



2021 THE YEAR IN REVIEW

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South Dakota's bioscience industry is thriving both in spite of the pandemic – and because of it.

“The last year has shown the potential we’ve seen in the state for bioscience growth start to be realized,”

said Joni Ekstrum, executive director of South Dakota Biotech, state affiliate of the international BIO organization.

“We saw a number of key developments within the industry, but we also are investing in the future in a big way – collaborating with other industries, supporting startups and connecting with our communities.”



Business growth

It doesn't get much bigger for a biotech startup for an IPO – usually.

“In the case of **SAB Biotherapeutics**, absolutely 2021 will be remembered as the year the company went public, but the year also was filled with milestones related to its biopharmaceutical products, especially SAB-185, its therapeutic for COVID-19,” Ekstrum said.

Sioux Falls-based SAB Biotherapeutics began trading on the Nasdaq in late October and has experienced significant advancement with multiple therapeutics. Its novel therapeutics for COVID-19 and influenza are in various stages of clinical trials and federal funding awards since March 2020 have exceeded \$200 million.

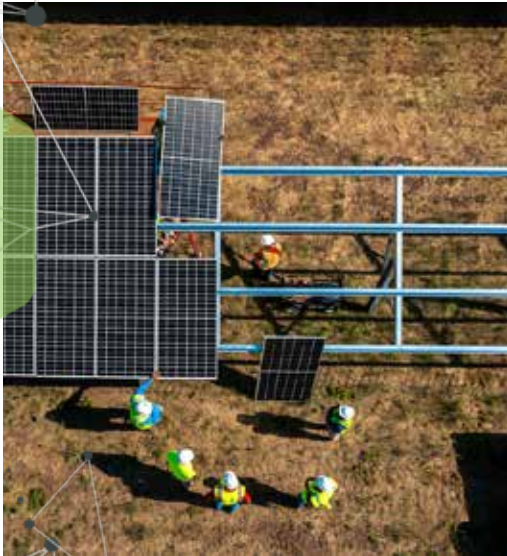
“The bioscience industry doesn't expect to see stories like this coming out of South Dakota, so the role SAB is playing to advance the industry here can't be overstated,” Ekstrum said.

“We anticipate 2022 will be a year that continues to show the promise of this game-changing company.”

Energy innovator **POET** also had a year of milestones, including its first solar farm, now helping power the company's Sioux Falls headquarters.

It serves as an example of the types of solar projects POET can help construct for others, the company said.

POET also released its inaugural sustainability report, pledging to transition its bioprocessing facilities to carbon neutrality by 2050.



Supporting innovation



South Dakota Biotech begins 2022 in a strong position to help advance the industry statewide.

Thanks to an SBA grant awarded in 2021, the association is able to hold everything from startup boot camps to regional summit, focused on connecting biotech businesses at all stages of growth with the resources they need.

“We’re interested in helping advance the work being done at a very grassroots level by injecting these additional resources,”

Ekstrum said. “We’re particularly interested in increasing diversity among our entrepreneurs, and this grant funding will allow us to tap the potential we know exists in South Dakota.”

South Dakota Biotech also increasingly is working with the manufacturing industry to explore opportunities for collaboration.

“The pandemic has led to a greater interest in domestic manufacturing, and healthcare-related manufacturing already was a growth opportunity,” Ekstrum said. “South Dakota is strong in this sector and we see a lot of possibilities to connect the bioscience community with the manufacturing resources they need.”



Adding resources

Biotech entrepreneurs also are able to access growing resources statewide.

In Rapid City, a new accelerator building is designed to blend startup office space with community resources.

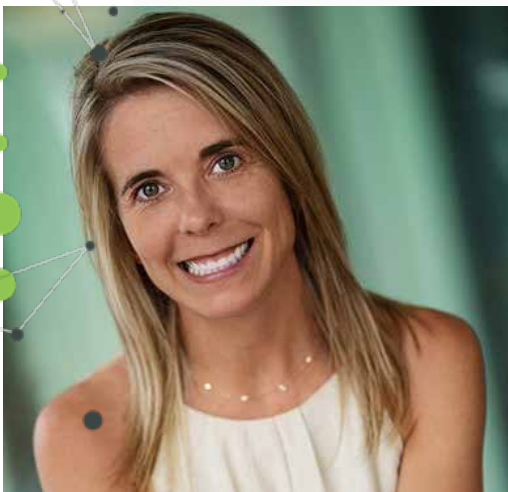
“We’re excited to see biotech grow on the west side of the state, particularly given the fantastic work being done at **School of Mines** that’s already translated to startups in other sectors,” Ekstrum said. “The affordable space, including the potential for wet labs, is going to be attractive to biotech tenants.”

And within South Dakota Biotech, members and prospective members now have an additional resource in **Shannon Van Buskirk**, who joined the team as member relations specialist in late 2021.

You’ll see her hit the ground running this year, including organizing events, learning opportunities and ways to get the word out about the momentum the biotech industry is experiencing.

“Our membership is growing, but so is our industry, so we know there are many companies that still can benefit from connecting to us or becoming more involved,”

Ekstrum said. “We look forward to meeting many of them in the months ahead.”



Impact of biotech and lifesciences on South Dakota



Source: TEconomy Partners analysis of Bureau of Labor Statistics, QCEW data; enhanced file from IMPLAN.
Note: U.S. totals include Puerto Rico.

South Dakota's biotechnology workers are Healing, Fueling and Feeding the world.

South Dakota's bioscience industry is helping diversify and grow the U.S. economy. American bioscience innovation in health, energy and agriculture is creating high-skill, high-wage jobs, driving economic growth and helping to improve the quality of life for Americans from coast to coast.

HEALING: Since 1982, biotechnology drugs and vaccines have helped improve the quality of life for more than 250 million patients living with debilitating diseases such as cancer, diabetes and HIV/AIDS.

FEEDING: Agricultural biotechnology benefits farmers, consumers and the environment by increasing crop yields and farm income, decreasing pesticide applications, increasing environmental sustainability and enhancing the nutritional profile of many foods – while also spurring America's economy.

FUELING: Industrial and environmental biotechnology companies are developing technologies to reduce waste, improve industrial processes and reduce our reliance on foreign sources of energy. Successful commercialization of cellulosic biofuels and renewable chemicals has created more than 8,000 new jobs since 2014.



Bio and Life Sciences Industry in South Dakota



6,356

In South Dakota, 6,356 individuals graduated within the last five years from the public university system with a degree that positions them to work in bioscience.



50%

GRADUATES

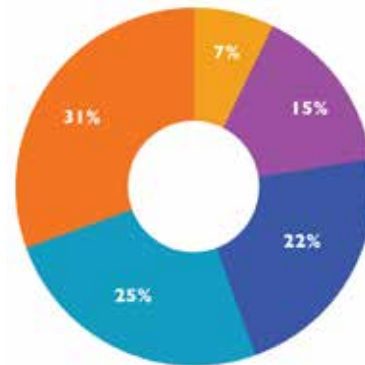
Approximately 50% of South Dakota students graduating in bioscience fields are staying in South Dakota. Continued growth in the industry is an opportunity to retain up to 3,000 additional workers.

19%



BIO DEGREES

19% of South Dakota public university graduates earn a degree in the biosciences.



- Ag Feedstock & Industrial Bio
- Medical Device & Equipment
- Bio-Related Distribution
- Research, Testing & Medical Labs
- Drugs & Pharmaceuticals

Representing a South Dakota specific supplement to the national CSBI/TEconomy Life Sciences Workforce Trends report and summary information on industry job postings for South Dakota.

The data represent the latest four years of unique (non-duplicative) job postings across the life sciences industry and its five major subsectors—agricultural feedstock and industrial biosciences; bioscience-related distribution; drugs and pharmaceuticals; medical devices and equipment; research, testing, and medical laboratories. From January 2017 through December 2020, South Dakota life sciences companies posted a total of 4,038 unique job opportunities.

Member supported, delivering direct savings



South Dakota Biotech members benefit from multiple opportunities for savings that directly impacts their work in the field.

Thanks to an agreement with Fisher Scientific, South Dakota Biotech members received more than \$10.2 million in savings off list price in 2021 for a huge range of laboratory equipment and related items.

Those can include everything from gloves to glassware, lab coats to chemicals and major pieces of equipment.

Members also saved more than \$188,000 in freight costs related to their Fisher orders thanks to this valuable program.

“There are significant costs to research and development before innovations can ever come to market, and this program helps absorb some of those costs,” Ekstrum said.

“And to make this opportunity even more beneficial, Fisher



Sum of Savings Off List:

\$10.2M

Freight Savings:

\$188K



More saving. More research.

Cost Saving Programs

\$2.8M





Member benefits

Scientific contributes to South Dakota Biotech to advance our broader goals for the industry.”

South Dakota Biotech also offers a growing range of business service savings for members, including significant discounts at UPS on shipping and Office Depot on supplies. **BIO Business Solutions**®, the largest cost-savings program for the life sciences industry, offers discounted pricing and other benefits on products and services, providing Members a savings of over \$2,800,000 in 2021.

“Whether you need recruitment services, a moving company or a microscope system, we have a partnership that will bring you immediate savings,” Ekstrum said.

“One of our goals for the coming year is making sure companies both directly related to biotech and those looking to connect with and support this industry know the many benefits of membership are growing all the time.”

*Interested in becoming a Member of South Dakota Biotech?
Visit sdbio.org or email joni@sdbio.org or shannon@sdbio.org.*