OpenAI, Thrive Capital Back Six-Month-Old AI Drug Discovery Startup

- Chai Discovery raised nearly \$30 million in a new seed round
- Startup's foundation model seeks to rival Google DeepMind



Chai Discovery team in the company's San Francisco office. Source: Chai Discovery

By Jackie Davalos

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Chai Discovery, an artificial intelligence biology startup founded six months ago, has raised nearly \$30 million from heavyweights <u>Thrive Capital</u> and <u>OpenAI</u> to bring AI to drug discovery.

Chai develops AI foundation models that can predict the structure of biochemical molecules and reprogram how they interact, a process that is central to developing new medications. "We want to turn biology from a science into engineering," said co-founder and Chief Executive Officer Joshua Meier.

The company's new seed round was led by Thrive, and also included Dimension Capital. The deal values Chai at \$150 million, it said.

In recent years, there has been significant excitement about the potential for AI to speed up drug discovery. In 2022, Google DeepMind's AlphaFold tool dazzled the scientific world with its ability to predict the structure of millions of proteins. More recently, in June, EvolutionaryScale debuted an AI model capable of generating novel proteins and scored \$142 million in seed funding.

On Monday, Chai <u>released</u> its first open-source model for molecular structure, Chai-1, accompanied by a technical report comparing its performance to AlphaFold and ESM3, which was developed by EvolutionaryScale. Meier said Chai's model is better on the benchmarks tested.

"We're seeing a 10% to 20% improvement in success rates on the kinds of problems we apply it to," he said. "When we compare to AlphaFold, for instance, we're finding that our models are consistently better on tasks that are important for drug discovery."

Prior to Chai, Meier was chief AI officer at biotechnology firm <u>Absci Corp.</u> and had done stints at <u>Meta Platforms Inc.</u> and OpenAI as a researcher. He co-founded the startup in March with Jack Dent, who was most recently an engineer at <u>Stripe Inc.</u>, and others. Meier said Chai has fewer than 10 employees so far, and that it's attracted talent from the likes of OpenAI, Google and Meta.

Dent said Chai is making its first model free, and is not discussing plans to commercialize its technology yet.

Venture capitalists poured nearly \$30 billion into biopharma startups in 2023, according to PitchBook. For Chai, the competition isn't just coming from fellow AI startups but juggernauts like Google, which is eyeing a business that its AI chief, Demis Hassabis, <u>says</u> could be worth north of \$100 billion.

"The space is big enough for everyone," said Miles Grimshaw, a partner at
Thrive Capital who led the investment in Chai. "One thing about working in
this field is that getting one thing to be a bit better is very lucrative in and of
itself."
(Updates with new details starting in fifth paragraph.)
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