a. Synthetic regression tasks Nonlinear (MLP) Linear Gaussian process Sinusoidal Hodgkin-Huxley 80 0.6 0.4 104 0.2 60 0.4 10³ MSE 40 0.2 0.1 0.2 20 0.0 0.0 IID OOD IID OOD IID OOD IID OOD IID OOD b. Synthetic classification tasks Real-world tasks c. Linear Nonlinear (MLP) Alchemy Raven's PM Gene targeting 0.83 1.00 1.00 Accuracy (↑) 0.8 Accuracy (1 0.75 0.82 0.6 0.98 0.4 0.81 0.2 0.96 0.00 0.99 0.80 IID OOD OOD OOD OOD OOD IID Implicit Explicit $D \rightarrow$ $x_a \rightarrow$ Transformer $\rightarrow y_q$ $D \rightarrow$ Transformer