Diffuse priors for rate parameters, informative prior for sampling probability log – posterior -3000 -4000 -5000 **-**0.00125 -0.00100 0.00075 Β 0.00050 0.00025 -0.35 0.30 0.25 ┰ 0.20 0.15 0.10 -Chain 0.3 ρ 0.2 -0.1 -1.0 $Pr(X_j(t_1) = S)$ 8.0 0.6 0.4 $Pr(X_j(t_1) = I)$ 0.075 0.050 0.025 0.000 -0.6 $Pr\big(X_j\big(t_1\big) = R\big)$ 0.4 0.2 0.0 25000 50000 75000 100000 Iteration