The benchwork of modern life science R&D involves innumerable well plates, cryovials, fridges, and other containers. When it comes to tracking the data and locations of these containers (and containers of containers), existing software fails to manage their complex interlinkages, and can’t tie results data back to sample records.

Benchling Inventory expresses the interlinkages and data of any organization’s samples and containers through point-and-click configuration, and it links results directly to the samples and containers that generated them. You never have to wonder where a particular tube is again, or what samples generated a certain result. A complete, digital picture of your lab is at your fingertips.

**INVENTORY**

Add a Digital Layer to the Physical Lab

- For any sample, see every experiment where it was used.
- See all of the data that a particular sample has ever produced, alongside the experimental procedures that generated that data.
- Pinpoint the current location of any sample.
- From individual containers of samples, trace their lineage through parent samples, up to the registered biological entities from which they are derived.
- Compare results produced by two samples with the same parent entities.

**Track down every sample used in an experiment**

**See every result a sample has produced**

**Trace from samples to upstream entities**
Express complex sample concentrations and transfers

- For containers holding more than one sample, define both the amount and the concentration of the samples that comprise it.
- Structure complex transfers between containers that automatically calculate new concentrations based on the concentrations of input samples.

Integrate instruments

- Benchling’s open REST APIs ensure that any instrument can be swiftly integrated.
- Plate readers, smart fridges, barcode scanners, and printers are just some of the instruments our clients have integrated with Benchling Inventory.
- Automatically create new samples and update sample data. For example, integrate a plate reader to automatically generate new plates and fill them with samples.

Link inputs and outputs in Benchling Workflows and Requests

- For any workflow, give scientists complete context by designating particular samples that should be used.
- At the end of a workflow, pinpoint all every sample and container that was created, and view the results that each one produced.
- For any request, a requester can designate the specific samples that are to be used for a particular task.
- Following request fulfillment, output samples will be automatically communicated to the requester, with their locations.