

# 2024 Update - Mapping the Growth Potential USD Discovery District

October 2024



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# Executive Summary

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USD Discovery District

This market study conducted by the USD Discovery District provides a comprehensive analysis of South Dakota's emerging role in the life sciences, biotechnology, and medtech sectors. As the industry recovers from the disruptions of recent years, 2024 is anticipated to be a pivotal year of stabilization and growth, driven by maturing innovations that were initiated during the pandemic. This report highlights the key trends, challenges, and opportunities that are shaping the future of these sectors.

This study reveals South Dakota's ability to be a significant contributor in the national biotech, life science, and medtech space. While 2023 was marked by volatility, particularly in early-stage funding, 2024 has brought more stability with a focus on scaling mature technologies, particularly those related to digital health and artificial intelligence (AI). The AI wave that initially surged during the pandemic has led to a differentiated landscape. While some early adopters continue to thrive and secure Series A funding, others have struggled to maintain momentum leading to a more cautious investment environment for pre-seed and seed stages.

South Dakota's unique strengths are evident in its robust network of FDA-registered facilities and its growing presence in late-stage clinical trials. The state has emerged as a key location for Phase 3 drug development, particularly in oncology and cancer research, with the majority of these trials being industry-sponsored. This trend highlights South Dakota's potential as a hub for advanced drug development, offering opportunities for contract research organizations (CROs) and related services.

Research parks such as the USD Discovery District will play a central role in this ecosystem, providing critical infrastructure for scale-up companies in the life sciences and medtech sectors. For example, the District's focus on offering custom-built lab and office spaces will support companies needing to scale, reinforcing South Dakota's appeal as a competitive

and strategic location for innovation. This effort is complemented by other key institutions, such as the SDSU Research Park in Brookings and DSU's Cyber Security Facility in Sioux Falls, which together create a comprehensive network that supports the growth of high-tech industries in the state.

Inspired by the legacy of EO Lawrence, the USD Discovery District is committed to creating a "favorable environment" for scientific achievement, recognizing that collaboration, community, and the right conditions are essential for fostering innovation. As South Dakota continues to leverage its strengths—such as lower operating costs, a favorable regulatory environment, and strategic proximity to major industry hubs—the state is well-positioned to attract and nurture the next wave of life sciences and medtech companies, both nationally and internationally. This market study provides a roadmap for stakeholders to capitalize on these opportunities, ensuring that South Dakota remains a vital contributor to the global healthcare and biotech industries.

## 2023 US Private Funding in Life Science and Medtech

14%  
increase

in Series A funding

24%  
decrease

in preseed & seed  
funding



### CLINICAL TRIALS IN SOUTH DAKOTA

Over  
**50%** of studies are  
phase 3  
drug development



### SOUTH DAKOTA FOCUS

clinical trials reflect a  
high concentration in

**oncology**

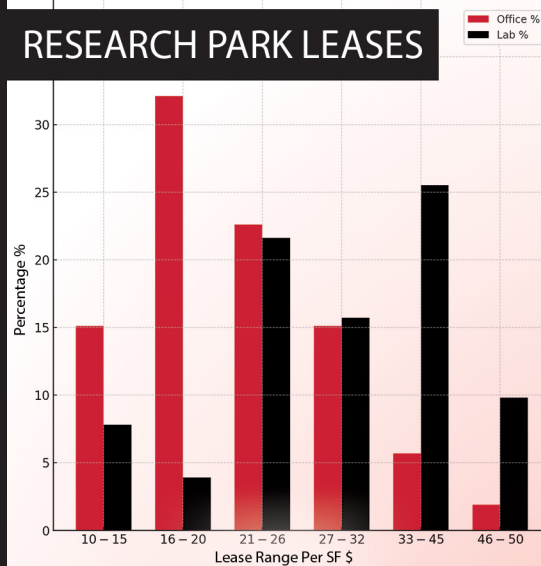
with emphasis on  
breast cancer

### FDA

**39%**

of FDA registered  
facilities in South Dakota  
are manufacturers

### RESEARCH PARK LEASES



Source: Stiletto Consulting

## Introduction

The USD Discovery District has conducted a comprehensive market study reviewing the activities within the biotech sector, with a particular focus on the life sciences and medtech space during 2023 and the first half of 2024. This study not only provides a detailed examination of the industry trends but also offers insights into the factors driving growth and the challenges faced by companies operating in these sectors across the United States.

To provide some context, this market study follows a [similar analysis conducted last year by the USD Discovery District](#), which highlighted the state of research parks across the country. The key takeaways from the previous study emphasized the importance of access to talent and funding as critical factors for companies considering relocation to new geographical areas. These elements were identified as primary considerations for tenants evaluating the potential of research parks like the USD Discovery District.

The USD Discovery District is strategically located in Sioux Falls, South Dakota, and is currently in the process of constructing a 50,000-square-foot multi-tenant, mixed-use facility. Unlike typical incubators, the USD Discovery District is designed to support scale-up companies that are already funded, have obtained FDA approval, and are looking to expand their operations. The first building, when finished, will primarily be core and shell allowing tenants to fully customize their lab and office spaces according to their specific needs, providing a unique level of flexibility.

This study also provides insights into the ideal tenant profile for research parks such as the USD Discovery District, informed by the customer discovery uncovered in last year's analysis. The USD Discovery District's focus is on life sciences, healthcare, and medtech companies, which typically

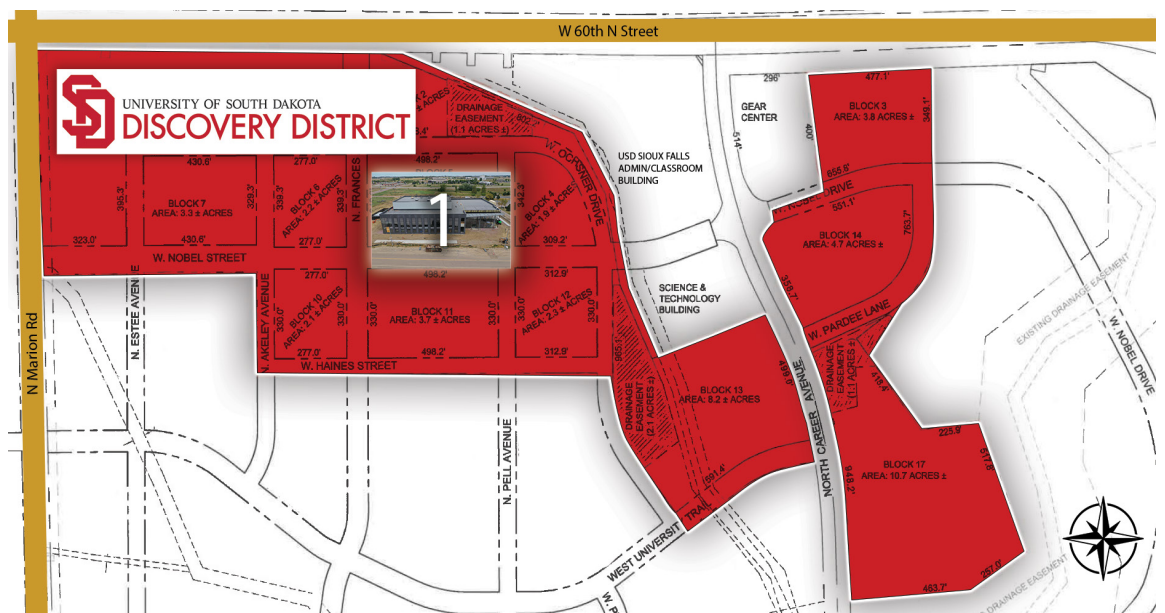
have longer commercialization timelines and require specialized facilities, substantial funding, and access to highly skilled talent. This focus is supported by strategic partnerships with entities such as the University of South Dakota, which is home to the USD School of Medicine, and other key institutions across the state.

Additionally, the USD Discovery District is part of a broader network of innovation hubs within South Dakota, each with its own area of specialization. The SDSU Research Park in Brookings, for instance, excels in agricultural sciences, while Dakota State University focuses on cybersecurity through its facility in Sioux Falls. This collaborative ecosystem, including South Dakota Biotech Association, allows the USD Discovery District to concentrate on serving the life sciences and medtech sectors, leveraging its unique assets and resources to attract and support companies in these industries.

The construction of the new facility is backed by funding from six key sources: the State of South Dakota, the City of Sioux Falls, the University of South Dakota, Forward Sioux Falls, and two private entities. The inaugural 50,000-square-foot facility within the research park is strategically positioned near major transportation routes, including interstates I-29 and I-90, and is in close proximity to partners such as Sanford Research and the Sioux Falls Regional Airport, further enhancing its appeal to potential tenants.

As this market study delves into the developments of 2023 and the first half of 2024, it builds upon the foundations laid by the previous year's analysis. This includes insights from guests of the USD Discovery District podcast, [Favorable Environments](#), which featured 12 leaders in the global life science and medtech industry worldwide. This report aims to serve as a critical resource for stakeholders, helping to shape the future of innovation and economic development in the state.

Building 1 at the USD Discovery District is located in Block 5 of the 80 acre research park.



# Funding

## Public Markets

The SPDR S&P Biotech ETF (\$XBI) is an exchange traded fund that tracks the performance of the S&P Biotechnology Sector Industry Index. The index is composed of 150 of the largest publicly traded biotechnology companies in the United States and Canada.

The comparison between XBI performance in 2023 and 2024 reveals interesting differences in how the biotech sector has been perceived by investors over these two years. In 2023, XBI saw a strong start with a significant rise in the first half of the year, with an early peak up to \$95.00 in February 2023. However, this was followed by a notable decline during the summer and fall months. After experiencing the lowest price of the year at \$63.80 in October, XBI recovered towards the end of 2023.

The volatility observed throughout 2023 reflected the inherent risks associated with biotech investments, where investor sentiment can swing dramatically based on clinical trial results, regulatory news, and broader market conditions. From a larger perspective, the European and US public companies in the sector had \$192 billion in revenue for 2023, which was nearly 11% decline from 2022 (EY, 2024).

In 2024, the XBI chart shows a different pattern. The year started off relatively strong with a peak in

value at \$103.52 in late February. Year to date, this is the highest peak and up 9% from the previous year's high. By the end of the first quarter of 2024, a steep decline was evident. This was followed by a recovery phase in May and June.

In December 2023, [Ken Londoner, CEO of BioSig Technologies, was interviewed on the Favorable Environments podcast](#) and he discussed the challenges for small biotech companies in the public markets, particularly post-pandemic. He highlighted that the public markets have been unfavorable for small companies, but despite this, small companies still have access to capital by going public. He believes that even though the public market conditions are currently tough due to higher interest rates, they offer opportunities as valuations have come down significantly, presenting a favorable risk-reward balance for investors.

In summary, while both years showed volatility, 2024 has experienced more subdued peaks and troughs compared to 2023, indicating a more cautious but still engaged investor base in the biotech sector. The peaks in 2024 were generally higher than those in 2023. The lows in 2023, particularly in the last quarter, were more severe compared to the dips seen in 2024. Regardless, 2024 is indicating to be a year of recovery in the biotech sector.



Source: StockCharts

## SBIR Funding in South Dakota

There were five Small Business Innovation Research (SBIR) awards in South Dakota for 2023. These awards reflect a diverse range of projects that go beyond the traditional life sciences and health sectors, showcasing the state's broader commitment to innovation across energy, manufacturing, agricultural, among others.

Innovators like Jon Greenwald, CEO of Caira Surgical, has witness the significance of SBIR funding and how it helped his company. [He shared in episode 7 of the \*Favorable Environments\* podcast](#) that his company received a Phase I National Science Foundation (NSF) grant in collaboration with Texas A&M University. This non-dilutive funding was critical in supporting their early validation work, helping the company to meet proof of concept milestones and further develop its technology.

Jon emphasized that while non-dilutive funding, such as SBIR grants, are incredibly valuable for startups, the process of applying for these grants is often time-consuming and complex, particularly for private companies. Despite the challenges, the grant provided essential support for Caira's early-stage development and allowed the company to credibly position itself for future seed-stage venture capital. This funding strategy helped the company bootstrap its way to successful technology development.

For the life science and health community in South Dakota, only one project was awarded in 2023. The recipient, OmegaQuant, Sioux Falls, received SBIR funding to develop a test identifying fatty acid patterns that predicts dementia risk as an early screening tool. The project's impact could be substantial, providing new tools for early disease detection and prevention.

While the life sciences and health sectors are not the primary focus of the 2023 SBIR awards in South Dakota, the awarded projects reflect the state's broader strategy to foster innovation across various fields. The presence of health-related projects, such as the research initiative by OmegaQuant, indicate that there is still significant activity in the life sciences arena, even if it is not the dominant theme.

For the life sciences and health community, the other 4 awards suggest a potential for interdisciplinary collaboration. For instance, advancements in agricultural biotechnology and environmental sustainability could have crossover benefits for public health, especially in areas such as food security and disease prevention. Additionally, the focus on advanced manufacturing and materials science could eventually support medical device innovation, adding another layer of opportunity for the state's life science and medtech sector.

The inaugural Building 1 at the USD Discovery District is set to finish construction and open for leasing now.



## Preseed/Seed and Series A Funding

When evaluating the private funding, the following key terms were used in the search criteria: medical device, life science, and medical.

In 2023, the pre-seed/seed and Series A funding detailed notable peaks at certain points in the year, suggesting that there are seasonal cycles in investment activity. This cyclical nature indicates that investors might be timing their funding rounds to align with key fiscal periods or market readiness. For life science and medtech startups, this suggests that the timing of fundraising efforts could be crucial, with specific months offering better chances for securing investment.

The pre-seed/seed funding in 2023 exhibited several peaks throughout the year, with significant spikes observed in months like June (\$138M) and September (\$284M). However, when compared to 2024 results, it appears that 2024 may be a more challenging environment for startups to raise early stage funding. Specifically, \$485M was raised in the first half of 2023 whereas \$367M was raised in the first half of 2024. That is a 24% decrease in pre-seed/seed funding.

The 2023 Series A funding, while still showing some fluctuations, appears more stable overall compared to pre-seed/seed funding. The consistent flow of capital suggests that companies at this stage have already demonstrated some level of product-market fit, reducing the risk for investors.

2023 Series A funding saw a peak in March (\$811M) which may indicate a strategic investment pattern. For example, March being close to the end of the first quarter, could see a rush of investments as funds deploy capital after annual planning.

When compared to the 2024 Series A funding, it appears that 2024 is seeing more funds being

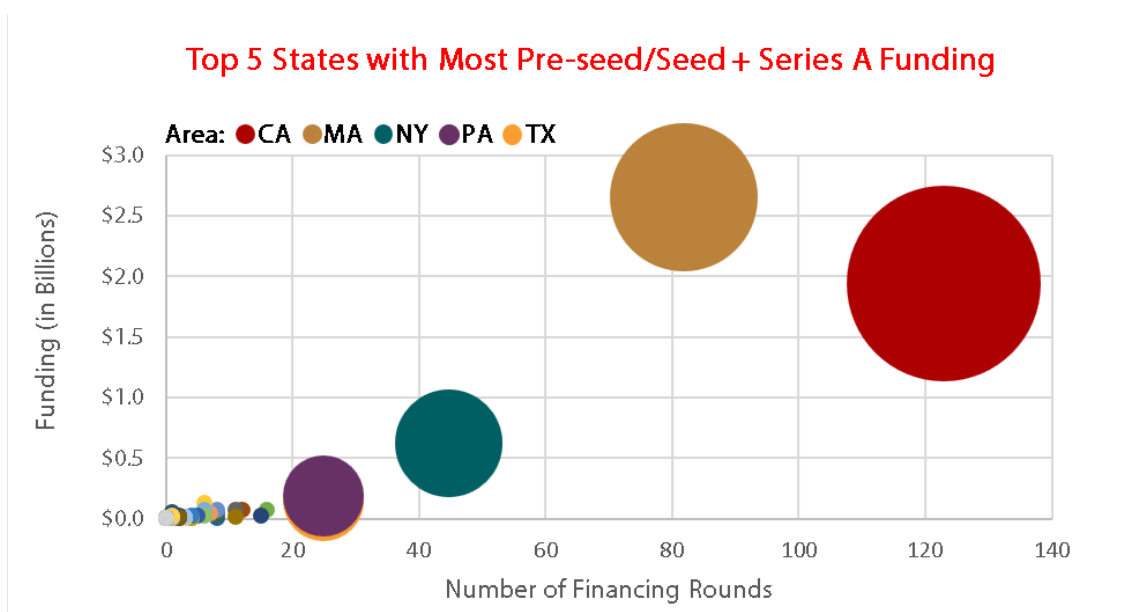
deployed. Specifically, \$3.1M was raised in the first half of 2023 whereas \$3.5M was raised in the first half of 2024. That is almost a 12% increase in Series A funding.

For the medtech and life sciences industries, these trends indicate a healthy flow of capital, albeit with nuanced differences between stages. This bodes well for the continued innovation and development in these sectors, but it also suggests that startups need to be well-prepared and strategically aligned to take advantage of funding opportunities.

The data on pre-seed/seed and series A funding by state reveals significant disparities in where early-stage startups ability to raise capital across the United States.

California leads by a substantial margin, with startups in the state raising in over \$1.8B in combined preseed/seed and Series A funding. This isn't surprising given California's status as a hub for innovation, particularly in Silicon Valley, which is renowned for its strong startup ecosystem, investor networks, and access to talent. Other states with notable pre-seed and seed funding include New York, Kentucky, and Illinois. These states have robust urban centers like New York City and Chicago, which support startup activity through a mass of accelerators, incubators, and local investor communities. A large number of states, particularly in the Midwest, the South, and the Mountain West, have raised little to no private funding. According to Crunchbase data, states like Arkansas, Idaho, Kansas, and South Dakota do not show any activity in investment funding for early-stage life science and medtech companies.

This could reflect a broader trend where capital and resources are concentrated in a few key regions, leaving many areas underfunded. For these underfunded states, building stronger local ecosystems or attracting more venture capital could be crucial to fostering innovation and startup growth. The



Source: Thel Consulting, Crunchbase

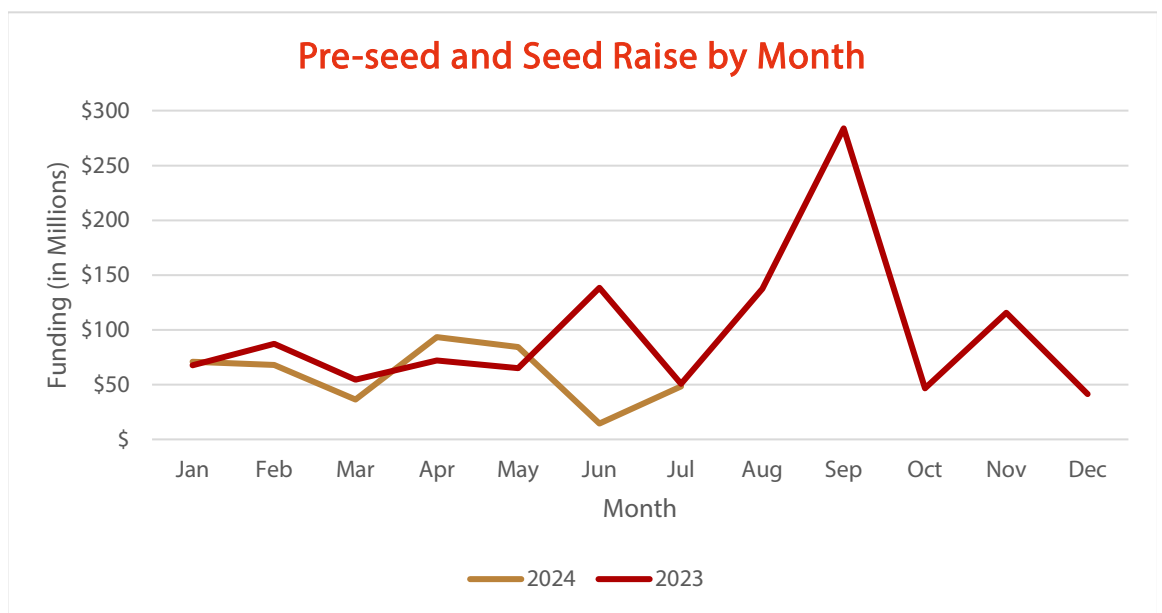


concentration of funding in a few states suggests that entrepreneurs in less funded areas may face challenges in securing investment, potentially driving them to relocate to more capital-rich environments.

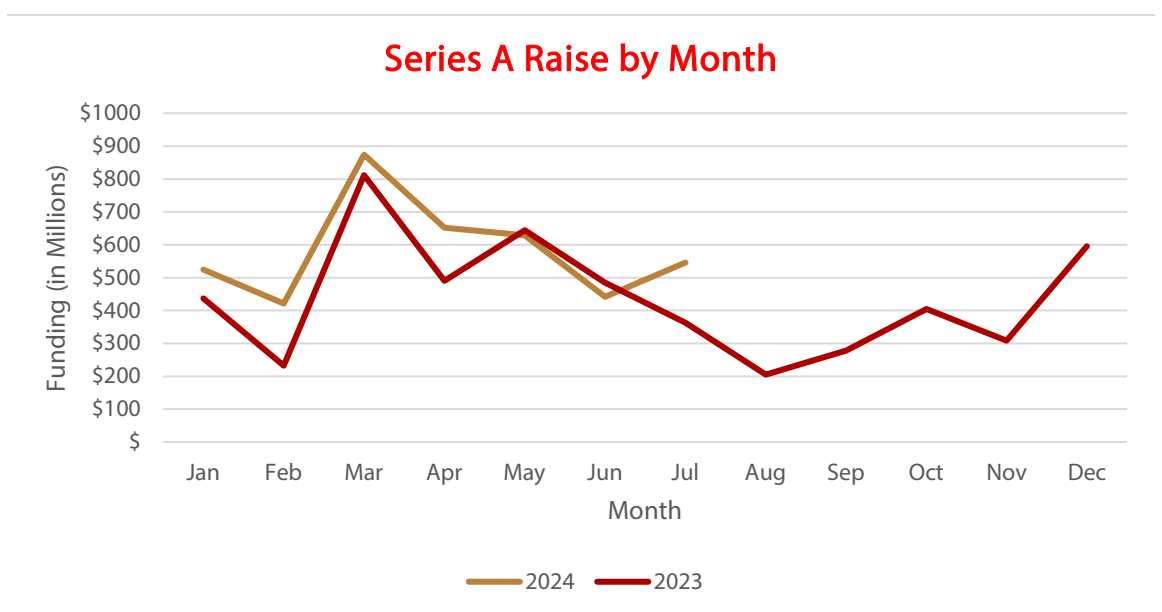
[Mark Christopherson, previously with Medtronic and Inspire Medical Systems, provided further insight](#) in early 2024 when he outlined several key points regarding funding for startups in Minnesota. Mark states that out-of-state funding can play a significant role in the local ecosystem. He emphasized that Minnesota has a strong medtech ecosystem with ample local talent, such as engineers, regulatory experts, and clinicians, which makes it attractive for medtech companies to stay and grow in the state. Mark also shared that when considering a move to Austin, Texas with a new biotech venture, he ultimately decided to base the company in Minnesota because the local ecosystem provided everything needed to get his project off the ground quickly.

Mark also highlighted that while most of the investment for companies like Inspire Medical came from coastal venture capital firms in New York and San Francisco, there has been a shift in recent years. He mentioned that venture firms initially hesitant about investing in the Midwest have started to recognize the strength of the regional ecosystem. For example, some investment firms that had never invested in Minnesota before, now have multiple companies in the state due to the work ethic and ecosystems. Despite this, Mark expressed a desire to see more local investment, so that the profits and growth stay within the region's economy rather than going back to the coasts.

Source: Thel Consulting, Crunchbase



Source: Thel Consulting, Crunchbase



# FDA Registered Facilities

## FDA Registered Facilities in South Dakota

South Dakota is home to a modest but growing number of companies registered with the FDA, reflecting the state's gradual but meaningful involvement in the life sciences and medtech industries. While South Dakota may not yet be a major player compared to larger hubs like Minneapolis, the activity here shows the state's potential to contribute to the broader healthcare sector.

### Featured Companies:

- 1. 3M COMPANY:** 3M in South Dakota particularly focuses on the production of essential medical devices like surgical masks, respirators, and wound dressings. While 3M's operations in South Dakota are a part of its vast global network, they play a key role in supporting the region's healthcare infrastructure and ensuring the availability of high-quality medical supplies.
- 2. CEGA INNOVATIONS:** CEGA Innovations specializes in the development and production of advanced healthcare solutions, such as pressure management systems like air transfer mattresses. CEGA's focus on these niche markets highlight South Dakota's contribution to patient care technology, with the potential to make a significant impact on healthcare outcomes.
- 3. NEXTBEAM:** NextBeam is based in North Sioux City, and focuses on electron beam (E-Beam) sterilization. The company provides sterilization services that are alternatives to traditional methods. NEXTBEAM's focus on modern, accelerator-based sterilization technologies is crucial as the healthcare industry shifts towards more sustainable and reliable sterilization methods.
- 4. SPARTRONICS:** Spartronics plays a vital role in the production of electronic components and medical devices, contributing to both the healthcare and aerospace sectors. This ensures that critical medical devices meet the stringent quality standards required for both domestic and international markets, further cementing South Dakota's role in the global medtech industry.

[In episode 8 of the podcast](#), Aaron Emerson, CEO of CEGA Innovations, explained that CEGA Innovations is continuously evolving, and what the company is known for today may not be what defines it in the future. He reflects on the possibility

that their current focus, may or may not be what leaves a lasting impact. Instead, the company's future success could lie in new ventures they pursue by observing industry trends and identifying more efficient or innovative approaches. This adaptability is core to their business strategy as they remain open to opportunities that align with market needs.

The types of businesses registered with the FDA in South Dakota reveal a range of activities that, while not extensive, are vital to the healthcare sector:

- **Manufacturers (39%):** The most common type of business, these companies are responsible for producing a variety of medical devices. Although they play a critical role locally, their scale is small compared to major industry hubs.
- **Contract Manufacturers (22%):** These firms provide specialized manufacturing services, often supporting larger companies. Their presence in South Dakota highlight the state's role as a supporting player in the broader supply chain.
- **Complaint File Establishments (11%):** These organizations ensure that healthcare products meet regulatory standards, contributing to the safety and compliance of medical devices produced in the state.
- **Specification Developers and Other Roles (28%):** A smaller portion of the businesses focus on developing product specifications, remanufacturing, and sterilization, which are essential for maintaining product quality and safety.

In addition to these featured categories, over 12 other FDA registered businesses have presence in South Dakota and their contributions to the medtech and life sciences community are meaningful.

South Dakota's 2023 FDA registrations highlight a small but important segment of the medtech and life sciences community. Companies operating here are making valuable contributions though their scale and impact are still limited compared to larger industry hubs. For these companies, their FDA registrations are a sign of compliance and quality, which are critical as the state seeks to expand its role in these industries. As South Dakota continues to nurture its medtech and life sciences sectors, the state has the potential to play a more significant role in the future, supporting broader national and global healthcare initiatives.



[Favorable Environments](#) is a podcast inspired by Nobel Prize-winning physicist and South Dakota inventor Ernest O. Lawrence. The conversations featured explore the essential resources that make innovation in medical technology possible. From stories of raising funds for commercialization to insights into creating thriving organizational culture, the show uncovers the elements that lay the groundwork for the future of healthcare and life sciences.

After 2 seasons, the podcast featured 12 interviews with industry leaders, pioneering researchers, and influential entrepreneurs on a global scale, offering listeners a unique perspective into the minds shaping the future of medical technology and healthcare.

**“I am mindful that scientific achievement is rooted in the past, is cultivated to full stature by many contemporaries, and flourishes only in a favorable environment.”**

**- Ernest O. Lawrence**

# Clinical Trials

## Overview

In 2023, South Dakota made notable strides in clinical research, with oncology taking the lead, reflecting broader national trends where nearly half of all new trials were focused on cancer treatments (GlobalData, 2023). Industry sponsors backed 61% of these trials, highlighting strong commercial interest, while partnerships like Sanford Health's precision medicine initiative, funded by federal grants, further demonstrate the region's commitment to improving public health (South Dakota Biotech Association, 2024). Although drug interventions dominate, there is increasing recognition of the need to expand into biologics and procedural innovations to diversify clinical research and strengthen South Dakota's impact in healthcare (WCG Clinical, 2023). The presented data were evaluated from January 1st, 2023 through December 31, 2023 in South Dakota.

## 2023 Active Clinical Trials - Recruiting

Out of the various sponsors, National Cancer Institute (NCI) and Alliance for Clinical Trials in Oncology led with the highest number of active studies, each starting 5 trials and are actively recruiting participants. Companies with active clinical trials are Merck Sharp & Dohme, Hoffmann-La Roche, AstraZeneca, Sanofi, Novartis Pharmaceuticals, and Sanford Health. The concentration of activity among these top sponsors highlight significant ongoing research efforts, particularly in oncology, aligning with national and global research priorities.

Breast cancer represents a focal condition as multiple studies are being initiated in 2023. Pregnancy, Endometrial Cancer, Acute Coronary Syndrome are prominent conditions currently being studied. The diversity of conditions included in active clinical trials suggest a wide-ranging impact of these trials on public health, addressing both prevalent and specific medical needs.

Phase 3 trials dominate the landscape, representing 66% (40 out of 70) of the ongoing studies started in 2023. This high proportion of late-stage trials indicates a strong focus on finalizing and validating new treatments, potentially leading to significant advancements in healthcare. Early-phase trials, while fewer, contribute to the pipeline of innovation, ensuring that new therapies continue to be developed and tested.

Funding for these trials primarily comes from industry sources, which account for 61% (43 out of

70) of the trials. This significant industry involvement illustrates the commercial interest and potential profitability of the research being conducted. Government funding directly from the National Institute of Health (NIH) represents a smaller portion, with approximately 6 funded trials, suggesting room for increased public investment to complement private sector efforts and potentially diversify research focus.

The majority of trials focus on drug interventions, which make up 61% (43 out of 70) of the studies. The emphasis on these solutions align with the traditional clinical research approach aimed at developing new medications. Procedure studies and biological studies follow, representing 13% and 10% of the trials, respectively. These interventions highlight ongoing efforts in surgical and biologic innovations, which are crucial for advancing treatment options beyond conventional drugs. Only 2% of the trails were focused on device interventions.

Overall, the significant focus on breast cancer positions South Dakota as a key player in oncology research. While drug development is crucial, expanding research into other intervention types, such as devices or behavioral therapies, could position South Dakota as a more versatile and comprehensive research hub.

## 2023 Active Clinical Trials - Non-recruiting

For non-recruiting clinical trials for 2023, Merck Sharp & Dohme LLC and Amgen were the most active sponsors, each leading 2 trials. Other sponsors, including Aurion Biotech, Janssen Research & Development LLC, Alumis Inc, Bristol-Myers Squibb, and GlaxoSmithKline, each contributed one trial.

The conditions under investigation in these trials reflect a range of health concerns. Plaque Psoriasis is a prominent condition with 2 studies. Other conditions currently studied include melanoma, small cell lung cancer (SCLC), psoriasis, colorectal cancer, asthma, corneal edema, and hypercholesterolemia, each appearing in one trial.

Similar to the studies started in 2023 and are recruiting, the 2023 active studies non-recruiting represent a majority of Phase 3 trials (60%), industry sponsored (90%), and a focus on drug interventions.

## Completed Clinical Studies in 2023

Out of 106 completed studies in 2023, 21 sponsors conducted more than one study, demonstrating a higher level of activity compared to single-study sponsors. The most active sponsor was the Children's Oncology Group with 8 studies, followed by the National Cancer Institute, Alliance for Clinical Trials in Oncology, and AstraZeneca, each with 5 studies. This concentration of activity among certain sponsors highlights a strong focus and expertise in specific areas, particularly pediatric oncology in the case of Children's Oncology Group.

Breast Cancer was the most studied condition, with 5 trials. Other conditions with multiple studies included cystic fibrosis, lymphoma, type 2 diabetes mellitus, plaque psoriasis, colorectal cancer, myopia, COVID-19, and presbyopia. The diversity of conditions studied suggests a broad research focus, addressing both rare and common diseases, which

could reflect a strategic effort to improve healthcare outcomes across a wide spectrum.

In terms of trial phases, Phase 3 dominated, accounting for 44% of the studies conducted in 2023. The presence of earlier phase trials (Phase 1 and 2) indicates the potential for a strong pipeline of new research that could contribute to future medical advancements. Funding was predominantly from industry sources, with National Institute of Health representing only 6% of the funding.

Finally, the majority of interventions focused on drug discovery comprising 53% of the studies, followed by biological studies at 20% and device studies at 8%.

In summary, it is evident that South Dakota is a key location for late-stage Phase 3 clinical trials with a primary focus on drug interventions in oncology and breast cancer research.

Building 1 at the USD Discovery District is located next to the USD Sioux Falls campus and the USD GEAR Center.



# Research Parks

In 2023, strategic planning and market research firm, Stiletto, conducted and evaluated a research park benchmark survey. This survey gathered over 90 responses which represented 95 research parks in US and Canada, combined.

According to the survey, over 80% of research parks are not located on university campus. This is true with USD Discovery District with its location in Sioux Falls, SD and the main university campus in Vermillion, SD. Although this may present some unique challenges being away from the critical mass of students and academic programs, the recent development of the University of South Dakota Sioux Falls campus coupled with the increased enrollment offers new opportunities in private public partnerships. In addition, future academic programs from the Vermillion campus may transition to Sioux Falls meeting the needs of both prospective and existing students as well as providing more research and commercialization support.

Over 30% of research parks have 1 to 3 buildings. Building 1 at the USD Discovery District is near completion with a target date of January 2025. This is the inaugural building for the research park. Considering that the research park is in its adolescence, an exciting future is prevalent. Infrastructure will be needed to support additional building construction to encompass a live, work, play vision outlined in the master plan.

Popular programming at research parks included networking facilitation and entrepreneurship programming. More specifically, programs providing access to funding and talent recruitment were most common. This insight reflects the 2023 USD Discovery District market study where prospective tenants revealed that access to funding and talent are key drivers to relocation to a research park. Programming will need to be a consideration as USD Discovery District continues to grow. However, in the life sciences and biotech space, the USD GEAR Center and other economic development programs in South Dakota have a track record with implementing relevant programs to entrepreneurs. The continuation of these programs and application of new ones will be critical to serve new companies relocating to the USD Discovery District and the region.

Popular services that research parks offer are private laboratories, testing and prototyping facilities, tech transfer services, and funding resources.

As an example, by close proximity to the USD GEAR Center, prospective tenants at the USD Discovery District will have access to several services offered by the university led incubator. The USD GEAR Center has various industry equipment for verification testing of devices and other technologies. In addition to incubator facilities and equipment, access to university intellectual property is also a benefit to companies within a research park. By partnering in the research and development of university owned technologies, researchers and companies can expand opportunities for commercialization. At the USD Discovery District, the presence of the University of South Dakota's tech transfer office in the USD GEAR Center promotes this type of collaboration between university led research, student engagement, and private industry.

Furthermore, scalable tenant-driven facility design is also a feature for some research parks. The ability to construct private laboratories and facilities guided by tenant requirements and specifications allows for flexibility and efficiency in operations.

One final element research parks incorporate is the presence of funding resources such organizations that assist in identifying funding programs and opportunities. This role remains to be largely supported by contributors from state and federal entities. However, this can include private equity and other for-profit groups. Examples for South Dakota based companies pursuing funding include the South Dakota Governor's Office of Economic Development, SD Biotech, Enterprise Institute, and the Small Business Innovation Research Office as part of Small Business Development Center. Dilutive funding resources include individual investors, angel funds, and venture capital firms.

From the commercial real estate perspective, few options suited for life science and medtech are available in the southeast region of South Dakota. The USD Discovery District represents a unique, mission driven environment. As a result, a partnership with experienced firms in architecture, engineering, and construction are essential. For Building 1 at the USD Discovery District, ISG leads the architecture, engineering, and design. McGough is the construction manager at risk.



# Conclusion

The 2023-2024 market study conducted by the USD Discovery District has illuminated key insights into the biotech, life science, and medtech sectors, both within South Dakota and across the broader United States. As 2024 comes to an end and into 2025, there is a palpable sense of recovery and resurgence in these industries. The study highlights that the post-pandemic landscape is fostering new discoveries and innovations, particularly in areas such as drug development, which are characterized by long commercialization timelines and significant funding requirements.

The findings suggest that while 2023 was marked by volatility, particularly in the biotech sector, 2024 and 2025 is poised to be years of stabilization and growth, with increasing investor interest and more predictable market conditions.

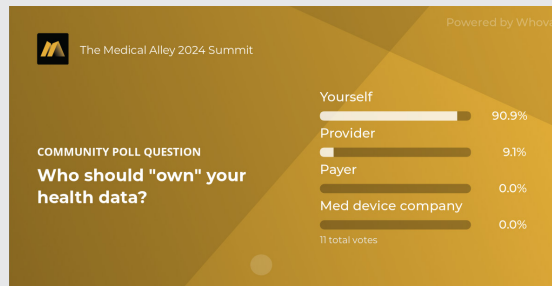
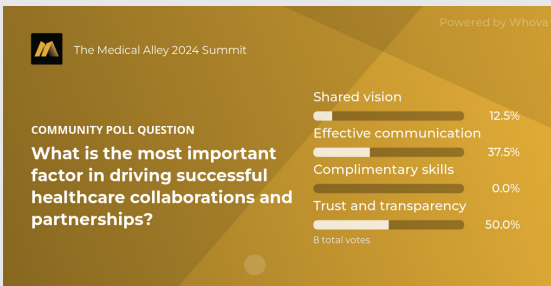
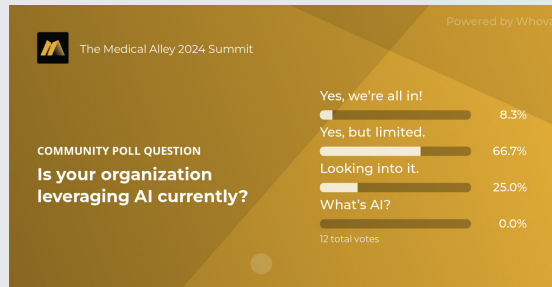
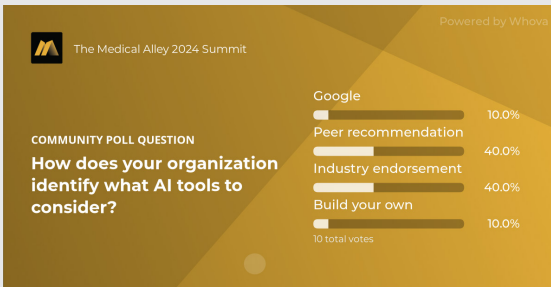
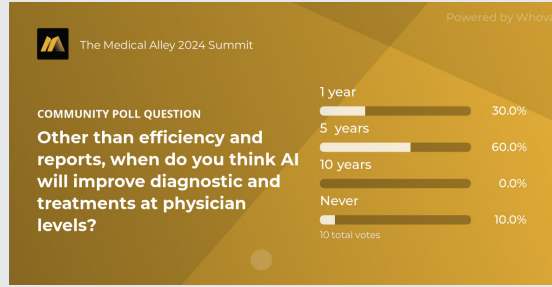
In South Dakota, the study highlights the growing, yet still modest, presence of FDA-registered facilities and clinical trials. The state's role, though small compared to major hubs like San Francisco, Minneapolis/St. Paul, and Boston, is significant in its contributions to late-stage, phase three clinical trials, especially in oncology and breast cancer research. These activities position South Dakota as a potential hub for specific types of medical research and innovation, despite its challenges in attracting early-stage funding.

The USD Discovery District, in its efforts to cultivate a favorable environment for life science and medtech companies, stands as a testament to the importance of strategic planning and collaboration. As the district continues to grow, it will need to leverage its unique strengths, such as its proximity to major interstates, partnerships with academic institutions, and access to a growing talent pool, to attract and support companies in these sectors.

In closing, the study not only provides a detailed snapshot of the current state of these industries but also offers a roadmap for how South Dakota, and specifically the USD Discovery District, can position itself as a key player in the evolving landscape of biotech, medtech and life science innovation. The insights gathered emphasize the importance of continued investment, collaboration, and strategic development to ensure that South Dakota can capitalize on emerging opportunities in these fields.



# Appendix



## Sources

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