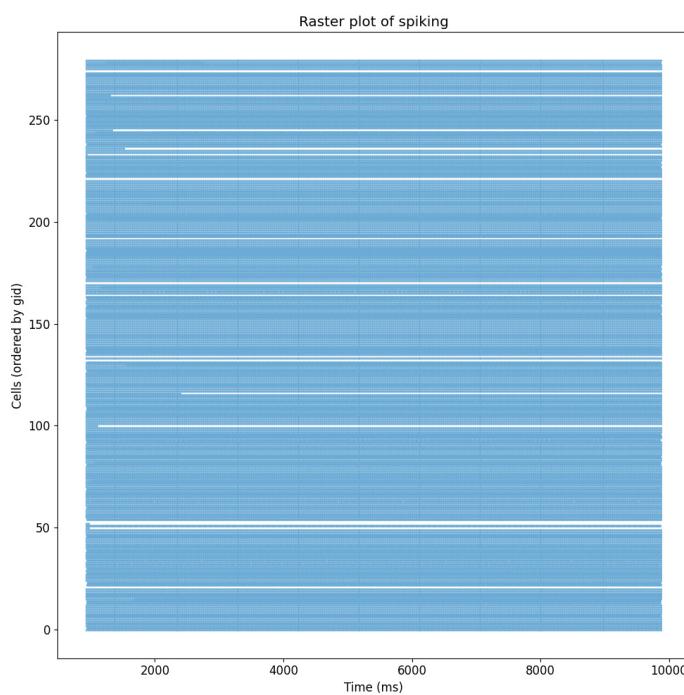
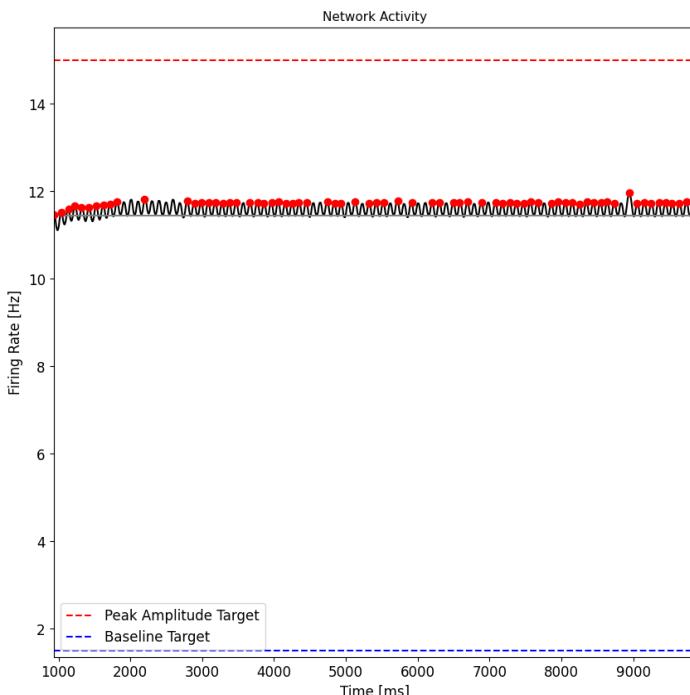
```

```

burstAmp_Fitness: {'Value': 0.28704492496954287, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 7.086813464945584, 'Fit': 1000}
IBI_fitness: {'Value': 128.91304347826087, 'Fit': 4.2051053571973505}
baseline_fitness: {'Value': 11.582610524223721, 'Fit': 1000}
slopeFitness: {'Value': 4.692826532269237e-05, 'Fit': 1.0000938609353074}
thresh: {'Value': 11.444469942203918, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 89.63963963963964, 'Fit': 7.941260946809959}
E_rate_fitness: {'Value': 37.16666666666667, 'Fit': 1000}
I_rate_fitness: {'Value': 0.037037037037037035, 'Fit': 1000}
maxFitness: 1000
average_fitness: 668.1273844627715
average_scaled_fitness: 667.7951484301434

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_2/gen_2_cand_61_data.json

SimLabel: gen_2_cand_61

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': 2.9992658854677496, 'Fit': 751.5425856828518}

burst_peak_frequency_fitness: {'Value': 0.4028197381671702, 'Fit': 1.5172787419474167}

IBI_fitness: {'Value': 3115.0, 'Fit': 334.4122269875836}

baseline_fitness: {'Value': 14.564726154216787, 'Fit': 1000}

slopeFitness: {'Value': -0.000502845167066948, 'Fit': 1.0010061962102286}

thresh: {'Value': 14.672069380501268, 'Fit': 1000}

sustain_oscillation_fitness: {'Value': 98.80149812734082, 'Fit': 1.2708683087573514}

E_rate_fitness: {'Value': 65.5, 'Fit': 1000}

I_rate_fitness: {'Value': 0.0, 'Fit': 1000}

maxFitness: 1000

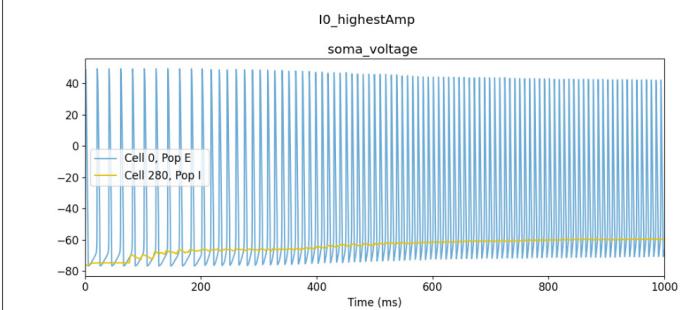
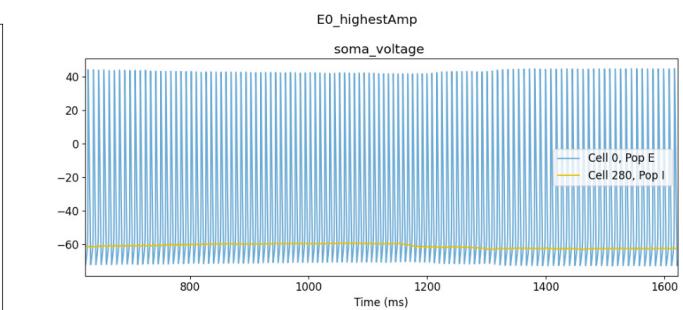
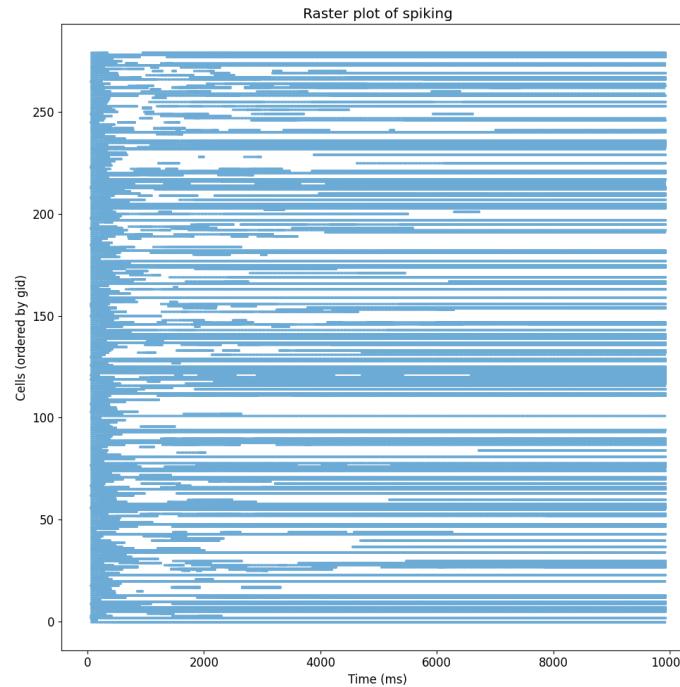
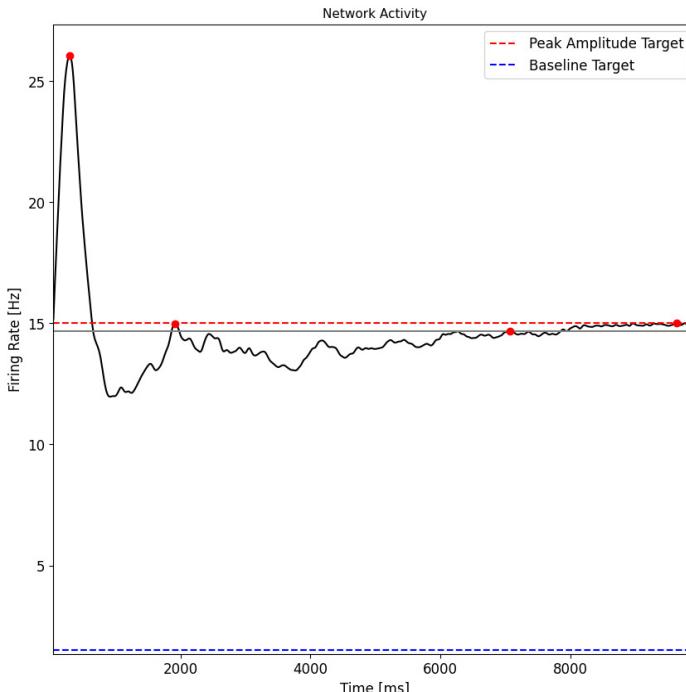
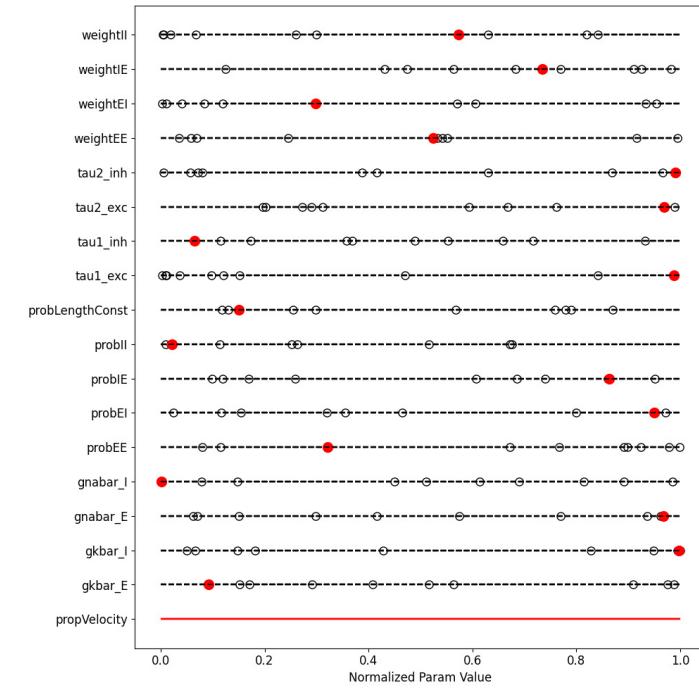
average_fitness: 565.52710732415

average_scaled_fitness: 565.0917614826113

binSize: 7.5

gaussianSigma: 30.0

thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_7/gen_7_cand_55_data.json

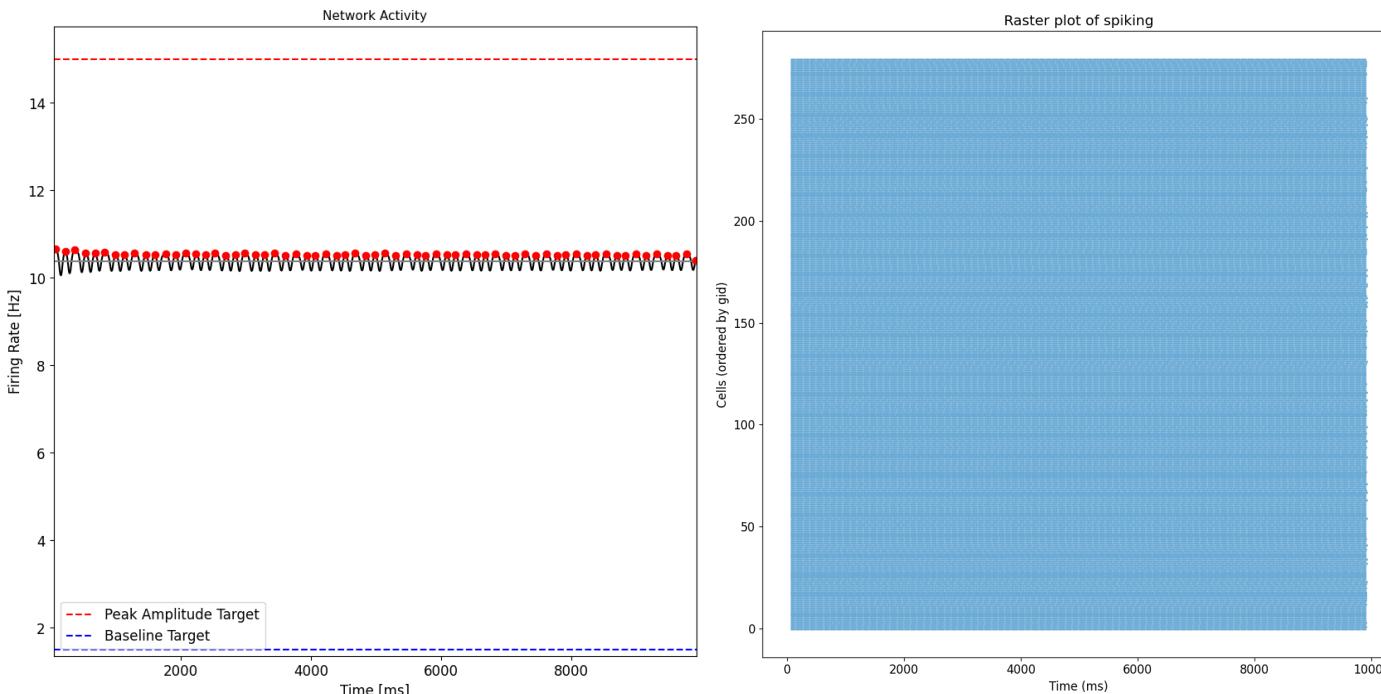
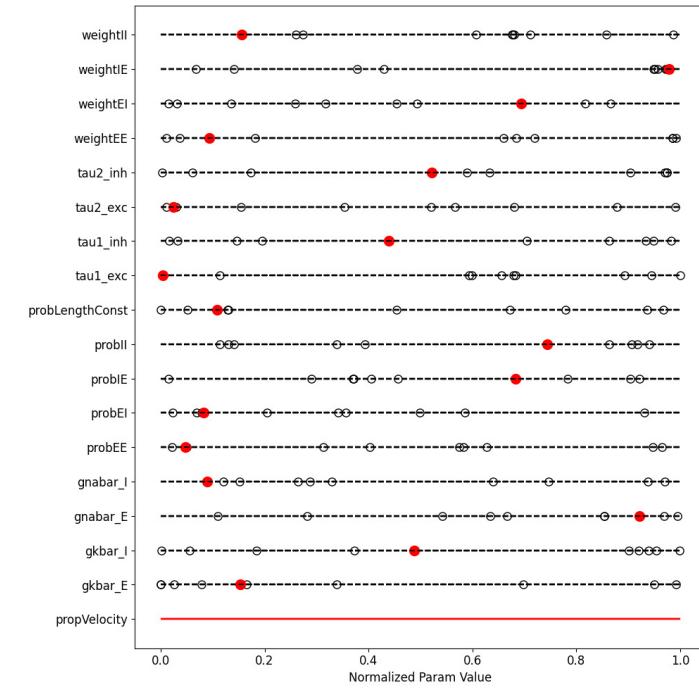
SimLabel: gen_7_cand_55

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.1612575680047546, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 6.555723651033788, 'Fit': 1000}
IBI_fitness: {'Value': 153.6328125, 'Fit': 4.150388088350092}
baseline_fitness: {'Value': 10.392456749522403, 'Fit': 1000}
slopeFitness: {'Value': -1.5493657869292495e-05, 'Fit': 1.0000309877958504}
thresh: {'Value': 10.376093752730533, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 98.79969992498124, 'Fit': 1.2713254466333697}
E_rate_fitness: {'Value': 36.757936507936506, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 667.3801938358644
average_scaled_fitness: 667.047230749141
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_7/gen_7_cand_59_data.json

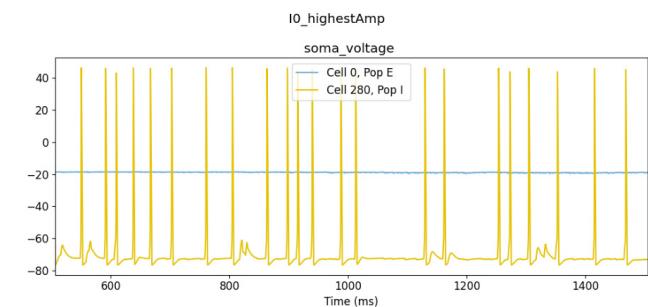
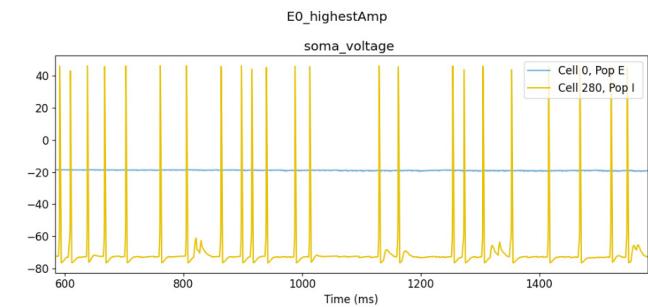
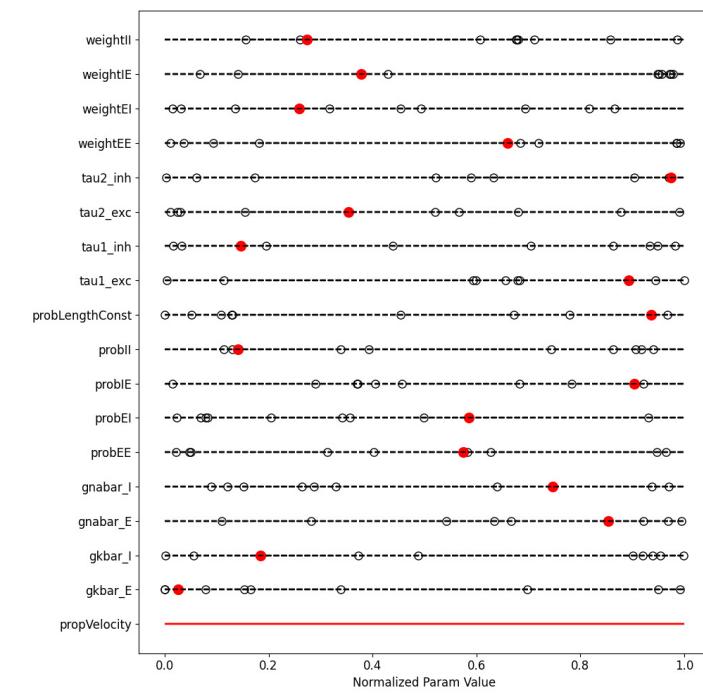
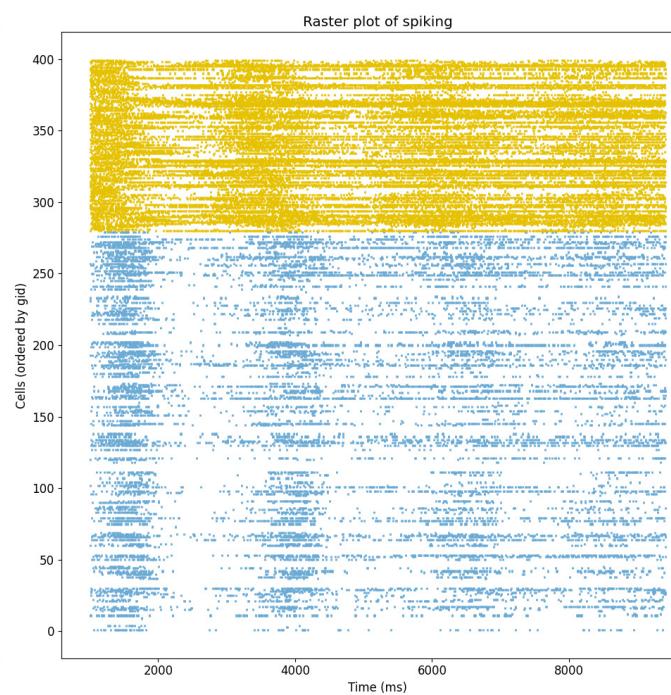
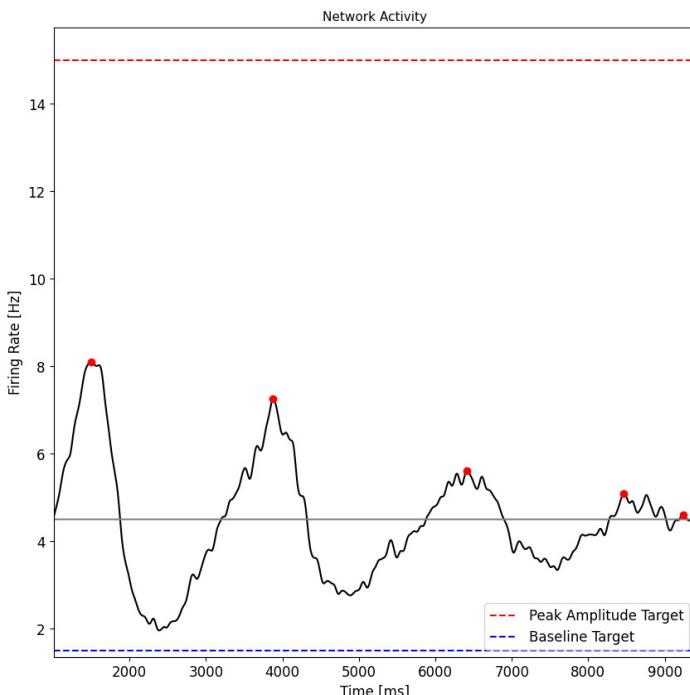
SimLabel: gen_7_cand_59

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 1.3809828099927994, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.6374501992031872, 'Fit': 6.200941871176879}
IBI_fitness: {'Value': 1576.5, 'Fit': 2.2900235543957783}
baseline_fitness: {'Value': 4.440313309194301, 'Fit': 1000}
slopeFitness: {'Value': -0.0004684156692259484, 'Fit': 1.0009372703019979}
thresh: {'Value': 4.498946131616797, 'Fit': 1.650459721808464}
sustain_oscillation_fitness: {'Value': 84.04494382022472, 'Fit': 24.31300119705449}
E_rate_fitness: {'Value': 0.3611111111111111, 'Fit': 1000}
I_rate_fitness: {'Value': 27.48148148148148, 'Fit': 1.2864054445828286}
maxFitness: 1000
average_fitness: 337.41575211770225
average_scaled_fitness: 336.7518823572961
```

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}

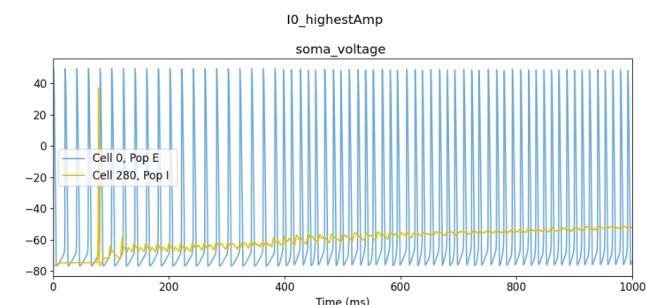
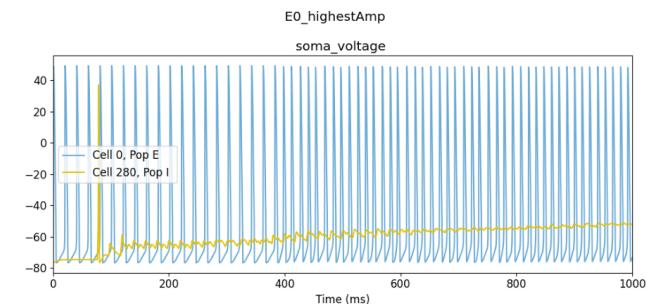
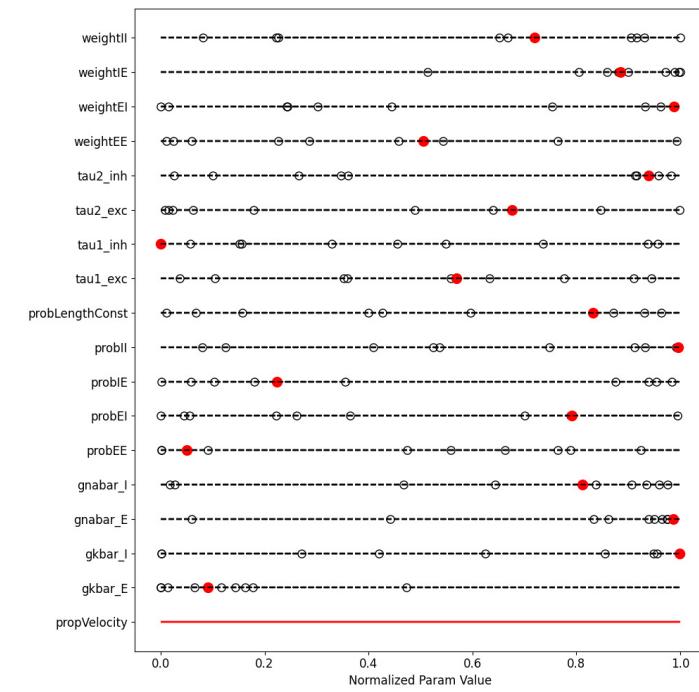
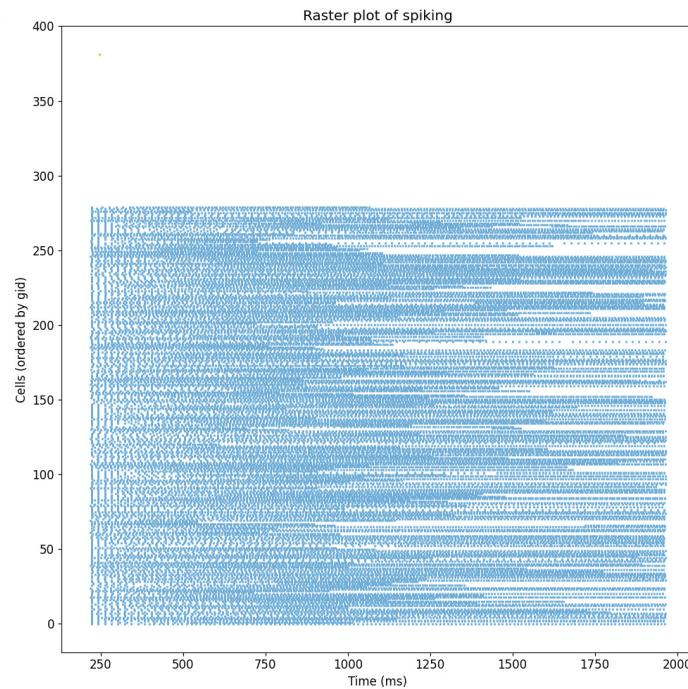
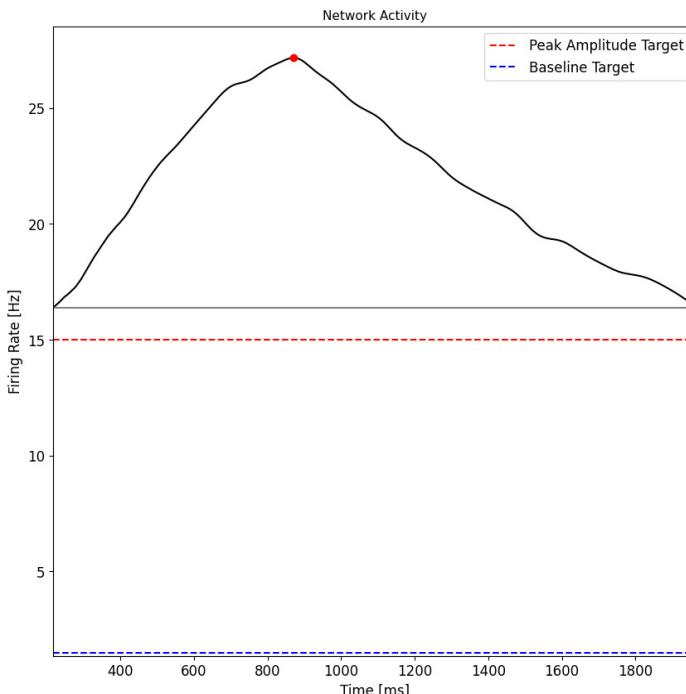
```

```

burstAmp_Fitness: {'Value': 10.786637512405498, 'Fit': 8.220912756146593}
burst_peak_frequency_fitness: {'Value': 0.5089058524173028, 'Fit': 2.8674843563460355}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 21.7830608826551, 'Fit': 1000}
slopeFitness: {'Value': -0.019380628516677517, 'Fit': 1.0395222753904285}
thresh: {'Value': 16.376833891934453, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 17.528089887640448, 'Fit': 1000}
E_rate_fitness: {'Value': 79.99603174603173, 'Fit': 1000}
I_rate_fitness: {'Value': 0.4722222222222222, 'Fit': 1000}
maxFitness: 1000
average_fitness: 668.0142132653204
average_scaled_fitness: 667.6687475255648

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_8/gen_8_cand_31_data.json

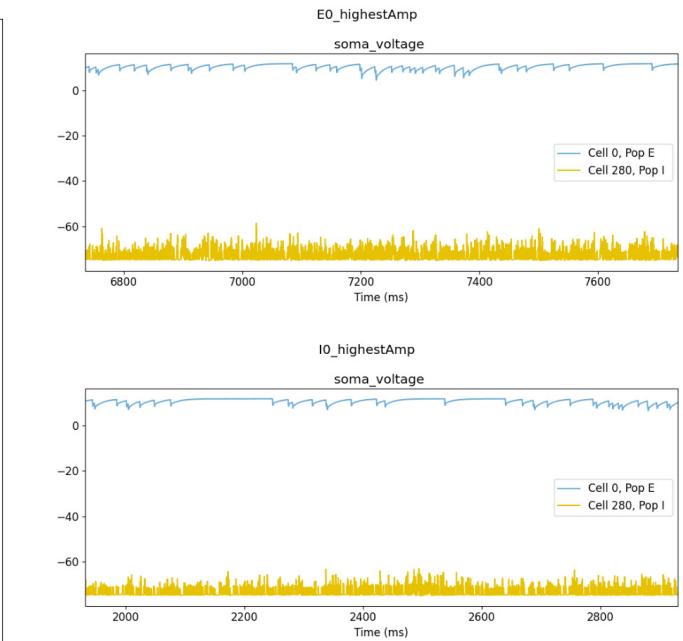
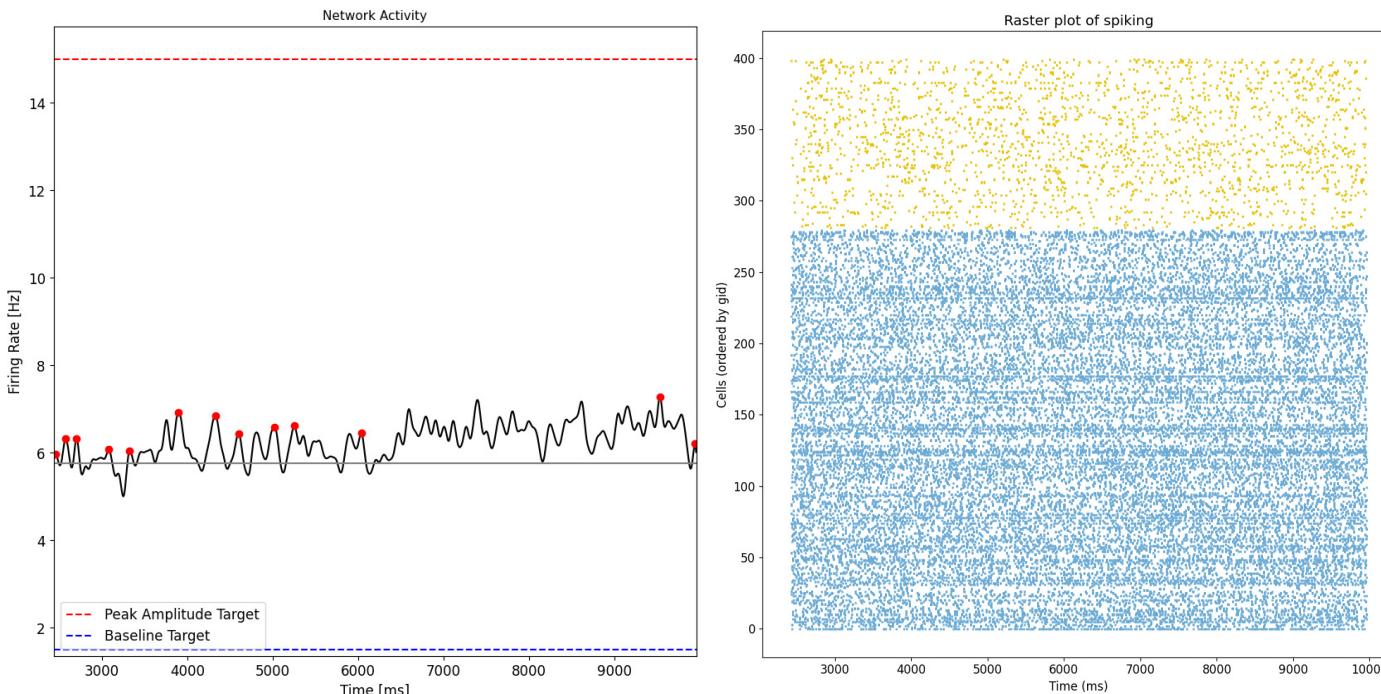
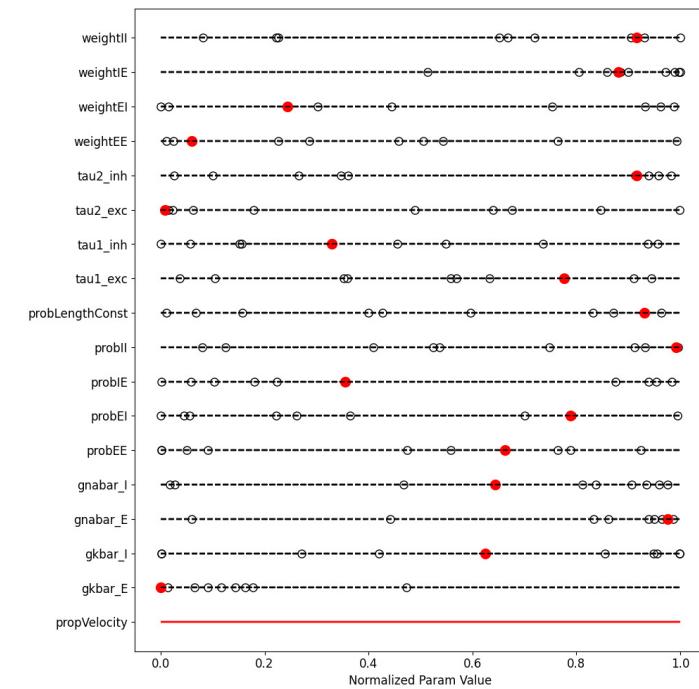
SimLabel: gen_8_cand_31

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.7091781970555127, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 1.3052208835341363, 'Fit': 340.8100558782384}
IBI_fitness: {'Value': 624.375, 'Fit': 3.547133758509341}
baseline_fitness: {'Value': 6.2552123831551905, 'Fit': 1000}
slopeFitness: {'Value': 0.0008411012593929044, 'Fit': 1.001683618215161}
thresh: {'Value': 5.758490901944847, 'Fit': 0.4683727142997178}
sustain_oscillation_fitness: {'Value': 75.28089887640449, 'Fit': 140.30522453405328}
E_rate_fitness: {'Value': 5.698412698412699, 'Fit': 2.05573802686593}
I_rate_fitness: {'Value': 3.1018518518516, 'Fit': 14.728948084894318}
maxFitness: 1000
average_fitness: 278.10190629056405
average_scaled_fitness: 277.7636304818068
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_8/gen_8_cand_79_data.json

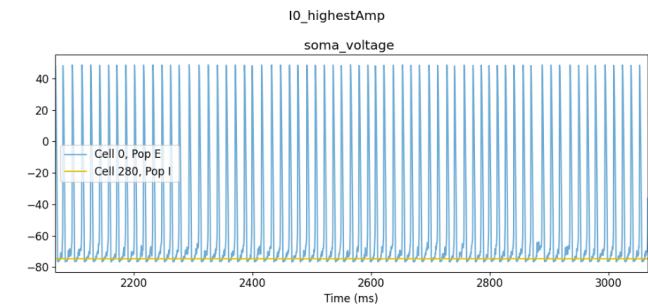
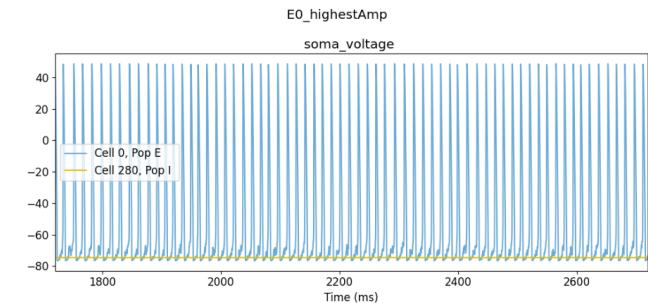
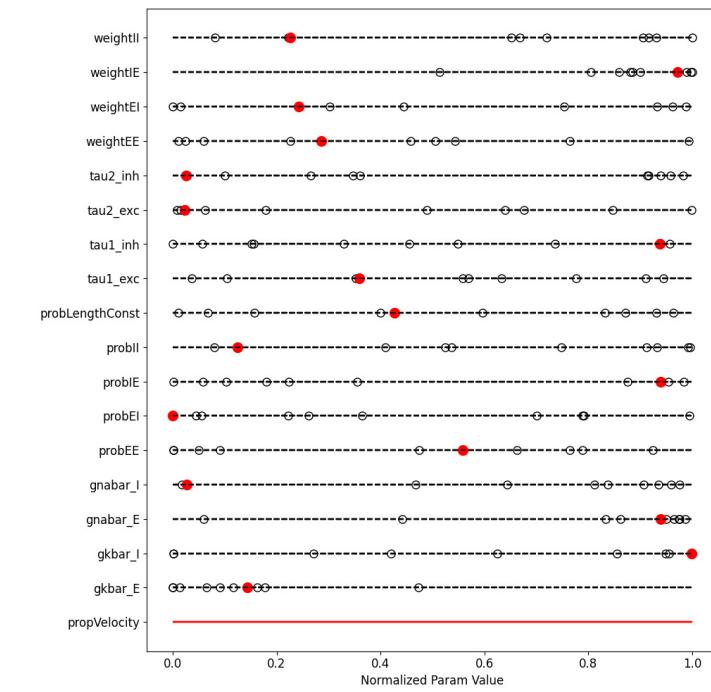
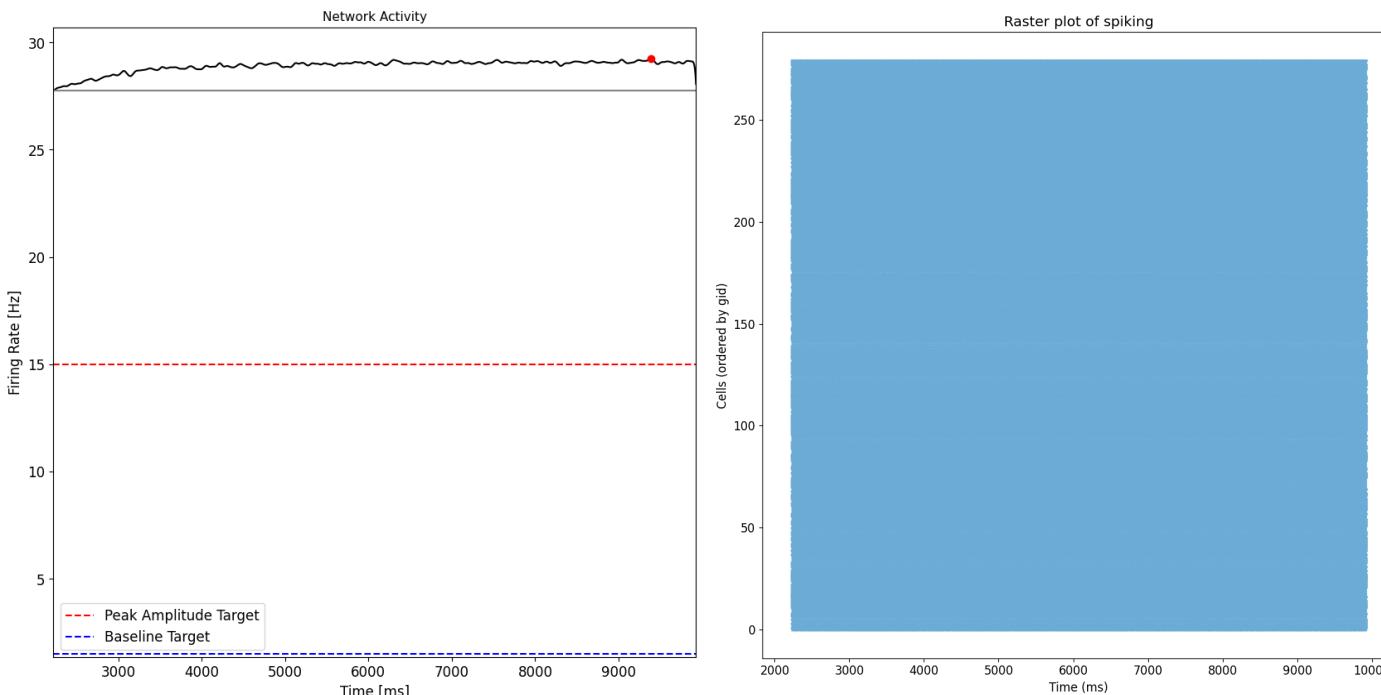
SimLabel: gen_8_cand_79

Generation Rank: 4/10

```
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': 1.4872525913182706, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10070493454179255, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 28.90274432450824, 'Fit': 1000}
slopeFitness: {'Value': 0.0007147156896765944, 'Fit': 1.001430453503348}
thresh: {'Value': 27.75354585729429, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 77.19429857464365, 'Fit': 95.69253441001473}
E_rate_fitness: {'Value': 70.46031746031746, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 788.521551651502
average_scaled_fitness: 788.3095583965647
```

```
binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0
```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_8/gen_8_cand_83_data.json

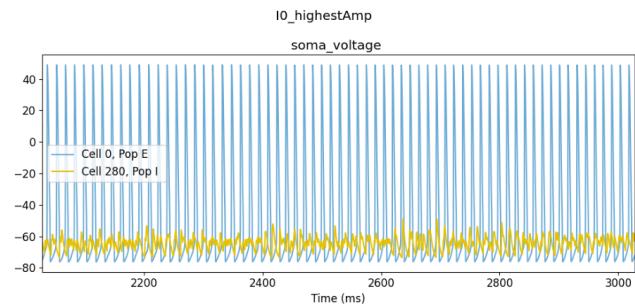
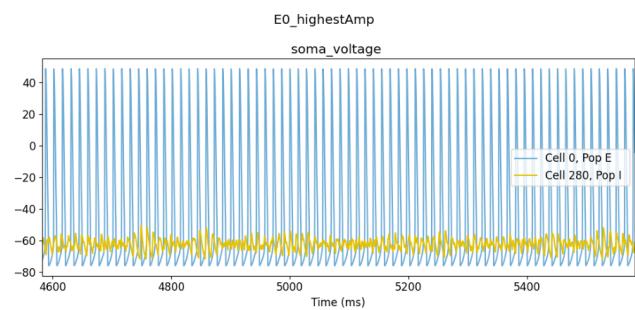
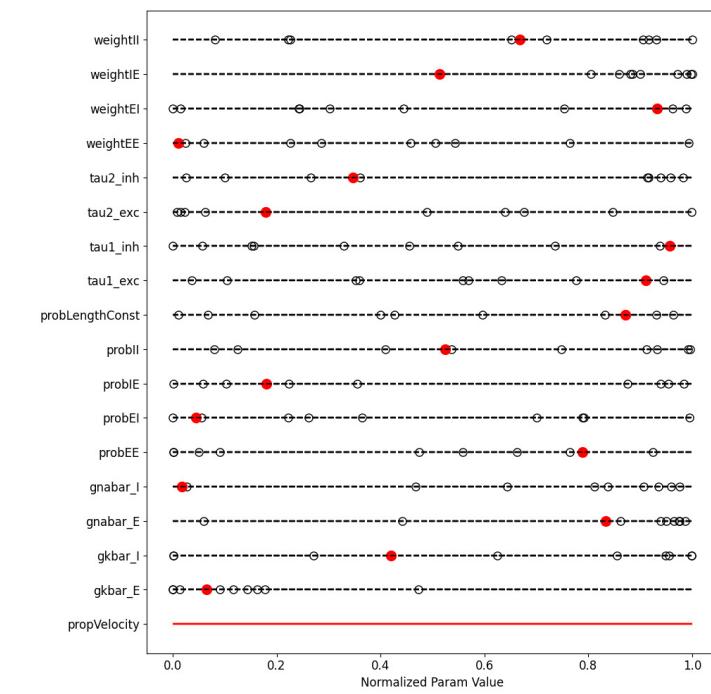
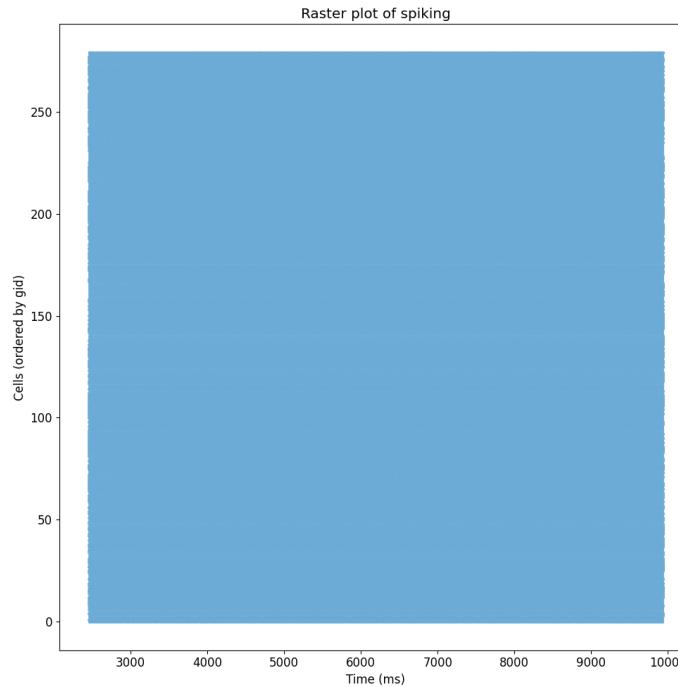
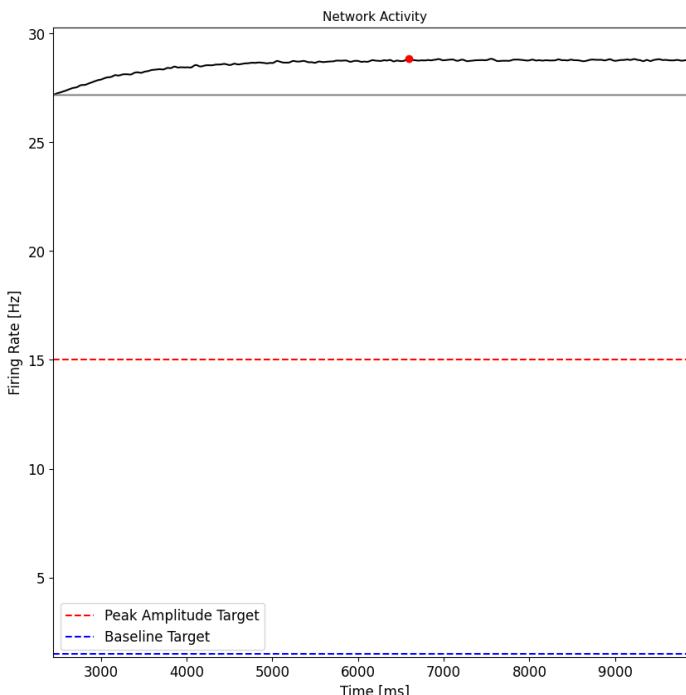
SimLabel: gen_8_cand_83

Generation Rank: 5/10

```
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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 1.6703350802008465, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10055304172951232, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 28.56170958322713, 'Fit': 1000}
slopeFitness: {'Value': 0.0009013534728683408, 'Fit': 1.001804332798735}
thresh: {'Value': 27.16179775956802, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 74.9812734082397, 'Fit': 1000}
E_rate_fitness: {'Value': 64.9563492063492, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 889.000200481422
average_scaled_fitness: 888.8888888888889
```

```
binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0
```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_8/gen_8_cand_92_data.json

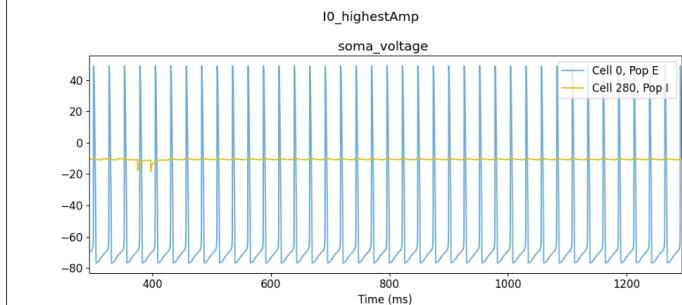
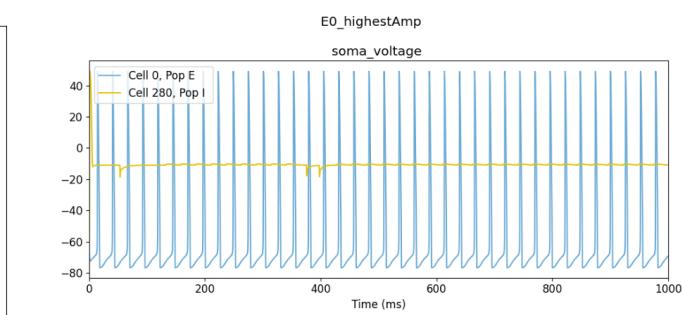
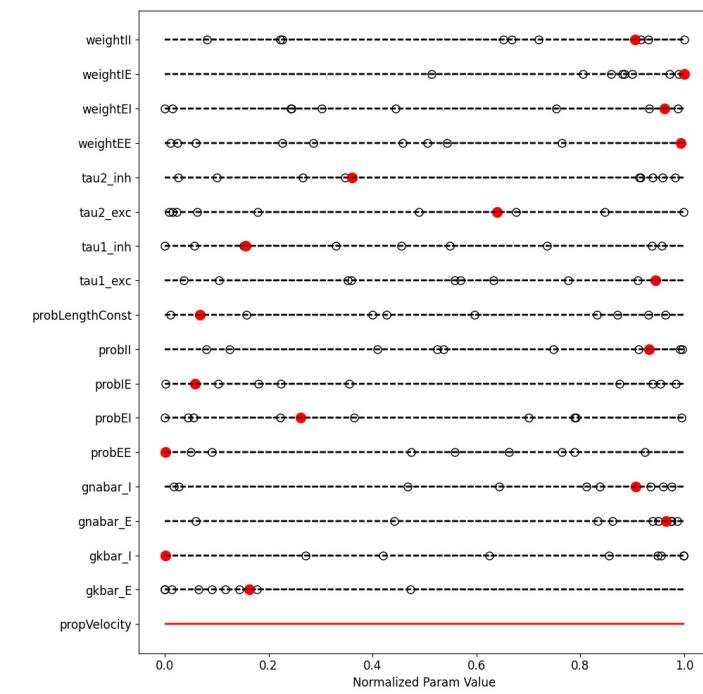
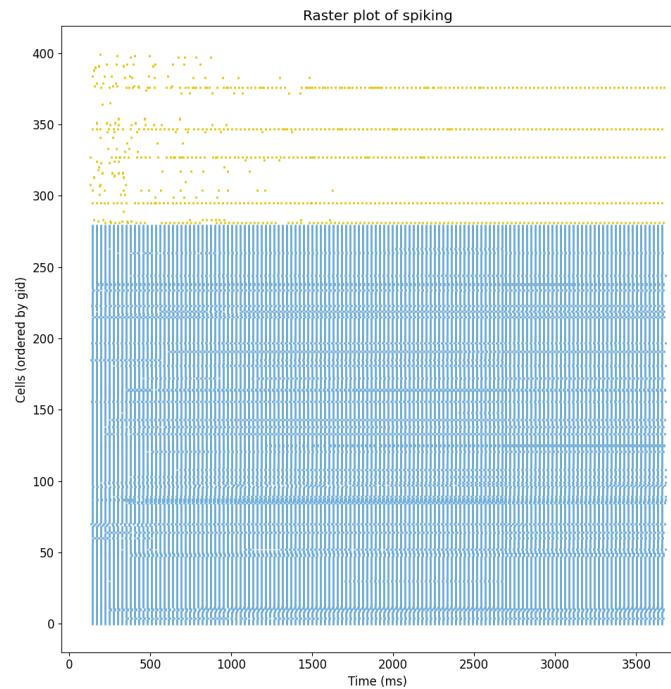
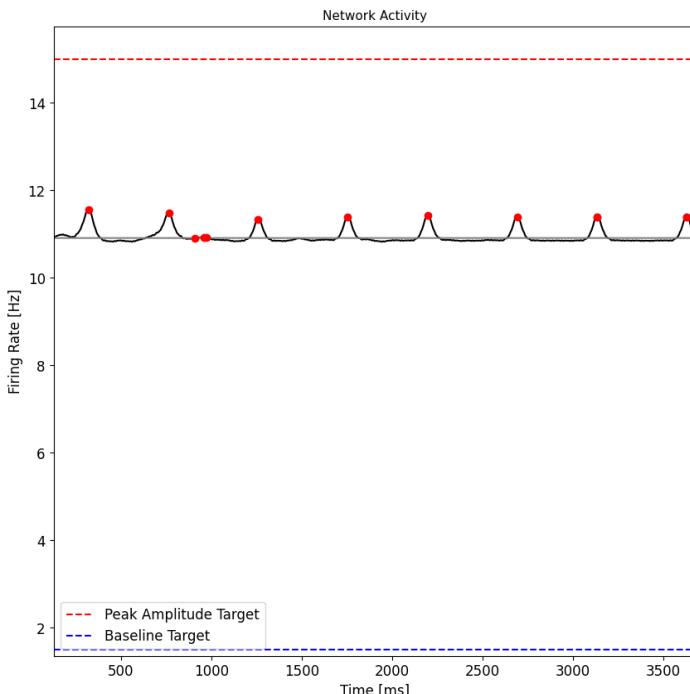
SimLabel: gen_8_cand_92

Generation Rank: 3/10

```
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': 0.4333819957326807, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 6.517311608961303, 'Fit': 1000}
IBI_fitness: {'Value': 143.80434782608697, 'Fit': 7.56123112079328}
baseline_fitness: {'Value': 10.946277490051605, 'Fit': 1000}
slopeFitness: {'Value': -0.00012284342448737714, 'Fit': 1.0002457170324606}
thresh: {'Value': 10.90910714720218, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 35.580524344569284, 'Fit': 1000}
E_rate_fitness: {'Value': 37.607142857142854, 'Fit': 1000}
I_rate_fitness: {'Value': 2.7037037037037033, 'Fit': 15.32720922437131}
maxFitness: 1000
average_fitness: 669.3209651180218
average_scaled_fitness: 668.9898736568529
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



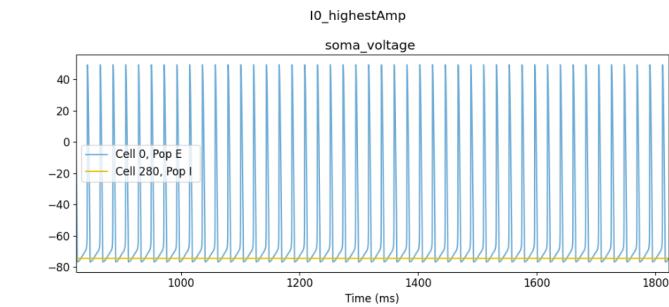
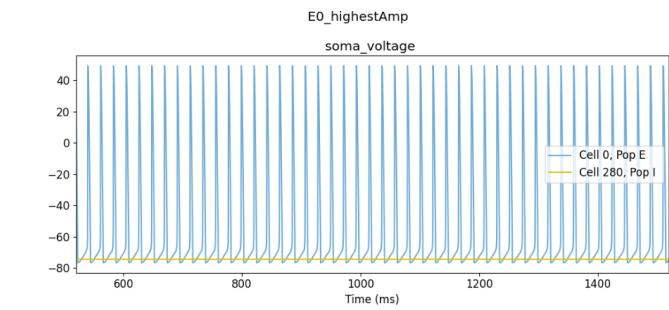
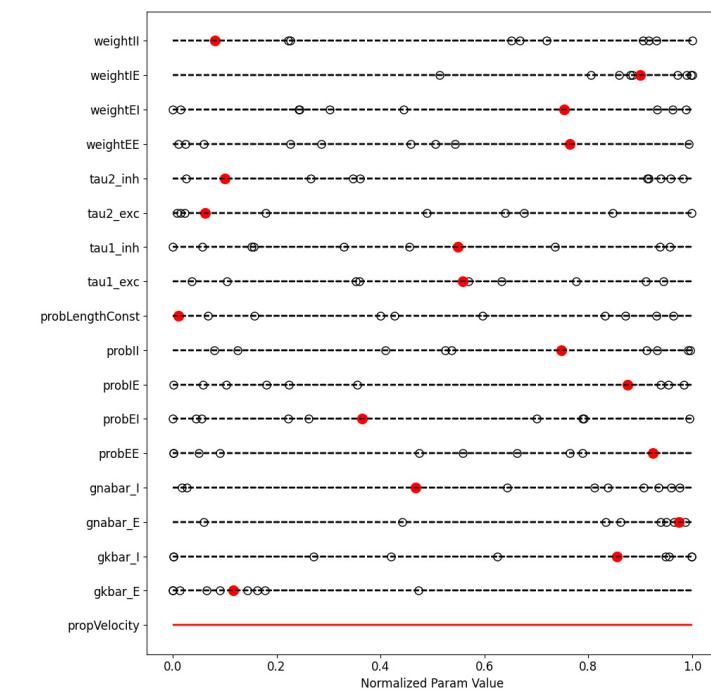
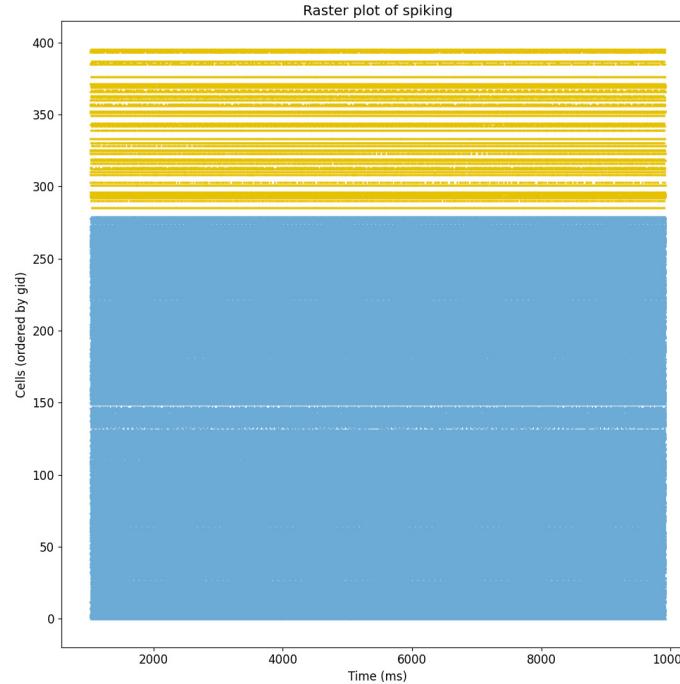
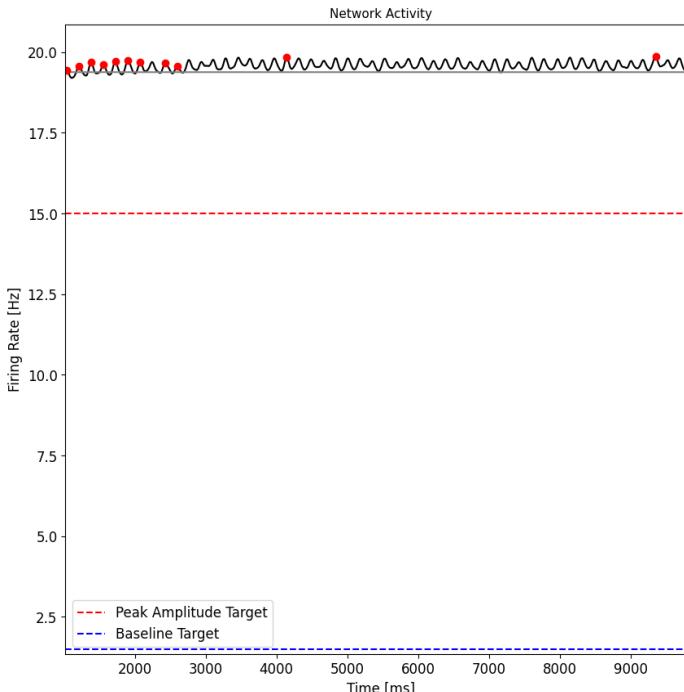
```

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': 0.2952502709542948, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 1.108591584782061, 'Fit': 104.747166539313}
IBI_fitness: {'Value': 831.75, 'Fit': 103.4599181480964}
baseline_fitness: {'Value': 19.575545918905025, 'Fit': 1000}
slopeFitness: {'Value': 0.00011257330089608917, 'Fit': 1.0002251719491906}
thresh: {'Value': 19.376101113922044, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 88.98876404494382, 'Fit': 9.045317233286173}
E_rate_fitness: {'Value': 57.89285714285714, 'Fit': 1000}
I_rate_fitness: {'Value': 17.296296296296294, 'Fit': 3.5621716408966004}
maxFitness: 1000
average_fitness: 469.09053319261574
average_scaled_fitness: 468.55897249950317

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_9/gen_9_cand_60_data.json

SimLabel: gen_9_cand_60

Generation Rank: 0/10

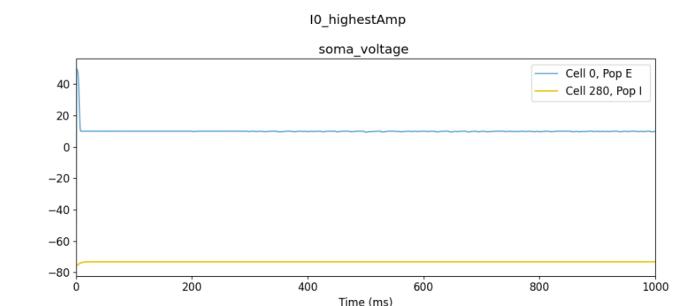
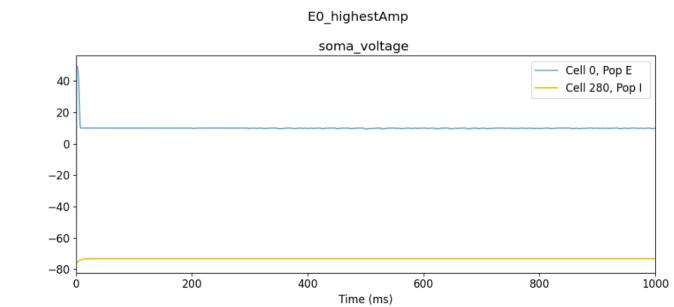
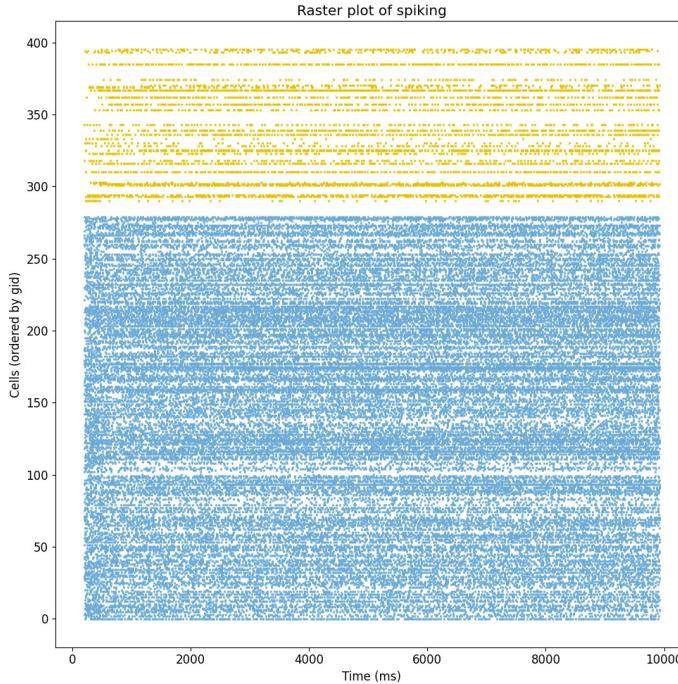
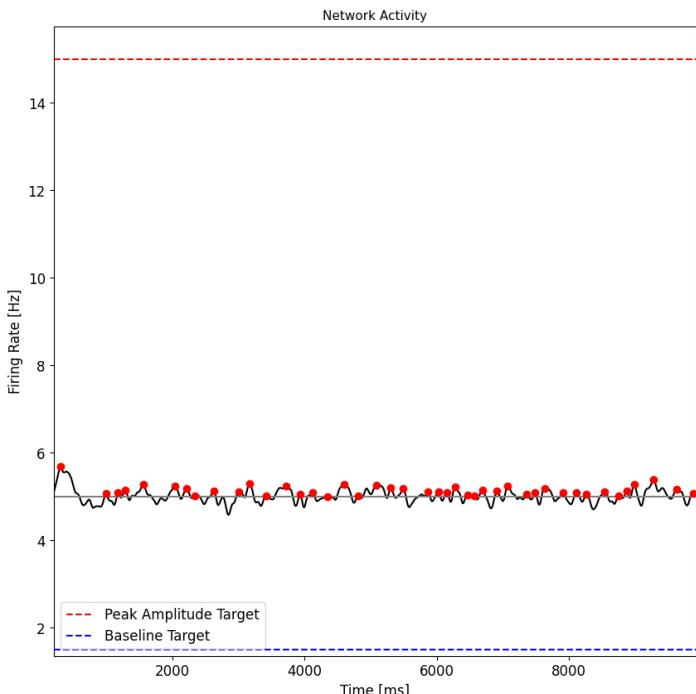
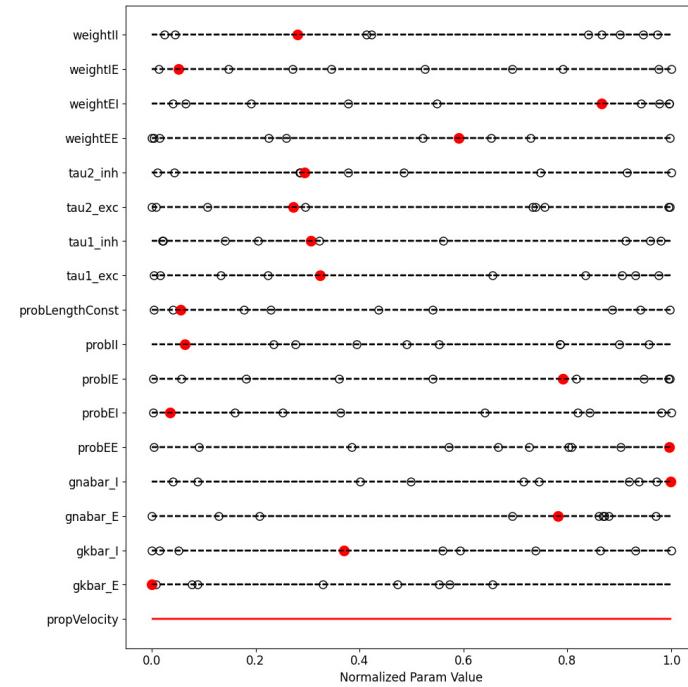
```
rate_targets: {'E': {'target': 7.5, 'width': 2.5, 'min': 1}, 'I': {'target': 30, 'width': 10, 'min': 2}}
bursts_peak_targets: {'target': 15, 'width': 2, 'min': 8}
IBI_targets: {'target': 3000, 'width': 2000, 'max': 4000}
baseline_targets: {'target': 1.5, 'width': 1, 'max': 3}
rate_slope: {'target': 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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.15017641951232422, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 4.3335852859662385, 'Fit': 1000}
IBI_fitness: {'Value': 227.85714285714286, 'Fit': 4.004920406439243}
baseline_fitness: {'Value': 5.020677576046005, 'Fit': 1000}
slopeFitness: {'Value': -2.526462761871425e-05, 'Fit': 1.0000505305318617}
thresh: {'Value': 4.9956281353530025, 'Fit': 1.0043814351891989}
sustain_oscillation_fitness: {'Value': 97.1535805243445, 'Fit': 1.7670091816660534}
E_rate_fitness: {'Value': 16.650793650793652, 'Fit': 38.87368176402811}
I_rate_fitness: {'Value': 3.361111111111107, 'Fit': 14.351994023433024}
maxFitness: 1000
average_fitness: 340.11133748236534
average_scaled_fitness: 339.45075485931994
```

binSize: 7.5

gaussianSigma: 30.0

thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_9/gen_9_cand_80_data.json

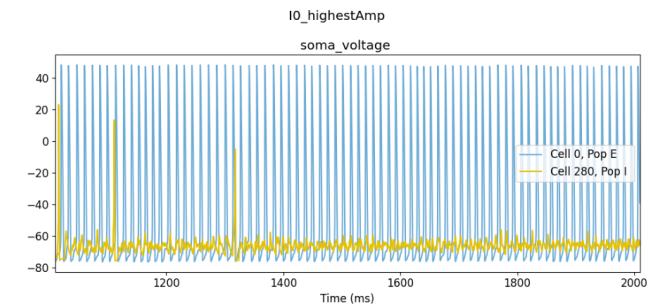
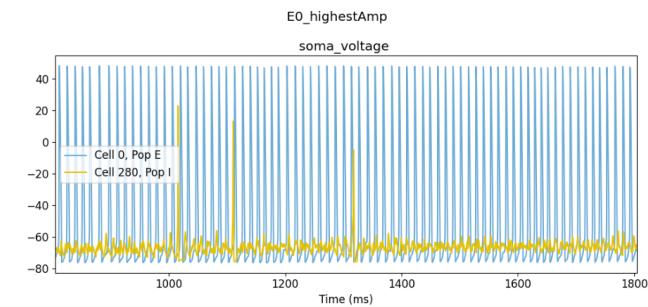
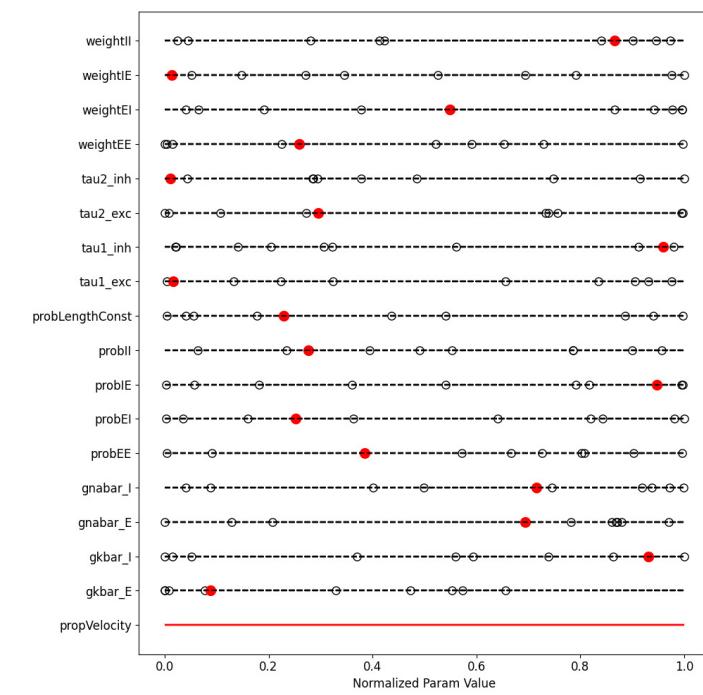
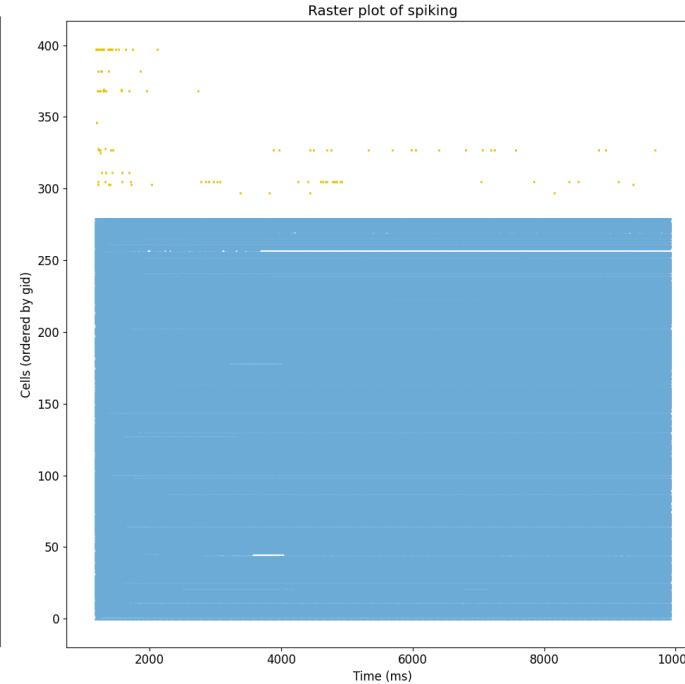
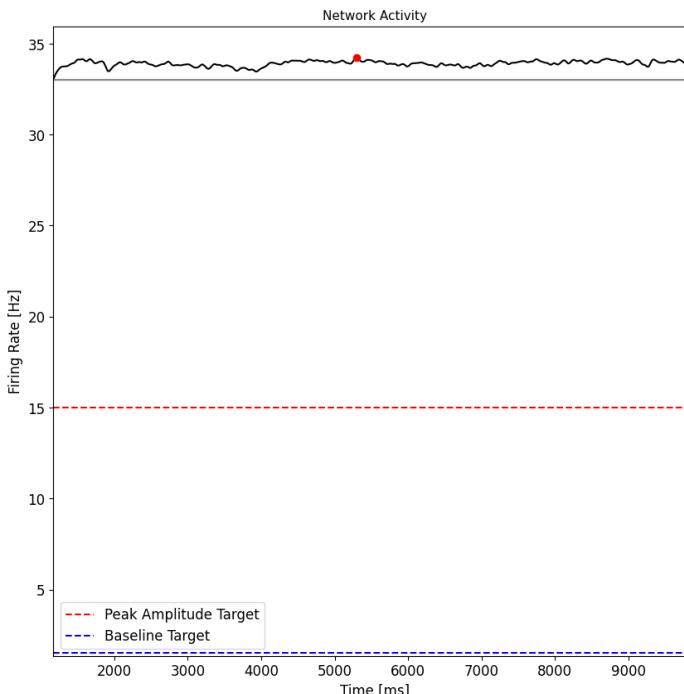
SimLabel: gen_9_cand_80

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 1.2300510385449996, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10078105316200554, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 33.90827873866286, 'Fit': 1000}
slopeFitness: {'Value': 0.00015307166099477133, 'Fit': 1.0003061901886388}
thresh: {'Value': 33.01043452624915, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 87.6219054763691, 'Fit': 11.889063033859058}
E_rate_fitness: {'Value': 80.27777777777777, 'Fit': 1000}
I_rate_fitness: {'Value': 17.76851851851852, 'Fit': 3.39786790497241}
maxFitness: 1000
average_fitness: 668.4763596810021
average_scaled_fitness: 668.1444024725467
```

```
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}

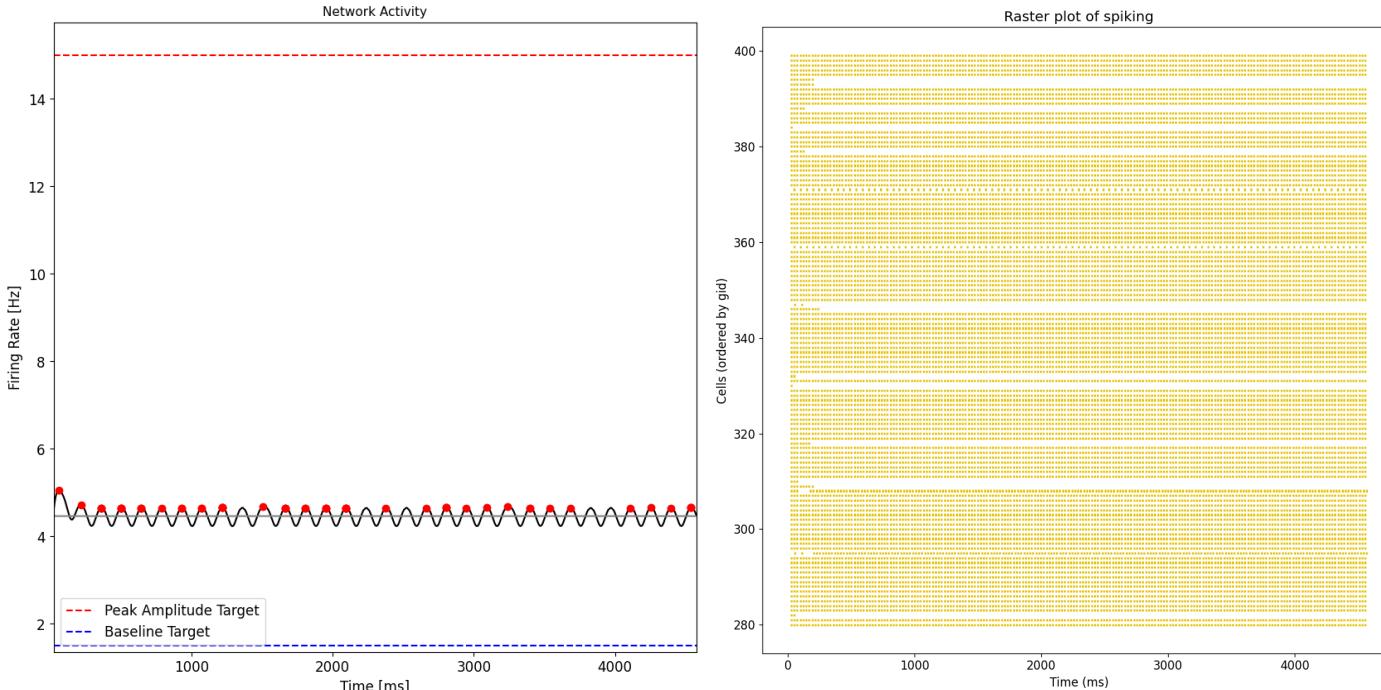
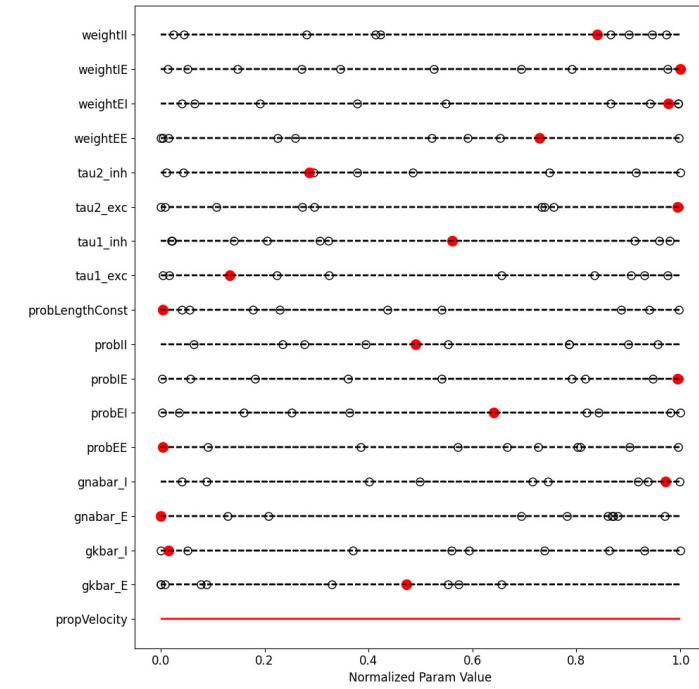
```

```

burstAmp_Fitness: {'Value': 0.1971474213383235, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 15.081967213114753, 'Fit': 1000}
IBI_fitness: {'Value': 65.84558823529412, 'Fit': 77.018119128969}
baseline_fitness: {'Value': 4.469599851883544, 'Fit': 1000}
slopeFitness: {'Value': -0.00010069801987536428, 'Fit': 1.0002014163212947}
thresh: {'Value': 4.4589181452815865, 'Fit': 1.7178643368832593}
sustain_oscillation_fitness: {'Value': 45.57721139430285, 'Fit': 1000}
E_rate_fitness: {'Value': 0.0, 'Fit': 1000}
I_rate_fitness: {'Value': 37.444444444444445, 'Fit': 2.1052715147470056}
maxFitness: 1000
average_fitness: 564.649050710769
average_scaled_fitness: 564.2131761123023

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_10/gen_10_cand_24_data.json

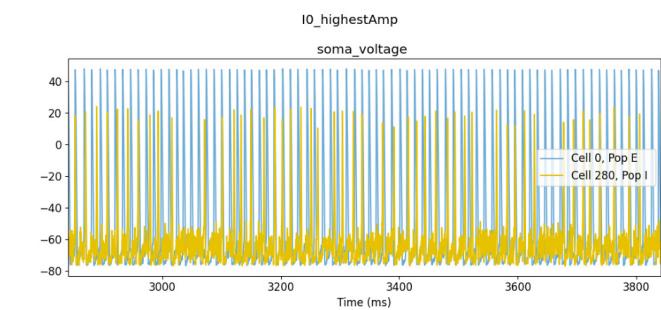
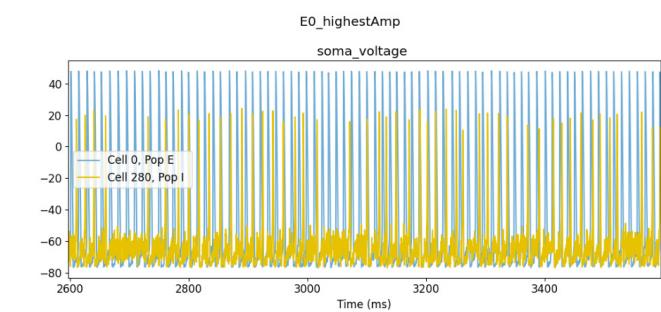
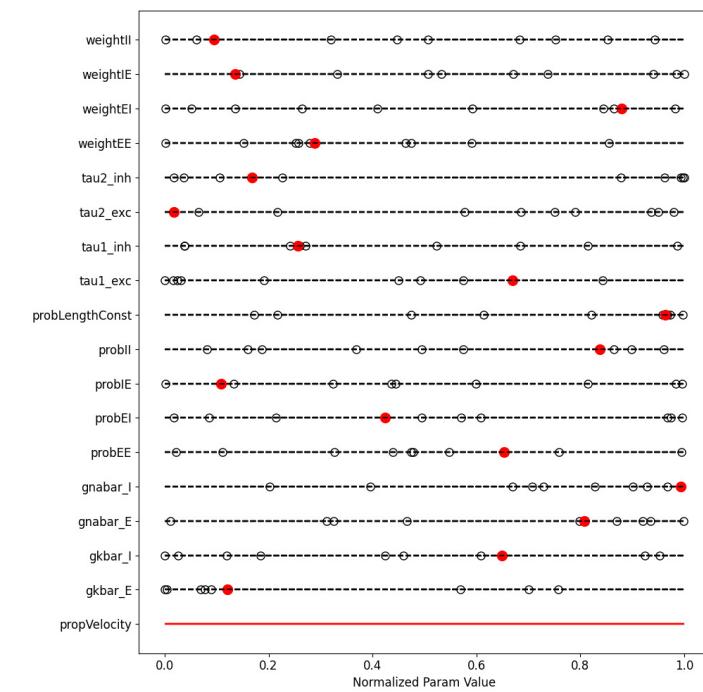
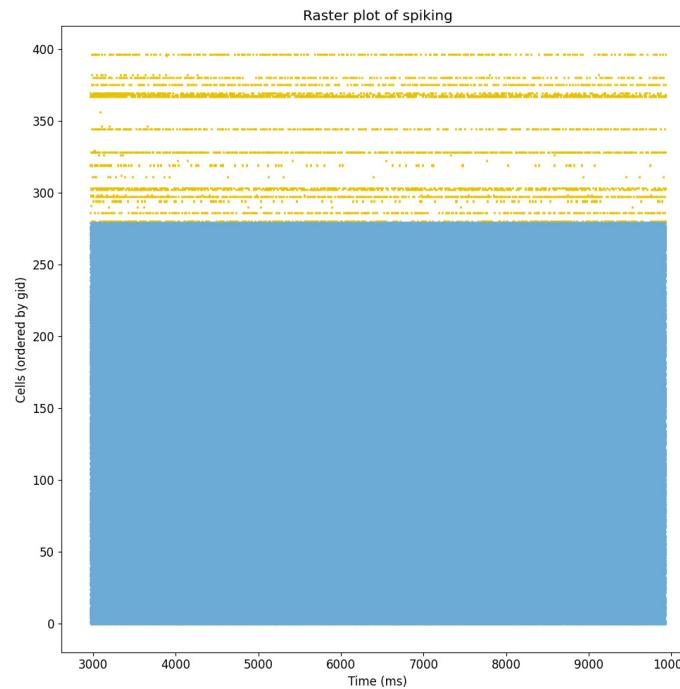
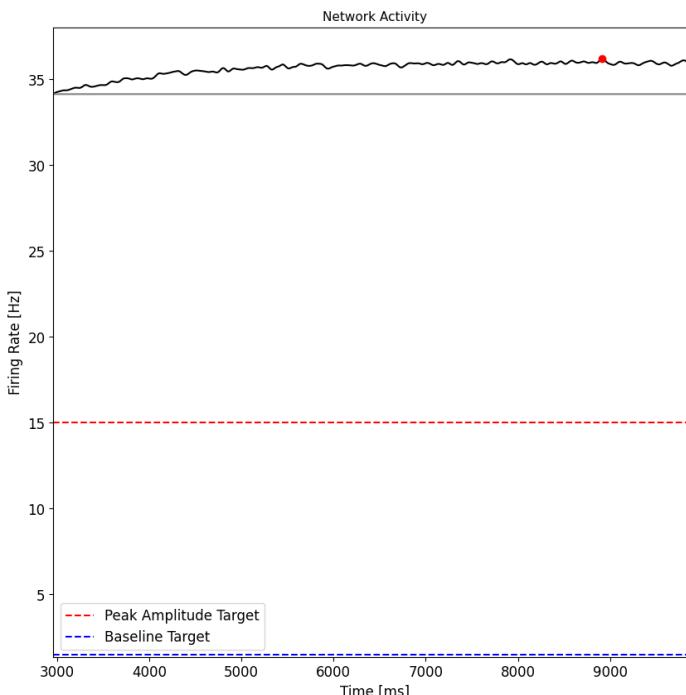
SimLabel: gen_10_cand_24

Generation Rank: 4/10

```
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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 2.079053453086587, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10070493454179255, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 35.62256609631095, 'Fit': 1000}
slopeFitness: {'Value': 0.0013708337759496152, 'Fit': 1.0027454293594715}
thresh: {'Value': 34.12053676150416, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 69.76744186046511, 'Fit': 1000}
E_rate_fitness: {'Value': 72.09523809523809, 'Fit': 1000}
I_rate_fitness: {'Value': 60.23148148148148, 'Fit': 20.555902955726467}
maxFitness: 1000
average_fitness: 780.1731831538984
average_scaled_fitness: 779.9525315606788
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_10/gen_10_cand_48_data.json

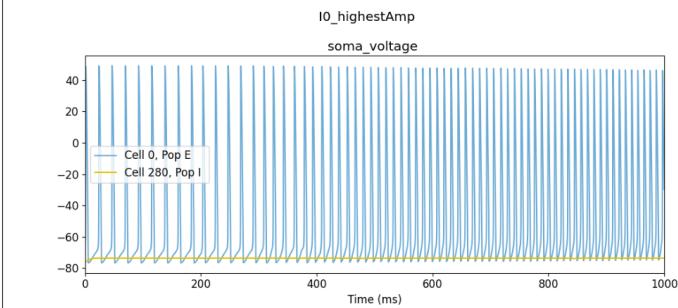
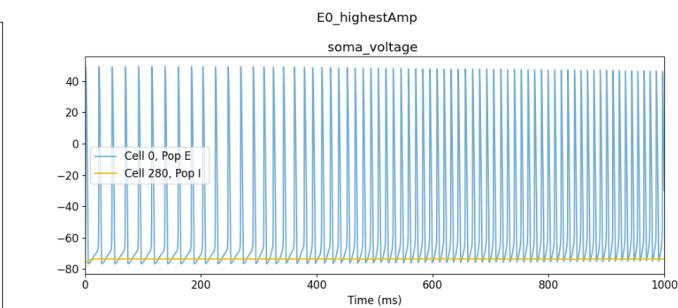
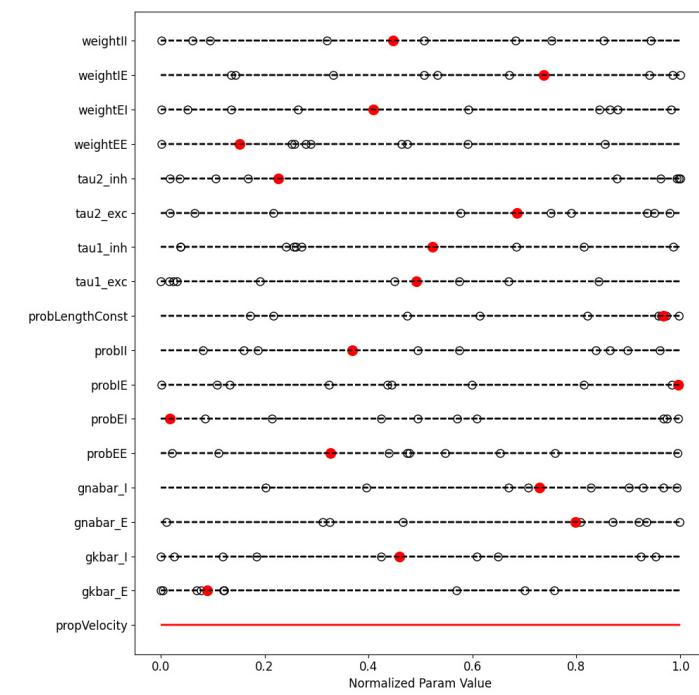
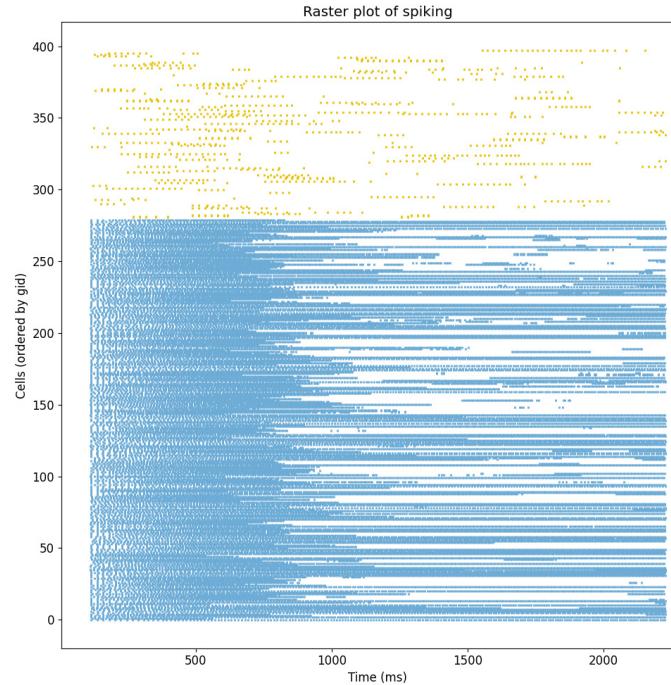
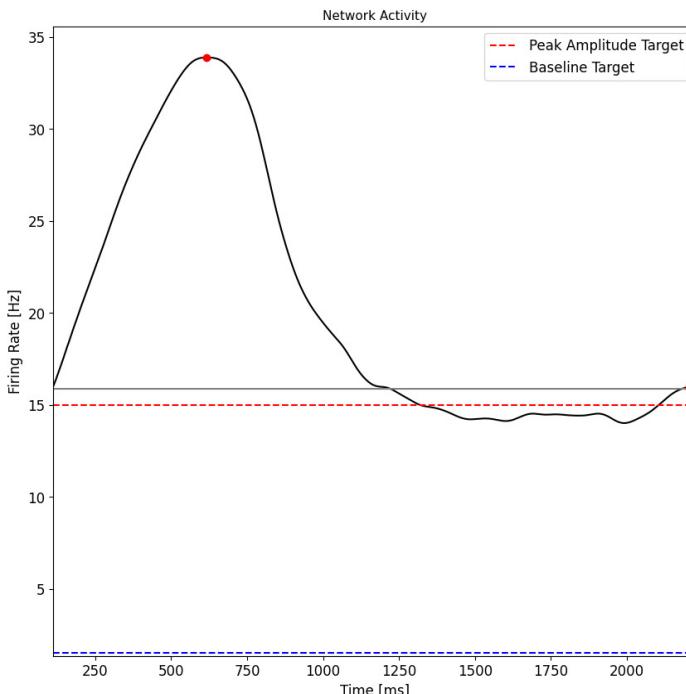
SimLabel: gen_10_cand_48

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': 9.054297222065244, 'Fit': 502.25679919134797}
burst_peak_frequency_fitness: {'Value': 0.8978675645342312, 'Fit': 29.583163156229464}
IBI_fitness: {'Value': 1590.0, 'Fit': 2.0238466849223475}
baseline_fitness: {'Value': 20.133170978378494, 'Fit': 1000}
slopeFitness: {'Value': -0.06146217852617717, 'Fit': 1.1307988807517393}
thresh: {'Value': 15.875430377944443, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 21.198501872659175, 'Fit': 1000}
E_rate_fitness: {'Value': 93.92063492063491, 'Fit': 1000}
I_rate_fitness: {'Value': 5.231481481481, 'Fit': 11.90373066029941}
maxFitness: 1000
average_fitness: 505.21092650817235
average_scaled_fitness: 504.6507861715939
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_10/gen_10_cand_50_data.json

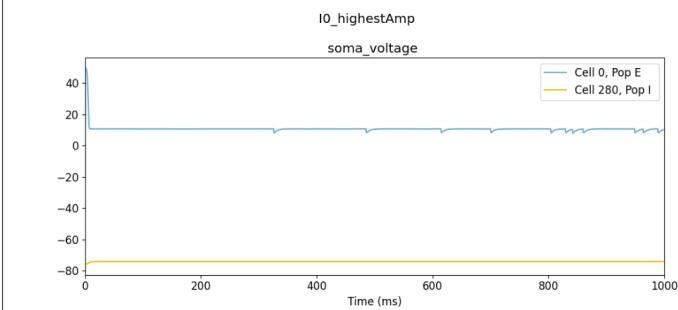
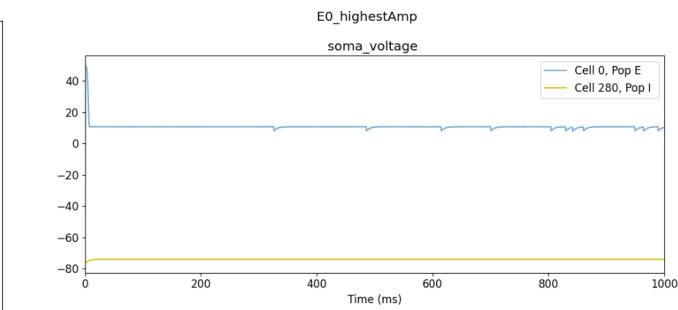
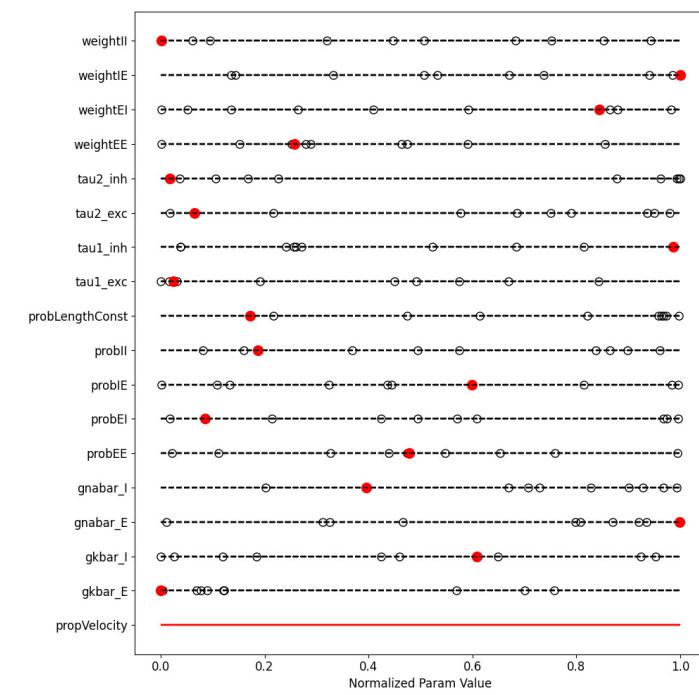
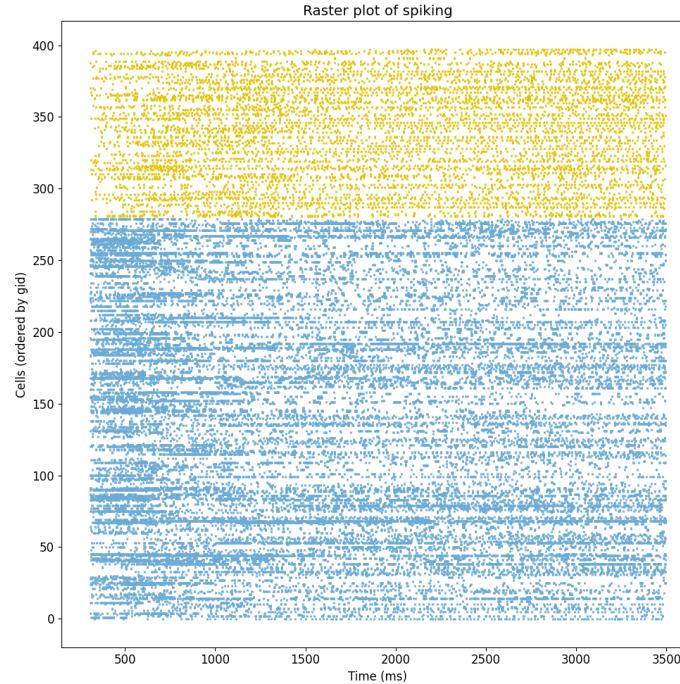
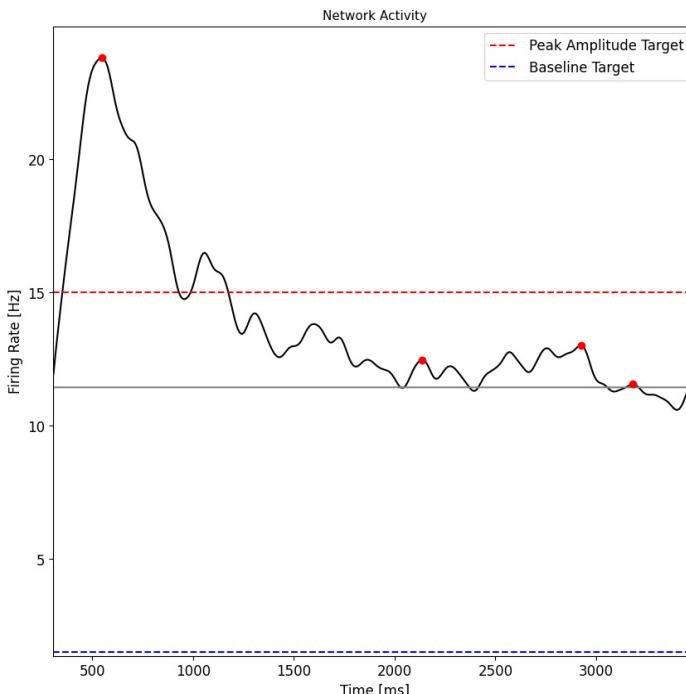
SimLabel: gen_10_cand_50

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 3.060016204995172, 'Fit': 800.7468914938518}
burst_peak_frequency_fitness: {'Value': 1.4306151645207439, 'Fit': 723.2037447729219}
IBI_fitness: {'Value': 733.125, 'Fit': 3.2123686137997334}
baseline_fitness: {'Value': 13.962623121116904, 'Fit': 1000}
slopeFitness: {'Value': -0.02052216108977231, 'Fit': 1.0418982837249118}
thresh: {'Value': 11.435411302774389, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 31.910112359550563, 'Fit': 1000}
E_rate_fitness: {'Value': 51.54365079365079, 'Fit': 1000}
I_rate_fitness: {'Value': 12.888888888888888, 'Fit': 5.535108182358286}
maxFitness: 1000
average_fitness: 614.8600012607396
average_scaled_fitness: 614.4583060314894
```

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}

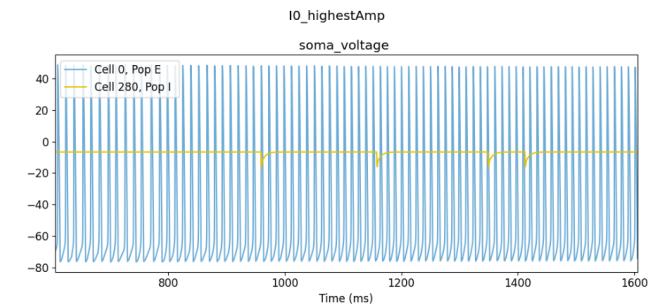
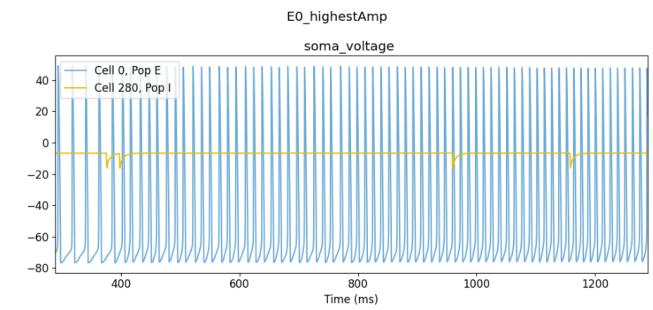
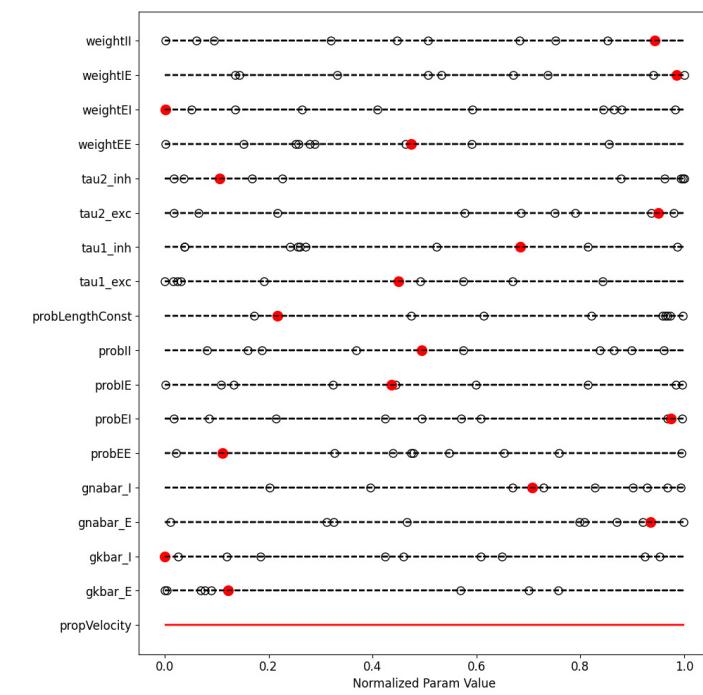
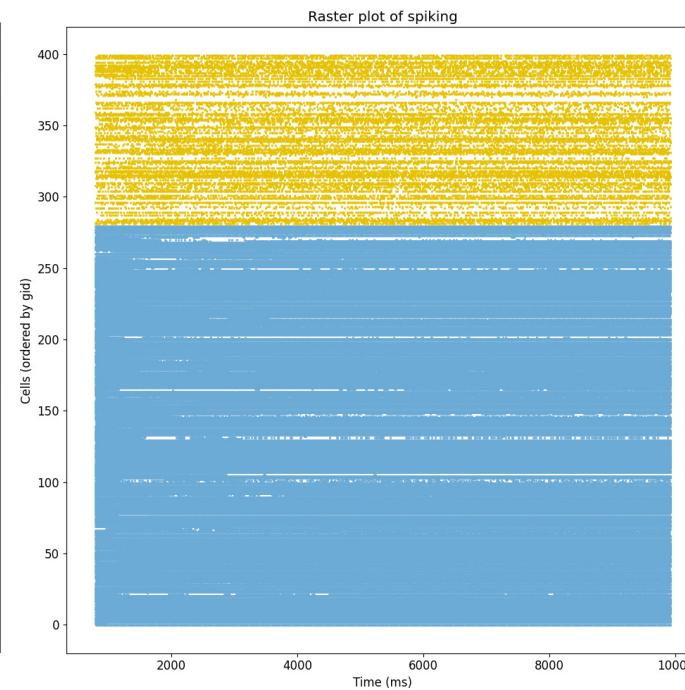
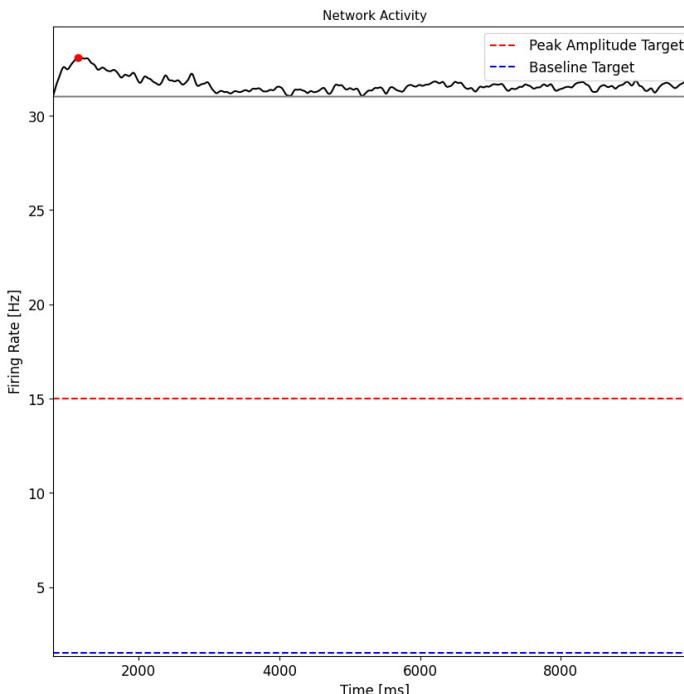
```

```

burstAmp_Fitness: {'Value': 2.0698910105645325, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10078105316200554, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 31.64099284414428, 'Fit': 1000}
slopeFitness: {'Value': -0.0005342819308352246, 'Fit': 1.001069134979441}
thresh: {'Value': 31.011778327617, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 91.31086142322098, 'Fit': 5.68498060368462}
E_rate_fitness: {'Value': 87.44047619047619, 'Fit': 1000}
I_rate_fitness: {'Value': 10.796296296296296, 'Fit': 6.823485218092863}
maxFitness: 1000
average_fitness: 668.1677261063064
average_scaled_fitness: 667.8352061834898

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_10/gen_10_cand_79_data.json

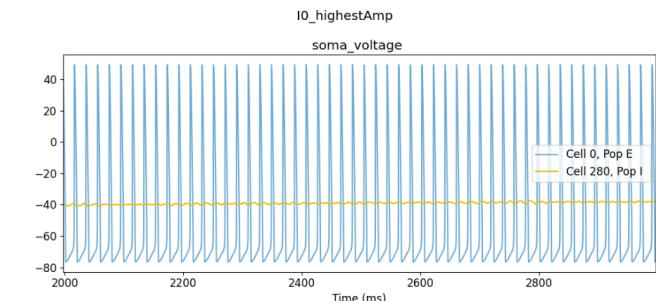
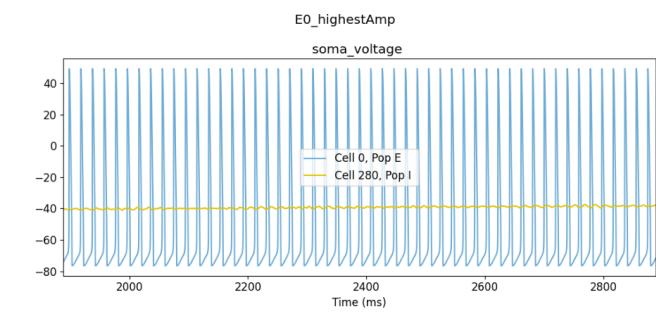
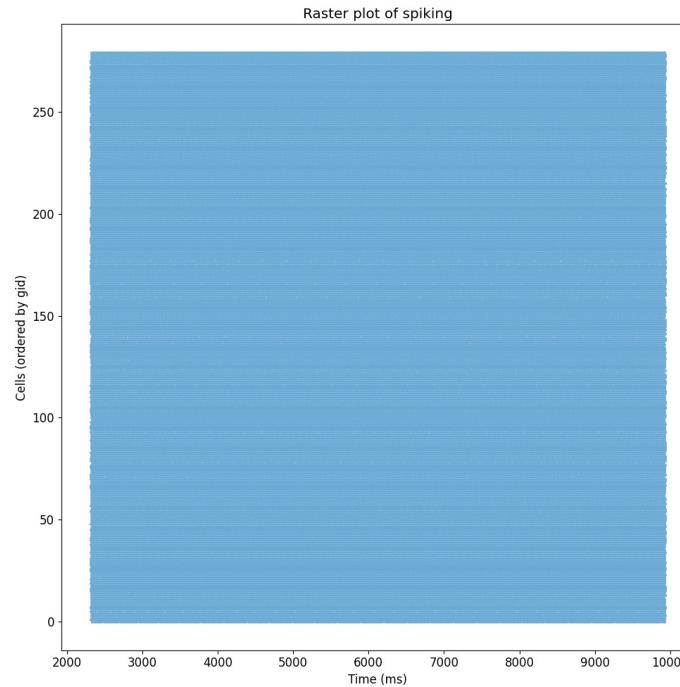
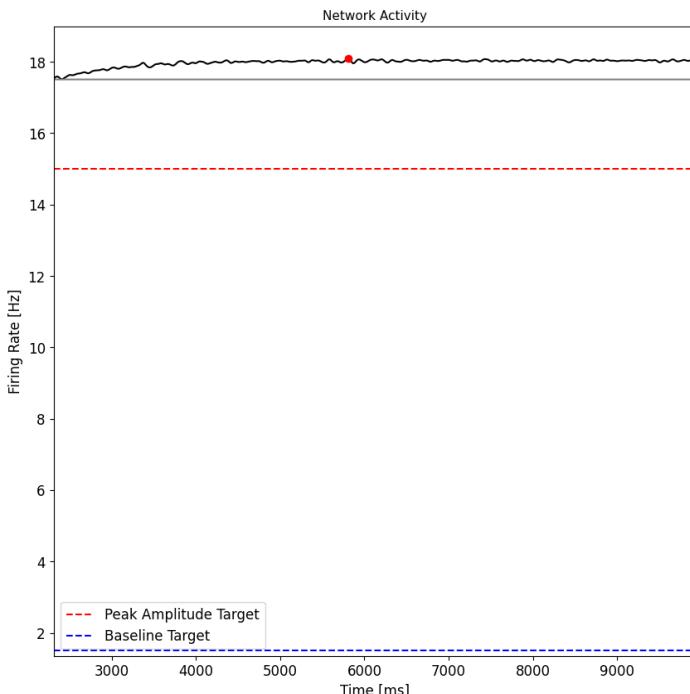
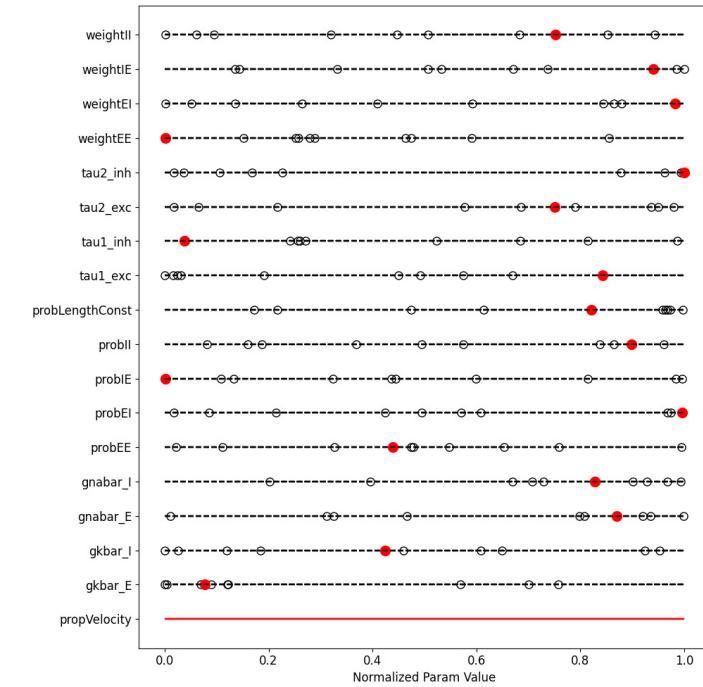
SimLabel: gen_10_cand_79

Generation Rank: 5/10

```
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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.583741598693404, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10062893081761007, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 17.972953880885175, 'Fit': 1000}
slopeFitness: {'Value': 0.0002542935347852295, 'Fit': 1.0005087164219022}
thresh: {'Value': 17.50248927875752, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 76.25468164794007, 'Fit': 115.47611019299336}
E_rate_fitness: {'Value': 52.6468253968254, 'Fit': 1000}
I_rate_fitness: {'Value': 1.3796296296296295, 'Fit': 1000}
maxFitness: 1000
average_fitness: 790.7196243232684
average_scaled_fitness: 790.5100277800593
```

```
binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0
```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_10/gen_10_cand_93_data.json

SimLabel: gen_10_cand_93

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_oscil: {'target': 100, 'width': 5, 'min': 75}

```

```

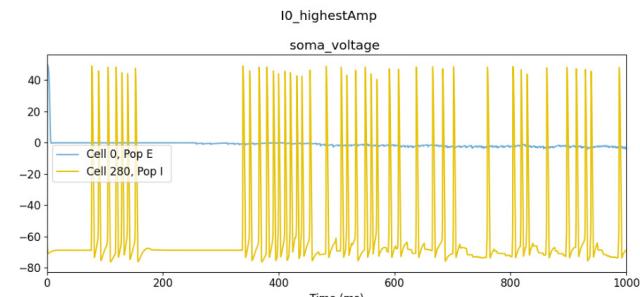
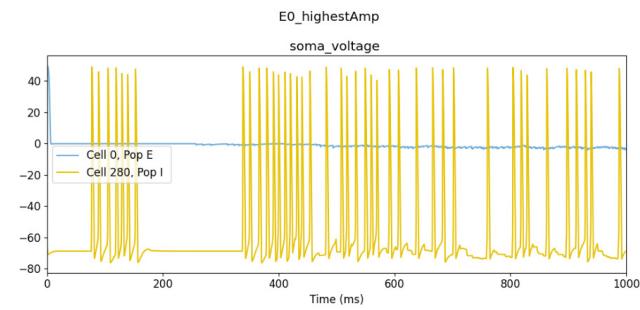
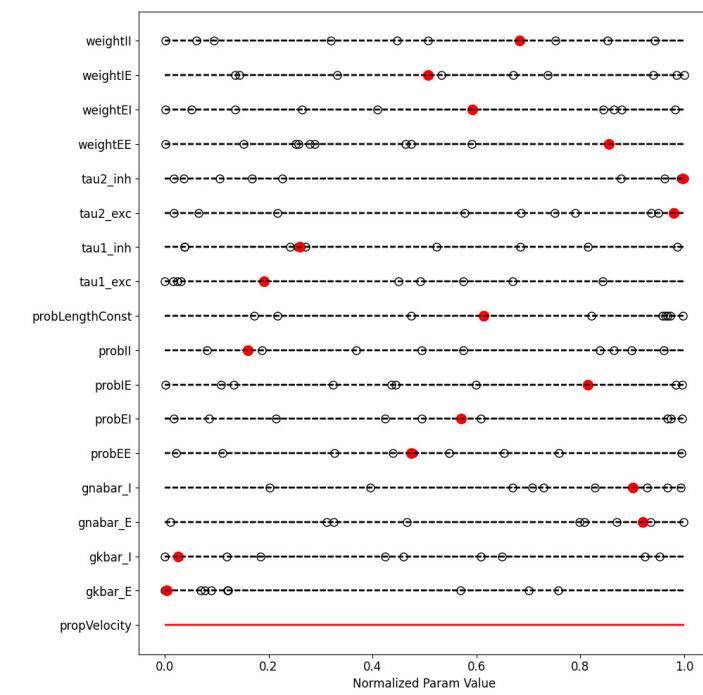
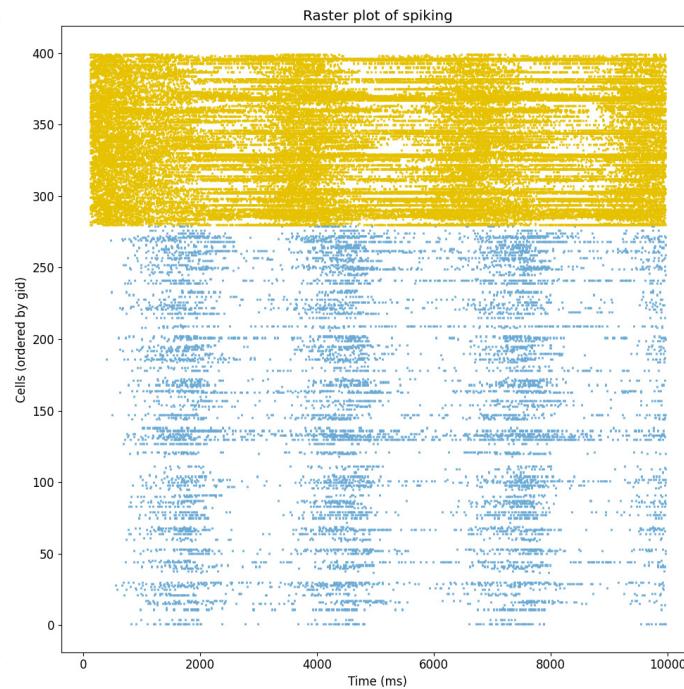
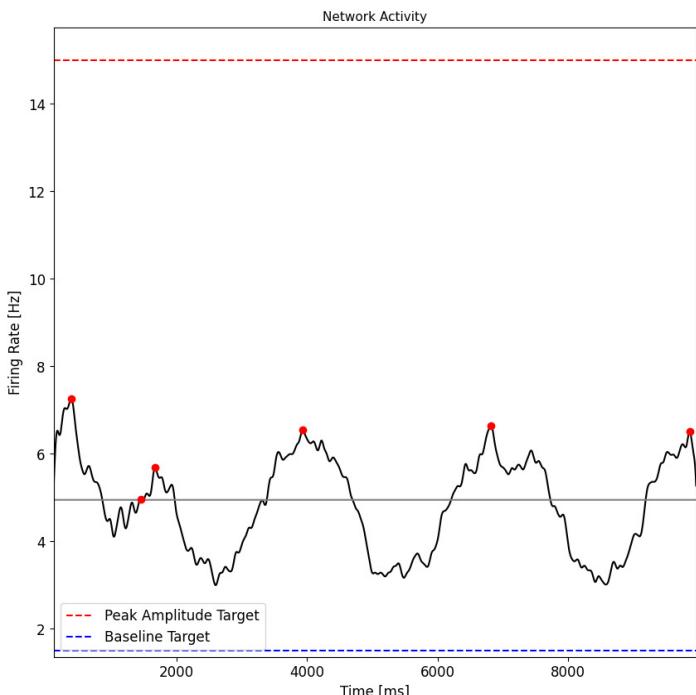
burstAmp_Fitness: {'Value': 1.3224500554685108, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.6024096385542168, 'Fit': 5.025162698969181}
IBI_fitness: {'Value': 1894.5, 'Fit': 2.0359881935251156}
baseline_fitness: {'Value': 4.836656861175548, 'Fit': 1000}
slopeFitness: {'Value': -0.00023594990893399957, 'Fit': 1.0004720111801035}
thresh: {'Value': 4.944237024263732, 'Fit': 1.0573470371301363}
sustain_oscillation_fitness: {'Value': 98.35205992509364, 'Fit': 1.390395188462777}
E_rate_fitness: {'Value': 0.5714285714285714, 'Fit': 1000}
I_rate_fitness: {'Value': 47.82407407407407, 'Fit': 5.944149196224549}
maxFitness: 1000
average_fitness: 335.16150159172133
average_scaled_fitness: 334.49568314939273

```

```

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}

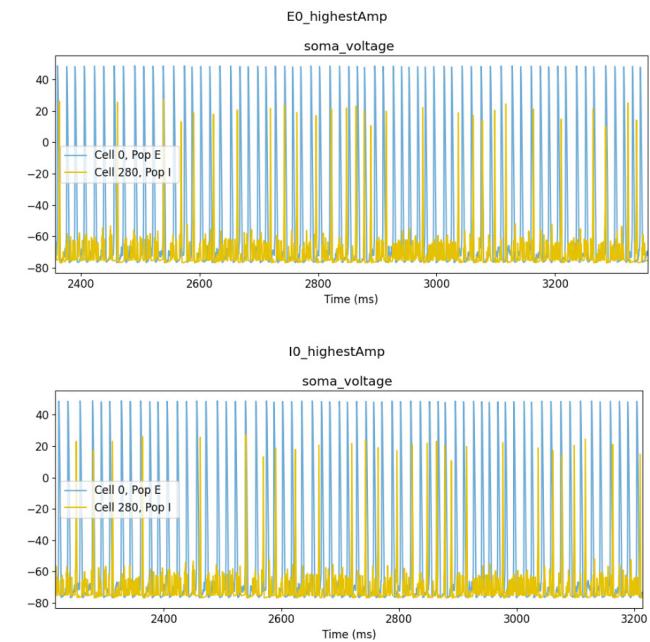
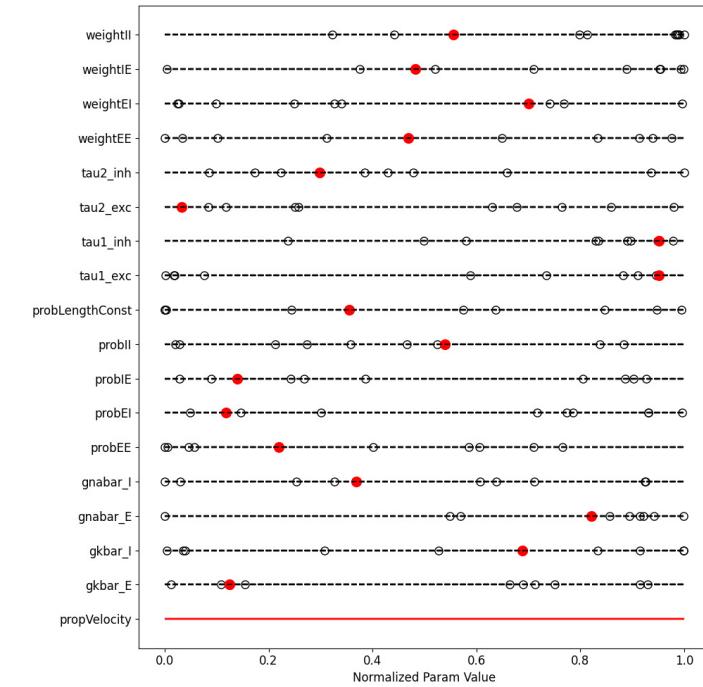
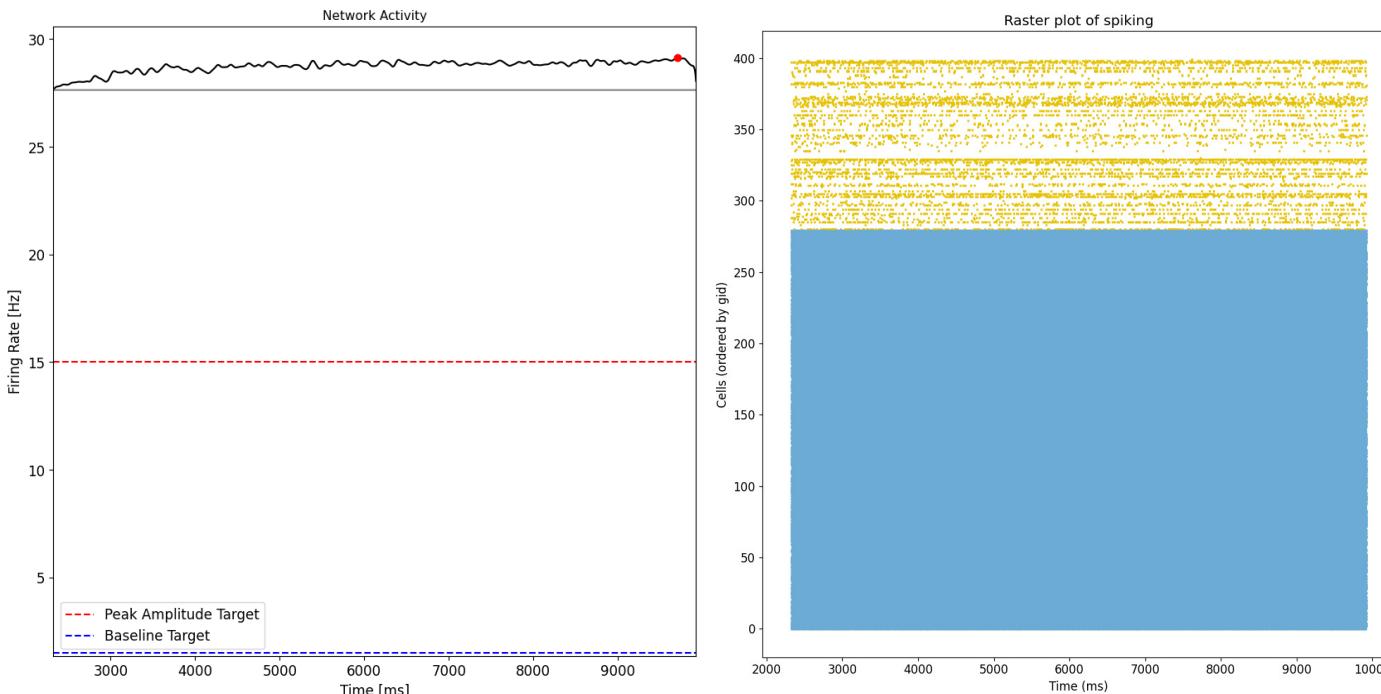
```

```

burstAmp_Fitness: {'Value': 1.5017715282787663, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10078105316200554, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 28.73045318375107, 'Fit': 1000}
slopeFitness: {'Value': 0.0007220138708511285, 'Fit': 1.0014450708517946}
thresh: {'Value': 27.62932926538822, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 76.06901725431358, 'Fit': 119.84467737078289}
E_rate_fitness: {'Value': 61.62698412698413, 'Fit': 1000}
I_rate_fitness: {'Value': 24.22222222222222, 'Fit': 1.7820738631661202}
maxFitness: 1000
average_fitness: 680.2920218116445
average_scaled_fitness: 679.9715308787108

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_11/gen_11_cand_88_data.json

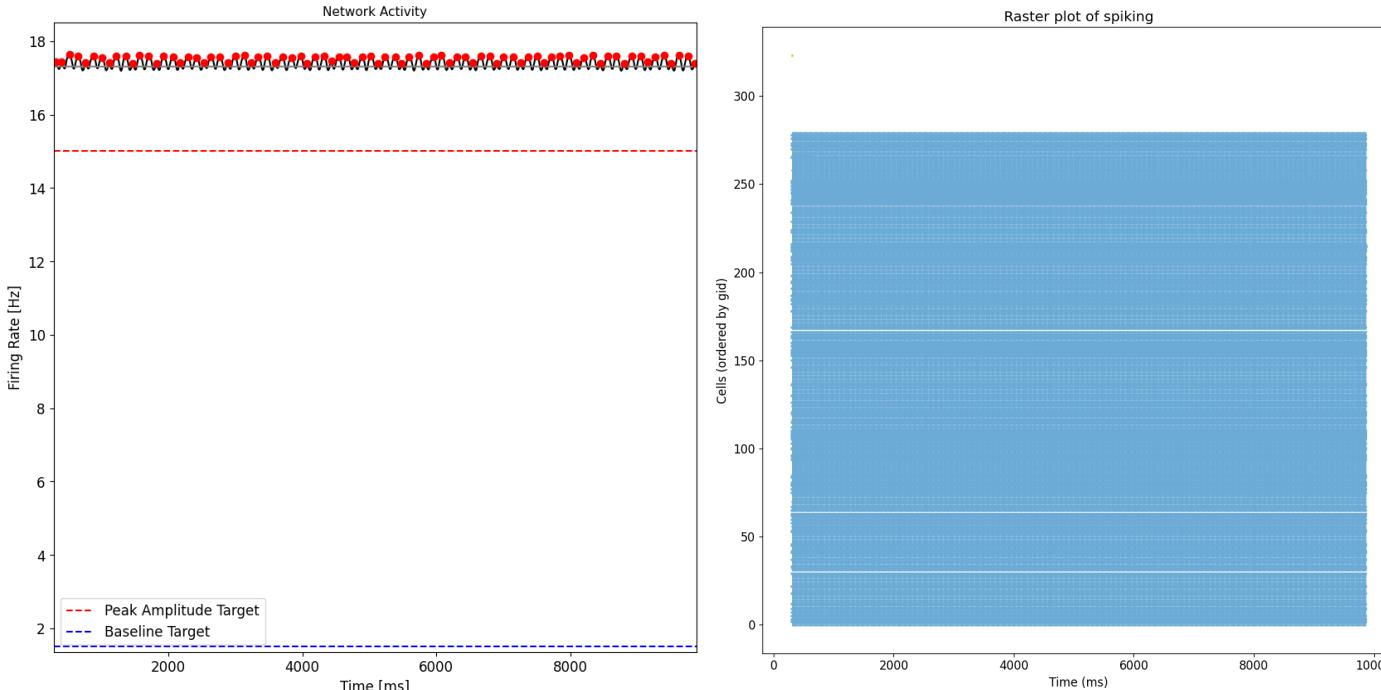
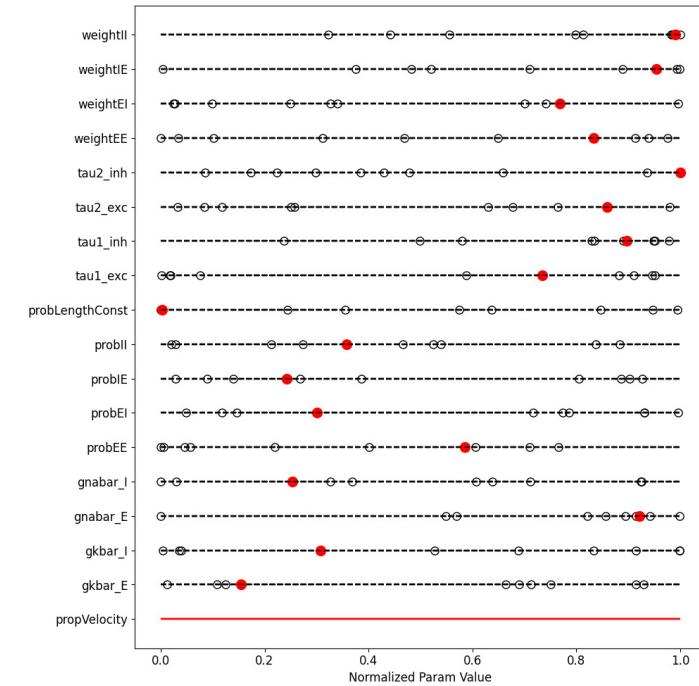
SimLabel: gen_11_cand_88

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.21791445675673676, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 8.308004052684904, 'Fit': 1000}
IBI_fitness: {'Value': 117.5925925925926, 'Fit': 4.225892803346768}
baseline_fitness: {'Value': 17.404173480950657, 'Fit': 1000}
slopeFitness: {'Value': -1.289113281737375e-06, 'Fit': 1.0000025782298871}
thresh: {'Value': 17.30872549211373, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 95.87396849212303, 'Fit': 2.2823515694882044}
E_rate_fitness: {'Value': 60.84126984126984, 'Fit': 1000}
I_rate_fitness: {'Value': 0.12962962962962962, 'Fit': 1000}
maxFitness: 1000
average_fitness: 667.5009163278961
average_scaled_fitness: 667.1680835533322
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_12/gen_12_cand_70_data.json

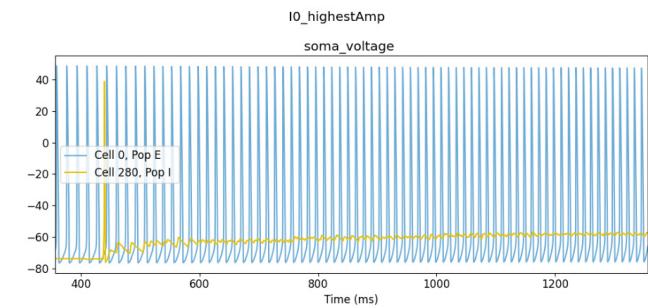
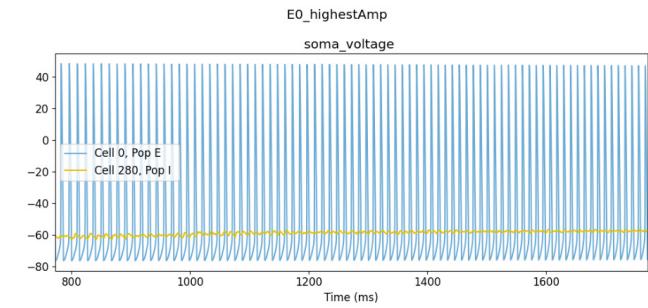
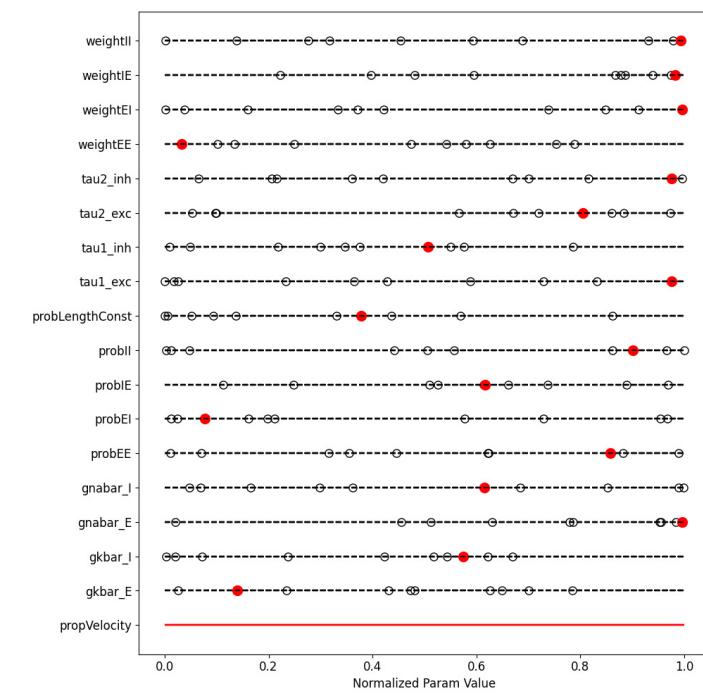
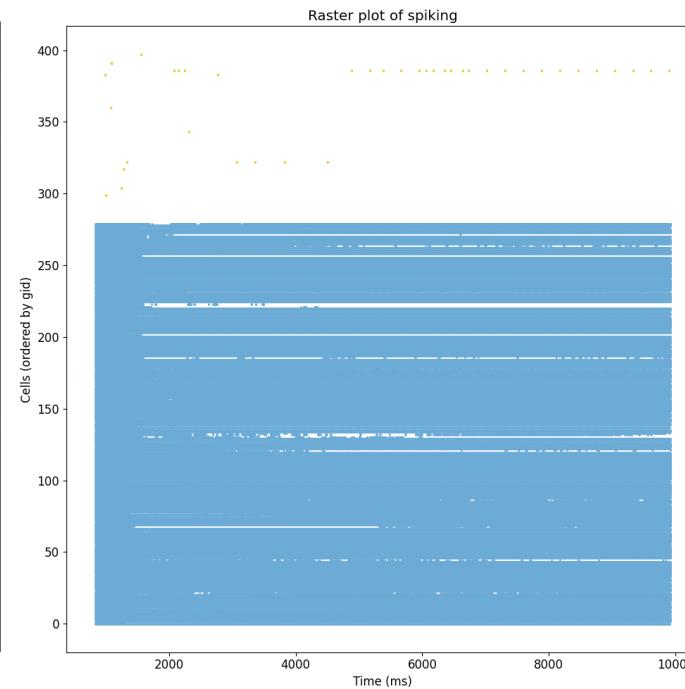
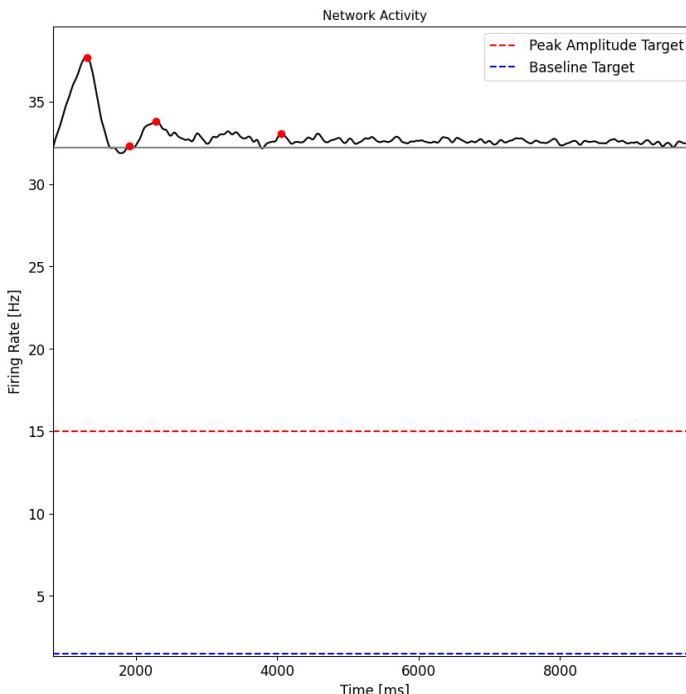
SimLabel: gen_12_cand_70

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 2.0165930306845095, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.4031242126480222, 'Fit': 1.5200531112933975}
IBI_fitness: {'Value': 915.0, 'Fit': 2.9599154570375865}
baseline_fitness: {'Value': 32.87566994236999, 'Fit': 1000}
slopeFitness: {'Value': -0.0012549837568487986, 'Fit': 1.0025131201192516}
thresh: {'Value': 32.20928989895307, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 90.86142322097378, 'Fit': 6.219660702371442}
E_rate_fitness: {'Value': 94.65873015873015, 'Fit': 1000}
I_rate_fitness: {'Value': 0.962962962962963, 'Fit': 1000}
maxFitness: 1000
average_fitness: 556.8557935989802
average_scaled_fitness: 556.4110898966622
```

```
binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0
```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_12/gen_12_cand_79_data.json

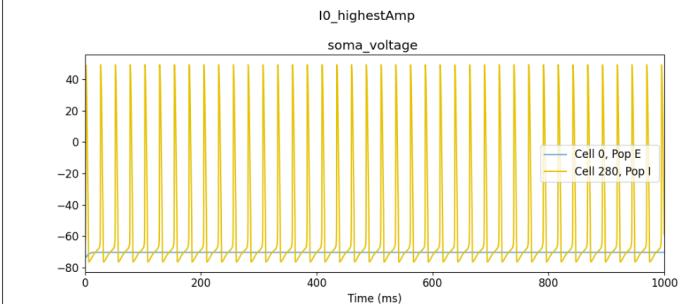
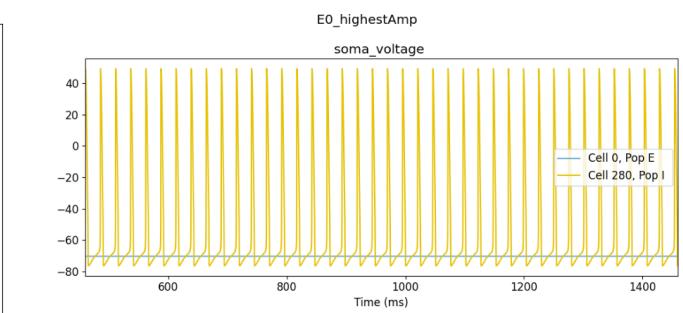
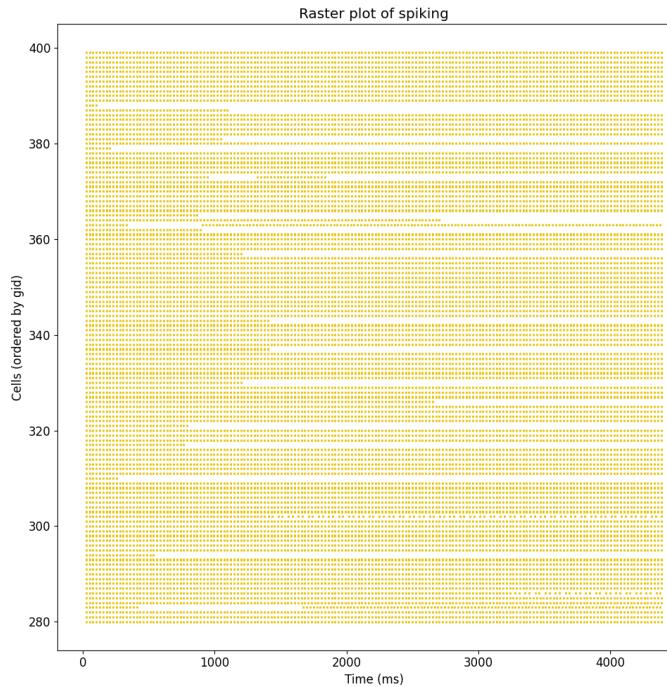
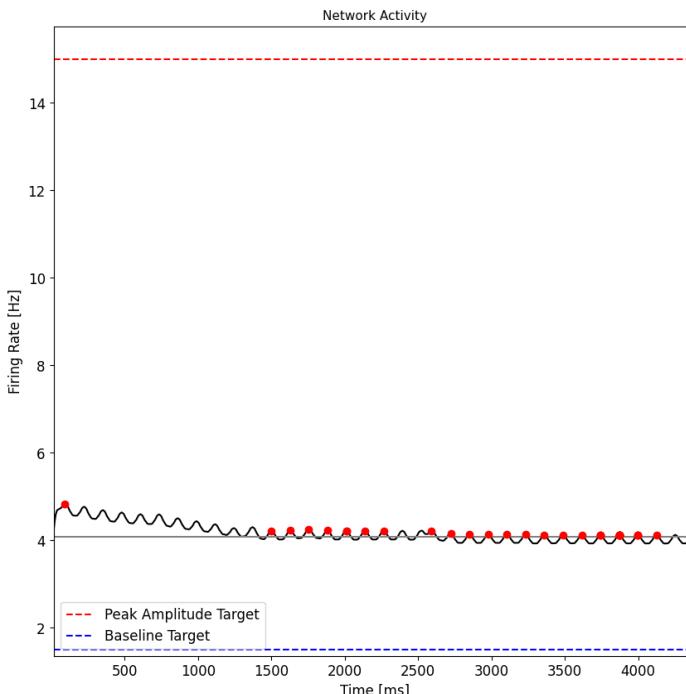
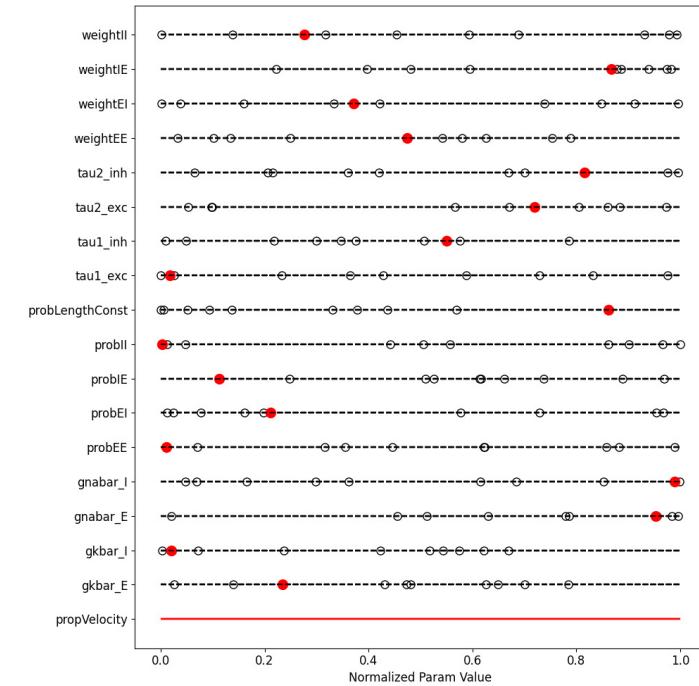
SimLabel: gen_12_cand_79

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.0669160395896518, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 15.47212741751991, 'Fit': 1000}
IBI_fitness: {'Value': 64.02985074626865, 'Fit': 4.775797755745505}
baseline_fitness: {'Value': 4.170322141908353, 'Fit': 1000}
slopeFitness: {'Value': -0.0010332037319426082, 'Fit': 1.0020685439551558}
thresh: {'Value': 4.077785403869687, 'Fit': 2.5148536125956644}
sustain_oscillation_fitness: {'Value': 43.853073463268366, 'Fit': 1000}
E_rate_fitness: {'Value': 0.0, 'Fit': 1000}
I_rate_fitness: {'Value': 38.277777777777778, 'Fit': 2.2882281347202107}
maxFitness: 1000
average_fitness: 556.7312164496685
average_scaled_fitness: 556.2865851941607
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_12/gen_12_cand_82_data.json

SimLabel: gen_12_cand_82

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_oscil: {'target': 100, 'width': 5, 'min': 75}

```

```

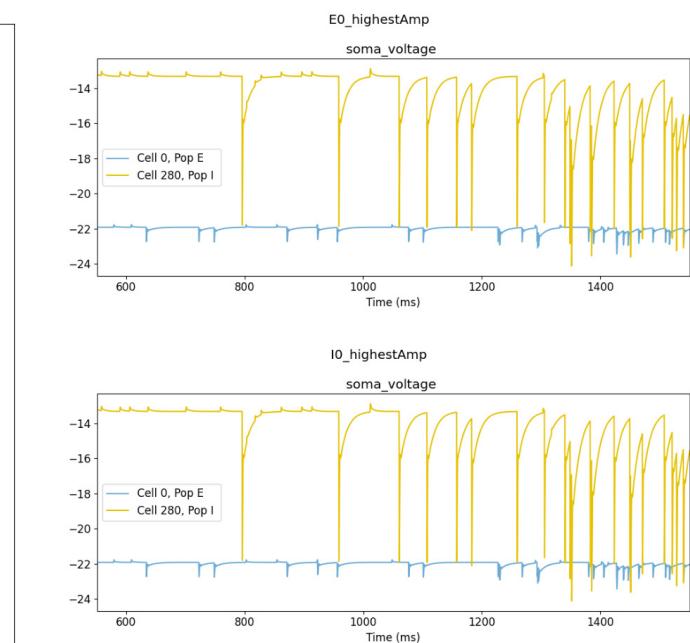
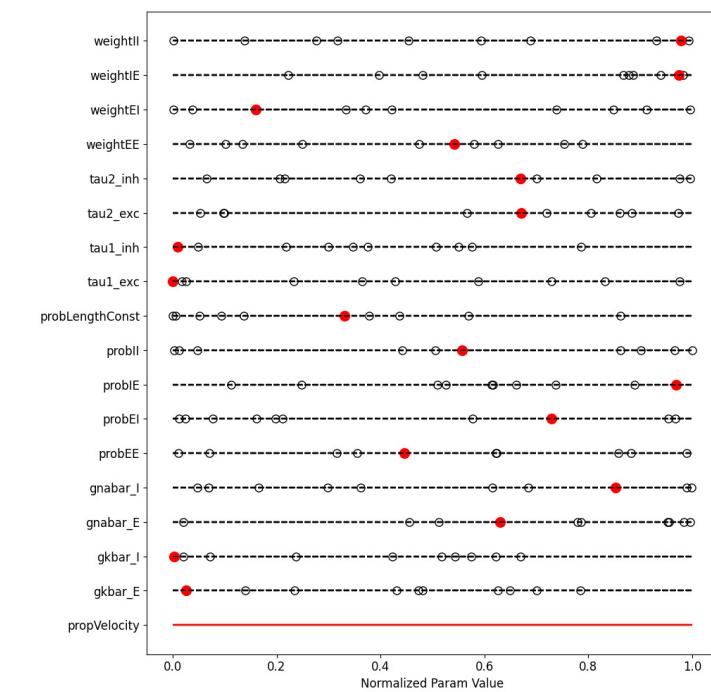
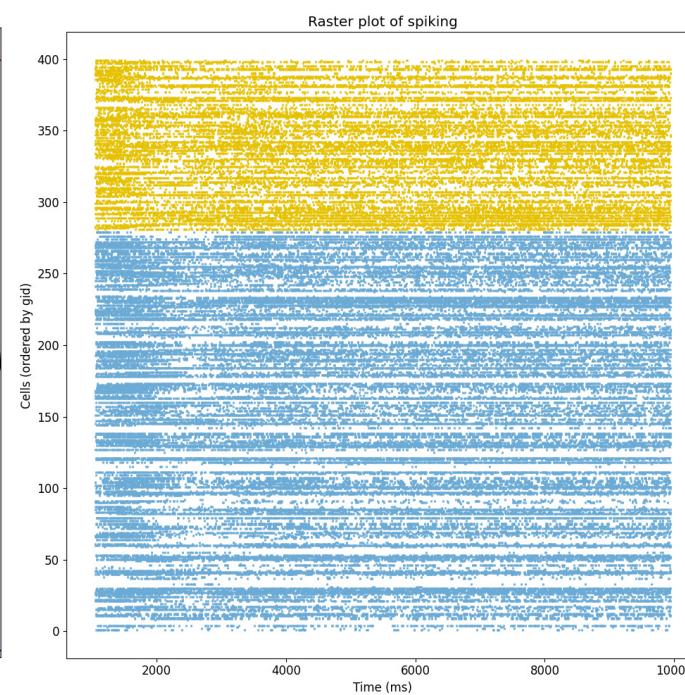
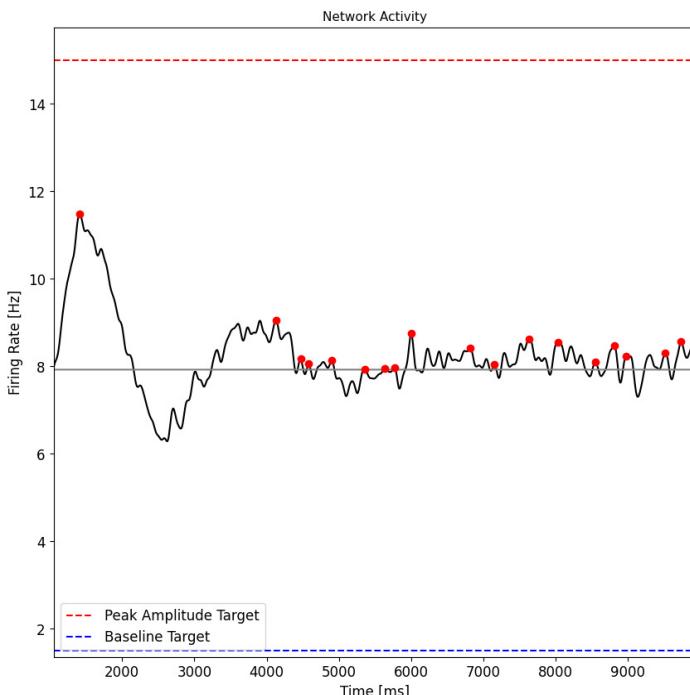
burstAmp_Fitness: {'Value': 0.5656623264981238, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 1.8099547511312217, 'Fit': 1000}
IBI_fitness: {'Value': 489.70588235294116, 'Fit': 3.6215689234589368}
baseline_fitness: {'Value': 8.236044180872337, 'Fit': 1000}
slopeFitness: {'Value': -0.0006885083061245977, 'Fit': 1.0013779651349517}
thresh: {'Value': 7.922456177342637, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 88.91385767790261, 'Fit': 9.181847750778108}
E_rate_fitness: {'Value': 5.698412698412699, 'Fit': 2.05573802686593}
I_rate_fitness: {'Value': 11.75925925925926, 'Fit': 6.19705434851148}
maxFitness: 1000
average_fitness: 446.8952874460832
average_scaled_fitness: 446.3408653884876

```

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0

```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_13/gen_13_cand_25_data.json

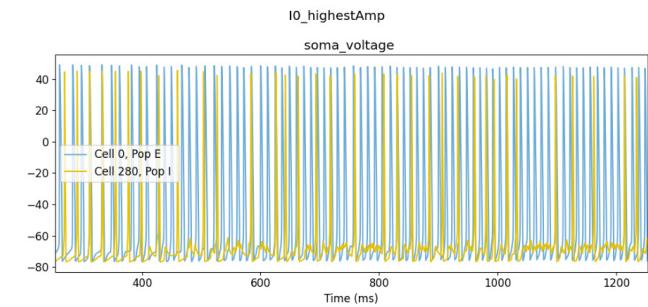
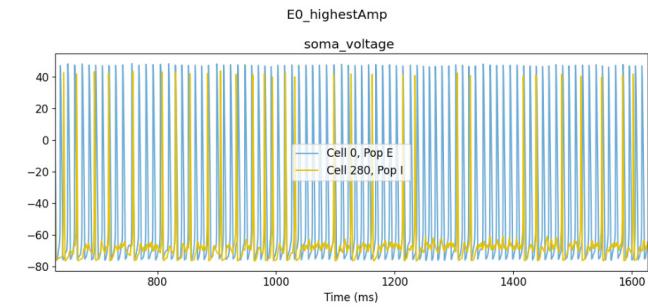
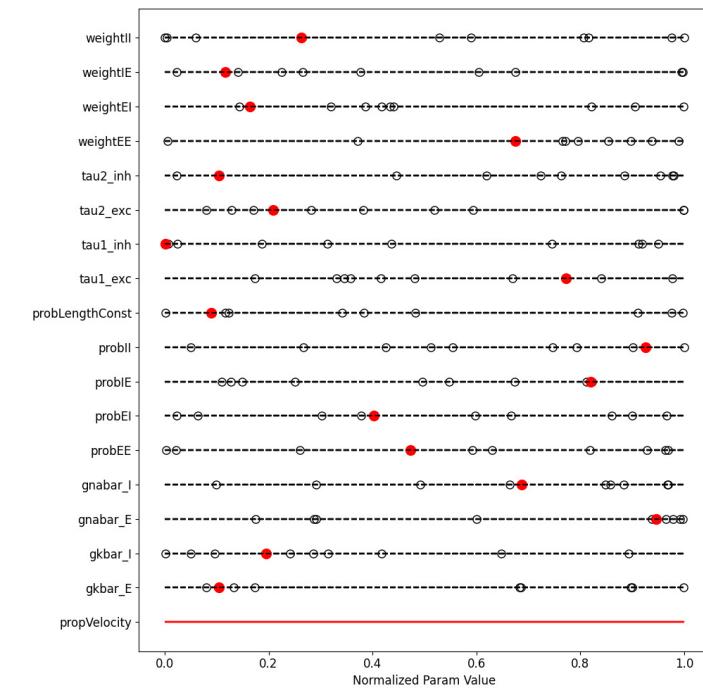
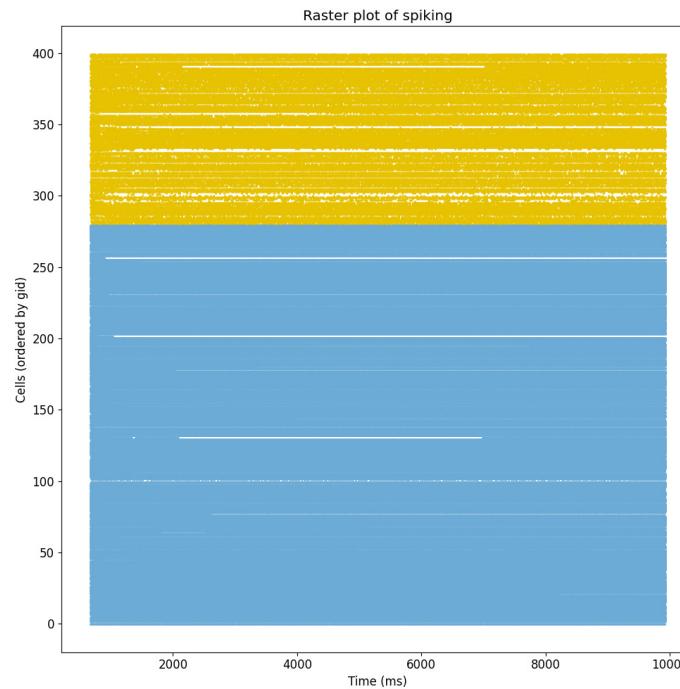
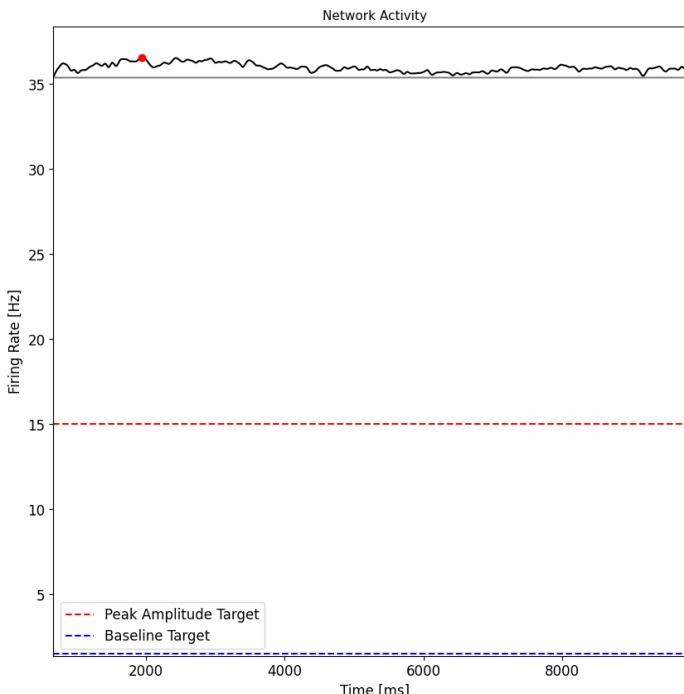
SimLabel: gen_13_cand_25

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 1.1905246857441654, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10070493454179255, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 35.94651361476584, 'Fit': 1000}
slopeFitness: {'Value': -0.00035538859541317123, 'Fit': 1.0007110298527924}
thresh: {'Value': 35.35938721245307, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 92.58426966292134, 'Fit': 4.406787947118637}
E_rate_fitness: {'Value': 90.75396825396825, 'Fit': 1000}
I_rate_fitness: {'Value': 46.36111111111114, 'Fit': 5.135160562306776}
maxFitness: 1000
average_fitness: 667.838073282142
average_scaled_fitness: 667.5053422107252
```

```
binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0
```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_13/gen_13_cand_26_data.json

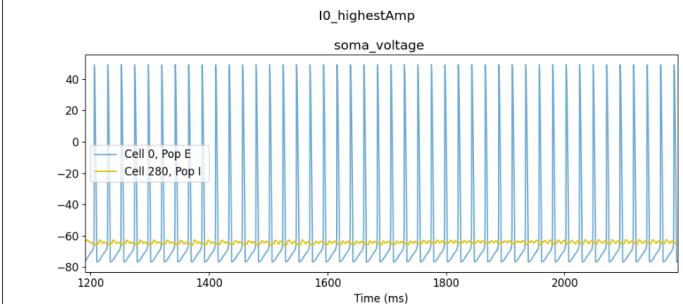
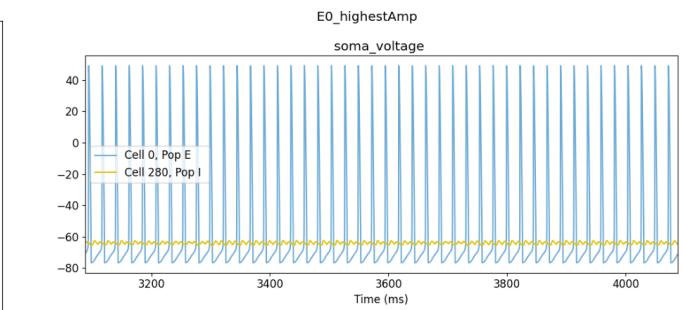
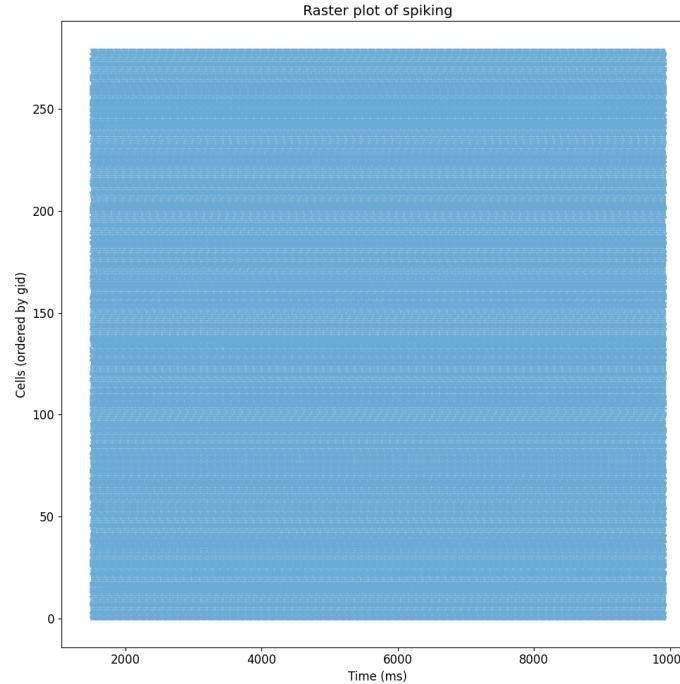
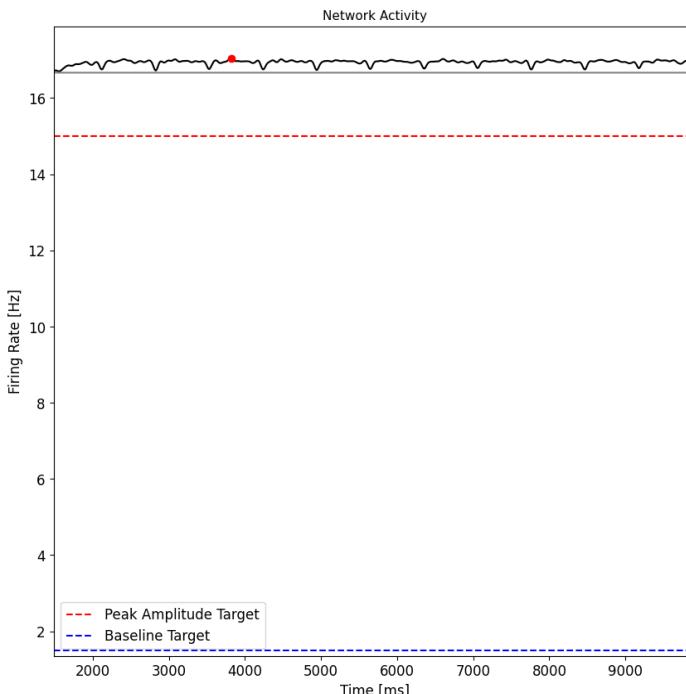
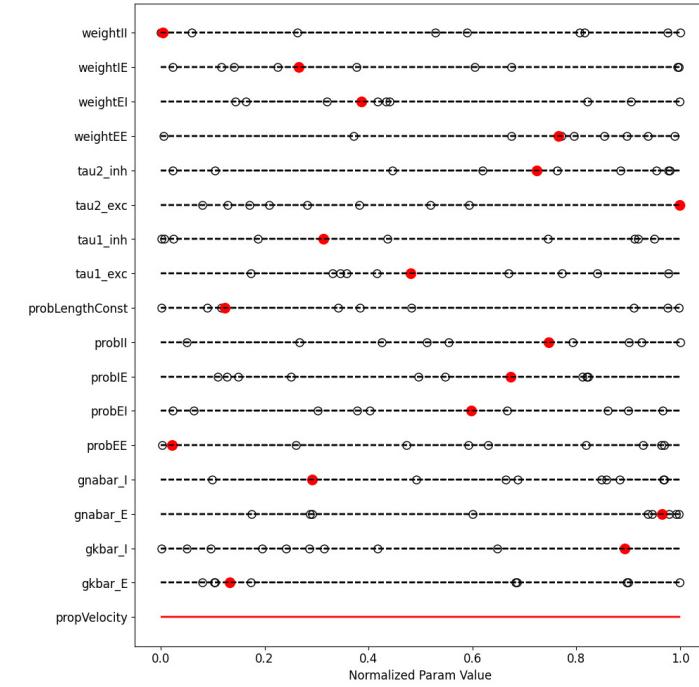
SimLabel: gen_13_cand_26

Generation Rank: 3/10

```
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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.36594593950272625, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10070493454179255, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 16.937179783786146, 'Fit': 1000}
slopeFitness: {'Value': 3.112180677084005e-05, 'Fit': 1.0000622455507155}
thresh: {'Value': 16.66614479312583, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 84.41947565543072, 'Fit': 22.558340598958633}
E_rate_fitness: {'Value': 52.23412698412698, 'Fit': 1000}
I_rate_fitness: {'Value': 0.3611111111111111, 'Fit': 1000}
maxFitness: 1000
average_fitness: 780.3953780938343
average_scaled_fitness: 780.1755399506906
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_13/gen_13_cand_39_data.json

SimLabel: gen_13_cand_39

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_oscil: {'target': 100, 'width': 5, 'min': 75}

```

```

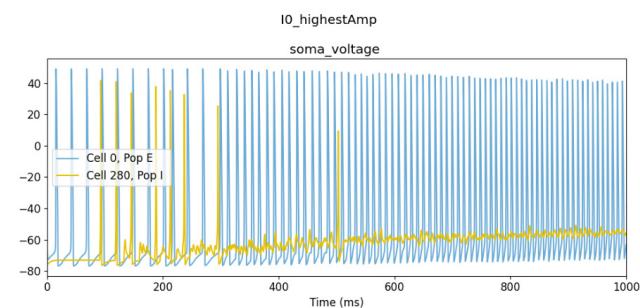
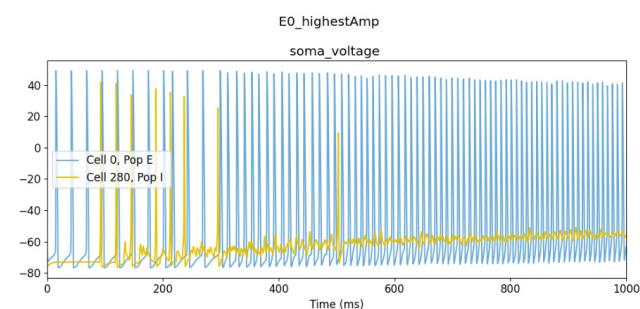
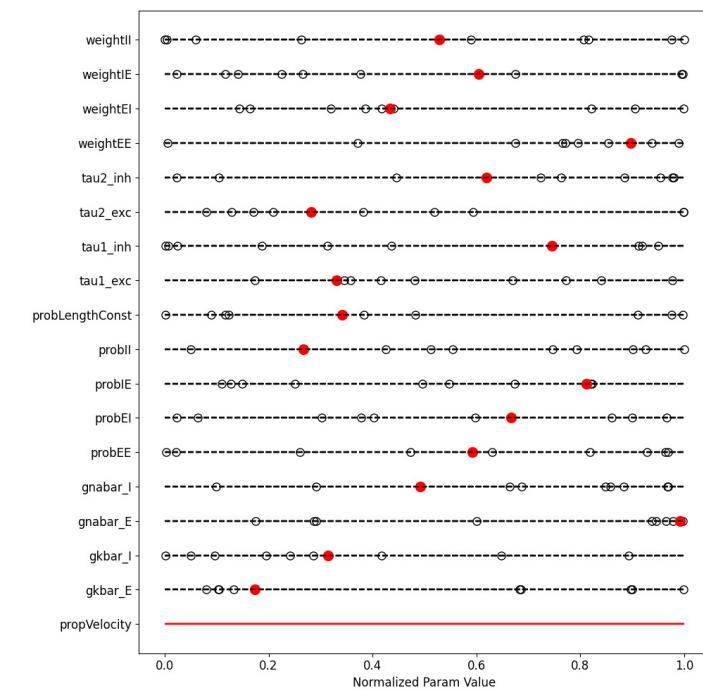
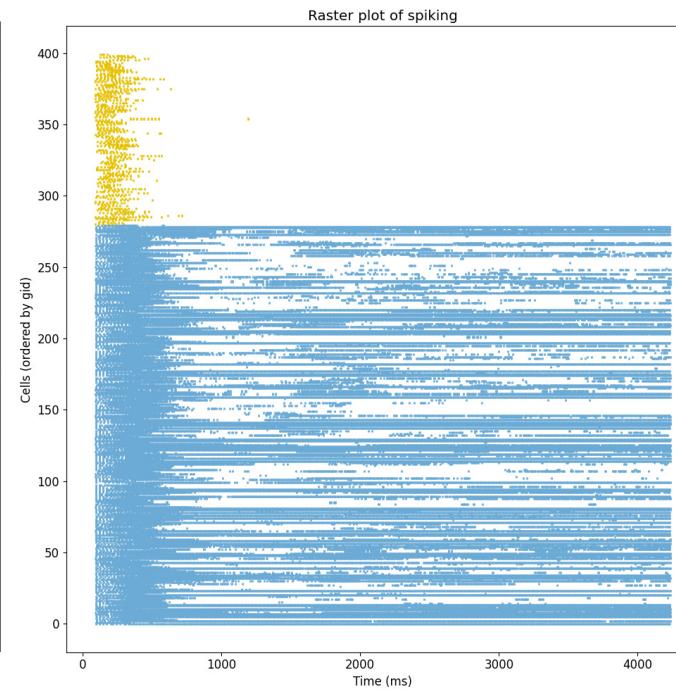
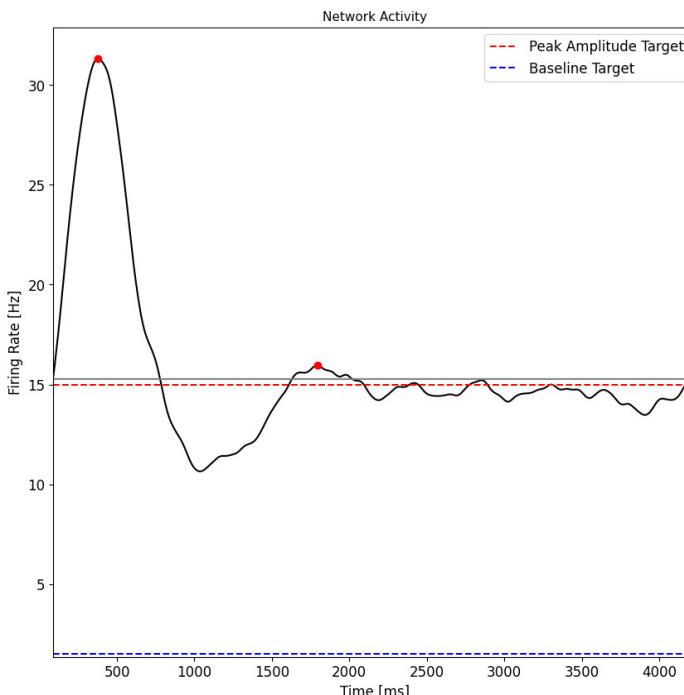
burstAmp_Fitness: {'Value': 5.603933663044473, 'Fit': 667.2304959593621}
burst_peak_frequency_fitness: {'Value': 0.7079646017699115, 'Fit': 9.46676847288738}
IBI_fitness: {'Value': 1923.75, 'Fit': 1.767957211015582}
baseline_fitness: {'Value': 15.792914632191872, 'Fit': 1000}
slopeFitness: {'Value': -0.01260045027673004, 'Fit': 1.0255211275923872}
thresh: {'Value': 15.271961714242815, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 41.56039009752438, 'Fit': 1000}
E_rate_fitness: {'Value': 73.09920634920634, 'Fit': 1000}
I_rate_fitness: {'Value': 8.546296296296296, 'Fit': 8.545205542217088}
maxFitness: 1000
average_fitness: 520.8928831458973
average_scaled_fitness: 520.4010442840391

```

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0

```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_8/gen_8_cand_92_data.json

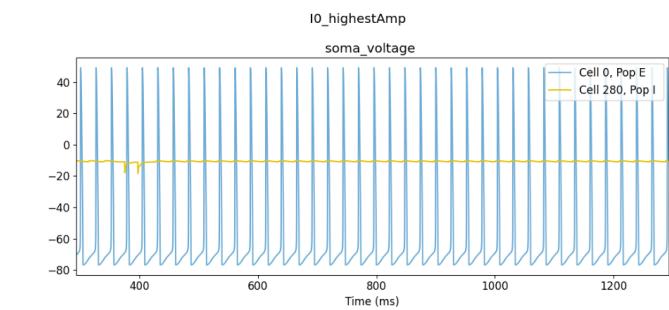
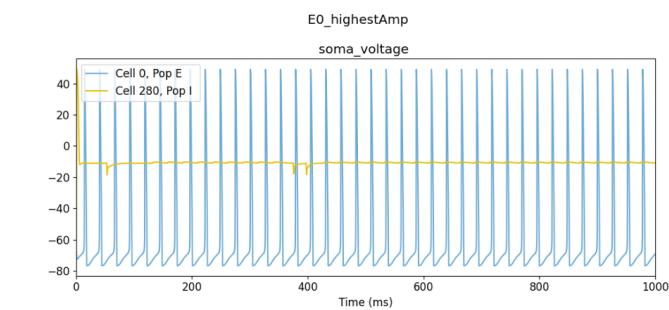
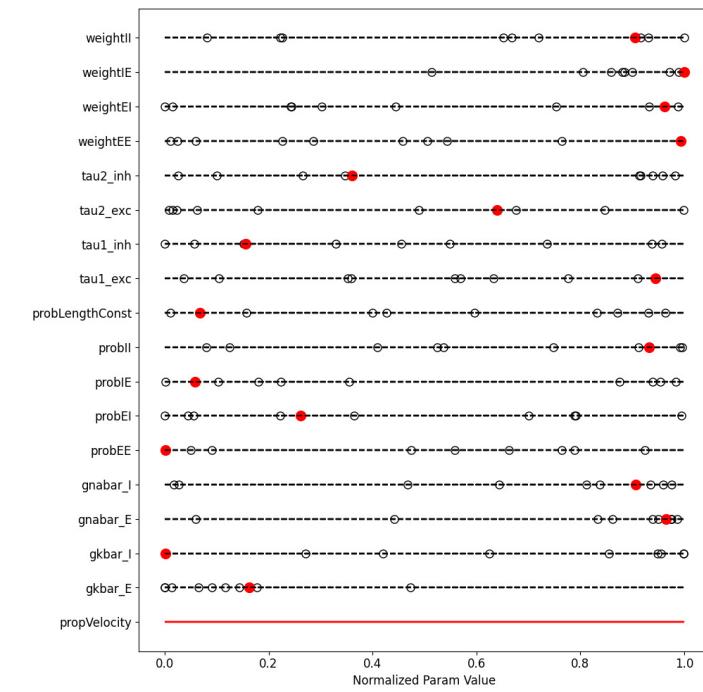
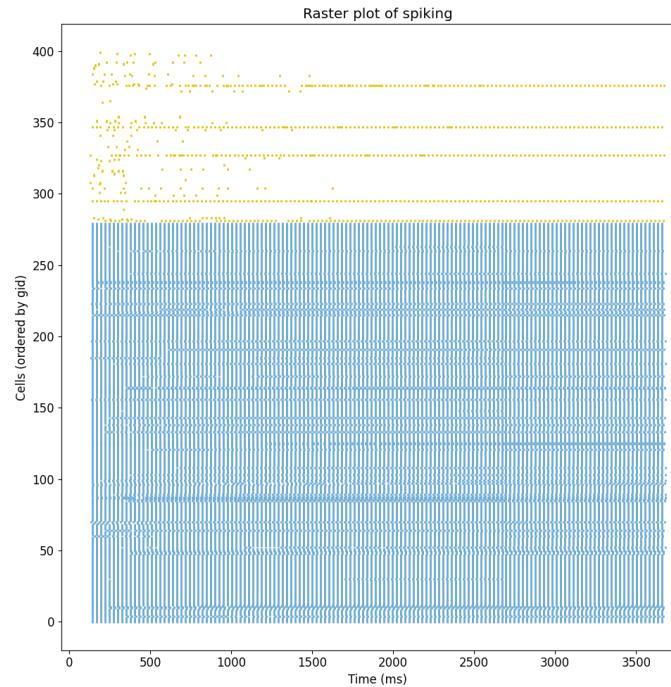
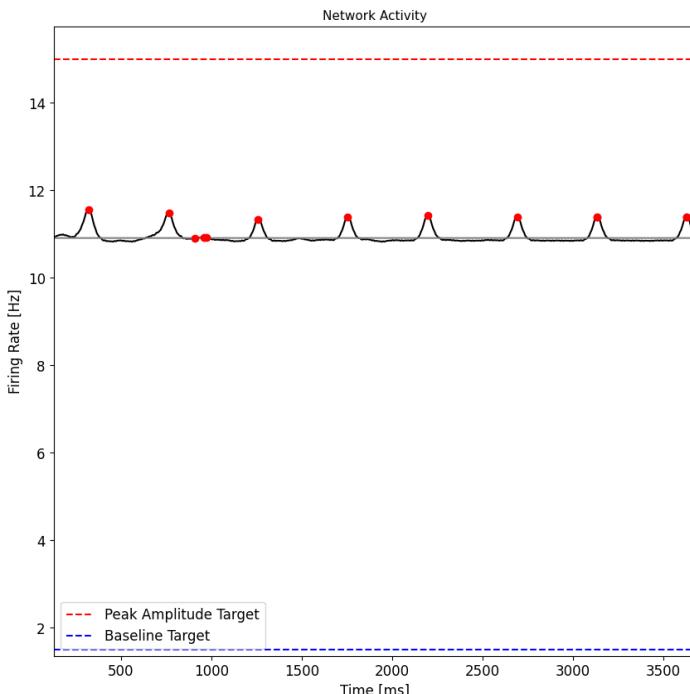
SimLabel: gen_8_cand_92

Generation Rank: 3/10

```
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': 0.4333819957326807, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 6.517311608961303, 'Fit': 1000}
IBI_fitness: {'Value': 143.80434782608697, 'Fit': 7.56123112079328}
baseline_fitness: {'Value': 10.946277490051605, 'Fit': 1000}
slopeFitness: {'Value': -0.00012284342448737714, 'Fit': 1.0002457170324606}
thresh: {'Value': 10.90910714720218, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 35.580524344569284, 'Fit': 1000}
E_rate_fitness: {'Value': 37.607142857142854, 'Fit': 1000}
I_rate_fitness: {'Value': 2.7037037037037033, 'Fit': 15.32720922437131}
maxFitness: 1000
average_fitness: 669.3209651180218
average_scaled_fitness: 668.9898736568529
```

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}

```

```

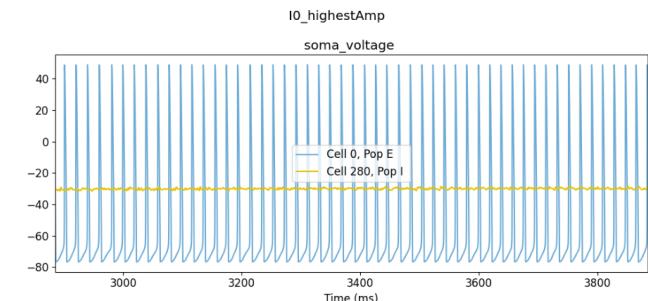
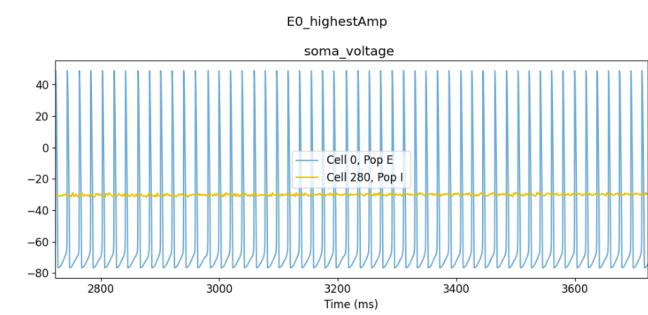
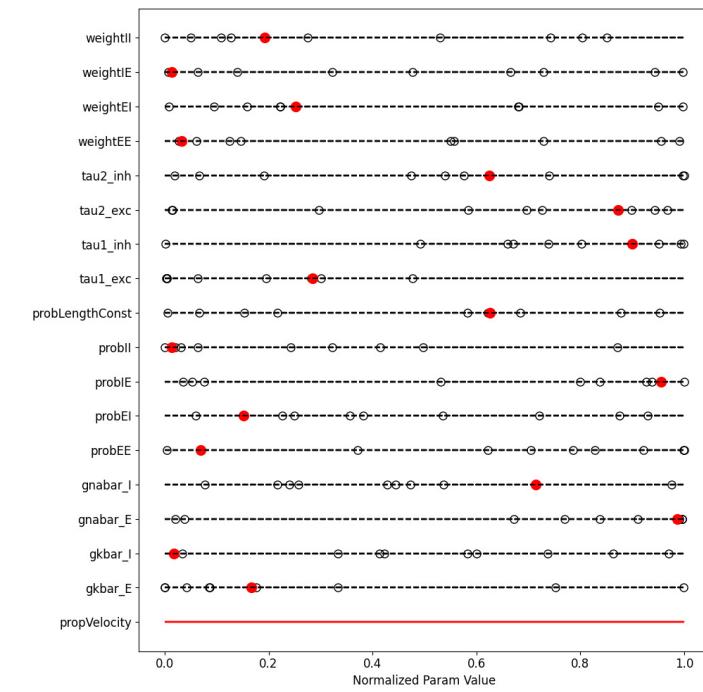
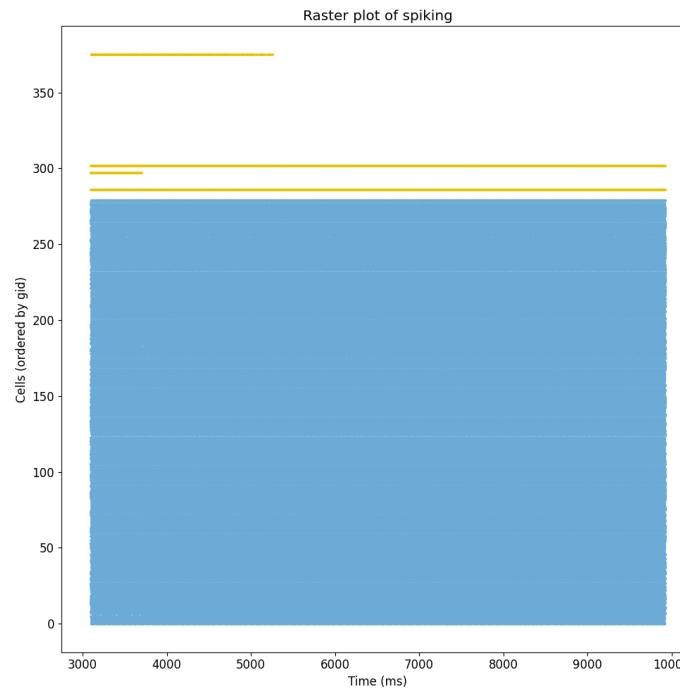
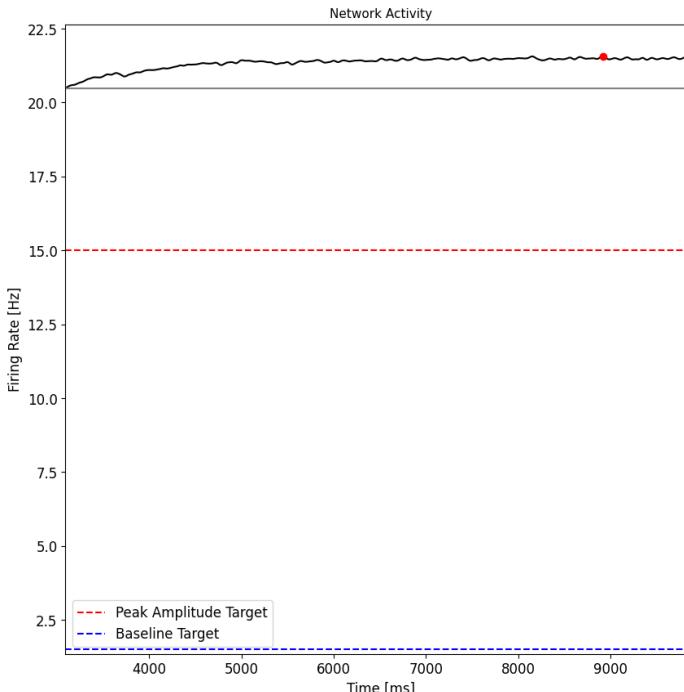
burstAmp_Fitness: {'Value': 1.0889477158496952, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10070493454179255, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 21.343095713565585, 'Fit': 1000}
slopeFitness: {'Value': 0.0006378021995971771, 'Fit': 1.0012764183285332}
thresh: {'Value': 20.479365263463343, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 68.4921230307577, 'Fit': 1000}
E_rate_fitness: {'Value': 41.25, 'Fit': 1000}
I_rate_fitness: {'Value': 51.75, 'Fit': 8.802185122187606}
maxFitness: 1000
average_fitness: 778.8670512822796
average_scaled_fitness: 778.6454141553845

```

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0

```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_14/gen_14_cand_39_data.json

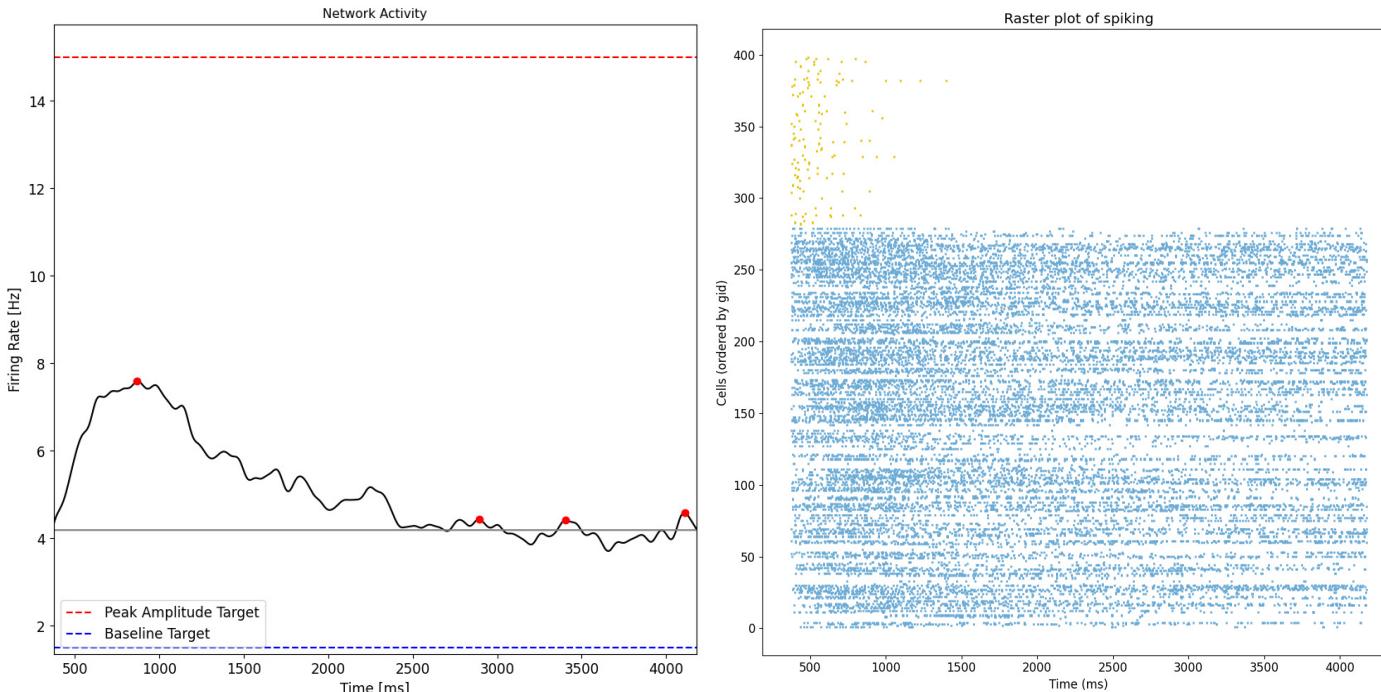
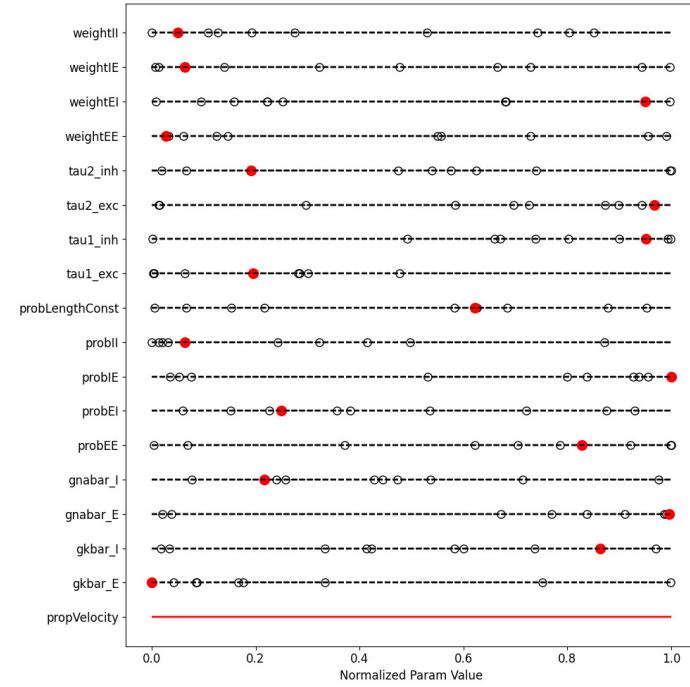
SimLabel: gen_14_cand_39

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 1.0675104913148168, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.9575104727707959, 'Fit': 42.311665857578134}
IBI_fitness: {'Value': 1080.0, 'Fit': 2.7504942046771332}
baseline_fitness: {'Value': 5.089996574480452, 'Fit': 1000}
slopeFitness: {'Value': -0.006497702175936205, 'Fit': 1.0130802115889344}
thresh: {'Value': 4.184952003875537, 'Fit': 2.2592841066286464}
sustain_oscillation_fitness: {'Value': 38.05243445692884, 'Fit': 1000}
E_rate_fitness: {'Value': 17.97222222222222, 'Fit': 65.94947304350626}
I_rate_fitness: {'Value': 2.601851851852, 'Fit': 15.484117401672387}
maxFitness: 1000
average_fitness: 347.7520127584057
average_scaled_fitness: 347.090563127951
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_14/gen_14_cand_49_data.json

SimLabel: gen_14_cand_49

Generation Rank: 3/10

```

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_oscil: {'target': 100, 'width': 5, 'min': 75}

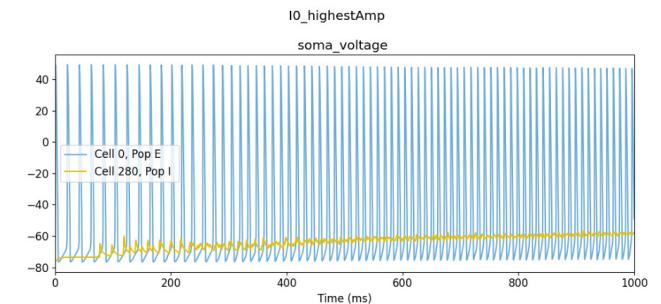
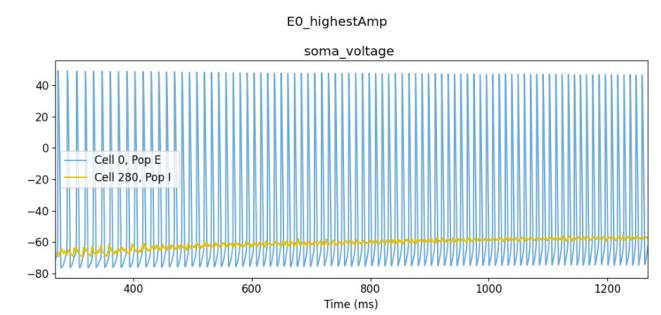
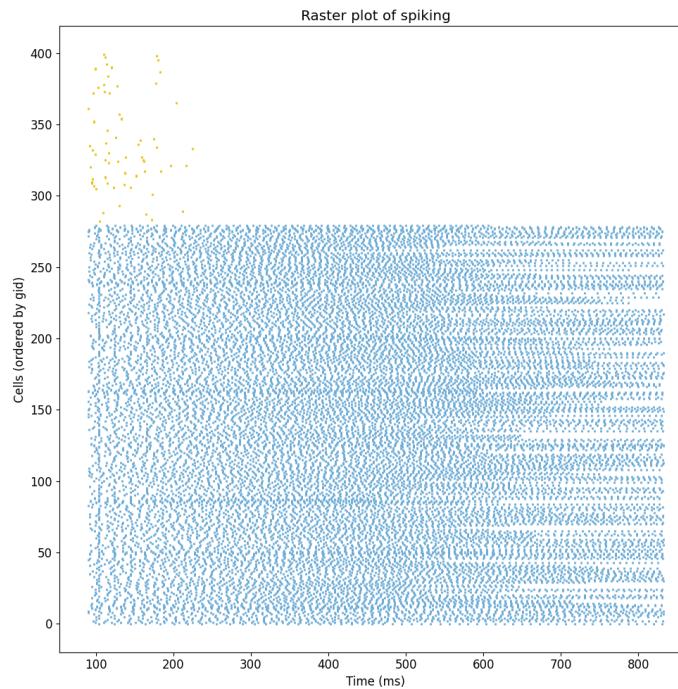
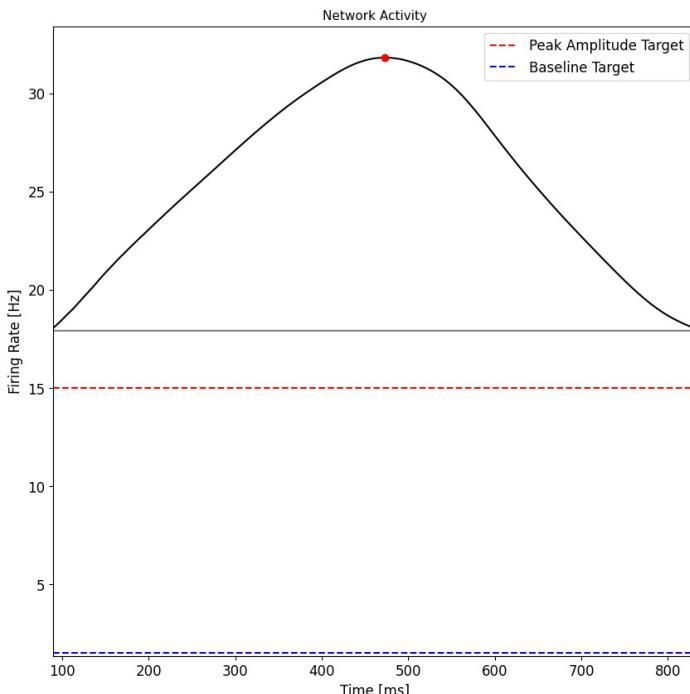
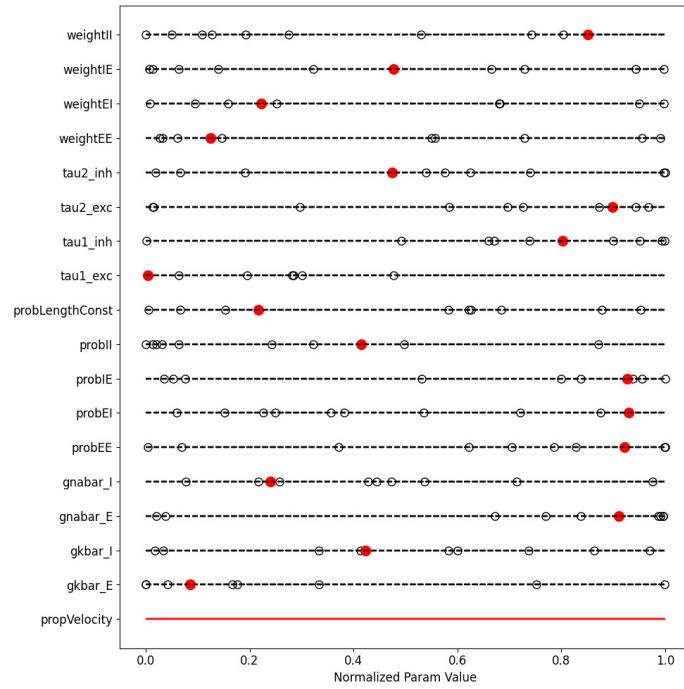
```

```

burstAmp_Fitness: {'Value': 13.918894269588012, 'Fit': 1.7169558449778186}
burst_peak_frequency_fitness: {'Value': 1.2012012012012012, 'Fit': 182.58342780192734}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 25.505549445744254, 'Fit': 1000}
slopeFitness: {'Value': -0.01163516819443172, 'Fit': 1.0235432031227945}
thresh: {'Value': 17.897045378011246, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 7.490636704119851, 'Fit': 1000}
E_rate_fitness: {'Value': 86.0595238095238, 'Fit': 1000}
I_rate_fitness: {'Value': 0.4814814814814815, 'Fit': 1000}
maxFitness: 1000
average_fitness: 687.2582140944475
average_scaled_fitness: 686.9377813884332

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_14/gen_14_cand_69_data.json

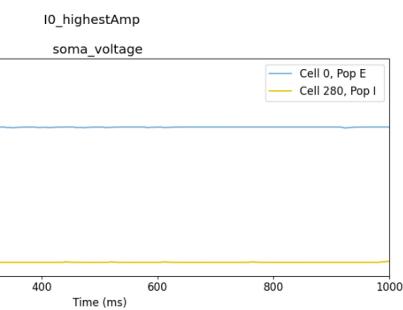
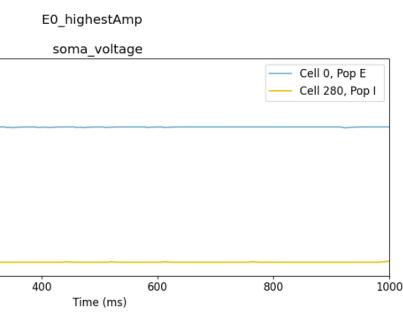
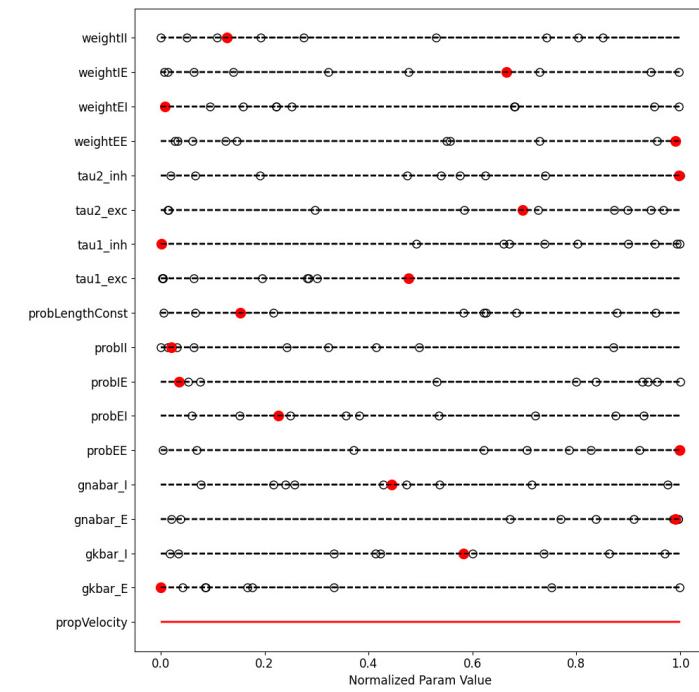
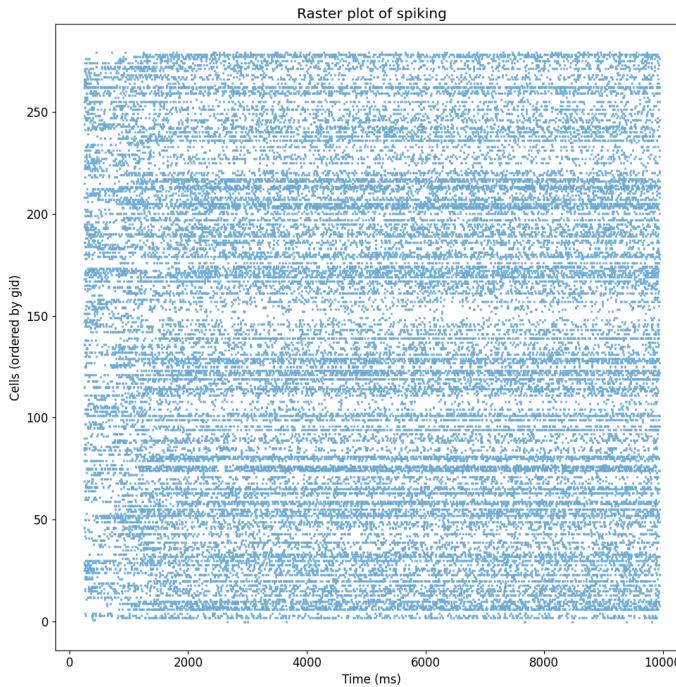
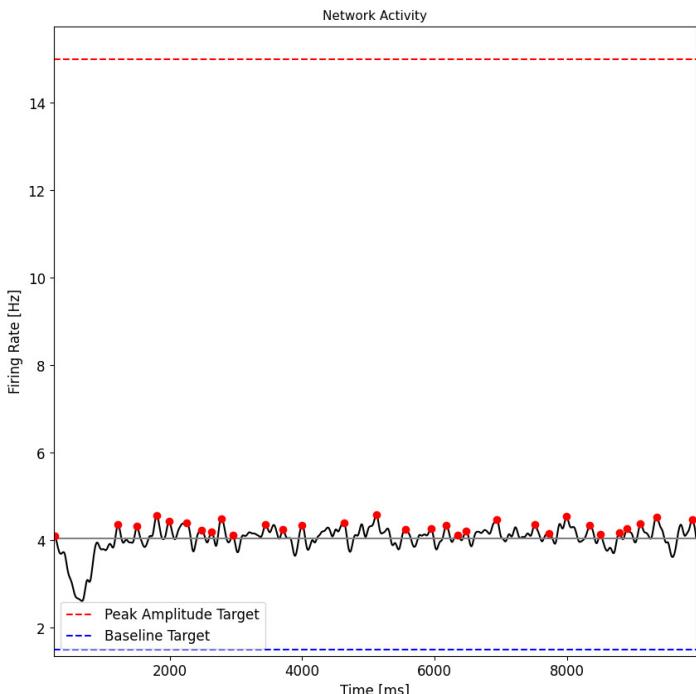
SimLabel: gen_14_cand_69

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.28505309784951033, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 3.117144293614882, 'Fit': 1000}
IBI_fitness: {'Value': 320.75, 'Fit': 3.8328382342859117}
baseline_fitness: {'Value': 4.0580745918374586, 'Fit': 1000}
slopeFitness: {'Value': 0.0002788022713104814, 'Fit': 1.0005577600329334}
thresh: {'Value': 4.040075077813346, 'Fit': 2.611500400323232}
sustain_oscillation_fitness: {'Value': 96.92883895131087, 'Fit': 1.8482369962813463}
E_rate_fitness: {'Value': 11.84920634920635, 'Fit': 5.695535029282108}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 446.10985204668947
average_scaled_fitness: 445.55509789738
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



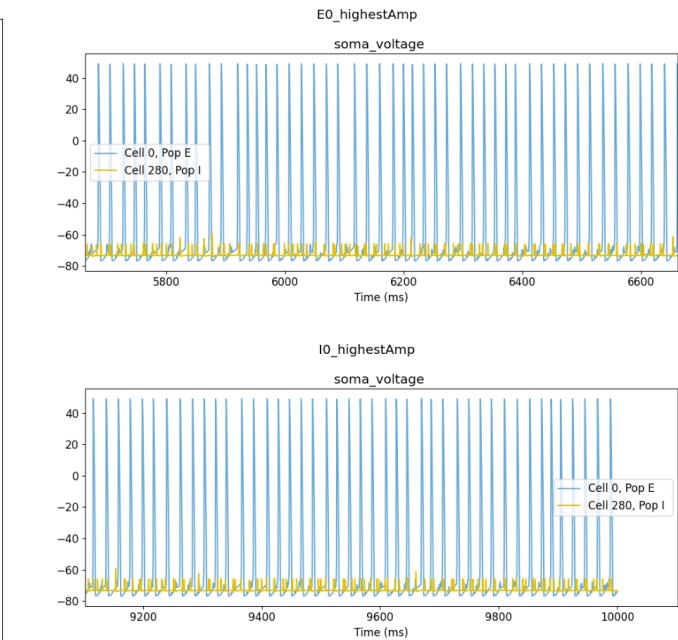
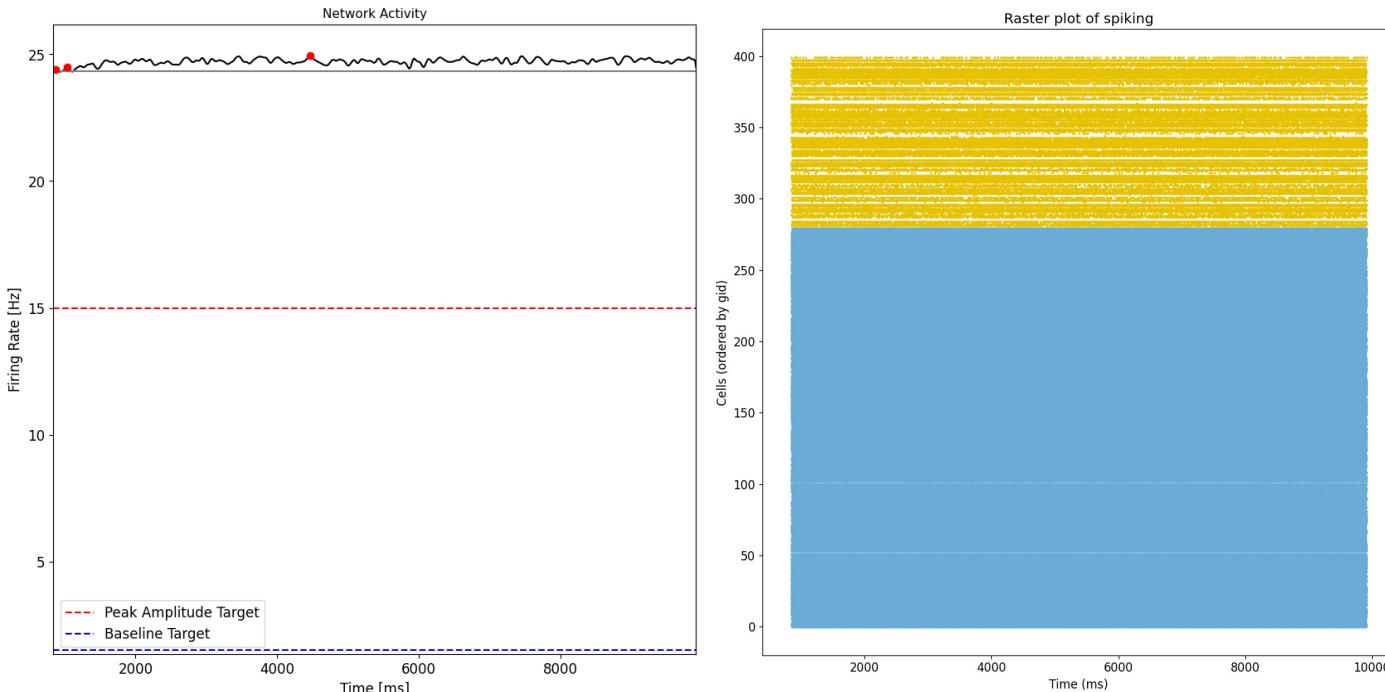
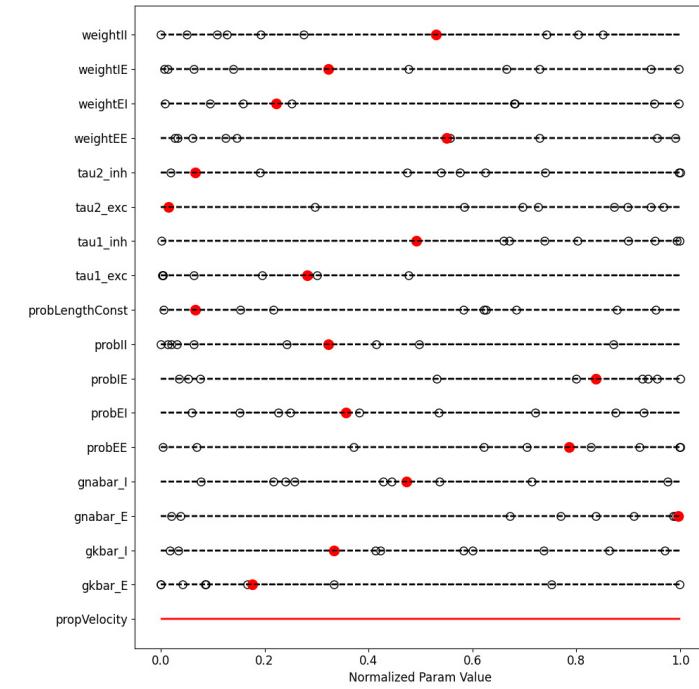
```

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': 0.333333333333333, 'width': 0.1666666666666666, 'min': 0.25}
sustained_oscil: {'target': 100, 'width': 5, 'min': 75}

burstAmp_Fitness: {'Value': 0.2748247950698932, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.30257186081694404, 'Fit': 1.2026997663922674}
IBI_fitness: {'Value': 1800.0, 'Fit': 2.684877993196425}
baseline_fitness: {'Value': 24.712147703008167, 'Fit': 1000}
slopeFitness: {'Value': 0.00012766066254205326, 'Fit': 1.0002553539223478}
thresh: {'Value': 24.33434931818058, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 90.847711927982, 'Fit': 6.2367400276716785}
E_rate_fitness: {'Value': 63.77777777777777, 'Fit': 1000}
I_rate_fitness: {'Value': 29.055555555555554, 'Fit': 1.099048103208941}
maxFitness: 1000
average_fitness: 445.8026245827102
average_scaled_fitness: 445.2477306551975

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_15/gen_15_cand_15_data.json

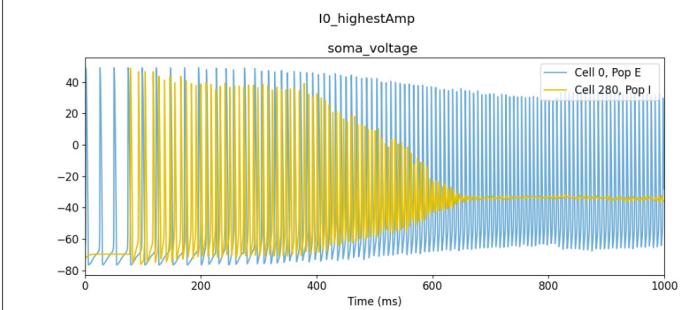
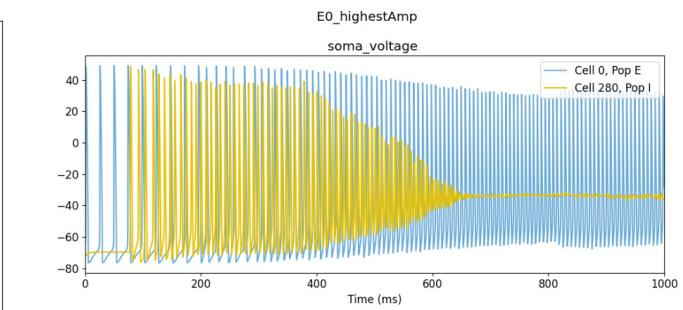
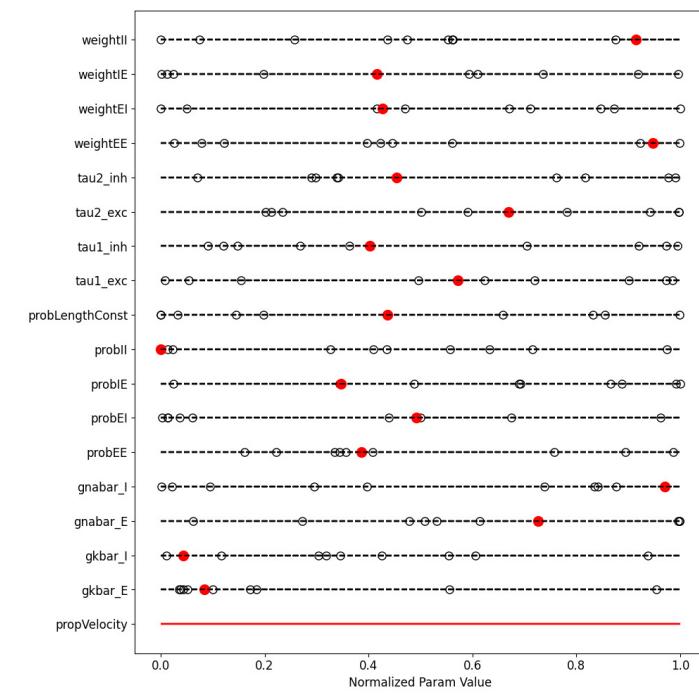
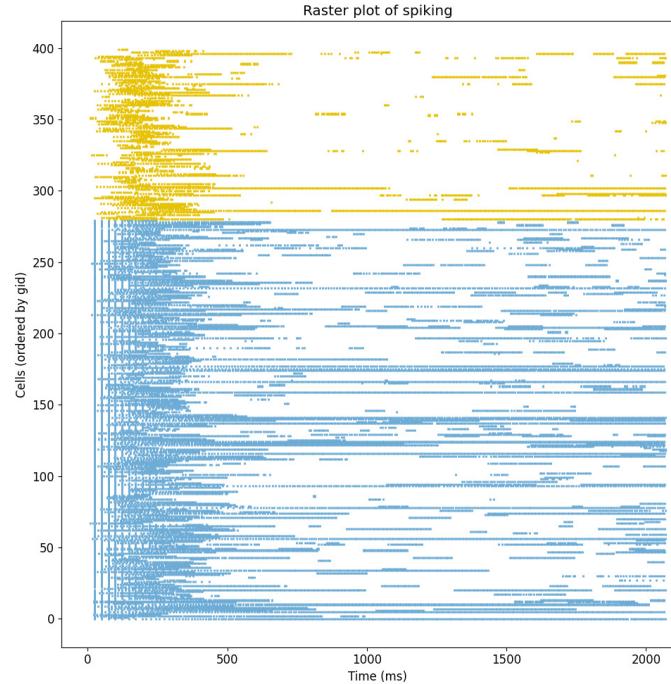
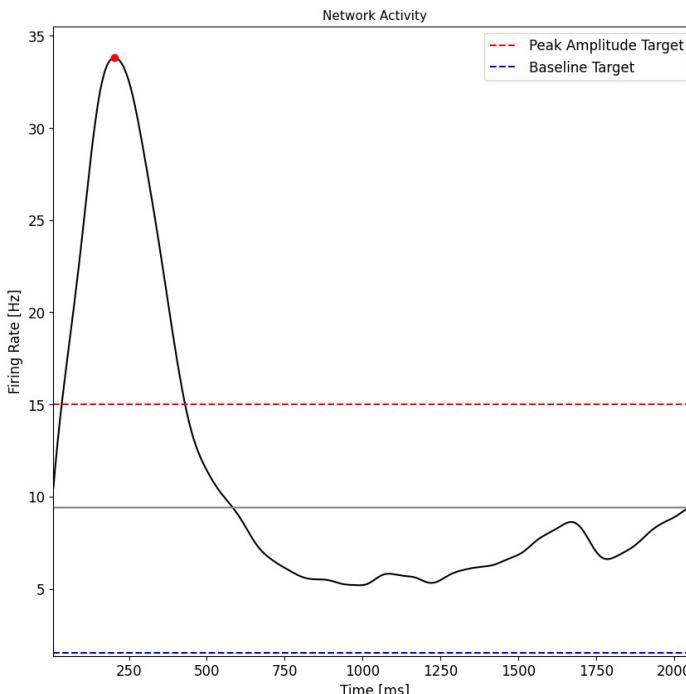
SimLabel: gen_15_cand_15

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 12.232709215893909, 'Fit': 555.5950288654005}
burst_peak_frequency_fitness: {'Value': 0.9661835748792271, 'Fit': 44.57180344194965}
IBI_fitness: {'Value': 1860.0, 'Fit': 1.768267051433735}
baseline_fitness: {'Value': 10.909212619822698, 'Fit': 1000}
slopeFitness: {'Value': -0.06444351959823756, 'Fit': 1.1375616170334146}
thresh: {'Value': 9.401007935293958, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 20.674157303370784, 'Fit': 1000}
E_rate_fitness: {'Value': 43.67460317460317, 'Fit': 1000}
I_rate_fitness: {'Value': 23.84259259259259, 'Fit': 1.85102722313369}
maxFitness: 1000
average_fitness: 511.65818757766124
average_scaled_fitness: 511.10203601919085
```

```
binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0
```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_15/gen_15_cand_47_data.json

SimLabel: gen_15_cand_47

Generation Rank: 3/10

```

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_oscil: {'target': 100, 'width': 5, 'min': 75}

```

```

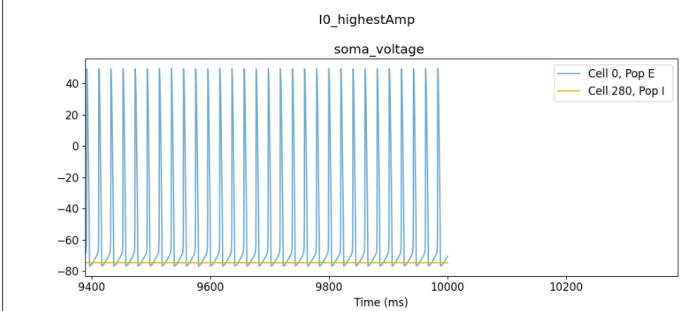
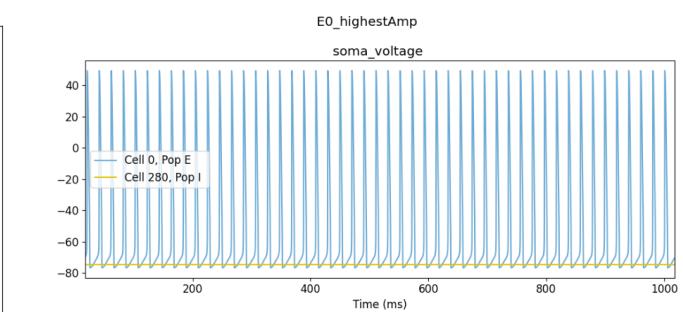
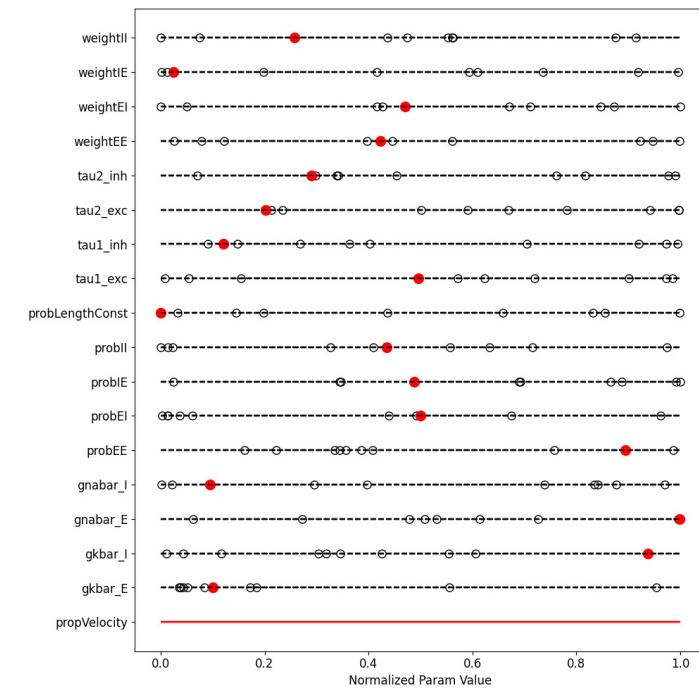
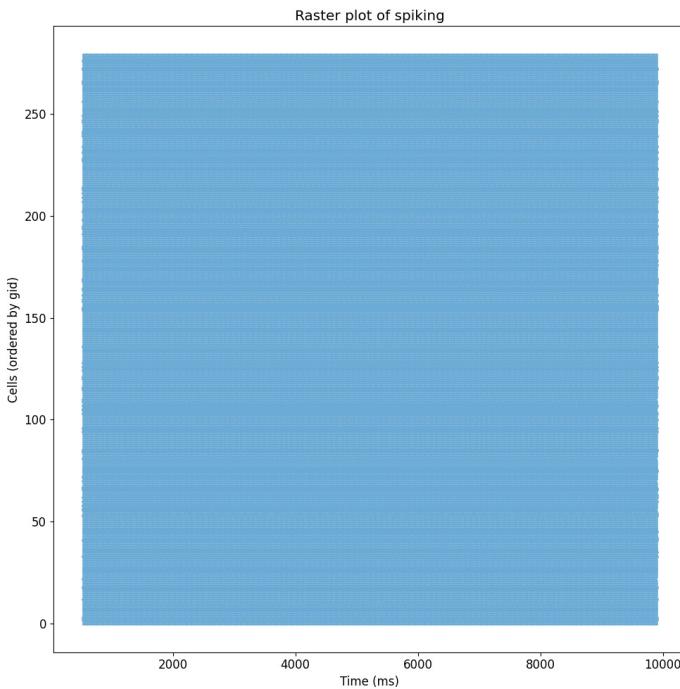
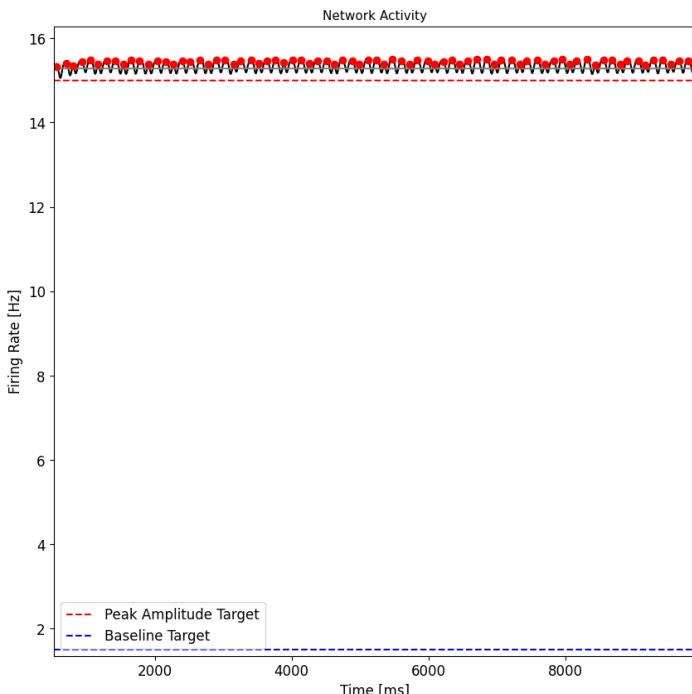
burstAmp_Fitness: {'Value': 0.160246295263196, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 7.766011094301564, 'Fit': 1000}
IBI_fitness: {'Value': 122.86184210526316, 'Fit': 4.214799987322567}
baseline_fitness: {'Value': 15.342490727005407, 'Fit': 1000}
slopeFitness: {'Value': 1.933556348113469e-05, 'Fit': 1.0000386718746999}
thresh: {'Value': 15.280907413429317, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 93.93258426966293, 'Fit': 3.365185695820062}
E_rate_fitness: {'Value': 54.12301587301587, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 667.6200027061129
average_scaled_fitness: 667.287277116605

```

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0

```



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_15/gen_15_cand_49_data.json

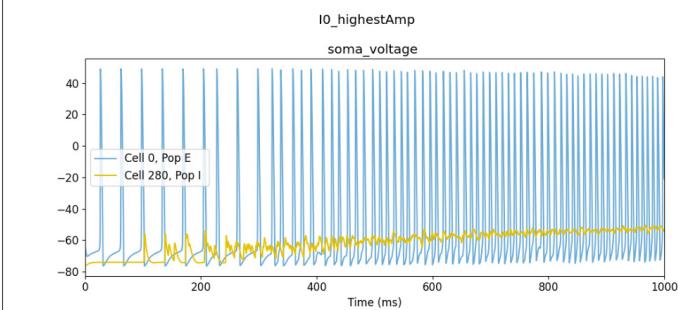
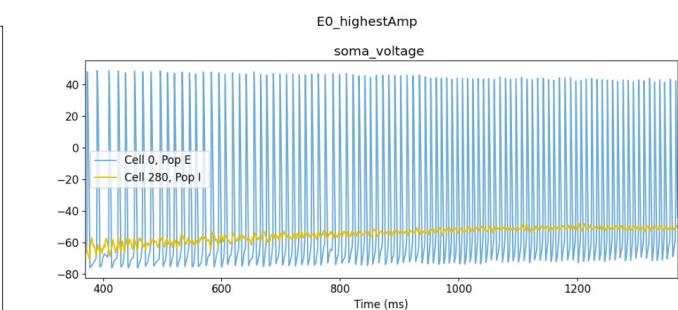
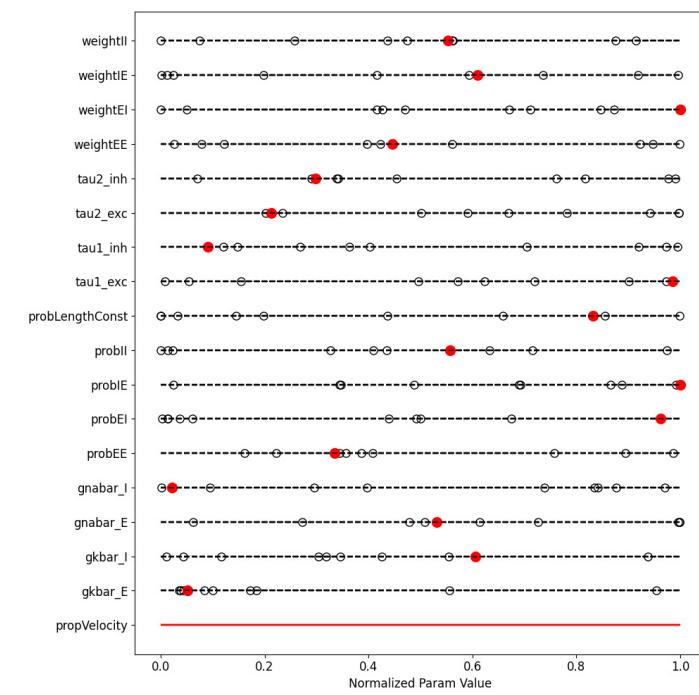
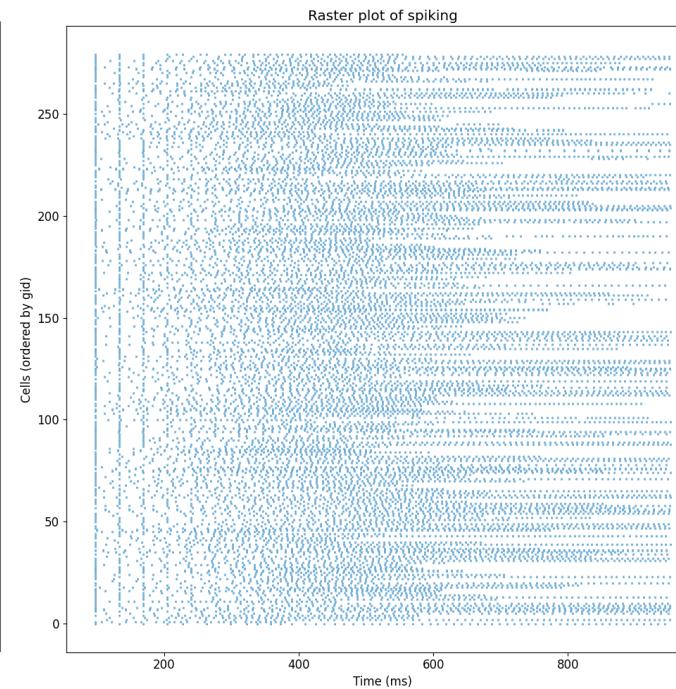
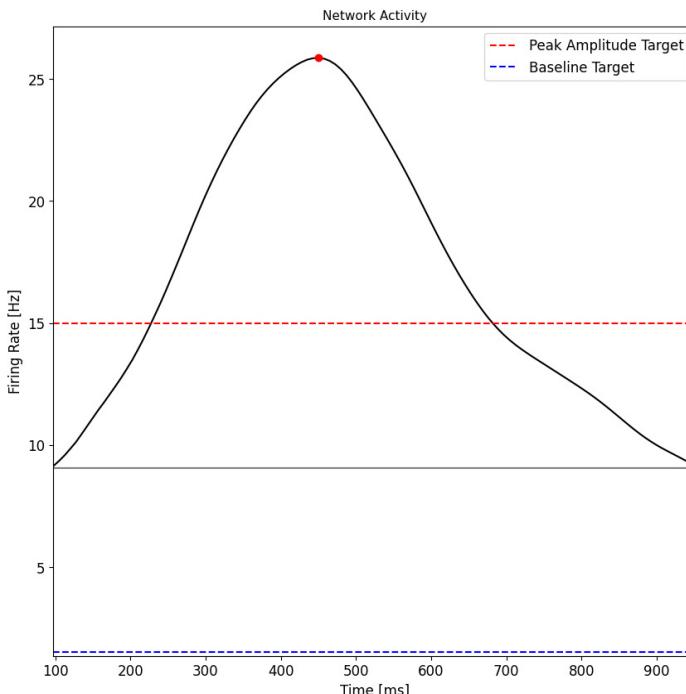
SimLabel: gen_15_cand_49

Generation Rank: 5/10

```
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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 16.807802217913817, 'Fit': 2.469217031166483}
burst_peak_frequency_fitness: {'Value': 1.0498687664041995, 'Fit': 73.64178520696044}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 16.841158560620404, 'Fit': 1000}
slopeFitness: {'Value': -0.04964071180121891, 'Fit': 1.1043770535989437}
thresh: {'Value': 9.063372216665817, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 8.640120210368146, 'Fit': 1000}
E_rate_fitness: {'Value': 58.76984126984127, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 675.2461532546363
average_scaled_fitness: 674.8871060347118
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_9/gen_9_cand_60_data.json

SimLabel: gen_9_cand_60

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_oscil: {'target': 100, 'width': 5, 'min': 75}

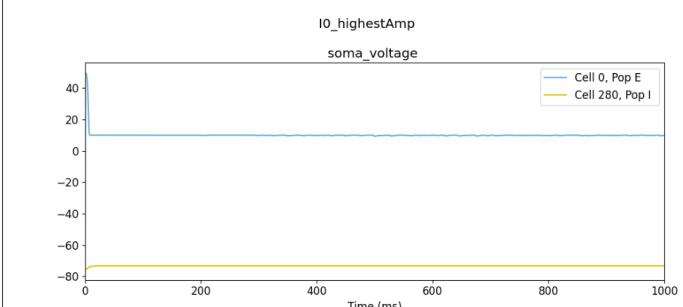
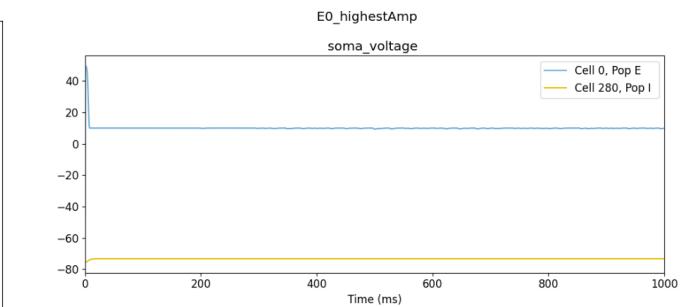
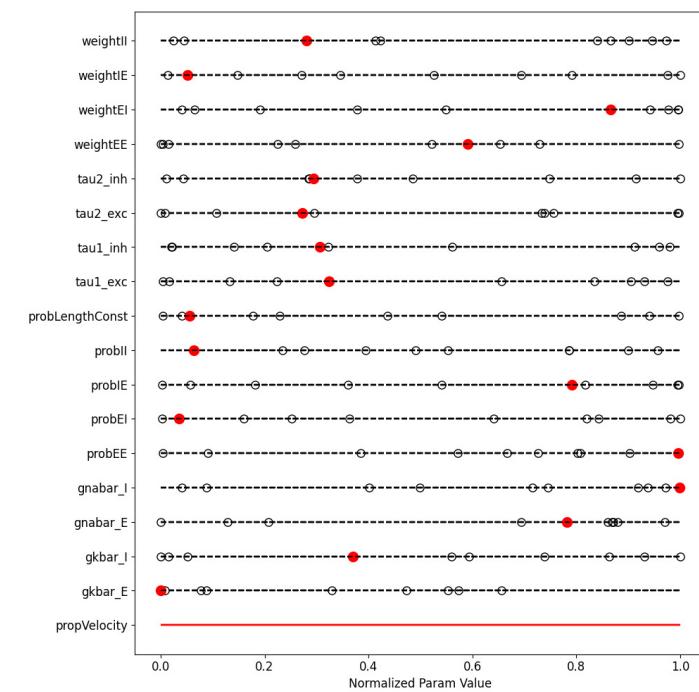
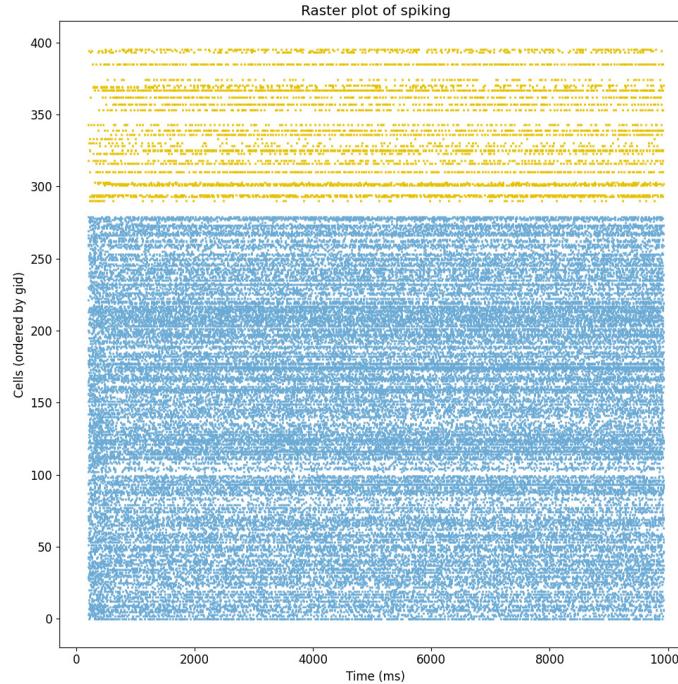
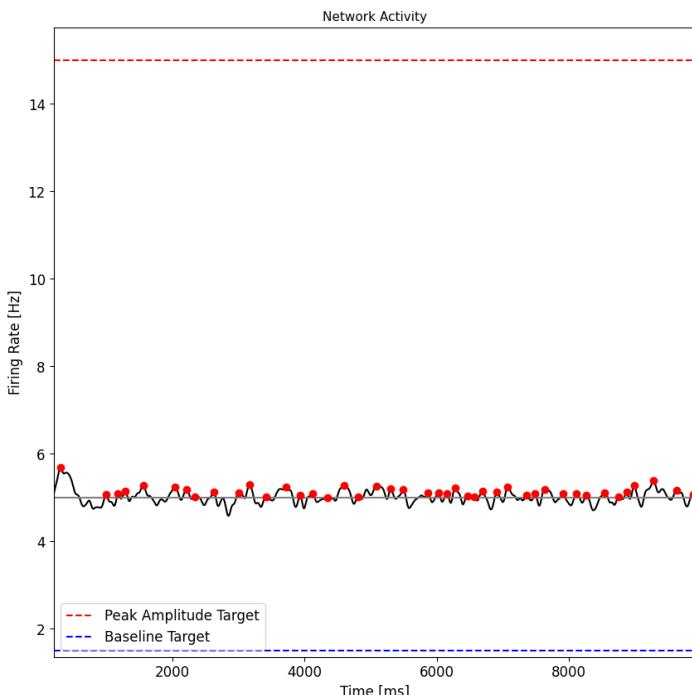
```

```

burstAmp_Fitness: {'Value': 0.15017641951232422, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 4.3335852859662385, 'Fit': 1000}
IBI_fitness: {'Value': 227.85714285714286, 'Fit': 4.004920406439243}
baseline_fitness: {'Value': 5.020677576046005, 'Fit': 1000}
slopeFitness: {'Value': -2.526462761871425e-05, 'Fit': 1.0000505305318617}
thresh: {'Value': 4.9956281353530025, 'Fit': 1.0043814351891989}
sustain_oscillation_fitness: {'Value': 97.1535805243445, 'Fit': 1.7670091816660534}
E_rate_fitness: {'Value': 16.650793650793652, 'Fit': 38.87368176402811}
I_rate_fitness: {'Value': 3.361111111111107, 'Fit': 14.351994023433024}
maxFitness: 1000
average_fitness: 340.11133748236534
average_scaled_fitness: 339.45075485931994

```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_15/gen_15_cand_90_data.json

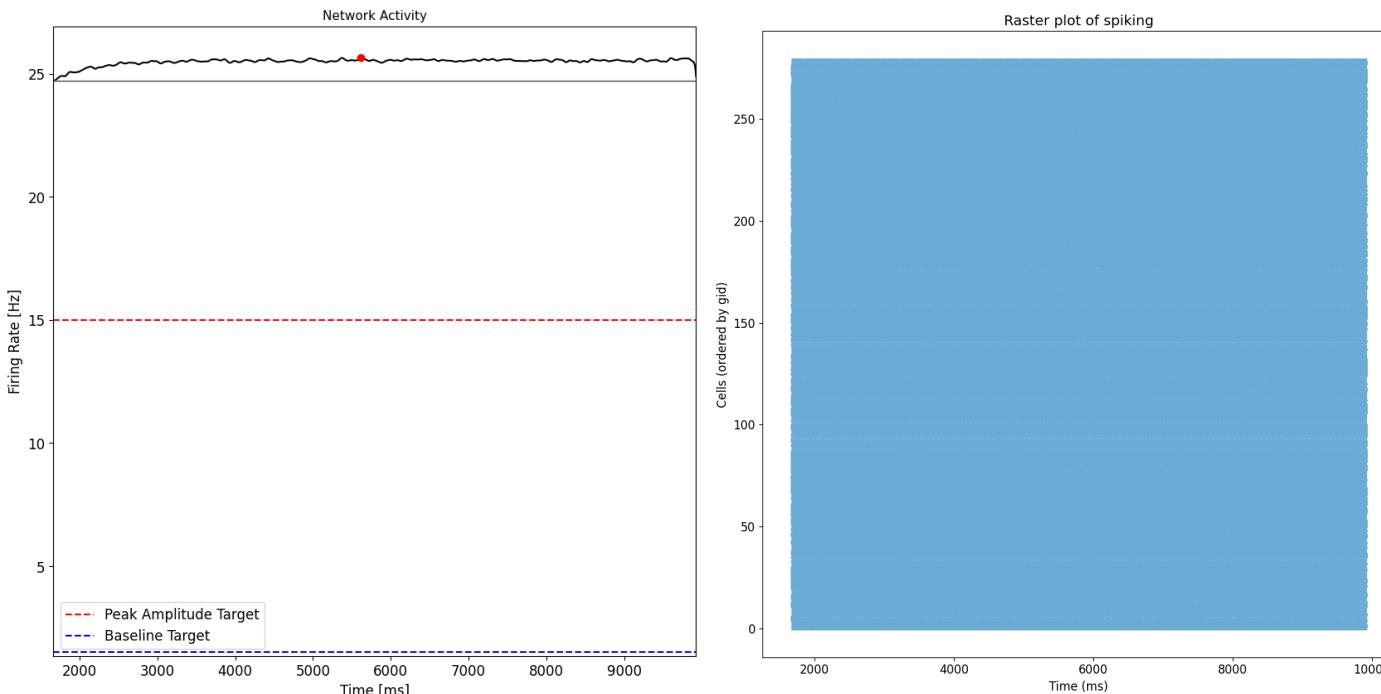
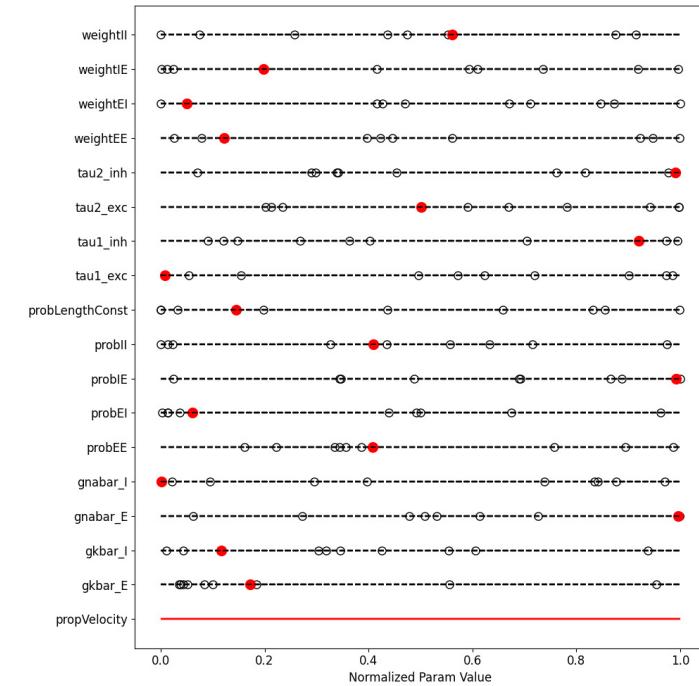
SimLabel: gen_15_cand_90

Generation Rank: 6/10

```
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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.9490937184787498, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 0.10078105316200554, 'Fit': 1000}
IBI_fitness: {'Value': None, 'Fit': 1000}
baseline_fitness: {'Value': 25.488345397842192, 'Fit': 1000}
slopeFitness: {'Value': 0.00023827625933872735, 'Fit': 1.0004766660878688}
thresh: {'Value': 24.693615553772158, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 82.67066766691673, 'Fit': 32.004178314904124}
E_rate_fitness: {'Value': 64.04365079365078, 'Fit': 1000}
I_rate_fitness: {'Value': 0.0, 'Fit': 1000}
maxFitness: 1000
average_fitness: 781.4449616645547
average_scaled_fitness: 781.2260834659137
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_15/gen_15_cand_91_data.json

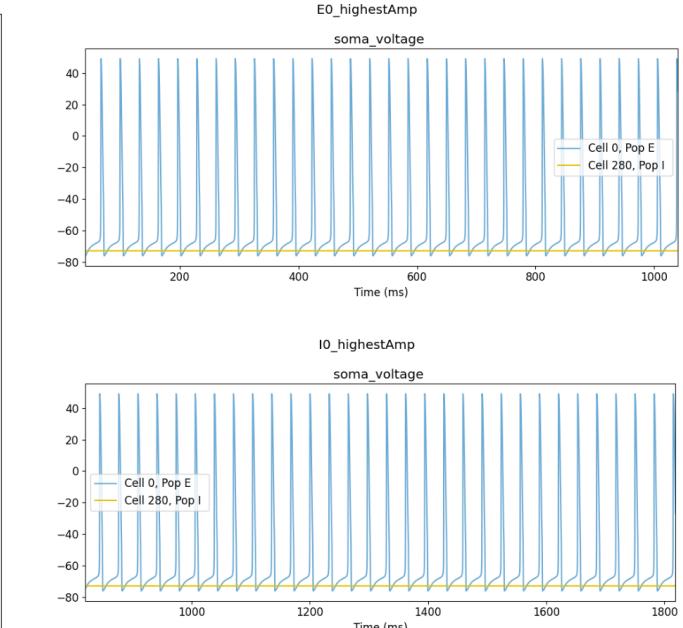
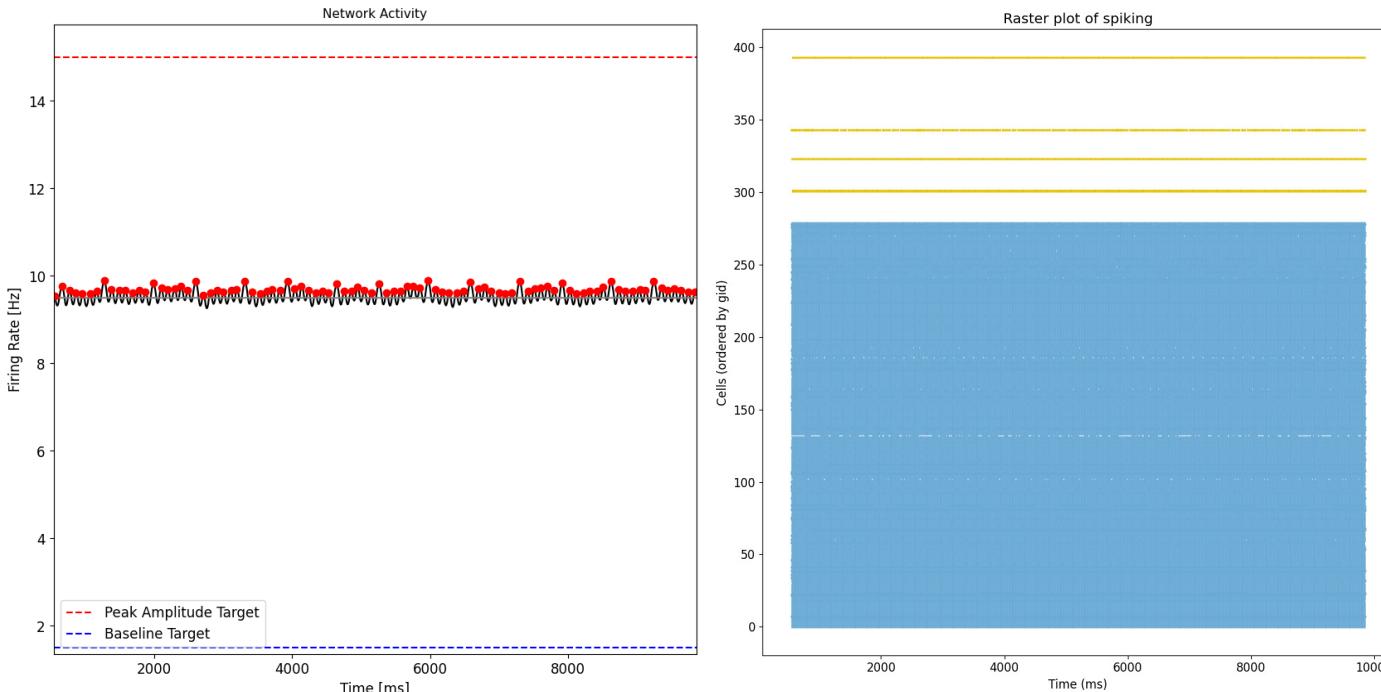
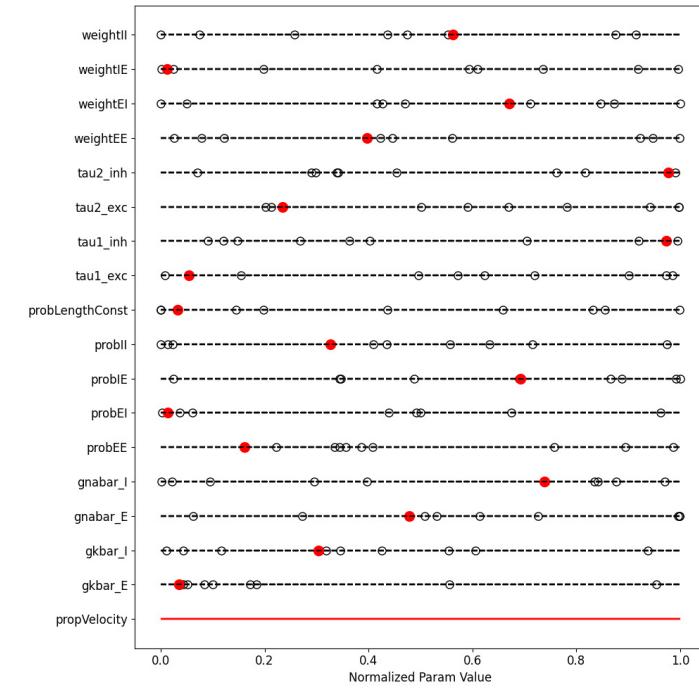
SimLabel: gen_15_cand_91

Generation Rank: 4/10

```
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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.19567487785056878, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 9.335362760020294, 'Fit': 1000}
IBI_fitness: {'Value': 101.95054945054945, 'Fit': 4.259039145384157}
baseline_fitness: {'Value': 9.538904513148204, 'Fit': 1000}
slopeFitness: {'Value': 1.516369945524812e-05, 'Fit': 1.0000303278587908}
thresh: {'Value': 9.495400603541558, 'Fit': 1000}
sustain_oscillation_fitness: {'Value': 93.10861423220975, 'Fit': 3.968059378133635}
E_rate_fitness: {'Value': 32.20238095238095, 'Fit': 1000}
I_rate_fitness: {'Value': 1.0462962962962963, 'Fit': 1000}
maxFitness: 1000
average_fitness: 667.6919032057085
average_scaled_fitness: 667.3592523697966
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0



Data Directory: /NERSC/output/240430_Run2_debug_node_run/gen_15/gen_15_cand_94_data.json

SimLabel: gen_15_cand_94

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_oscil: {'target': 100, 'width': 5, 'min': 75}
```

```
burstAmp_Fitness: {'Value': 0.09864882653996489, 'Fit': 1000.0}
burst_peak_frequency_fitness: {'Value': 7.267221801665404, 'Fit': 1000}
IBI_fitness: {'Value': 138.16901408450704, 'Fit': 4.1848955731650515}
baseline_fitness: {'Value': 4.4343189970382575, 'Fit': 1000}
slopeFitness: {'Value': -6.67381008219279e-07, 'Fit': 1.0000013347629073}
thresh: {'Value': 4.428505261200153, 'Fit': 1.7709121251586877}
sustain_oscillation_fitness: {'Value': 98.65067466266866, 'Fit': 1.3097877058353968}
E_rate_fitness: {'Value': 0.0, 'Fit': 1000}
I_rate_fitness: {'Value': 36.666666666666664, 'Fit': 1.9477340410546753}
maxFitness: 1000
average_fitness: 445.579258975553
average_scaled_fitness: 445.02428251730925
```

binSize: 7.5
gaussianSigma: 30.0
thresholdBurst: 1.0

