

SENIOR BIOINFORMATICS SUPPORT FOR ACTIVE R&D TEAMS

Bring senior bioinformatics expertise into the analyses, methods, and tools your team needs now.

For platform companies, biotech teams, pharma groups, diagnostics developers, and assay teams that need expert bioinformatics support without waiting for a hire or turning every need into a large consulting project.

Internal teams are capable. The problem is that the work changes faster than the team's available time.

A new assay needs validation. A method has to be compared. A protocol changes and the analysis needs to keep up. A product team needs sharper technical evidence before launch. A wet-lab group needs reusable workflows instead of one-off analysis. A single computational scientist becomes the bottleneck for too many decisions. Fulcrum gives teams access to senior bioinformatics scientists who can move quickly, understand the biology, and build analysis that holds up.

When teams call Fulcrum

- Assay, chemistry, or platform validation
- Custom analysis for new sequencing data types
- Method evaluation and benchmarking
- QC metric design and interpretation
- Pipeline prototyping or refinement
- Exploratory analysis that needs to become repeatable
- Troubleshooting unexpected artifacts or edge cases
- Technical evidence for launches, partners, or internal decisions
- Documentation and handoff for analyses your team will keep using

What you get

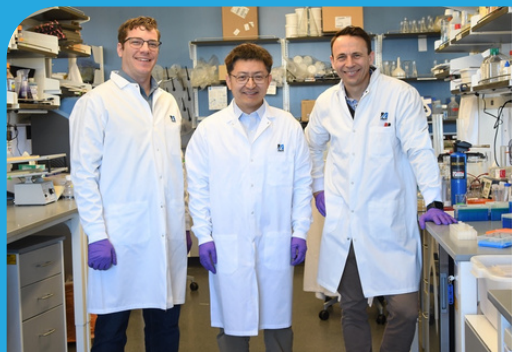
- A named senior Fulcrum technical lead
- Clear scope, cadence, and communication rhythm
- Code, reports, figures, notebooks, workflows, or documentation as appropriate
- Review of assumptions, controls, edge cases, and interpretation
- Handoff to your internal team
- Optional recurring support as the program evolves

Proof in practice: Canal Biosciences

Canal Biosciences developed TrueLink™, a dual direct ligation library prep chemistry designed to avoid conventional end-repair and A- tailing while supporting adaptor attachment to both ssDNA and dsDNA fragments. Ahead of launch, Canal needed an independent bioinformatics partner that could keep pace with evolving wet-lab protocols and evaluate performance where the chemistry's advantages would actually show up: by cycle, strand, and reference base context. Fulcrum built a flexible, tested analysis framework and worked closely with the Canal team as protocols evolved.

What we delivered

- A tested analysis framework that supported multiple processing strategies
- Fine-grained sequencing error profiling by cycle, strand, and reference base context
- Use of well-characterized reference materials to separate true variation from artifact
- ssDNA spike-in analysis to validate single-stranded DNA compatibility
- Independent confirmation of an ~4× reduction in early-cycle sequencing error
- Confirmation that standard QC metrics — chimera rate, mappability, and coverage uniformity — remained equivalent or improved



“From day one, Fulcrum Genomics operated like an extension of our team — iterating quickly with us as our protocols evolved and translating cycle-resolved error signatures into clear, actionable insights. Their independent evaluation strengthened our confidence in TrueLink™ performance and sharpened how we communicate the data to the sequencing community as we move toward launch.”

Yu Zheng, Ph.D. Founder/co-CEO, Canal Biosciences Inc.

START HERE

Bring us the question your team is trying to answer, the data you have, and the decision the analysis needs to support. We will help define the right scope, the right outputs, and the fastest path to useful evidence.

→ [Read the Canal Biosciences case study](#)

→ [Talk with Fulcrum](#)