Informative priors for rate parameters, informative prior for sampling probability log – posterior -3000 -4000 -5000 **-**8e-04 6e-04 Β 4e-04 2e-04 **-**0.30 0.25 Ŧ 0.20 0.15 0.10 -Chain 0.3 ρ 0.2 0.1 -1.0 $Pr(X_j(t_1) = S)$ 0.8 0.6 0.08 $Pr(X_j(t_1) = I)$ 0.06 0.04 0.02 0.00 $Pr\big(X_j\big(t_1\big)\!=\!R\big)$ 0.4 0.2 0.0 25000 50000 75000 100000 Iteration