The effects of Ex4 depend on the starting glycemic level. A) WT mice fasted overnight did not have a glycemic response to Ex4 (0.3 nmol/kg). B) Fed WT mice given Ex4 responded with a decline in glycemia. * - p<0.05 vs PBS control, values are mean ± SEM.
The glycemic effects of exogenous alanine in Gcg−/− mice. Alanine given intraperitoneally to fasted Gcg−/− mice did not alter glycemia compared to PBS control. Values are mean ± SEM.
Exogenous alanine stimulates insulin secretion in WT mice. A) WT mice given alanine along with glucose (1.5 g/kg) intraperitoneally reduces glycemia and B) stimulates insulin secretion more than glucose alone. C) Alanine + glucose in Gcgr:Glp1r<sup>βcell/-</sup> mice leads to a higher glucose AUC and D) fails to stimulate insulin secretion beyond glucose alone. * - p<0.05 vs PBS control, values are mean ± SEM.