

### Electronic Supplementary Information

**Table S1:** The performance chart of the latest multi-omics predictive models for 28 different problems in computational biology. In the table header, input refers to the type of omics layer that a predictive model uses as input features. Output refers to the type of omics layer that is predicted by predictive models. We collected the reported AUC values and validated that the reported performance is indeed the highest for that specific problem, by also curating any articles citing the referenced publication. We only investigated the articles providing AUC of their methods. In the case where the authors reported multiple performance results in various settings, the highest AUC was included, while for different sub-tasks of the same prediction problem, we included their average performance (Average AUC column).