## Rancho biosciences

## Building High Quality AI/ML Datasets

AI/ML methods hold huge potential in all facets of drug discovery, including predictive toxicology. It is of paramount importance that high quality datasets are used to build and train all AI/ML models. When quality matters, you can count on Rancho! With over 12 years of experience in harmonizing/standardizing datasets containing a wide range of data types we can support you with such needs and give you confidence in the quality of the datasets used to train & build AI/ML models. We are platform agnostic and have robust workflows and pipelines to extract data from different sources:

- Scientific publications
- Clinical trial protocols,
- Toxicology and pathology reports,
- and much more

## **TRAIN AI**

Rancho has experienced data scientists and subject matter experts (SMEs) who can build tailor-made AI/ML models:

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- Predictive toxicology
- Cellular phenotype classification
- Target liability
- Disease signature analysis



Rancho SMEs harmonize toxicology findings across multiple studies by aligning terms to SEND, MedDRA and other Ontologies. That is a significant step towards achieving FAIR data principles. FAIR stands for Findable, Accessible, Interoperable, and Reusable, which are guidelines that aim to enhance the utility and value of digital assets.

Data harmonization supports meta-analyses and systematic reviews and helps to uncover patterns, trends, and outliers across studies, leading to more informed conclusions about the toxicity and safety profiles of substances.

At Rancho BioSciences we empower businesses with a comprehensive suite of services through an expertly-crafted synergy of domain experts, data scientists, and data engineers. Our full-cycle AI solutions span every essential aspect – from data collection to robust model training, seamlessly merging cutting-edge technology and industry-specific knowledge.

Together, we unlock the potential hidden within your data, enabling you to accelerate growth and drive innovation.

