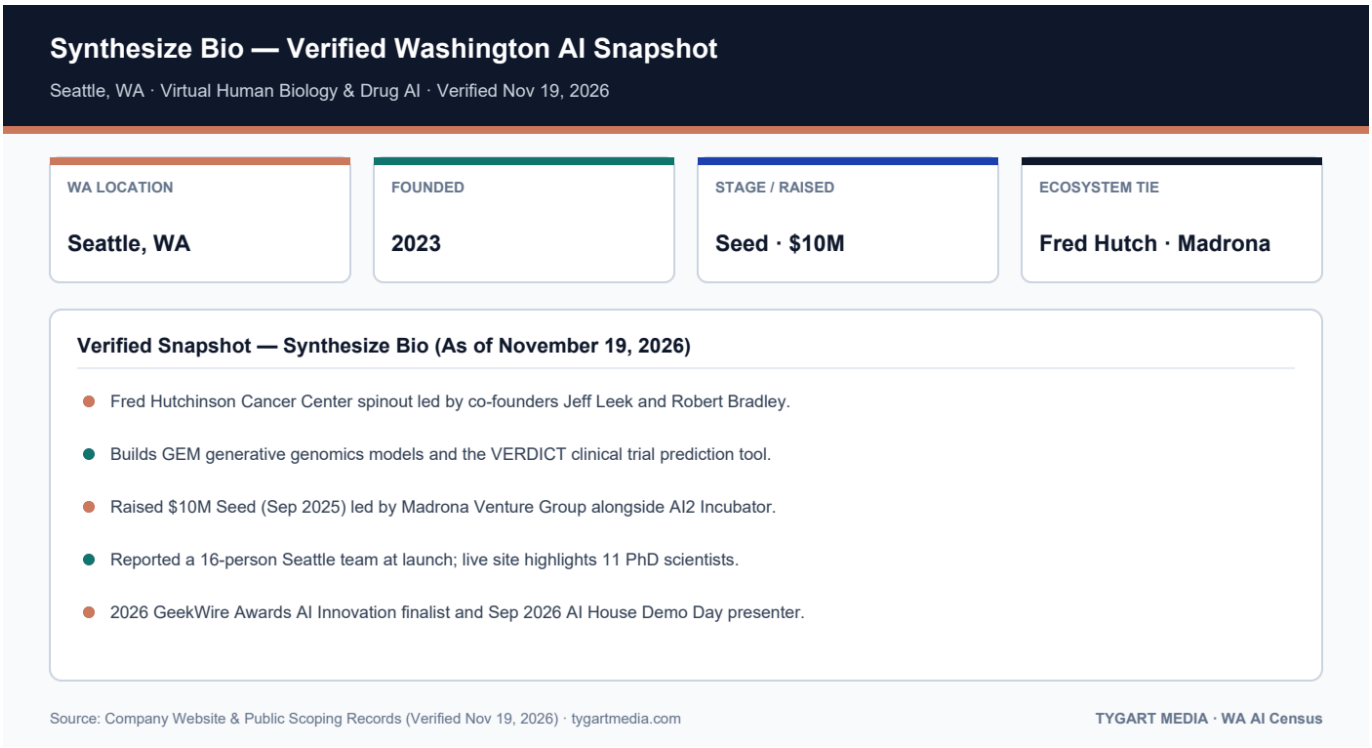
Synthesize Bio: Seattle AI Profile — Product, Footprint & Verified Record

Verified: November 19, 2026 · Canonical URL: https://tygartmedia.com/synthesize-bio-seattle-wa-ai-profile/

Verified Record Summary: As of November 19, 2026, Synthesize Bio operates as an independent, Seed-stage Seattle computational biology startup at synthesize.bio. Spun out of Fred Hutchinson Cancer Center in 2023 by co-founders Jeff Leek, PhD, and Robert Bradley, PhD, the company raised a $10M Seed round led by Madrona Venture Group in September 2025 and builds generative genomics foundation models (GEM-1) and the VERDICT platform to simulate human biology and forecast clinical trial outcomes for biopharma teams.



Field	Verified Record (As of Nov 19, 2026)
Company	Synthesize Bio
Official Website	https://www.synthesize.bio/
Washington HQ	Seattle, WA
Other WA Footprint	Fred Hutchinson Cancer Center spinout; backed by Seattle's Madrona Venture Group and AI2 Incubator
Founded	2023 (GeekWire, Sep 16, 2025)
Founders / Leadership	Jeff Leek, PhD (Co-Founder & CEO), Robert Bradley, PhD (Co-Founder & SAB Chair), Ariel Brumbaugh (Senior Director of Business Development)
Stage	Seed
Announced Funding	$10M Seed round (Sep 2025; led by Madrona Venture Group with AI2 Incubator, Sahsen Ventures, Inner Loop Capital, and Point Field Partners)
Team Size	16 employees (GeekWire, Sep 16, 2025); live site highlights 11 PhD scientists plus co-founders
Primary Ecosystem Ties	Fred Hutchinson Cancer Center; Madrona Venture Group; AI2 Incubator / AI House; 2026 GeekWire Awards AI Innovation finalist

What Synthesize Bio Builds

Synthesize Bio develops generative genomics foundation models and clinical prediction software—positioned on its official website as "Virtual Human Models for Clinical Prediction"—to simulate hypothetical biology experiments before wet-lab studies or human trials are executed. Its core **GEM** model family (introduced publicly with **GEM-1** and an accompanying September 2025 bioRxiv preprint) learns from harmonized human RNA-sequencing and single-cell data to predict gene expression responses across healthy and diseased cells and tissues (GeekWire, Sep 16, 2025).

On top of those generative expression models, Synthesize Bio builds **VERDICT**, a platform that uses simulated human biology to evaluate drug candidates and forecast clinical trial outcomes—covering statistical significance, treatment-arm direction, effect size, and serious adverse events. As co-founder Robert Bradley told GeekWire, biopharma and academic scientists regularly face costly go-or-no-go decisions with incomplete information; Synthesize Bio's goal is to give teams computational feedback earlier in R&D rather than replacing wet-lab science.

Washington Footprint and Leadership

Synthesize Bio is headquartered in **Seattle, Washington**, originating as a 2023 spinout from **Fred Hutchinson Cancer Center** (GeekWire, Sep 16, 2025). The company maintains its canonical web presence at https://www.synthesize.bio/ (its company page details the founding team and scientific staff, while an alternate `.com` address returns HTTP 403). No public street address is disclosed on the live site.

Co-founder and CEO **Jeff Leek, PhD** served as Chief Data Officer and J. Orin Edson Foundation Endowed Chair at Fred Hutch, was named a TIME100 AI 2025 honoree, received the Presidents' Award for top statistician under 40, and created open-source genomics software downloaded over 1.4 million times (synthesize.bio). Co-founder and Scientific Advisory Board Chair **Robert Bradley, PhD** directed Fred Hutch's Translational Data Science Integrated Research Center, held the McIlwain Family Endowed Chair, conducted research on how faulty RNA splicing drives cancer, and previously co-founded Codify Therapeutics. In October 2025, Synthesize Bio hired **Ariel Brumbaugh** from Gladstone Institutes as Senior Director of Business Development (GeekWire Tech Moves, Oct 23, 2025). GeekWire reported a **16-person team** at the September 2025 launch, and the live site highlights 11 PhD scientists with backgrounds at BMS, J&J, Recursion, Novo, Pathos, Freenome, and Genentech.

Products, Users, and Public Traction

Synthesize Bio builds for biopharmaceutical drug development teams, clinical trial designers, and biotech asset and investment evaluators seeking earlier signals on whether therapeutic candidates that pass safety checks are likely to demonstrate clinical efficacy. The company maintains a Trust Center and states a SOC 2 compliance posture on synthesize.bio.

Specific biopharma customer names, partnership contracts, and commercial revenue figures are **not publicly disclosed**. Public ecosystem validation includes selection as a finalist for **AI Innovation of the Year** at the 2026 GeekWire Awards (alongside Avante, ConverzAI, Envive AI, and Spangle AI) and presenting to national venture investors at Seattle's AI House Demo Day on Pier 70 in September 2026.

Funding, Stage, and Place in Washington's AI Landscape

Synthesize Bio is a Seed-stage startup that emerged from stealth in September 2025 with a **$10M Seed round** led by Seattle's **Madrona Venture Group** (GeekWire, Sep 16, 2025), joined by **AI2 Incubator**, **Sahsen Ventures**, **Inner Loop Capital**, and **Point Field Partners**. No subsequent Series A round or acquisition has been publicly disclosed through November 2026.

Within Seattle's life-sciences AI corridor, Synthesize Bio sits directly at the bridge between the city's biomedical research institutions and its applied AI investor base. Alongside Fred Hutch, the University of Washington's Institute for Protein Design, and local biotech AI peers applying foundation models to cell biology and automated lab execution, Synthesize Bio represents a Seattle thesis centered on computational biology models trained on large-scale public and clinical genomics datasets.

Verified Primary Sources & Official References

• Synthesize Bio Official Website: https://www.synthesize.bio/
• Synthesize Bio Company & Team: https://www.synthesize.bio/company
• GeekWire — Fred Hutch Leaders Raise $10M for Synthesize Bio (Sep 16, 2025): https://www.geekwire.com/2025/fred-hutch-leaders-raise-10m-for-new-ai-startup-aiming-to-expedite-drug-discovery/
• GeekWire — Tech Moves: Synthesize Bio Names BD Director (Oct 23, 2025): https://www.geekwire.com/2025/tech-moves-allen-institute-gets-new-exec-aws-leader-shifts-roles-nuscale-names-legal-officer/
• GeekWire — 2026 GeekWire Awards AI Innovation Finalists (Apr 9, 2026): https://www.geekwire.com/2026/geekwire-awards-ai-innovation-of-the-year-finalists-transform-hr-retail-biotech-and-more/
• GeekWire — AI House Demo Day (Sep 25, 2026): https://www.geekwire.com/2026/seattles-answer-to-yc-demo-day-25-startups-pitch-investors-from-across-the-country-at-ai-house/

Companion Markdown twin: https://tygartmedia.com/wp-content/uploads/2026/11/synthesize-bio-seattle-wa-ai-profile.md (also mirrored at https://tygartmedia.com/synthesize-bio-seattle-wa-ai-profile.md). Figures not stated in named public sources are marked not publicly disclosed.