Test Set Performance
(Data not used in training)

Cell Health Target (y-axis), R^2 (x-axis)

Cell Line:
- ○ A549
- △ ES2
- □ HCC44

Measurement:
- Cell Viability
- Death
- Apoptosis
- Reactive Oxygen Species
- DNA Damage
- G1 Phase
- S Phase
- G2 Phase
- Early Mitosis
- Mitosis
- Late Mitosis
- Cell Cycle Count
- Shape
- Infection Efficiency

Cell Health Target labels (top to bottom):
Live Width / Length
Live Cells
% Dead Only (CASP-; DRAQ7+)
Live Cell Roundness
S - # cells
CC - # cells
% Live (DRAQ7-; CASP-)
% All Dead (DRAQ7+)
S - Intensity Nucleus EdU Sum
G1 - # cells
ALL - # cells
CC - % S
Live Cell Area
Cell Count - G1+G2
G1 - # of gH2AX Spots
CC - # of gH2AX Spots per Area of Nucleus
M - # cells
G1 - # of gH2AX Spots per Area of Nucleus
CC - # of gH2AX Spots
CC - % G2
G2 - # cells
ALL - # of gH2AX Spots per Area of Nucleus
ALL - # of gH2AX Spots
CC - % G1
ALL - Nucleus Area
S - Intensity Nucleus EdU Mean
% All Apoptosis (CASP+)
Polynuclear - # cells
S - # of gH2AX Spots per Area of Nucleus
ALL - Nucleus Roundness
CC - % High gH2AX spots
ALL - % High gH2AX Spots
Cell Count - G2 + M
early M - # cells
CC - % M
CC - % early M
Polyploid - # cells
ALL - Polynuclear
ROS
ROS-back
early M - % High gH2AX Spots
S - # of gH2AX Spots
Late M - # cells
S - % High gH2AX Spots
G1 - % High gH2AX Spots
early M - # of gH2AX Spots per Area of Nucleus
early M - # of gH2AX Spots
% Late Apoptosis (CASP+; DRAQ7+)
% Early Apoptosis (CASP+; DRAQ7-)
Polyploid - # of gH2AX Spots per Area of Nucleus
G2 - # of gH2AX Spots per Area of Nucleus
G2 - % High gH2AX Spots
CC - % Late M
Polynuclear - % High gH2AX Spots
Late M - # of gH2AX Spots per Area of Nucleus
Cell Count - G2/G1
% Caspase / % Dead Only
Polynuclear - # of gH2AX Spots per Area of Nucleus
Late M - % High gH2AX Spots
G2 - # of gH2AX Spots
Late M - % High gH2AX Spots
Polynuclear - # of gH2AX Spots
VB - Infection Efficiency
CC - Infection Efficiency
Polyploid - % High gH2AX Spots
M - # of gH2AX Spots per Area of Nucleus
M - # of gH2AX Spots
M - % High gH2AX Spots
Polyploid - # of gH2AX Spots
ALL - Polyploid

x-axis: R^2 (≤ -1.0, -0.5, 0, 0.5, 1.0)