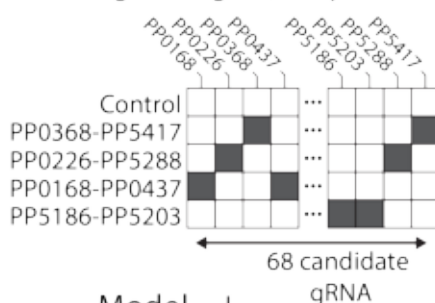


Filtered training data
from previous cycles

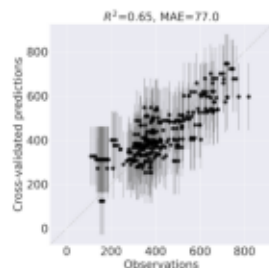
gRNA targets (binary vectors)



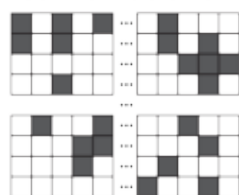
Model
Training



Model
Evaluation



Identify best
predicted new gRNA
combinations



N = 60 new
recommendations

Pred.
Titer
680
650
640
620
480
450
440
420

Data for next
cycle

Experimental
Design, Build
and Test.

DBTL0: Initial
cycle

DBTL1: Pseudo-
random 2x and 3x
combinations

DBTL2:
ART designs
from DBTL0-1

DBTL3: DBTL2 repeat
with improved dCas9
plasmid

DBTL4:
ART designs
from DBTL3

DBTL5:
ART designs
from DBTL3-4

DBTL6:
ART designs
from DBTL3-5

