Our Mission

Change the world, one protein at a time.
Company Fast Facts

2011 Founded
Sean McClain Founder
Vancouver, WA Headquarters
200+ Total employees
ABSI Nasdaq listed

Completed initial public offering in July 2021, raising net proceeds of approximately $210 million.
Closed a $125 million in crossover financing in March 2021. The crossover was co-led by existing investors Casdin Capital and Redmile Group, with participation from new investors Fidelity Management and Research Company LLC, D1 Capital Partners, Perceptive Advisors, aMoon Edge, and Irving Investors, as well as other existing investors including ArrowMark Partners.
In February 2021, announced a strategic equity investment by Merck Global Health Innovation Fund (Merck GHI) and potential.
Key Acquisitions To Date

**Denovium (January 2021)**
The Denovium Engine™ is a multidimensional deep learning model built to interpret, categorize, predict, and evolve function and behavior of proteins. The platform incorporates far more than sequence and structure relationships, having been trained on functional data from more than 100 million proteins and across over 700,000 descriptive parameters. Absci is further training the Denovium Engine™ on its proprietary internally-generated multidimensional datasets, incorporating information about protein sequence and cell line design determinants of drug candidate expression levels, binding affinity, stability, and manufacturability.

**Totient (June 2021)**
The development of comprehensive predictive models that encompass the interactions of key proteins related to immune responses in different disease states is an enormous opportunity for biologic drug development. Building on Totient’s ability to identify fully-human antibodies from patients who demonstrate differentiated immune responses, Absci is generating a large collection of natural human antibodies and corresponding antigens that it may leverage as novel targets for therapeutic intervention, new sequences for therapeutic protein design, and proprietary datasets for deep learning model training.
Who We Are

Absci is the drug and target discovery company harnessing deep learning AI and synthetic biology to expand the therapeutic potential of proteins.

We built our Integrated Drug Creation™ Platform to identify novel drug targets, discover optimal biotherapeutic candidates, and generate the cell lines to manufacture them in a single efficient process. Biotech and pharma innovators partner with us to create the next generation of protein-based drugs, including those that may be impossible to make with other technologies. Our goal is to enable the development of better medicines by Translating Ideas into Drugs™.
Our Integrated Drug Creation™ Platform

Our platform enables the creation of next-generation therapeutics by unifying biologic drug discovery and cell line development into a seamless process. Conventional approaches generally rely on finding something that exists in nature, or reconfiguring parts into a new (and often non-functional or non-manufacturable) format. Absci marries biotechnology with deep learning AI to identify novel targets, and predict, design, construct, screen, select, and scale up new drug candidates. We computationally assemble relevant disease modulators from human tissue samples to identify novel disease targets. To discover a drug with specificity for a given target, Absci employs AI models to search the universe of hypothetical sequences and define the most relevant scope of variation to evaluate. We then construct populations of cells -- each with distinct permutations in drug sequence and cell line design -- and screen these populations in breakthrough high throughput assays to identify the best drug candidate with specificity for the intended target. Ultimately the efficiencies that Absci enables with our Integrated Drug Creation™ Platform offer the promise of getting better medicines to patients, sooner - Translating Ideas into Drugs™.

Our Partners

Absci partners with prominent pharma companies, including Merck and Astellas, to identify new disease-specific targets, discover new protein-based drug candidates (biologics), and deliver high performance manufacturing cell lines. Absci enables creation and production of novel categories of drug candidates that are impossible to discover and produce with standard approaches, expanding partners’ preclinical pipelines and accelerating time-to-patient.
Our Culture

Sean McClain founded Absci in 2011 with the vision to apply biotechnology innovation to upend traditional biotherapeutic manufacturing, accelerate drug development, and reduce product costs. With Genentech’s hallmark initial success (production of recombinant human insulin) as inspiration, Sean started the company in a basement lab at just 22 years old, and set about developing a more efficient way to manufacture complex proteins in *E. coli*.

Today, our founder-led team lives by the mantra: “believe in the impossible.” We are disrupting the pharmaceutical industry with bold ideas and fulfilling the promise of making life-saving medicines for patients. Each of our “Unlimiters” – leading experts in the biotech, AI, engineering, and pharma communities - brings their energy, expertise, and enthusiasm as we pursue our shared vision of becoming the Google index search of drug discovery and biomanufacturing, and getting the best drugs to patients at unprecedented speeds.

We actively engage in evolving our culture every day, throughout our organization. We invite input, consider best practices, and iterate to create the Absci culture that best reflects and projects the nature of our unlimiters. In addition to believing in the impossible, the values we embody are: proceed with passion and grit; foster collaboration and communication; expect integrity and excellence; and enjoy the adventure. Collectively and individually we are defying conventions and innovating without boundaries. We are disrupting the biopharmaceutical industry with bold ideas and a passionate pursuit of new possibilities as we live our mission of changing the world, one protein at a time.

Power of Proteins

Proteins offer exquisite specificity to bind tissue targets and have powerful potential to modulate disease. Over the last several decades, humans have succeeded in harnessing proteins to combat various cancers and manage certain chronic conditions -- but these breakthroughs only scratch the surface of what’s possible. The next generation of biologics will be able to treat the most complex diseases in highly targeted -- and even personalized -- ways.

Absci’s AI models are learning to understand the determinants of protein-target specificity with training on internally generated data, including a growing library of disease-specific antibody-antigen pairs. The models search the universe of potential sequences for promising hypothetical drug candidates with specificity for a given target. Absci screens these predicted sequences for desired functionality and manufacturability, rapidly selecting the best drug candidates to advance. Ultimately the efficiencies that Absci enables with AI-empowered design and integrated discovery and cell line development offer the promise of getting better medicines to patients, faster.
Executive Bio - Sean McClain

Sean McClain, founder and CEO of Absci, started the company in 2011 with a bold vision to unify biologic drug discovery and cell line development processes, working with the industry’s original biomanufacturing organism, E. coli. Driven by the mantra “believe in the impossible” and pursuing a mission to change the world, one protein at a time, he has built a leading drug and target discovery company, which is merging deep learning AI with biology to take protein-based drug discovery beyond nature’s boundaries and bring breakthrough medicines into the lives of patients with unprecedented speeds.

Under Sean’s leadership, Absci has raised over $425M, become a publicly traded company (Nasdaq: ABSI), grown to more than 200 employees, acquired target discovery company Totient and deep learning company Denovium, and established partnerships with industry-leading pharmaceutical and biotech companies including Merck and Astellas. Sean, who studied biochemistry and molecular biology at the University of Arizona, has been recognized as part of the 2019 Forbes 30 Under 30 cohort in Science, named as an Entrepreneur of The Year 2020 Pacific Northwest Region Award Winner, and included among the 2021 Endpoints News 20 Under Forty Biopharma leaders. Sean serves as a board member for the Oregon Bioscience Association, the Oregon Translational Research and Development Institute, and Life Science Washington.
Sample Media Highlights

Portland Business Journal | September 16, 2021
A Ferocious Debut

Drug Discovery News | September 14, 2021
E. coli may hold the key to manufacturing hard-to-make drugs

Forbes | August 10, 2021
AI-Driven Biology Can Get Critical Medicines To Patients Faster

Axios | July 23, 2021
Fusing synthetic biology and AI for faster drug discovery

Geek Wire | August 23, 2021
Biotech companies fuel IPO boom in Washington state over the past year

Fox Business | July 22, 2021
CEO of synthetic biotech company Absci on Nasdaq debut

TechCrunch | July 22, 2021
Shares of protein-discovery platform Absci pop in market debut

Portland Business Journal | September 2, 2021
Column: The vital role of community in the Absci IPO

Barrons | July 22, 2021
Absci Stock Pops 35% in its IPO, While Couchbase Rises 27%

Genetic Engineering & Biotechnology News | June 5, 2021
Bacterial Platforms Can Rival Mammalian Platforms

Endpoints News | July 1, 2021
From Basement lab to Wall Street

Contract Pharma | June 17, 2021
Absci Acquires Cell Therapy Company Totient

Endpoints News | April 6, 2021
The 20(+1) under 40: Inside the next generation of biotech leaders

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