A
Fasted
7pm
7am
icv
Lights OFF
Lights ON
1h 1h 1h 1h
9am
0 15 30 60 120
Blood Sample
B
Vehicle (ICV, n=4)
Insulin (ICV, n=4)
Plasma Insulin (ng/ml)
1.5
1.0
0.5
0.0
0 15 30 45 60 75 90 105 120
Time (min)
C
Pyruvate Tolerance Test
(1 mg/g Sodium Pyruvate)
Ptpn2fl/fl + Vehicle (n=5)
POMC-TC + Vehicle (n=5)
Ptpn2fl/fl + Insulin (n=5)
POMC-TC + Insulin (n=5)
Blood Glucose (mM)
25
20
15
10
5
0
Mice ICV Injected with insulin (0.5 mU x 5; 6 h)
0 15 30 45 60 75 90 105 120
Time (min)
AUC (mmol/L x min)
1500
1000
500
0
***
**
Ptpn2fl/fl
POMC-TC
5 5 5 5
Vehicle
Insulin