

From phenotype to pathway: integrated compound profiling with phenotypic screening and transcriptomics.

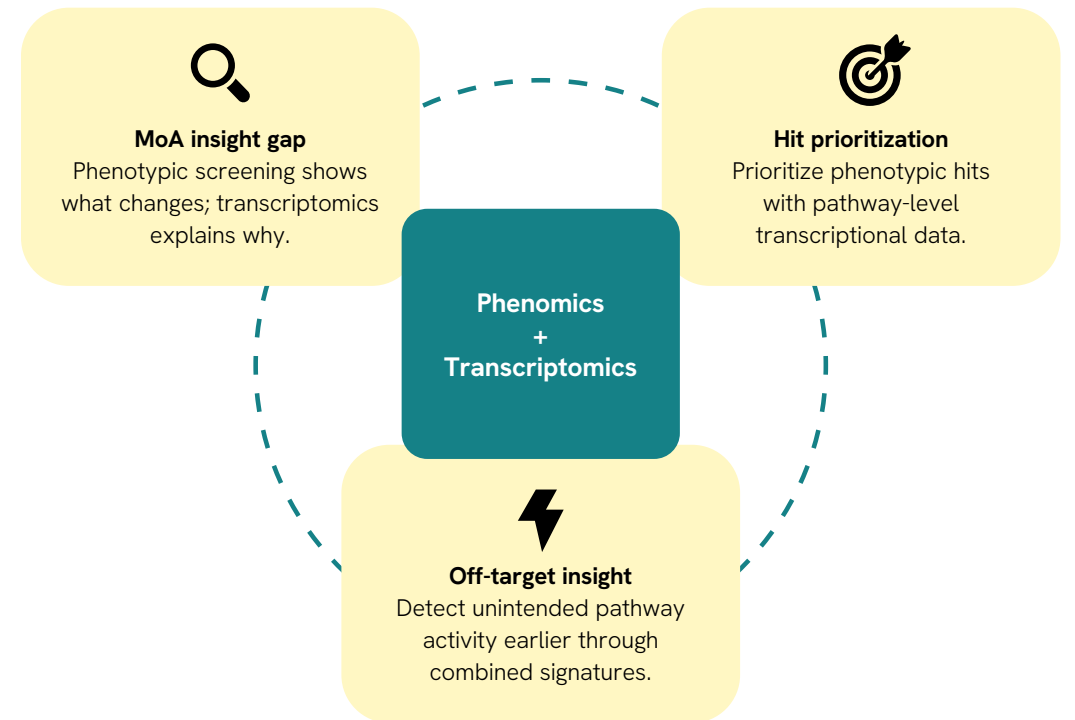
Enhanced drug discovery confidence

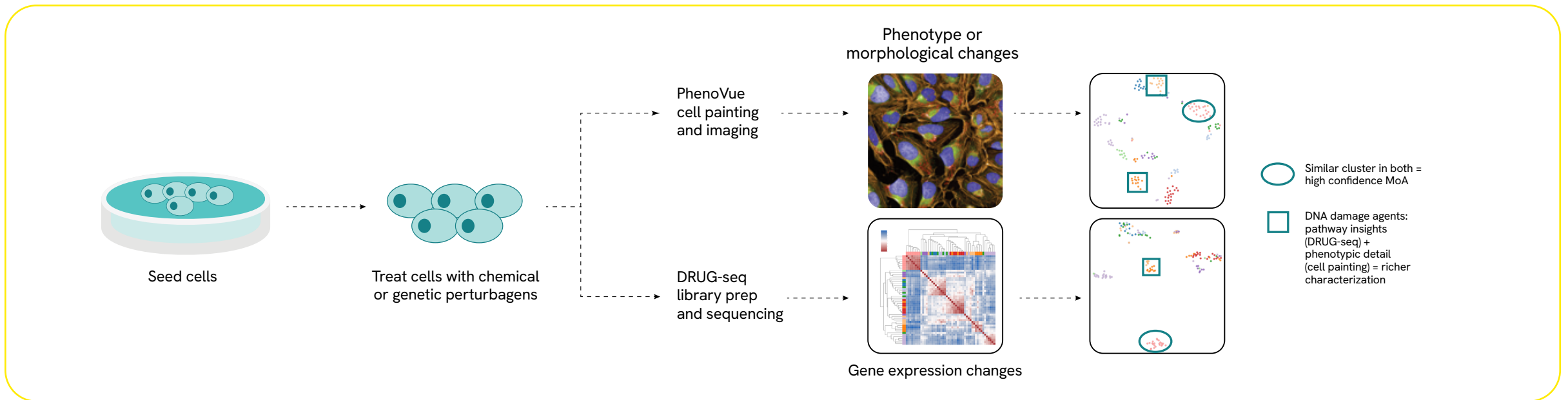
Phenotypic screening reveals how compounds affect cellular morphology. **Alithea Genomics' MERCURIUS™ DRUG-seq** adds scalable gene-expression profiling to help connect those phenotypic changes with pathway-level transcriptional signatures. Together, **PhenoVue™ cell painting kits** and DRUG-seq support compound profiling, hit prioritization, MoA hypothesis generation, and earlier identification of stress or off-pathway responses.



Key benefits:

- Connect phenotype to pathway for comprehensive compound understanding
- Prioritize hits with greater confidence through integrated data
- Add molecular context to cell painting readouts for deeper insights
- Scale effectively from screening to mechanistic follow-up studies





From phenotype to pathway, Revvity offers integrated solutions that can help deliver the full picture of compound activity.

PhenoVue cell painting

- **Six-probe simultaneous labeling:** comprehensive cellular profiling in a single assay
- **Quantitative morphological analysis:** measures compound and gene effects on multiple parameters
- **Computational biology integration:** advanced imaging analytics for cellular response insights
- **Kit solution:** all reagents and protocols included for streamlined workflows

[Learn more about PhenoVue kits](#)

DRUG-seq

- **Extraction-free workflow:** streamlined one-day protocol
- **Early multiplexing:** enables high-throughput processing
- **Workflow improvements:** significantly reduces handling steps, time, and variability
- **Cost-effective:** considerably lower cost/condition than conventional RNA-seq
- **Screening scale:** up to 20,000 wells per batch

[Learn more about DRUG-seq](#)

