Supplementary Figure 1: The ROC Curves derived from simulations with 24 sampling time points. Periodic signals are two superimposed sinusoidal waves with amplitudes $M_1 = M_2 = 1$, frequencies $\omega_{s1} = 0.4\pi$ and $\omega_{s2} = 0.2\pi$. Sampling strategies: (a)(b) regular, (c)(d) bio-like, (e)(f) binomially random, (g)(h) exponentially random. The left-hand side sub-plots (a, c, e, and g) consider non-periodic signals with Gaussian noise $\mu = 0$ and $\sigma = 0.5$. The right-hand side sub-plots (b, d, f, and h) additionally consider a transcriptional burst and a sudden drop (Eq.(27)).