1. Pedro Talk

$$dx(t) = -\nabla f(x(t))dt + \sigma dW(t), \quad x(0) = x_0$$

$$dx(t) = -\exp\left\{-\gamma\left(f(x(t)) - \min_{s\leq t} f(x(s))\right)\right\}\nabla f(x(t))dt + \sigma dW(t), \quad x(0) = x_0$$

$$dx(t) = -\nabla\left(f(x(t)) + \int_0^t \delta(x(t), x(s))ds\right)dt + \sigma dW(t), \quad x(0) = x_0$$