

# **Resume Example: Bioinformatician**

# SUMMARY OF EXPERIENCE

Bioinformaticist and translational biologist specializing in cancer immunotherapy, myeloid immunology and antibody drug development in a biotechnology and pharmaceutical setting. Expertise in RNA/DNA genomic profiling, single cell biology, target discovery and pre-clinical regulatory activities for lead drug selection and IND filing. Excellent communication and project management skills and service as core member on drug development teams involving direct management of bioinformaticists and scientists.

## **SKILLS**

#### **Statistics**

Hypothesis testing, regression modeling, high dimensional data analysis, machine learning, including lasso/ridge/elastic net, dimensionality reduction methods (e.g., PCA, UMAP, TSNE)

#### NGS assays

RNA-seq, single cell RNAseq, CHiP-seq, ATAC-seq

#### **Bioinformatics**

Raw data QC, sequence alignment, batch effect correction/integration, differential expression/enrichment detection, pathway analysis

#### **Bioinformatics tools/biological database**

BWA/bowtie/STAR, Limma/DESeq2, CellRanger, Seurat, Monocle, MACS2, GSEA, ENCODE, GTEx, TCGA, GEO, etc.

#### Data science/visualization

dplyr, tidyverse, plotly, ggplot2, R markdown, etc.

#### Programming

R (extensive experience with R bioinformatics packages), Python, Linux shell

## **EXPERIENCE**

**Clinical Company** 

City, State

Associate Director, Bioinformatics

- Serve as the Bioinformatics lead for multiple preclinical programs •
- Manage one direct report, multiple bioinformatics consultants and interns •
- Manage multiple CRO relationships pertaining to clinical stage programs
- Lead a multi-labjoint single-cell sequencing and immunohistochemistry collaboration

Principal Scientist, Bioinformatics

- Served as bioinformatic and translational lead in diligence efforts
- Managed CRO diligence efforts for genetic profiling associated with both clinical stage programs •
- Served as Data Integrity Lead for INDs associated with both programs as well as author and • analyst for multiple Module 2 sections
- Led bioinformatic and translational efforts resulting in discovery and advancement of current • clinical stage assets
- Managed internal \$1.7M budget for tumor acquisition, RNA profiling and associated CRO efforts

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Timeframe

Timeframe



• Developed Tumor Matching Program, designed to correlate immune infiltrate from human tumors to that of murine syngeneic models with known efficacy patterns, thus enabling prediction of response across clinical cohorts

Senior Scientist, Bioinformatics

Timeframe

- Developed single-cell sequencing translational platform, mapping a variety of human and murine, syngeneic tumor microenvironments and providing high-dimensionality mechanism of action studies associated with therapeutics
- Responsible for identification and subsequent board approval of multiple novel, early-stage immunosuppressive, myeloid targets
- Hired and managed direct reports ranging from summer interns and research associates to scientists in a cross-functional matrix environment
- Led bioinformatic and translational efforts resulting in discovery and advancement of current clinical stage assets
- Presented key scientific findings associated with lead programs to board of directors, clinical investigators and KOLs
- Responsible for all early-stage IT efforts, designed R&D file server structure, led efforts to implement vivarium and electronic lab notebook software

Research Center

City, State

Timeframe

Bioinformatics Programmer III

- Served as lead analyst
- Developed pipelines for high-throughput genomics analyses: single-cell RNAseq, bulk RNAseq, small RNAseq, CHiPSeq, microarrays
- Designed custom oligonucleotide sequencing libraries, developed analytical pipeline for highthroughput, massively parallel approach to assess functional activity of 3' UTR elements
- Designed analytical pipelines for analysis of CRISPR/Cas9 targeted sequencing assays
- Provided analytics for 50-70 RNA and DNA profiling projects yearly, each consisting of tens to thousands of samples

## **EDUCATION**

Accredited University Master of Science Integrative Biology (Computational Biology)

Accredited University Bachelor of Science Anthropology