# Langevin Monte Carlo

Say we want to sample from $p(w \mid D)$

Start from $w^0$

For k = 1, …

$$w^{k+1} = \boxed{w^k + \varepsilon \nabla \log p(w^k \mid D)} + \eta^k,$$

Gradient ascent

$$\eta^k \sim \mathcal{N}(0, 2\varepsilon I)$$