A Strategic Analysis of the East Bay Biotechnology Landscape for the Protein Scientist

I. Strategic Overview: The East Bay Biotechnology Ecosystem for the Structural and Computational Biologist

The East Bay of California represents a distinct and cohesive biotechnology ecosystem, uniquely characterized by a powerful synergy between world-leading academic research and a dense network of pioneering startup companies. This region is not merely a satellite of the larger South San Francisco biotech hub; it possesses its own scientific identity, heavily weighted toward foundational research and development, platform technology innovation, and the direct commercial translation of academic breakthroughs. For a scientist with deep expertise in structural biology, protein engineering, and computational innovation, this environment offers exceptionally fertile ground for professional growth and high-impact work.

The ecosystem's scientific character is profoundly shaped by the immense gravity of its core institutions: the University of California, Berkeley, and Lawrence Berkeley National Laboratory (LBNL). These centers of excellence function as a powerful influence engine, seeding the entire region with foundational technologies, a world-class talent pool, and a culture of rigorous scientific inquiry.[1] The most prominent example is the development of CRISPR-Cas9 gene editing technology in the UC Berkeley laboratory of Nobel laureate Jennifer Doudna, which has directly led to the formation of a "CRISPR-plex" of local companies including Caribou Biosciences, Scribe Therapeutics, and the Innovative Genomics Institute (IGI).[1] This direct pipeline from laboratory bench to commercial venture is a defining feature of the East Bay.

The region's technological landscape is built upon several core pillars that align precisely with an advanced protein biochemistry skillset:

- **Genome and Protein Engineering:** The East Bay is a global epicenter for the

engineering of biological macromolecules. This extends beyond CRISPR to include companies focused on developing novel enzymes for DNA synthesis, engineering microbes for sustainable agriculture, and creating new protein-based tools for cell therapy manufacturing.[4] This focus treats proteins not just as drug targets, but as programmable machines to be designed and optimized.

- **Synthetic and Systems Biology:** The influence of institutions like the Joint BioEnergy Institute (JBEI), co-founded by synthetic biology pioneer Jay Keasling, has cultivated a profound expertise in engineering biology at scale.[4] This has fostered a generation of companies that apply engineering principles to redesign metabolic pathways, create novel bioproducts, and develop sophisticated biological platforms.
- **World-Class Structural Biology Infrastructure:** A key strategic advantage of the region is the presence of the Advanced Light Source (ALS) at LBNL, a national user facility that provides premier synchrotron beamlines for X-ray crystallography and other advanced imaging techniques.[4] This infrastructure, combined with a high concentration of leading structural biology, biophysics, and cryo-EM laboratories at UC Berkeley, creates an unparalleled environment for research that depends on high-resolution structural information.[11]

This ecosystem represents a near-perfect match for a professional profile centered on solving complex molecular challenges. Expertise in X-ray crystallography is not simply a desirable skill but a core competency that aligns with the region's premier scientific resources. The proven ability to purify and characterize "impossible" proteins and to develop novel computational workflows is precisely the skillset required by the numerous local companies operating at the cutting edge of enzyme, antibody, and gene-editor engineering. The East Bay's cultural DNA, which values deep scientific rigor and technological novelty, is highly favorable for a scientist who thrives on fundamental problem-solving and tool-building.

II. East Bay Biotech Company Matrix: A Strategic At-a-Glance Reference

The following matrix provides a consolidated, high-level overview of the biotechnology organizations detailed in this report. This tool is designed to facilitate rapid strategic assessment, allowing for the filtering and prioritization of potential opportunities based on location, scientific focus, direct relevance to a protein science profile, and company stage.

Company Name	City	Primary Scientific	Relevance to Profile	Company Stage

		Focus		
Berkeley				
Acrigen Biosciences	Berkeley	Precision CRISPR Gene Editing, Anti-CRISPR Proteins	Tier 1	Pre-clinical/Startup
Actym Therapeutics	Berkeley	Microbial-based Immunotherapy Platform	Tier 2	Pre-clinical/Startup
Addition Therapeutics	Berkeley	RNA-mediated Transgene Insertion	Tier 2	Pre-clinical/Startup
Amber Bio	Berkeley	RNA Writing, Multi-kilobase Gene Editing	Tier 2	Pre-clinical/Startup
Bayer — Berkeley Campus	Berkeley	Biologics, Cell & Gene Therapy, Manufacturing	Tier 2	Large Pharma
Caribou Biosciences	Berkeley	Next-Gen CRISPR Allogeneic Cell Therapies	Tier 1	Clinical-Stage Biotech
Glyphic Biotechnologies	Berkeley	Single-Molecule Protein Sequencing Platform	Tier 1	Pre-clinical/Startup
Indee Labs	Berkeley	Microfluidics for Intracellular	Tier 2	Pre-clinical/Sta

		Delivery		rtup
Innovative Genomics Institute (IGI)	Berkeley	CRISPR/Genomics Research Institute	Tier 1	Academic/Gov't
Kimia Therapeutics	Berkeley	AI/ML Drug Discovery Platform	Tier 2	Pre-clinical/Startup
LBNL — Advanced Light Source (ALS)	Berkeley	Synchrotron for Structural Biology	Tier 1	Academic/Gov't
Nanotein	Berkeley	Protein-based Reagents for Cell Therapy	Tier 1	Pre-clinical/Startup
Pivot Bio	Berkeley	Engineered Microbes, Computational Protein Design	Tier 1	Commercial-Stage Biotech
Prellis Biologics	Berkeley	3D Organoids for Antibody Discovery, AI	Tier 1	Pre-clinical/Startup
Ray Therapeutics	Berkeley	Optogenetic Gene Therapy, Protein Engineering	Tier 1	Pre-clinical/Startup
Regel Therapeutics	Berkeley	Targeted EpiEditing, dCAS Fusion Proteins	Tier 1	Pre-clinical/Startup
ResVita Bio	Berkeley	Engineered Skin	Tier 1	Pre-clinical/Sta

		Probiotics, Protein Delivery		rtup
Sampling Human	Berkeley	Synthetic Biology, Single-Cell Biomarkers	Tier 2	Pre-clinical/Startup
Valitor	Berkeley	Protein Therapeutics, Multivalent Biopolymers	Tier 1	Pre-clinical/Startup
Emeryville				
4D Molecular Therapeutics	Emeryville	AAV Capsid Engineering, Gene Therapy	Tier 1	Clinical-Stage Biotech
Abalone Bio	Emeryville	Functional Antibody Discovery for GPCRs, AI	Tier 1	Pre-clinical/Startup
Ansa Biotechnologies	Emeryville	Enzymatic DNA Synthesis, Enzyme Engineering	Tier 1	Pre-clinical/Startup
Arcadia Science	Emeryville	Discovery Biology, Open Science Platform	Tier 2	Non-Profit/Research
Catalent (SMARTag®)	Emeryville	Antibody-Drug Conjugates (ADCs), Bioconjugation	Tier 1	Tools/Services/CDMO

Dynavax Technologies	Emeryville	Vaccines, TLR Agonists, Immunology	Tier 3	Commercial-Stage Biotech
Eureka Therapeutics	Emeryville	T-Cell Therapies, Antibody Discovery, Structural Bio	Tier 1	Clinical-Stage Biotech
Ginkgo Bioworks — Foundry West	Emeryville	High-Throughput Organism Engineering	Tier 1	Commercial-Stage Biotech
Gritstone bio	Emeryville	Immuno-oncology, AI-based Antigen Discovery	Tier 2	Clinical-Stage Biotech
JBEI / ABPDU	Emeryville	Synthetic Biology, Biofuels, Process Scale-up	Tier 1	Academic/Gov't
OmniAb	Emeryville	Transgenic Platforms for Antibody Discovery	Tier 2	Tools/Services/CDMO
Prolific Machines	Emeryville	Optogenetic Control of Protein Production	Tier 1	Pre-clinical/Startup
Profluent	Emeryville	AI-first Protein Design, Generative Models	Tier 1	Pre-clinical/Startup

Oakland				
Phyllom BioProducts Corp.	Oakland	Microbial Biopesticides, Protein Engineering	Tier 2	Commercial-Stage Biotech
UCSF Benioff — CHORI	Oakland	Translational Pediatric Research, Core Facilities	Tier 2	Academic/Gov't
Albany				
USDA-ARS WRRC	Albany	Agricultural Research, Protein Chemistry, Enzymes	Tier 1	Academic/Gov't
Alameda				
Acepodia	Alameda	Antibody-Cell Conjugation (ACC™) Technology	Tier 1	Clinical-Stage Biotech
Adanate	Alameda	Antibody Therapeutics for Immuno-oncology	Tier 2	Clinical-Stage Biotech
AllCells	Alameda	Cell & Gene Therapy Starting Materials	Tier 3	Tools/Services/CDMO
Apertor Pharmaceutica	Alameda	Molecular Glues,	Tier 2	Pre-clinical/Sta

ls		Protein-Protein Interaction Disruption		rtup
CellFE	Alameda	Microfluidics for Intracellular Delivery	Tier 2	Pre-clinical/Startup
Exelixis	Alameda	Oncology Drug Development (Small Molecule & Biologics)	Tier 2	Commercial-Stage Biotech
GeneFab	Alameda	CRDMO for Cell & Gene Therapies	Tier 3	Tools/Services/CDMO
Ohmic Biosciences	Alameda	Protein Engineering for Crop Disease Resistance	Tier 1	Pre-clinical/Startup
Santa Ana Bio	Alameda	Precision Immunology, Antibody Engineering	Tier 2	Pre-clinical/Startup
Scribe Therapeutics	Alameda	CRISPR Enzyme Engineering for *In Vivo* Therapies	Tier 1	Pre-clinical/Startup

III. The Berkeley Hub: Epicenter of Academic Innovation and Commercial Translation

Berkeley stands as the intellectual and innovative core of the East Bay biotech ecosystem. Its character is defined by the direct and fluid translation of foundational scientific discoveries from UC Berkeley and its affiliated institutes into commercially-focused ventures. The city hosts an unparalleled concentration of companies where the primary product is a feat of molecular engineering, making it a premier destination for a protein scientist.

A. Core Genome and Protein Engineering Innovators

This group comprises companies whose fundamental business is the design, construction, and optimization of biological macromolecules. The work at these organizations represents the most direct application of a sophisticated protein engineering and structural biology skillset.

- **Caribou Biosciences**
  - **Address:** 2929 7th St, Suite 105, Berkeley, CA 94710.[4]
  - **Scientific Mission:** Caribou Biosciences is a clinical-stage company pioneering next-generation CRISPR-based allogeneic (off-the-shelf) cell therapies for hematologic malignancies and solid tumors.[1] A direct spin-out of the Doudna lab at UC Berkeley, Caribou's core technology platform is based on CRISPR hybrid RNA-DNA (chRDNA) guides, which are engineered to provide superior specificity and reduce off-target editing, a critical safety feature for human therapeutics.[1]
  - **Strategic Fit Analysis: Tier 1.** This organization is a prime target. The R&D is fundamentally a protein and nucleic acid engineering challenge focused on improving the performance of the Cas nuclease machinery. Expertise in purifying and characterizing complex ribonucleoprotein (RNP) complexes, understanding their enzymatic kinetics, and applying structural and computational methods to predict guide performance and off-target effects is central to their mission. The ability to tackle complex biomolecular systems is a direct and powerful fit for Caribou's goal of creating safer and more effective cell therapies.
- **Pivot Bio**
  - **Address:** 2910 7th St, Berkeley, CA 94710.[4]
  - **Scientific Mission:** Pivot Bio is dedicated to creating more sustainable and productive agriculture by replacing synthetic nitrogen fertilizer with engineered nitrogen-fixing microbes.[4] The company uses computational protein and genome design to optimize the metabolic pathways within these microbes, enabling them to produce nitrogen for crops like corn and wheat directly in the field.[1]
  - **Strategic Fit Analysis: Tier 1.** The core of Pivot Bio's technology is the sophisticated re-engineering of microbial enzymes and regulatory networks. This work is heavily

reliant on advanced protein engineering to enhance enzyme efficiency, stability, and function within the complex environment of the plant root microbiome. Deep experience in expressing and purifying large, multi-subunit enzyme complexes and structurally characterizing enzymatic cycles is highly relevant. The explicit mention of "computational protein/genome design" aligns perfectly with a background in developing and applying computational workflows to biological problems.[4]

- **Acrigen Biosciences**
  - **Address:** 626 Bancroft Way, Berkeley, CA 94702.[13]
  - **Scientific Mission:** Acrigen Biosciences is developing a new generation of high-precision gene editing systems designed to maximize safety and efficacy for human therapeutics.[6] Their proprietary technology utilizes novel CRISPR-Cas gene editors (from their αCas and μCas families) coupled with engineered anti-CRISPR proteins (ErAcrs) that act as selective inhibitors to eliminate off-target editing.[6]
  - **Strategic Fit Analysis: Tier 1.** This company represents a pure-play protein engineering opportunity. Its entire value proposition rests on the discovery, engineering, and detailed characterization of novel protein-based tools. The central challenges involve expressing, purifying, and validating the function and structure of new Cas enzymes and anti-CRISPR inhibitors, which are often difficult targets. A background in tackling "impossible" proteins and solving their structures is an exact match for the core R&D activities at Acrigen.
- **Valitor**
  - **Address:** Berkeley, CA.[5]
  - **Scientific Mission:** Valitor is engineering a new class of protein therapeutics based on its Multivalent Polymer (MVP) technology platform, with an initial focus on ophthalmic medicines.[14] The platform uses proprietary multivalent biopolymers that can be loaded with multiple copies of bioactive molecules, allowing for independent control over drug attributes like potency, tissue localization, and therapeutic durability.[14]
  - **Strategic Fit Analysis: Tier 1.** This is a protein design and engineering company at its core. The MVP platform involves the rational assembly of novel, large-scale macromolecular entities from interchangeable biopolymer and protein components. This work requires deep expertise in protein chemistry, bioconjugation, and the advanced biophysical characterization of large, complex biologics. The challenges of ensuring proper folding, stability, and function of these engineered constructs are central to the company's mission and align directly with a strong background in protein science.

B. Therapeutics and Drug Discovery Platforms

This group includes Berkeley-based companies that are leveraging innovative platforms—from AI and machine learning to novel biological systems—to discover and develop new medicines. These roles often require a blend of deep domain expertise and cross-functional collaboration.

- **Actym Therapeutics**
  - **Address:** Berkeley, CA.[5]
  - **Scientific Mission:** Actym is developing a novel microbial-based immunotherapy platform called STACT™ (*S. Typhimurium* Anti-Cancer Therapy).[16] This technology uses a precisely engineered bacterial vehicle to be safely administered systemically, home to tumors, and deliver multiple therapeutic payloads directly to the disease site, thereby amplifying the therapeutic effect locally while avoiding systemic toxicity.[5]
  - **Strategic Fit Analysis: Tier 2.** While the core platform is microbial, the efficacy of the system depends critically on the "therapeutic payloads," which are often functional proteins such as cytokines, antibodies, or other immunomodulators. A key R&D challenge is the successful expression, folding, stability, and secretion of these proteins by the bacterial vehicle within the tumor microenvironment. Expertise in protein expression and purification would be highly valuable for developing, testing, and optimizing these payloads.
- **Kimia Therapeutics**
  - **Address:** Berkeley, CA.[5]
  - **Scientific Mission:** Kimia Therapeutics aims to transform drug discovery by generating a "chemical atlas for treating human disease".[17] Their ATLAS platform merges active machine learning with automated chemical synthesis and high-throughput biological screening to rapidly map the relationship between chemical structure and protein function at single-atom resolution.[17]
  - **Strategic Fit Analysis: Tier 2.** This opportunity would be heavily computational and analytical. The company's iterative design-build-test-learn cycle is a direct parallel to the professional summary's description of combining computational workflows with experimental validation. While the output is often a small molecule, the platform generates massive proteomic and biological datasets that require sophisticated bioinformatic and structural analysis to guide the next round of chemical design. Expertise in protein-ligand interactions and computational structural biology would be a strong asset.
- **Prellis Biologics**
  - **Address:** Berkeley, CA.[5]
  - **Scientific Mission:** Prellis is revolutionizing therapeutic antibody discovery through its Externalized Human Immune System (EXIS™) platform.[19] This technology uses advanced two-photon laser bioprinting to create 3D lymph node organoids that replicate the human immune response *in vitro*, enabling the rapid discovery of a diverse library of fully human antibodies, which is then refined using integrated

machine learning.[20]
    - **Strategic Fit Analysis: Tier 1/2.** This is a strong fit. The EXIS™ platform is designed to produce and screen a vast array of human antibodies. This process requires a robust downstream protein science pipeline to express, purify, and rigorously characterize the most promising antibody candidates. Advanced structural and biophysical skills would be critical for validating hits, understanding the atomic basis of antigen-antibody interactions through crystallography, and guiding the engineering of variants with enhanced affinity, stability, or developability.
- **ResVita Bio**
    - **Address:** 2625 Durant Avenue, Berkeley, CA 94720.[21]
    - **Scientific Mission:** Co-founded by synthetic biology pioneer Jay Keasling, ResVita Bio is developing a platform of engineered skin probiotics to treat chronic skin diseases.[8] The technology uses synthetic biology and metabolic engineering to program harmless skin bacteria to continuously produce and deliver therapeutic proteins directly to affected areas, offering a novel approach for conditions like Netherton Syndrome and atopic dermatitis.[21]
    - **Strategic Fit Analysis: Tier 1.** This company's technology is centered on the challenge of *in vivo* protein production and delivery. Key scientific hurdles involve the design and engineering of therapeutic proteins (such as LEKTI fragments for Netherton Syndrome [24]) that are stable and highly expressed by the probiotic chassis. The purification and characterization of these proteins for analytical and preclinical studies are paramount. The company's stated use of "ML-guided Protein Design" creates a direct link to a background in computational protein science.[23]
- **Additional Berkeley Startups:** The local ecosystem is populated with a dynamic array of early-stage companies, many with strong ties to UC Berkeley, creating numerous opportunities in cutting-edge science.[5]
    - **Addition Therapeutics:** Focuses on developing RNA-only therapeutics using their PRINT™ platform for precise, RNA-mediated insertion of transgenes into the genome.[27] (Tier 2 - While RNA-centric, the machinery enabling this process is protein-based and requires expert characterization).
    - **Amber Bio:** Pioneering a first-of-its-kind RNA writing platform capable of multi-kilobase edits to address diverse genetic mutations with a single product.[28] (Tier 2 - Similar to Addition, the platform relies on complex protein machinery that must be engineered and understood).
    - **Glyphic Biotechnologies:** Developing a revolutionary next-generation protein sequencing platform to analyze the human proteome at single-molecule resolution.[29] (Tier 1 - A tools company where deep expertise in protein chemistry, bioconjugation, and surface chemistry would be paramount for platform development [32]).
    - **Indee Labs:** Developed the Hydropore™ system, which uses microfluidic vortex shedding for rapid, non-viral intracellular delivery of cargo, including gene-editing ribonucleoprotein (RNP) complexes.[33] (Tier 2 - Focus is on the delivery device, but the cargo is often complex protein machinery that requires expert formulation and

characterization).
    - **Nanotein:** Specializes in developing soluble, protein-based activators (the NanoSpark™ platform) that improve the manufacturing process for cell therapies like CAR-T by promoting the growth and potency of immune cells.[35] (Tier 1 - The core product is a functional, engineered protein reagent, making protein science central to their R&D and manufacturing).
    - **Ray Therapeutics:** Developing optogenetic gene therapies for vision restoration by using AAV to deliver bioengineered light-sensitive proteins to retinal cells.[38] (Tier 1 - The core therapeutic agent is an engineered protein, making protein design, engineering, and characterization a central activity).
    - **Regel Therapeutics:** Creating a new class of precision genetic medicine, "Targeted EpiEditing," which uses a deactivated CRISPR-Cas fused to an epigenetic modulator to correct gene expression without altering the genome.[41] (Tier 1 - The therapeutic itself is a complex, multi-domain fusion protein that must be designed, produced, and validated, a classic protein engineering challenge).
    - **Sampling Human:** Applying synthetic biology and genetic engineering to develop novel methods for single-cell measurement and the creation of single-cell biomarkers.[42] (Tier 2 - The tools and reporters used in synthetic biology are often protein-based, requiring engineering and characterization).

C. Major Research Institutes and Academic Centers

These large-scale organizations provide stable, well-resourced environments for research and development. They offer roles ranging from industry-style process development to fundamental academic research, often with access to state-of-the-art facilities.

- **Bayer — Berkeley Biotech Campus**
    - **Address:** 800 Dwight Way, Berkeley, CA 94710.[4]
    - **Scientific Mission:** The 46-acre Berkeley campus is a global hub for Bayer's biopharmaceutical development and manufacturing, with a focus on biologics, monoclonal antibodies, and a growing portfolio in cell and gene therapies.[43] The site emphasizes advanced process and analytical development to bring new therapies from the lab to patients at scale, including a new Cell Therapy Launch Facility.[43]
    - **Strategic Fit Analysis: Tier 2.** This is a large pharmaceutical environment focused on the development and manufacturing phases rather than early discovery. A background including GMP training is a significant asset here. Roles in Analytical Development, Protein Characterization, and Process Sciences would be a strong fit. Deep biochemical and biophysical knowledge would be applied to ensure the quality, consistency, and manufacturability of therapeutic products, tackling a different but equally complex set of molecular challenges compared to discovery research.

- **Lawrence Berkeley National Laboratory (LBNL)**
  - **Address:** 1 Cyclotron Rd, Berkeley, CA 94720.[4]
  - **Scientific Mission:** As a U.S. Department of Energy national laboratory, LBNL conducts a wide range of unclassified scientific research. Of particular relevance are the **Advanced Light Source (ALS)**, a premier user facility for synchrotron-based research including macromolecular crystallography [4], and the **Molecular Biophysics and Integrated Bioimaging (MBIB)** division, which investigates the structure and function of complex biological systems.[9]
  - **Strategic Fit Analysis: Tier 1.** LBNL is a world-class destination for a structural biologist. A staff scientist position at an ALS beamline, such as the SIBYLS beamline which integrates SAXS and macromolecular crystallography [10], would leverage expert-level X-ray crystallography skills to support and collaborate with a global community of academic and industrial researchers. Alternatively, a research scientist position within an MBIB program, such as the one studying the structural cell biology of DNA repair machines [10], would represent a direct continuation of high-impact, academic-style research in a national lab setting.
- **Innovative Genomics Institute (IGI)**
  - **Address:** 2151 Berkeley Way, Berkeley, CA 94720.[4]
  - **Scientific Mission:** Founded by Jennifer Doudna, the IGI is a non-profit research partnership between UC Berkeley and UCSF dedicated to advancing the understanding and application of genome engineering.[4] The institute's mission is to bridge fundamental research with translational applications to solve major challenges in human health, agriculture, and climate.
  - **Strategic Fit Analysis: Tier 1.** The IGI offers an environment similar to that of the leading CRISPR startups but in a non-profit, academic-adjacent context. The institute is at the absolute forefront of discovering, characterizing, and engineering novel CRISPR systems and delivery mechanisms. A role here would involve applying the full spectrum of protein engineering, structural biology, and computational skills to the core scientific challenges of creating the next generation of gene editing tools.

IV. The Emeryville Corridor: A Dense Cluster of Therapeutic Innovation and Platform Technologies

The city of Emeryville, situated directly adjacent to Berkeley, functions as a dense, commercially-oriented biotech corridor. This hub is characterized by companies focused on scaling biology through high-throughput platforms, developing advanced therapeutic modalities, and providing specialized services to the broader industry. The environment in Emeryville is often more milestone-driven and commercially focused than the R&D-centric

atmosphere of many Berkeley startups, offering a diverse range of opportunities from growth-stage platforms to global contract development and manufacturing organizations (CDMOs).

A. Synthetic Biology and High-Throughput Platforms

This group of companies embodies the engineering principles of synthetic biology, applying automation, computation, and massive scale to the design and production of biological systems.

- **Ginkgo Bioworks — Foundry West**
  - **Address:** 1440 Stanford Ave, Emeryville, CA 94608.[4]
  - **Scientific Mission:** Ginkgo Bioworks operates a highly automated, centralized "foundry" for organism engineering. Utilizing a combination of robotics, software, and high-throughput screening, Ginkgo's platform executes on a massive scale the design-build-test-learn cycle of synthetic biology for a wide range of partners and applications, from pharmaceuticals to industrial chemicals.[4]
  - **Strategic Fit Analysis: Tier 1.** This is a premier high-throughput protein and strain engineering environment. Deep expertise in optimizing protein expression across various systems and developing robust computational workflows for data analysis is extremely valuable. A role at Ginkgo would likely involve developing and scaling reliable protein expression and characterization pipelines to support a diverse portfolio of projects, representing a perfect application for a blend of advanced wet-lab and computational skills.
- **Ansa Biotechnologies**
  - **Address:** 1198 65th St, Suite 250, Emeryville, CA 94608.[4]
  - **Scientific Mission:** Ansa is developing a revolutionary enzymatic DNA synthesis technology aimed at writing long, complex strands of DNA with unprecedented speed and accuracy.[4] Their approach is designed to overcome the limitations of traditional chemical synthesis methods and is powered by the extensive engineering of novel DNA polymerase enzymes.
  - **Strategic Fit Analysis: Tier 1.** The core of Ansa's technology is a highly engineered protein. The company's success is directly dependent on its ability to apply protein engineering to improve the speed, accuracy, processivity, and substrate scope of its proprietary enzymes. A background that includes capturing enzymatic cycles through structural biology and engineering gain-of-function variants is an ideal and direct match for the central R&D challenges at Ansa.
- **Joint BioEnergy Institute (JBEI) & Advanced Biofuels & Bioproducts Process Dev. Unit (ABPDU)**
  - **Address:** 5885 Hollis St, Emeryville, CA 94608.[4]

    - **Scientific Mission:** JBEI is a DOE Bioenergy Research Center dedicated to developing sustainable biofuels and bioproducts from plant biomass through advanced synthetic biology.[4] It houses a strong structural biology group focused on understanding and optimizing enzymes for this purpose.[7] The co-located ABPDU is a scale-up facility that collaborates with industry and academia to bridge the gap from bench-scale research to commercially relevant production.[4]
    - **Strategic Fit Analysis: Tier 1/2.** JBEI offers a national lab environment focused on enzyme discovery, structural characterization, and engineering for biomass conversion, making its structural biology group a direct fit.[7] ABPDU provides opportunities in process development, including downstream purification and scale-up, which aligns well with experience in sophisticated protein purification strategies and GMP training.
- **Prolific Machines**
    - **Address:** Emeryville, CA.
    - **Scientific Mission:** Prolific Machines is developing a next-generation "photomolecular platform" that uses light and advanced optogenetic tools for precise, dynamic, and closed-loop control over protein production in cells.[45] Their goal is to solve the production challenges for difficult-to-express proteins, thereby improving yield, quality, and speed to clinic.[45]
    - **Strategic Fit Analysis: Tier 1.** This company is directly addressing the challenge of expressing "impossible" proteins. Their novel technology, which involves light-inducible transcriptional and secretory control, represents a new frontier in expression system optimization. Deep expertise across multiple expression systems (E. coli, insect, mammalian) and a track record of success with challenging targets would be invaluable for developing, validating, and applying their platform.

B. Antibody and Biologics Discovery

Emeryville is also a hub for companies developing and providing technologies for the discovery and engineering of antibody-based therapeutics and other complex biologics.

- **Eureka Therapeutics**
    - **Address:** 5858 Horton St, Suite 370, Emeryville, CA 94608.[4]
    - **Scientific Mission:** Eureka is a clinical-stage company developing novel T-cell therapies for solid tumors using its proprietary ARTEMIS® antibody and T-cell receptor platforms.[4] The company places a clear emphasis on structural biology to inform the design of its TCR-mimic antibodies, which can recognize intracellular cancer targets presented on the cell surface.[46]
    - **Strategic Fit Analysis: Tier 1.** The company's explicit focus on the structural biology

of its therapeutic platform, evidenced by publications on the crystal structure of its TCR-mimic molecules [46], makes this an excellent fit. Advanced skills in X-ray crystallography and protein engineering would be applied directly to the design, validation, and optimization of novel antibody and T-cell receptor constructs, a core component of their R&D strategy.

- **OmniAb**
  - **Address:** Emeryville, CA.[5]
  - **Scientific Mission:** OmniAb provides the biopharmaceutical industry with access to a cutting-edge suite of transgenic animal platforms and high-throughput screening technologies for the discovery of next-generation therapeutic antibodies.[47] Their platforms, including OmniRat®, OmniMouse®, and OmniChicken®, are engineered to generate fully human antibodies, and they integrate AI and machine learning tools (OmniDeep™) to optimize the discovery process.[48]
  - **Strategic Fit Analysis: Tier 2.** As a technology and platform provider, OmniAb's internal R&D is focused on creating and validating new antibody discovery systems. This involves significant protein engineering to create novel transgenic animals and enable new antibody formats, such as the humanized single-domain antibodies from the OmniChicken® platform.[47] Skills in protein engineering and characterization would be applied to platform development rather than a specific therapeutic pipeline.
- **Abalone Bio**
  - **Address:** Emeryville, CA.[18]
  - **Scientific Mission:** Abalone Bio is tackling one of the most challenging target classes in drug discovery, G-protein coupled receptors (GPCRs), by developing function-activating antibodies.[49] Their proprietary Functional Antibody Selection Technology (FAST) platform measures the functional activity of millions of antibodies in parallel, generating unique datasets that power an AI-guided approach to designing these difficult-to-create drugs.[49]
  - **Strategic Fit Analysis: Tier 1.** This company is focused on a classic "impossible" protein problem. Their function-first screening approach provides a unique advantage in a field often limited by simple binding assays. Expertise in the structural biology of membrane proteins and computational analysis would be a powerful combination to help Abalone understand the mechanism of action of their hits at an atomic level and to rationally engineer improved variants.
- **Catalent (SMARTag® Technology)**
  - **Address:** 5959 Horton St, Suite 400, Emeryville, CA 94608.[50]
  - **Scientific Mission:** Catalent's Emeryville site serves as a center of excellence for its proprietary SMARTag® technology, a precision protein-chemical engineering platform for the development and manufacturing of advanced antibody-drug conjugates (ADCs).[50] This technology enables site-specific conjugation of payloads to antibodies, resulting in more homogeneous and potentially more effective ADC products.
  - **Strategic Fit Analysis: Tier 1/2.** This is a highly specialized protein engineering role

focused on the intersection of protein biochemistry and organic chemistry. The work involves the precise modification of antibodies and the rigorous analytical characterization of the resulting conjugates. A deep understanding of protein structure and chemistry, along with experience in sophisticated analytical and biophysical methods, would be critical. This is a development-focused role that offers a direct application of protein science to a leading therapeutic modality.

C. Therapeutic Modalities and Drug Development

This group includes companies in Emeryville that are advancing their own pipelines of novel therapeutics, often built upon a sophisticated underlying technology platform.

- **Gritstone bio**
  - **Address:** 5959 Horton St, Suite 300, Emeryville, CA 94608.[4]
  - **Scientific Mission:** Gritstone is a clinical-stage company developing personalized cancer immunotherapies and infectious disease vaccines.[4] Their core platform, GRITSTONE EDGE™, uses artificial intelligence and machine learning to analyze tumor genomics and identify tumor-specific neoantigens, which are then used to create patient-specific vaccines designed to elicit a powerful T-cell response.
  - **Strategic Fit Analysis: Tier 2.** While the discovery engine is heavily computational, the final product is a vaccine or therapy that requires robust manufacturing and characterization. This includes the production of peptides and proteins that serve as the immunogens. Roles within the CMC (Chemistry, Manufacturing, and Controls) or Analytical Development groups would leverage skills in protein purification, biophysical characterization, and analytical methods to ensure product quality and consistency.
- **Dynavax Technologies**
  - **Address:** 2100 Powell St, Suite 720, Emeryville, CA 94608.[4]
  - **Scientific Mission:** Dynavax is a commercial-stage biopharmaceutical company focused on developing and commercializing novel vaccines.[4] Their core technology is a proprietary Toll-like Receptor 9 (TLR9) agonist adjuvant, which is used to enhance the immune response to vaccine antigens.
  - **Strategic Fit Analysis: Tier 3.** The primary focus of Dynavax is on immunology, clinical development, and manufacturing related to their adjuvant technology. While protein antigens are a key component of the vaccines they enable, the company's core R&D is centered on the adjuvant itself. Roles would most likely be in immunology or CMC, where protein science skills would be a supportive, rather than central, competency.
- **4D Molecular Therapeutics (4DMT)**
  - **Address:** Emeryville, CA.[1]

- **Scientific Mission:** 4DMT is a clinical-stage gene therapy company that designs, engineers, and evolves novel adeno-associated virus (AAV) capsids for targeted and efficient gene delivery. Using a proprietary platform called Therapeutic Vector Evolution, they create customized AAV vectors optimized for delivery to specific tissues such as the eye, lung, and heart, aiming to unlock the full potential of gene therapy.
- **Strategic Fit Analysis: Tier 1.** The engineering of AAV capsids is a quintessential protein engineering challenge. The goal is to create protein variants (the viral shell) with entirely new biological properties, such as altered tissue tropism, enhanced potency, and the ability to evade the immune system. This work relies heavily on directed evolution, rational design guided by structural biology (often cryo-EM), and computational modeling. The entire skillset of an advanced protein biochemist is directly and critically applicable to 4DMT's core mission.

V. Oakland, Albany, and Alameda: Expanding Frontiers in Biomanufacturing and Novel Modalities

The cities of Oakland, Albany, and Alameda form an arc around the core Berkeley-Emeryville hub, each contributing a specialized and complementary role to the regional ecosystem. Alameda is rapidly emerging as a center for cell and gene therapy innovation. Albany hosts a major government research institution focused on applied science. Oakland provides a crucial bridge to clinical and translational research.

A. Oakland: Clinical Translation and Urban Biotech

- **UCSF Benioff Children's Hospital Oakland — CHORI**
  - **Address:** 5700 Martin Luther King Jr Way, Oakland, CA 94609.[4]
  - **Scientific Mission:** The Children's Hospital Oakland Research Institute (CHORI) is the research arm of the hospital, with a mission to conduct translational research focused on preventing and treating pediatric diseases.[4] The institute houses several core facilities, including proteomics and genomics, that support a wide range of basic and clinical research projects.
  - **Strategic Fit Analysis: Tier 2/3.** This is an academic research environment where the focus is on clinical application. A role at CHORI would likely be as a staff scientist within a research group or as a manager or senior scientist in a core facility. A position in the proteomics core, for instance, would directly leverage expertise in

protein analysis, mass spectrometry, and biophysical characterization to support diverse research projects across the institute.

- **Phyllom BioProducts Corporation**
  - **Address:** Oakland, CA.[52]
  - **Scientific Mission:** Phyllom BioProducts develops and commercializes safe and high-performing microbial biopesticides as alternatives to chemical insecticides for the agricultural and landscape markets.[52] Their products are based on proprietary strains of *Bacillus thuringiensis* (Bt) and their associated insecticidal crystal (Cry) proteins.
  - **Strategic Fit Analysis: Tier 2.** The company's technical leadership team includes expertise in "Cry protein engineering," indicating that a core R&D activity is the optimization of these insecticidal proteins.[52] This is a direct application of protein engineering to improve the efficacy, stability, and target spectrum of the Bt toxin proteins. Advanced skills in protein expression, purification, and functional characterization would be highly relevant to a role focused on discovering and improving these proteins.

B. Albany: Government Research and Applied Science

- **USDA-ARS Western Regional Research Center (WRRC)**
  - **Address:** 800 Buchanan St, Albany, CA 94710.[4]
  - **Scientific Mission:** The WRRC is a major research center for the Agricultural Research Service (ARS) of the U.S. Department of Agriculture. Its mission is to conduct innovative research to enhance the economic viability and environmental sustainability of American agriculture. The center has research units focused on areas including food processing, crop improvement, and bioproducts, with specific groups working on protein chemistry, enzyme technology, and the development of novel computational and analytical methods.[4]
  - **Strategic Fit Analysis: Tier 1/2.** This opportunity represents a stable, long-term government research career path, similar to one at LBNL but with an agricultural and food science focus. A permanent Research Scientist position within a protein chemistry or enzymology group would be an excellent fit, applying the full range of structural, biochemical, and computational skills to fundamental problems in areas like food quality, nutrition, and the conversion of agricultural materials into value-added products.

C. Alameda: Cell/Gene Therapy and Platform Technologies

Alameda is quickly becoming a significant hub for companies developing next-generation therapeutic modalities, particularly in the fields of gene editing, cell therapy, and RNA medicines.

- **Scribe Therapeutics**
  - **Address:** 1150 Marina Village Pkwy, Alameda, CA 94501.[4]
  - **Scientific Mission:** Co-founded by Jennifer Doudna, Scribe Therapeutics is focused on engineering a new generation of CRISPR-based molecules for *in vivo* genetic therapies.[4] Their mission is to create "therapeutics that can treat the underlying cause of disease" by developing bespoke CRISPR enzymes and delivery systems that are highly active, specific, and optimized for therapeutic applications.
  - **Strategic Fit Analysis: Tier 1.** Along with Caribou and Acrigen, Scribe is a premier protein engineering company in the East Bay. Their entire platform is built upon the molecular engineering of better CRISPR enzymes. The combined expertise in structural biology to understand enzyme mechanism, protein engineering to create novel functions, and computational analysis to guide design is a perfect trifecta for the core scientific challenges at Scribe.
- **Exelixis**
  - **Address:** 1851 Harbor Bay Pkwy, Alameda, CA 94502.[4]
  - **Scientific Mission:** Exelixis is a commercial-stage oncology company dedicated to the discovery, development, and commercialization of new medicines for cancer.[54] While known for its success in small molecule drug discovery, the company has a comprehensive R&D approach that includes an integrated team for discovering and developing biotherapeutics.[55]
  - **Strategic Fit Analysis: Tier 2.** As a large, established company, Exelixis has dedicated groups for protein and antibody production to support its drug discovery pipeline.[55] A role in their biologics group would involve expressing, purifying, and characterizing protein targets for screening campaigns and producing therapeutic antibody candidates for preclinical evaluation. This is a solid fit for applying core protein science skills within a mature drug discovery organization.
- **AllCells (Discovery Life Sciences)**
  - **Address:** 1301 Harbor Bay Pkwy, Suite 200, Alameda, CA 94502.[4]
  - **Scientific Mission:** AllCells is a leading provider of high-quality primary human cells, including blood and bone marrow-derived products.[4] The company serves as a critical supplier of starting materials for academic, biotech, and pharmaceutical clients, particularly those working in the fields of cell and gene therapy.
  - **Strategic Fit Analysis: Tier 3.** This is a life sciences services and reagents company. While integral to the cell therapy ecosystem, their core operations are focused on cell isolation, characterization, and banking, rather than molecular engineering. A deep scientific background is valuable for quality control and product management, but the day-to-day work would be less directly aligned with a core skillset in protein

engineering and structural biology.

- **Additional Alameda Companies:** The city hosts a growing cluster of innovative startups and clinical-stage companies.[5]
  - **Acepodia:** Developing off-the-shelf cell therapies using its proprietary Antibody-Cell Conjugation (ACC™) technology, which uses biorthogonal chemistry to chemically link tumor-targeting antibodies to immune cells without genetic engineering.[5] (Tier 1 - Involves advanced protein chemistry, bioconjugation, and characterization of the resulting cell-antibody conjugates).
  - **Adanate:** A clinical-stage company developing antibody therapeutics that target inhibitory receptors of the LILRB family to enhance both innate and adaptive immunity against cancer.[57] (Tier 2 - A classic immuno-oncology antibody discovery and engineering opportunity).
  - **Apertor Pharmaceuticals:** Creating novel "molecular glues," which are heterobifunctional drugs designed to selectively disrupt disease-causing protein-protein interactions via proximity induction.[61] (Tier 2 - A fascinating modality at the intersection of small molecules and protein biology where structural and biophysical insights into ternary complex formation would be critical).
  - **CellFE:** Developed a microfluidic-based mechanoporation platform for the high-efficiency, non-viral intracellular delivery of gene editing cargo into cells for therapeutic applications.[5] (Tier 2 - A technology platform company where expertise in handling and characterizing the protein-based cargo (e.g., RNPs) is essential).
  - **GeneFab:** A Contract Research, Development, and Manufacturing Organization (CRDMO) that partners with innovators to design and manufacture cell and gene therapies.[66] (Tier 3 - Roles would primarily be in process development, manufacturing, and quality control rather than discovery research).
  - **Ohmic Biosciences:** An early-stage company using protein engineering and synthetic biology to design novel disease resistance genes for agricultural crops.[67] (Tier 1 - A direct protein engineering opportunity focused on agricultural biotechnology).
  - **Santa Ana Bio:** A precision immunology company that leverages multi-omics platforms and antibody engineering to develop targeted therapies for autoimmune and inflammatory diseases.[5] (Tier 2 - An antibody engineering-focused role within the context of immunology).

VI. Extended East Bay Landscape: Notable Opportunities in Adjacent Hubs

While the core focus remains on the Berkeley-to-Alameda corridor, several highly relevant

companies are located in adjacent East Bay cities that are well within a reasonable commute. These organizations represent key components of the broader regional ecosystem, particularly in the areas of life science tools and large-scale manufacturing.

- **Hayward**
  - **Eikon Therapeutics:** Founded by Nobel laureate Eric Betzig, Eikon has developed a platform that uses super-resolution microscopy for live-cell single-molecule imaging to track protein movement and understand drug mechanisms in real-time.[4] This technology provides unprecedented insight into protein dynamics within their native cellular context. The platform's utility is critically dependent on the ability to fluorescently tag proteins without disrupting their function, a significant protein engineering and biochemistry challenge.
  - **Lonza:** A major global CDMO, Lonza's Hayward facility provides process development and cGMP manufacturing services for biologics, including monoclonal antibodies and cell and gene therapies.[4] This site offers roles in process sciences, analytical development, and manufacturing for a scientist with GMP experience.
- **Pleasanton**
  - **10x Genomics:** A leader in the life sciences tools market, 10x Genomics develops instruments and reagents for single-cell and spatial transcriptomics, genomics, and proteomics.[4] While primarily a genomics company, their expansion into spatial proteomics (e.g., Xenium platform) requires deep expertise in protein biochemistry, antibody-oligonucleotide conjugation, and the analytical methods needed for reagent development and quality control.
  - **Unchained Labs:** This company develops and markets innovative tools for biologics characterization, aiming to solve problems that traditional analytical instruments do not.[4] Their portfolio includes instruments for measuring protein stability (DSF, DLS), aggregation, and other critical quality attributes. A role here, likely in applications science or R&D, would be a **Tier 1** fit, as it would involve using an expert-level understanding of protein biophysics to drive instrument design and develop new applications for customers.
- **Richmond & Hercules**
  - **ProMab:** A CRO/CDMO providing a range of services including antibody discovery, protein production, and CAR-T/CAR-NK development.[5]
  - **Bio-Rad Laboratories:** A major life sciences tools and diagnostics company headquartered in Hercules. Bio-Rad develops a vast array of instruments and reagents for protein analysis, including chromatography systems, electrophoresis equipment, and immunoassays.[4] Roles in R&D for their protein purification or analysis divisions would be a strong fit.

VII. Strategic Synthesis and Professional Trajectory

Analysis

The comprehensive analysis of the East Bay biotechnology landscape reveals a rich and diverse set of opportunities that are exceptionally well-aligned with a high-caliber protein science profile. This concluding section synthesizes these findings into a strategic framework to guide professional planning and engagement.

A. Tiers of Opportunity: Mapping Expertise to the Market

The identified organizations can be categorized into distinct tiers based on the directness of the scientific fit and the centrality of protein science to their core mission.

- **Tier 1: Core Protein Science Roles:** These are organizations where expertise in protein engineering, structural biology, and computational protein science is fundamental to the core technology and primary value proposition. The work is R&D-intensive, focused on fundamental problem-solving, and represents a direct application of an advanced PhD and postdoctoral skillset.
    - **Examples:** Scribe Therapeutics, Caribou Biosciences, Ansa Biotechnologies, 4D Molecular Therapeutics, Acrigen Biosciences, Valitor, Pivot Bio, Ray Therapeutics, ResVita Bio, Prolific Machines, Unchained Labs, Lawrence Berkeley National Lab (ALS/MBIB).
    - **Nature of Work:** Designing novel enzymes, engineering viral capsids, discovering and characterizing new gene editors, developing next-generation biophysical tools, or conducting fundamental structural biology research at a national laboratory.
- **Tier 2: Applied Protein Science Roles:** These are companies where advanced protein science skills are critical for the development of a therapeutic product or platform but are often applied within a broader, cross-functional drug discovery and development context.
    - **Examples:** Exelixis, Gritstone bio, Eureka Therapeutics, Prellis Biologics, Abalone Bio, Kimia Therapeutics, Bayer, Eikon Therapeutics, Actym Therapeutics.
    - **Nature of Work:** Supporting a drug discovery pipeline through target validation and therapeutic candidate production, leading analytical development and protein characterization for CMC, or applying structural and biophysical methods to solve project-specific challenges in immuno-oncology or other therapeutic areas.
- **Tier 3: Adjacent and Supporting Roles:** These are organizations where a strong scientific background is highly valuable, but the day-to-day responsibilities may not involve direct bench or computational work in protein science.
    - **Examples:** Dynavax Technologies, AllCells, GeneFab. Potential roles could also exist in venture capital, consulting, or business development firms that focus on the life

sciences.
    - **Nature of Work:** Technical specialist, project management, scientific liaison, quality control, or technical due diligence.

B. Key Scientific Trends and Future Directions

The East Bay ecosystem is not static; it is at the forefront of several major technological waves in biotechnology. A background combining structural, computational, and engineering skills is perfectly positioned to contribute to and lead in these emerging areas.

- **The AI/ML Revolution in Protein Design:** A significant number of local companies are explicitly integrating artificial intelligence and machine learning with high-throughput wet-lab data to design novel proteins *de novo* or optimize existing ones. Companies like Profluent, Kimia Therapeutics, and Abalone Bio are leading this charge, using generative models and active learning to navigate the vastness of protein sequence space.[17] A demonstrated ability to combine computational tools like AlphaFold with custom scripts and rigorous experimental validation (e.g., ITC, crystallography) is a highly sought-after skillset at the vanguard of this trend.
- **The Primacy of "Delivery":** A critical bottleneck for advanced therapies, including CRISPR, RNA medicines, and cell therapies, is the challenge of effective and safe delivery to the target tissue. The East Bay is a hotbed of innovation in this area. This is fundamentally a protein engineering problem, whether it involves engineering AAV capsids for better tissue tropism (4D Molecular Therapeutics), designing novel protein-based delivery vehicles (Scribe Therapeutics), or developing physical delivery methods for protein-based cargo (Indee Labs, CellFE).[1] Expertise in the structural and biophysical properties of these delivery systems is essential for their success.
- **The Evolution of Engineered Cell Therapies:** The region is pushing the boundaries of cell therapy beyond standard CAR-T. Innovations include creating allogeneic "off-the-shelf" therapies (Caribou Biosciences), targeting solid tumors with novel receptor architectures (Eureka Therapeutics), and arming immune cells with antibodies through chemical conjugation rather than genetic engineering (Acepodia).[1] The development and manufacturing of these complex living medicines rely on a sophisticated ecosystem of tools, including engineered protein-based reagents for cell activation and expansion (Nanotein).[36]

C. Actionable Recommendations for Professional Engagement

- **Networking Strategy:** Prioritize targeted informational interviews at Tier 1 companies to engage directly with scientists on their core technical challenges. Leverage institutional networks from Princeton, AstraZeneca, and Achaogen to identify key contacts. Actively participate in the local academic community by attending seminars at UC Berkeley's Department of Molecular & Cell Biology (MCB) and events hosted by QB3 and affiliated incubators like Bakar Labs.[1] These venues are primary meeting points for founders, principal investigators, and senior scientists from across the local ecosystem.
- **Resume and Narrative Customization:** The existing professional summary is exceptionally strong and well-suited to this market. For applications to Tier 1 "Platform" companies (e.g., Ansa, Ginkgo, Unchained Labs), emphasize the track record of tool-building, developing novel computational workflows, and optimizing complex systems. For Tier 1 "Therapeutic" companies (e.g., Scribe, 4DMT, Caribou), highlight the proven ability to solve "impossible" protein target challenges to drive a biological or therapeutic program forward, showcasing the direct link between molecular insights and functional outcomes.
- **Career Path Consideration:** The East Bay offers two distinct, high-potential career trajectories. The first is to join an early-stage, venture-backed Tier 1 startup as a pivotal scientist, contributing to the construction of a novel platform from the ground up in a high-growth, high-equity environment. The second is to join an established biologics organization (Bayer, Exelixis) or a premier national laboratory (LBNL, USDA-ARS) for a more stable role with significant resources, established infrastructure, and broad scientific impact. The choice between these paths depends on personal risk tolerance, long-term career ambitions, and preferred work environment. The strength of the candidate's profile makes both paths highly viable.

Works cited

1. About - QB3, accessed on September 18, 2025, https://qb3.org/about/
2. protein engineering - Faculty Expertise | Research UC Berkeley, accessed on September 18, 2025, https://vcresearch.berkeley.edu/faculty-expertise?kw=protein%20engineering
3. Systems & Synthetic Biology - UC Berkeley Bioengineering, accessed on September 18, 2025, https://bioeng.berkeley.edu/research/synbio
4. east_bay_biotech_v2_for_google_mymaps.csv
5. Bay Area & Northern CA Biotech Companies - Career Pages - BioPharmGuy, accessed on September 18, 2025, https://biopharmguy.com/links/career-by-location-northern-california.php
6. Acrigen Biosciences, accessed on September 18, 2025, https://www.acrigen.com/
7. Structural Biology - jbei.org, accessed on September 18, 2025, https://www.jbei.org/research/technology/structural-biology/
8. Resvita Biosciences | Intellectual Property & Industry Research Alliances, accessed on September 18, 2025, https://ipira.berkeley.edu/resvita-biosciences
9. Structural Biology - Biosciences Area - Lawrence Berkeley National Laboratory, accessed on September 18, 2025,

https://biosciences.lbl.gov/mbib/structural-biology/
10. MBIB Programs - Biosciences Area - Lawrence Berkeley National Laboratory, accessed on September 18, 2025, https://biosciences.lbl.gov/mbib/mbib-programs/
11. Biochemistry, Biophysics and Structural Biology - UC Berkeley MCB, accessed on September 18, 2025, https://mcb.berkeley.edu/faculty/bbs
12. Doctoral Program | Molecular and Cell Biology - UC Berkeley MCB, accessed on September 18, 2025, https://mcb.berkeley.edu/grad
13. Acrigen Biosciences - Berkeley Startup Cluster, accessed on September 18, 2025, https://berkeleystartupcluster.com/startup_business/acrigen-biosciences/
14. Valitor: Leadership | VLTR-557 | AMD, accessed on September 18, 2025, https://www.valitorbio.com/
15. Biotech Companies in Bay Area - Big4Bio, accessed on September 18, 2025, https://www.big4bio.com/resources/biotech-companies-in-bay-area
16. Actym Therapeutics | Bacterial Immunotherapy & Cancer Treatment ..., accessed on September 18, 2025, https://www.actymthera.com/
17. Kimia, accessed on September 18, 2025, https://www.kimiatx.com/
18. Antibody Companies - Career Pages - BioPharmGuy, accessed on September 18, 2025, https://biopharmguy.com/links/career-by-location-antibodies.php
19. Pioneering Antibody Therapeutics - About Prellis Biologics, accessed on September 18, 2025, https://prellisbio.com/about
20. Prellis Biologics: Antibody Discovery with AI & Immune Diversity, accessed on September 18, 2025, https://prellisbio.com/
21. ResVita Bio - Berkeley Startup Cluster, accessed on September 18, 2025, https://berkeleystartupcluster.com/startup_business/resvita-bio/
22. Resvita Bio 2025 Company Profile: Valuation, Funding & Investors | PitchBook, accessed on September 18, 2025, https://pitchbook.com/profiles/company/515754-46
23. ResVita Bio, accessed on September 18, 2025, https://www.resvitabio.com/
24. Skin probiotics to treat Netherton Syndrome - Award | SBIR, accessed on September 18, 2025, https://www.sbir.gov/awards/213244
25. Medical Therapeutics | Intellectual Property & Industry Research Alliances - IPIRA-Berkeley, accessed on September 18, 2025, https://ipira.berkeley.edu/entrepreneurs/startups-launched/medical-therapeutics
26. The Berkeley Startup Cluster maintains a list of innovation companies in Berkeley., accessed on September 18, 2025, https://berkeleystartupcluster.com/startups/
27. Addition Therapeutics, accessed on September 18, 2025, https://www.additiontx.com/
28. Amber Bio, accessed on September 18, 2025, https://www.amber.bio/
29. Glyphic Biotechnologies 2025 Company Profile: Valuation, Funding & Investors | PitchBook, accessed on September 18, 2025, https://pitchbook.com/profiles/company/462288-34
30. Glyphic Biotechnology - Master of Translational Medicine - UC Berkeley & UCSF, accessed on September 18, 2025, https://mtm.berkeley.edu/capstone/projects/glyphic-biotechnology/

31. Glyphic Biotechnologies - NIH SEED Office, accessed on September 18, 2025, https://seed.nih.gov/portfolio/nih-portfolio-company-showcase/glyphic-biotechnologies
32. Jobs at Glyphic Biotechnologies | Consider, accessed on September 18, 2025, https://consider.com/boards/co/glyphic-biotechnologies
33. Drug Discovery and Delivery Startups funded by Y Combinator (YC) in the San Francisco Bay Area 2025, accessed on September 18, 2025, https://www.ycombinator.com/companies/industry/drug-discovery-and-delivery/san-francisco-bay-area
34. Indee Labs, accessed on September 18, 2025, https://www.indeelabs.com/
35. Nanotein Technologies | The Pharmaletter, accessed on September 18, 2025, https://www.thepharmaletter.com/nanotein-technologies
36. Nanotein Technologies 2025 Company Profile: Valuation, Funding & Investors | PitchBook, accessed on September 18, 2025, https://pitchbook.com/profiles/company/470947-33
37. Nanotein: Next generation ex vivo T Cell activation and expansion, accessed on September 18, 2025, https://nanoteintech.com/
38. Ray Therapeutics 2025 Company Profile: Valuation, Funding & Investors | PitchBook, accessed on September 18, 2025, https://pitchbook.com/profiles/company/489677-59
39. Ray Therapeutics, accessed on September 18, 2025, https://deerfield.com/what-we-do/investment/portfolio/companies/ray-therapeutics
40. Ray Therapeutics Raises $100 Million for Gene Therapies to Treat Eye Disease, accessed on September 18, 2025, https://globalgenes.org/raredaily/ray-therapeutics-raises-100-million-for-gene-therapies-to-treat-eye-disease/
41. Regel Therapeutics, accessed on September 18, 2025, https://www.regeltherapeutics.com/
42. Sampling Human Homepage - Sampling Human, accessed on September 18, 2025, https://www.samplinghuman.com/
43. Biotech@Berkeley | Bayer United States, accessed on September 18, 2025, https://www.bayer.com/en/us/biotech-at-berkeley
44. Bio-Tech Connect company info - UC Berkeley Bioengineering, accessed on September 18, 2025, https://bioeng.berkeley.edu/news-events/btc-company-info
45. Prolific Machines, accessed on September 18, 2025, https://www.prolific-machines.com/
46. Eureka Therapeutics, accessed on September 18, 2025, https://www.eurekatherapeutics.com/
47. OmniAb: Therapeutic Antibody Discovery Company, accessed on September 18, 2025, https://www.omniab.com/
48. Transgenic Antibody Discovery Technology Platform - OmniAb, accessed on September 18, 2025, https://www.omniab.com/technology/
49. Abalone Bio | Home, accessed on September 18, 2025, https://www.abalonebio.com/

50. Emeryville, USA - Catalent, accessed on September 18, 2025, https://www.catalent.com/our-locations/north-america/emeryville-usa/
51. Emeryville, USA - Catalent Biologics, accessed on September 18, 2025, https://biologics.catalent.com/our-locations/north-america/emeryville-usa/
52. Phyllom BioProducts Corporation | Oakland, CA, US Startup - Gust, accessed on September 18, 2025, https://gust.com/companies/phyllom_bioproducts_corporation
53. Phyllom BioProducts | Protecting Forests, Farms & Landscapes, accessed on September 18, 2025, https://phyllombioproducts.com/
54. Shaping the Future of Oncology for Patients I Exelixis, accessed on September 18, 2025, https://www.exelixis.com/
55. Drug Discovery Careers at Exelixis, accessed on September 18, 2025, https://www.exelixis.com/careers/drug-discovery/
56. Senior Scientist Protein Engineering Jobs in Oakland, CA - ZipRecruiter, accessed on September 18, 2025, https://www.ziprecruiter.com/Jobs/Senior-Scientist-Protein-Engineering/-in-Oakland,CA
57. Biotech Companies in the Bay Area & Northern California - BioPharmGuy, accessed on September 18, 2025, https://biopharmguy.com/links/company-by-location-northern-california.php
58. Acepodia® | POWERFUL, ACCESSIBLE CELL THERAPIES FOR ..., accessed on September 18, 2025, https://www.acepodia.com/
59. Adanate 2025 Company Profile: Valuation, Funding & Investors | PitchBook, accessed on September 18, 2025, https://pitchbook.com/profiles/company/267955-57
60. ADA-011 - Drug Targets, Indications, Patents - Patsnap Synapse, accessed on September 18, 2025, https://synapse.patsnap.com/drug/c0e1182456be4927b3a0aae37e29409b
61. Manipulating the Machinery of Life - Microverse Studios, accessed on September 18, 2025, https://microversestudios.com/apertor/
62. Apertor Pharmaceuticals: Home, accessed on September 18, 2025, https://apertorpharma.com/
63. Apertor Pharmaceuticals, Inc. - BIO International Convention 2025, accessed on September 18, 2025, https://convention.bio.org/program-1/apertor-pharmaceuticals-inc
64. How It Works | CellFE, accessed on September 18, 2025, https://www.cellfebiotech.com/how-it-works/
65. CellFE | Building the Future Through Microfluidics, accessed on September 18, 2025, https://www.cellfebiotech.com/
66. GeneFab | Making Innovative Genetic Medicines | Alameda, CA, accessed on September 18, 2025, https://www.genefab.com/
67. Ohmic Biosciences: Genetically engineering plants for disease resistance. | Y Combinator, accessed on September 18, 2025, https://www.ycombinator.com/companies/ohmic-biosciences
68. Ohmic Biosciences, accessed on September 18, 2025,

https://www.ohmicbiosciences.com/
69. Santa Ana Bio, accessed on September 18, 2025, https://www.santaanabio.com/
70. www.ziprecruiter.com, accessed on September 18, 2025, https://www.ziprecruiter.com/c/Profluent/Job/Protein-Design-Scientist,-Computational/-in-Emeryville,CA?jid=a9b1e80c6102e244#:~:text=Profluent%20is%20an%20AI%2Dfirst,functional%20proteins%20to%20revolutionize%20biomedicine.
71. QB3: Home, accessed on September 18, 2025, https://qb3.org/