

# Automate lab instrument runs and data acquisition

With Benchling for Lab Automation, automatically ingest, parse, and append data from liquid handlers, plate readers, and other instruments using powerful APIs and events.

- In-app interface for defining liquid handler operation and processing rules
- Liquid handler instruction generation directly within Notebook entries
- Standardized assay and instrument-specific data capture tables
- Automatic data ingestion, parsing, and appendage of results and entities
- Open source instrument data converters (July 2023)

## Simplify instrument runs

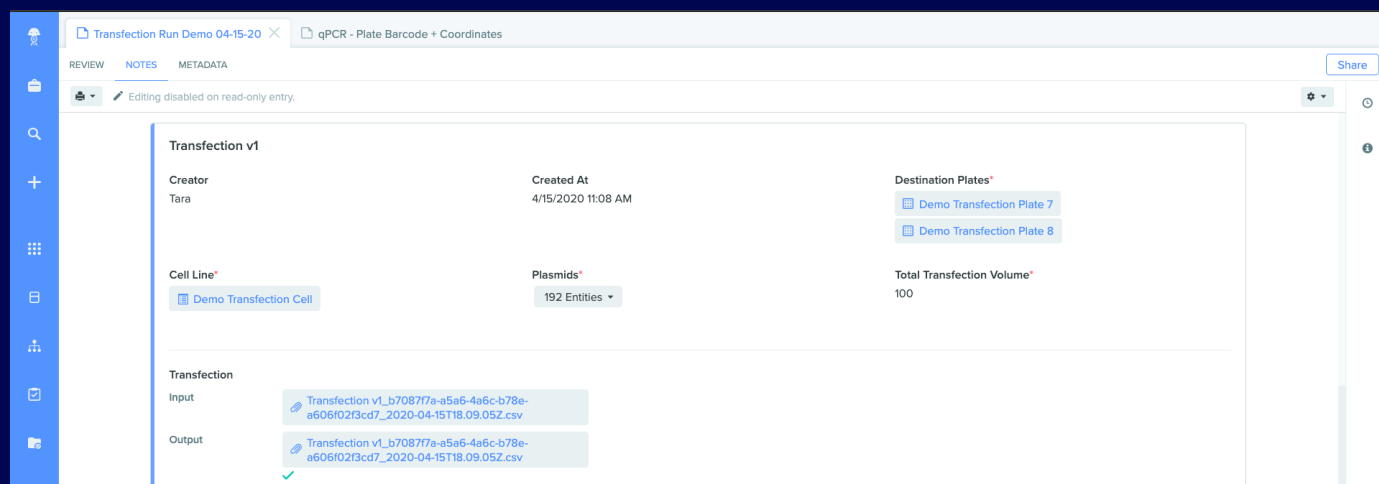
Define instrument runs with a single click — specify instructions that include sample data and preconfigured, instrument-specific input parameters to reduce errors and artifacts.

## Reduce errors from manual data transfer

Processed run outputs can be automatically pulled into Benchling using APIs upon completion of your instrument runs, with results data automatically synced to predefined, structured data tables.

## Retain full data integrity at high-throughput

Registered and inventoried sequence, sample, and reagent volumes are automatically created and updated in lab automation workflows from start to finish.



The screenshot displays the Benchling interface for configuring a Transfection Run. The main window is titled "Transfection Run Demo 04-15-20" and "qPCR - Plate Barcode + Coordinates". The interface is divided into several sections:

- Transfection v1**: The main configuration area, showing fields for Creator (Tara), Created At (4/15/2020 11:08 AM), Cell Line\* (Demo Transfection Cell), Plasmids\* (192 Entities), Destination Plates\* (Demo Transfection Plate 7, Demo Transfection Plate 8), and Total Transfection Volume\* (100).
- Transfection**: A section for defining the run parameters, including Input and Output. Both fields are set to "Transfection v1\_b70877a-a5a6-4a6c-b78e-a606f02f3cd7\_2020-04-15T18.09.05Z.csv".
- Navigation**: A vertical sidebar on the left contains icons for Home, Search, Add, List, and other functions.
- Header**: Includes tabs for REVIEW, NOTES, and METADATA, along with a Share button.