

Bioscience

2005

C O L O R A D O

TALKING TO THE TITANS

Colorado's Medical
Device Pioneers

STANDING ON FERTILE GROUND

Roundtables with
Bioscience Execs

THE URGE TO CONVERGE

Collaboration
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Bioscience

C O L O R A D O

in this issue

Welcome to Bioscience Colorado, the annual collaborative publication of the Colorado BioScience Association and the Colorado Office of Economic Development and International Trade.

Bioscience Colorado provides an in-depth look at Colorado's growing life sciences community, from biotech entrepreneurs to university research programs and medical device pioneers. We are proud of our accomplishments and eager to face the challenges that lie ahead.

In 2003, *An Action Plan to Grow Colorado's Bioscience Cluster* recommended several priorities. These included nurturing collaborative partnerships; appointing a state advocate for bioscience; continued development of the Fitzsimons bioscience park; and forming a unified industry association. Although we've now accomplished each of these steps, we know this is only the beginning.

It is no secret that Colorado is a great place to live. It is also a great place to do business. Our Western culture inspires an entrepreneurial spirit that is producing incredible results in new research and development. On behalf of the Colorado BioScience Association, we invite you to enjoy this glimpse into our past, our present, and, most of all, our future.



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State Economic Development Director Sees Bright Future for Colorado

By Jon Pushkin



Brian Vogt

Looking at the Front Range from his office on the 17th floor of the World Trade Center building in downtown Denver, Brian Vogt is confident that the future is bright for bioscience in Colorado. The Director of the Colorado Office of Economic Development and International Trade, Vogt's optimism is based on a purpose driven, long-term strategic approach he calls intentional economic development.

“We are on the right road. We have a lot of opportunity in front of us.”

He knows that building a world class bioscience cluster takes perseverance, vision and leadership. The key is not to focus on today's problems, but to look at what is necessary for the state to succeed in the next decade and beyond.

To get there, he's developed a plan to produce an environment that nurtures innovation and fuels growth.

Integration

Government and regulatory agencies can often present multiple layers that combined, make things inefficient for business. The key to minimizing those layers is collaboration.

The state is implementing mechanisms to spur collaborations among bioscience entrepreneurs, venture capital, university faculty, business associations and service providers to make it easier to access and share all the resources the state can muster. It is a creative approach that Vogt believes can provide serious benefits to the bioscience community.

Local, state and regional economic development agencies already work together to stimulate international trade. Now Colorado is expanding that model through the Advance Colorado Center, created by Vogt's office and the University of Colorado at Denver to allow business associations and government

organizations to share resources in an environment that promotes convergence and collaboration.

Beyond these steps, Vogt is exploring some “out of the box” ideas to spur economic development. For example, what if bioscience entrepreneurs could leap over bureaucratic hurdles and work together with Colorado’s tourism industry to attract new early stage funding and lure new business to the state?

Entrepreneurs, like most people, fall in love with Colorado the first time they come here. Why not leverage the state’s natural beauty and lifestyle to create a unique brand using a coordinated communications program to tout the advantages of doing business here?

Communication

Vogt believes the best way to overcome challenges is by encouraging teamwork and embracing a long-term vision. The goal is to connect bioscience entrepreneurs around the state with every available resource to help them succeed — from venture capital to a talented workforce, to essential service providers.

A bi-monthly e-newsletter targeted at biosciences and emerging technologies, and the creation of a bioscience portal on the state Web site to serve as a primary conduit between entrepreneurs and service providers, are two communications tactics the state uses to facilitate networking and enhance the benefits of doing business in Colorado.

Funding Economic Development

While continuing to look at ways to attract out of state venture capital, Vogt does not overlook the importance of growing from within. Colorado is working on several legislative policy initiatives to help the state compete with other bioscience clusters. The new Colorado Venture Capital Authority directs \$50 million to startup companies in the next decade. Another bill would allow bioscience companies to sell their operating losses to profitable businesses that can apply those losses to their own tax situations.

Vogt’s Vision

By putting all the components into play, Vogt’s vision is a comprehensive, long-term strategy that he is actively selling to bioscience entrepreneurs. Making it

succeed depends on convincing them that Colorado’s economic future is in their hands. From Vogt’s vantage point, the future looks very, very bright. ♦

COLORADO BUSINESS FINANCIAL ASSISTANCE OPTIONS

VENTURE CAPITAL:

The state of Colorado provides funding for two venture capital funding models — Certified Capital Companies and the Venture Capital Authority.

Certified Capital Companies (CAPCOs): The state has six Certified Capital Companies that make loans and provide equity to Colorado businesses. The CAPCOs are independently operated and generally make funding decisions. Minimum and maximum investments generally range from \$100,000 — \$3.3 million.

Venture Capital Authority (VCA): The state provides funding for a new venture capital program to provide seed and early-stage capital to businesses. The Venture Capital Authority fund manager will make nearly \$50 million in investments in Colorado businesses over the next ten years.

BIOSCIENCE R&D STATE SALES TAX REFUND:

Colorado bioscience companies can receive a refund of state sales and use taxes paid on the sale, storage, use or consumption of tangible personal property that is being used in Colorado directly or predominantly for research and development of biotechnology.

MANUFACTURING EQUIPMENT EXEMPTION:

Bioscience companies purchasing manufacturing equipment and machine tools that cost over \$500 are exempt from state sales and use tax on these purchases. The following items are also exempt from state sales and use taxes: component parts, fuels and electricity, ink and newsprint, aircraft parts used in general maintenance, interstate long distance telephone charges, farm equipment and machinery and packaging materials.

ECONOMIC DEVELOPMENT COMMISSION (EDC):

Business incentive funds are available for businesses that commit to meet certain job creation or retention requirements. Incentives vary based on a number of factors; however, requests generally range between \$1,000 and \$3,000 per each fulltime job created. The local community must also provide matching funds/incentives to the business.

ENTERPRISE ZONE (EZ):

A variety of tax benefits are provided for businesses expanding or locating new business facilities in economically distressed areas of the state (state designated enterprise zones).

JOB TRAINING GRANT FUNDS:

Through the Colorado FIRST Program (targeted to new jobs being created that need training) and the Existing Industry Program (targeted to existing jobs that need retraining for the business to remain competitive), the state has funds available to assist with employee training for specific businesses. Generally, up to \$800 per employee trained may be provided. Businesses must pay for a minimum of 40 percent of the total training costs.

BUSINESS LOANS:

The state has 15 Business Loan Funds that operate primarily in the rural areas of the state. The funds are locally driven, with each loan fund having its own local review committee and board of directors. Generally, the maximum loan size is \$250,000; however, this may vary based on the availability of capital and other factors. Businesses typically commit to meet certain job creation or retention requirements.

INFRASTRUCTURE ASSISTANCE/GRANTS:

The state has funds available to assist with constructing public infrastructure needed by a specific business, primarily in rural areas of the state. The state provides the funding to an eligible city or county. A business needs to commit to certain job creation or retention requirements. Generally, funding may be provided up to \$500,000; however, this amount may vary based on a number of factors.

FEASIBILITY STUDY GRANTS:

The state has funds available to assist with feasibility studies in rural areas. Funding goes to an eligible city or county; however, the study must be completed in conjunction with a specific business. The specific business needs to commit to certain job creation or retention requirements if the project is determined to be feasible and is implemented. Generally, funding may be provided up to \$20,000 per study. This amount may vary based on a number of factors.

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Talking To The Titans

COBE LABORATORIES & VALLEYLAB

Four founding fathers of Colorado's medical device industry talk about the early days and **why Colorado is "absolutely" the right place to be.**

By Bob Griff and Jere Paulmeno

Cobe Laboratories

A 1967 move to Colorado by a small southern California business named Cobe Laboratories launched the state's first outstanding success story in medical equipment manufacturing. That story carries on today through the global leadership of Gambro, AB.

Bob Collins and Ran Bellows founded Cobe Laboratories in Glendale, California to respond to a pressing clinical need.

Heart lung machines were a new technology, and a Los Angeles hospital needed special tubing to connect their machine to open-heart surgery patients. Collins and Bellows worked with the hospital to develop a heart lung plastic tubing pack.

They soon saw an opportunity in custom tubing that larger companies overlooked. "Open heart surgery was beginning to expand," remembers Collins, "and our timing couldn't have been better."

Two years later it was time to expand a thriving business. But land was expensive in Los Angeles. Another problem, says Collins, was that "product shipments of less than full trucks took 24 to 30 days to reach our East Coast customers." Collins had lived in Denver. He understood the advantages of its central location and lifestyle. He began making inquiries.



*Top: Cobe Laboratories' Bob Collins & Ran Bellows circa 1970.
Bottom: Valleylab's Robert Anderson & Fred Ayers circa 1970.*

In response, Forward Metro Denver, a predecessor to the Metro Denver Economic Development Corporation, sent representatives to visit Collins and Bellows. "They put us in touch with real estate, financing and sourcing professionals," Collins says.

Collins and Bellows negotiated a lease with purchase option for a building constructed to their specifications on 11 acres in Lakewood. "Colorado's lower costs gave us the opportunity to have our own facility in a community we would enjoy living in," Bellows says.

At home in Colorado, they redefined themselves. No longer just tubing set manufacturers, Cobe Laboratories would now focus on the evolving new therapies that would require new technologies. This became the company's driving force and organizing principle for the years of dramatic growth ahead.

But first they had to recruit an organization to achieve that mission. "**Rather than just going for experience, we concentrated on people who shared our values and wanted to learn and grow,**" Collins says. They succeeded, says Bellows, because "talented people at all levels were attracted to the opportunity to contribute to improved therapies." Many came from the University of Colorado.

Cobe's Bob Collins, retired and hip-deep in his favorite fishing hole, in Tasmania.



In time, Cobe Laboratories had two laboratory and production facilities located in Lakewood and neighboring Arvada. "These communities were good locations for quality production workers," Bellows says, "and we continued to attract more through word of mouth."

Cobe Laboratories developed an innovative systems approach to product development that blended disposable plastics and electromechanical equipment. "There are many similar requirements which apply across therapies," commented Collins. Multidisciplinary technical teams moved easily from one therapy application to another. "Each team worked with medical specialists to ensure that we were meeting their needs," he says.

The company's systems approach was first used to develop products for the extracorporeal therapies used in nephrology. Based on a prototype dialyzer it acquired, Cobe Laboratories refined the technology and later introduced its own Century system used in hemodialysis.

The company also innovated from an acquired technology to produce the Cobe BCT therapeutic plasma exchange system used in blood banks. By the late 1980s, the company had formalized its business emphases into four divisions: nephrology, cardiovascular, blood component technology, and international.

By 1990, annual sales for Cobe Laboratories were \$250 million. It employed 2,300 people worldwide and was Colorado's largest medical equipment manufacturer. That year, Gambro, AB, a global medical products company based in Sweden, acquired the company.

The acquisition brought together two companies from separate worlds with common interests. By 1998, Gambro was transformed into a fully-integrated company providing both equipment and services in the area of cardiovascular, renal and extracorporeal therapies. A significant portion of Gambro's growth was due to its dialysis services business, Gambro Healthcare, a 565-clinic business area that Gambro sold late last year to DaVita. The move allowed Gambro to return to its roots as a medical technology company focused on products and treatment systems.

"We're proud of the growth and innovation Gambro has always displayed, and we're confident we are well positioned to strengthen our leadership in renal and cell-based therapies, products and services," said Kevin Smith, President of Gambro, Inc., a holding company for Gambro's businesses in the U.S.

The Lakewood-based Gambro BCT and Gambro Renal Products continue to employ a combined Colorado workforce of 1,500. The entrepreneurial spirit that first lured Collins and Bellows to Colorado lives on in Gambro.

Valleylab

In the late '60s, Karl Mills, a scientist and Denver based distributor for pacemaker giant Medtronic, recruited Fred Ayers, a fellow distributor in Virginia, and Robert Anderson, an electrical engineer from Medtronic's home office in Minneapolis, to develop and distribute electronic medical devices for Valleylab.

By 1970, under the guidance of Anderson, Ayers and a handful of others, the company's innovative design for a solid-state electrosurgical generator was fast becoming the standard of care in surgery. Valleylab was on a meteoritic rise to global leadership.

"There were many challenges in those early days," said Anderson recently from his home in the foothills outside of Boulder. **"First of all, there were no road maps in the medical device field on what to do and how to grow, so we had to chart our own course.** From a technology standpoint, we were pushing the envelope in terms of semiconductor reliability. What's more, unlike today, there was an absence of venture capital resources, so we had to be creative about financing right from the start."

Creative thinking would continue to be a hallmark of the company. It spearheaded one of Boulder County's only revenue bond initiatives to underwrite the development of the company's new facilities in the Longbow Industrial Park located north of town, where Valleylab has continued to reside since 1976.



From left to right, Valleylab's Fred Ayers and Robert Anderson

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“The regulatory environment in the medical device field was in its infancy,” commented Anderson. “In the early ’70s, when we wanted to validate product efficacy in a certain procedure or technique, we simply recruited a competent surgeon who wanted to try something new. It’s a much more difficult proposition today to bring a medical product to market. Surgery was still reimbursed on a cost-plus basis, totally unlike today’s capitated reimbursement structure. Our timing was perfect!”

With a simpler regulatory environment, market-driven costs, the company’s leading edge technology and the right people in management, Valleylab was on a fast track to success. “Having the right people is the key to success in any new endeavor,” said Anderson. “The first few hires will make it or break it. It’s been my experience that good people tend to hire others like themselves. Or to put it another way, if you hire some pigeons at the beginning, don’t expect any eagles to join the flock. In great part, Valleylab was a wonderful experience and success because of the founding management team. They brought 100 percent to the

job every day, and they hired people who shared their commitment.”

For 10 years, fellow founder Fred Ayers directed marketing and sales as vice president for the company. “In the early days, we had to overcome considerable skepticism that our smaller box could actually perform at least as well as the much larger tube-type generator that had dominated the electrosurgical marketplace for over 20 years,” said Ayers. “We succeeded in the challenge, not only because of our technology, but thanks to the best sales organization in the world. Based on our experience with Medtronic, we knew who the influential surgeons were and we focused on meeting their needs.

“Boulder was a very good energy base for the early Valleylab,” continued Ayers. “The University of Colorado and IBM were already providing a strong economic foundation for the community. And we were able to secure critical support services locally, like plastics injection and molding capabilities that would help to fuel the growth of our disposable product business. Boulder

was also home to many talented product designers and software engineers who also helped sustain our growth.”

In fact, if he had to do it all over again, “I’d absolutely choose Boulder,” says Ayers. “It met the needs of Valleylab very well.”

The innovations by the early founding fathers of Colorado’s medical device industry created a lasting legacy. Today over 160 medical device companies make their home in Colorado. Many of their executives can trace their success back to Cobe or Valleylab. The tradition of medical device invention, high quality innovation, quality manufacturing, and leadership those companies started lives on in Colorado’s thriving medical device community. ♦



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Standing on Fertile Ground

In April 2005, two panels of experts participated in a free flowing discussion of the state of bioscience in Colorado. One group included executives from established Colorado companies. The other panel included bioscience entrepreneurs involved with young companies.

By Jon Pushkin

MATURE COMPANIES

1. Greg Baldwin is CEO and Chairman of Baxa, a medical device company founded in 1975 with a twenty-year history in Colorado. Baxa develops innovative methods of medication delivery, including the accurate and safe dosing of oral liquid drugs.

2. Michael J. Gerber, M.D. is the Senior Vice President for clinical development and regulatory affairs with Myogen, a publicly traded biopharmaceutical company discovering new treatments for cardiovascular disorders. Based in Westminster, Myogen spun out of research developed at the University of Colorado.

3. Mike Hart is President of Allos Therapeutics, a Westminster based oncology development company founded in 1994. The publicly traded Allos develops and commercializes drugs for improving cancer treatments, including breast, lung, brain and other cancers.

4. Jim Linfield is Managing Partner of the Colorado office of Cooley Godward, one of the most integrated and comprehensive life sciences legal practices in the country. The firm represents over 500 life sciences companies, both public and private, in the U.S. and internationally.

5. Sean Moriarty is the Vice President of business development and counsel for QLT USA, Inc., the Fort Collins based subsidiary of QLT Inc. QLT is a global biopharmaceutical company specializing in developing treatments for cancer, eye diseases and dermatological and urological conditions. QLT USA was created when QLT acquired Atrix Laboratories, Inc. in late 2004.

Q: Why did your company choose Colorado?

What are some of the challenges and advantages facing Colorado bioscience companies?

Sean: Colorado is a fertile ground to grow a new business. Even though half of all University of Colorado law students are from out of state, 80 percent of them stay and practice in Colorado after graduation. **Once people are drawn here they tend to stay.**

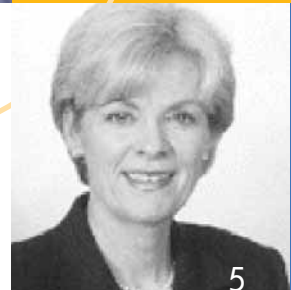
Mike H: Allos Therapeutics originated in Richmond, Virginia. We came to Denver because our first CEO was a Denver native and the company relocated here. We've been here ever since.

Greg: Baxa moved to Colorado in 1982 with about 12 employees. The founders really wanted to live in Colorado because of the lifestyle. We now have 285 people in Colorado and over 300 employees worldwide. As a medical device company, our profile is higher in Colorado than it might be elsewhere. It's a great place to work, with a highly educated workforce.

Mike G: Myogen's founder, Mike Bristow, was the chief of cardiology at the University of Colorado. The rest of the management team all had Colorado connections as well. We were committed to building biotech in Colorado.

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Expert Roundtables Focus on Industry Growth



By Dan Christopherson

Q: How does Colorado compare to other major bioscience clusters?

Terry: Colorado is particularly well positioned to take advantage of convergence. Convergence spells the future of Colorado because the state brings together so many technologies here.

Harry: One of the really nice things about Colorado is there is such a nice mix. You can have two great companies from different areas working together to spin off innovation in a totally different area. The other thing that makes us unique is that Colorado is big enough to have everything you need, but small enough to know where to look for help.

Randy: Fitzsimons (*see page 26*) gives us a tremendous amount of infrastructure investment to promote entrepreneurial growth. For a small startup, finding 2,000 square feet of lab space is hard to come by. So we set Proteome up at Fitzsimons. It really speaks to the level of investment that's going on there.

David: Entrepreneurship is a lonely pursuit. But the nice thing in Colorado is you don't have to feel like you are odd or different. There are a lot of people like you and the entrepreneurial community is very supportive. If you are in Colorado and doing something entrepreneurial, you're in the right place.

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YOUNG COMPANIES

1. David Allen is the Assistant Vice President for technology transfer for the University of Colorado System. CU's technology transfer office plays a vital role in the growth of young bioscience companies.

2. Terry Knapp, M.D., is the President and CEO of Orthonetx Incorporated. Located in Superior, southeast of Boulder, the company develops medical devices for distraction osteogenesis (mechanically induced growth of new bone and adjacent soft tissues) to treat human bone-related tissue deficiencies and deformities.

3. Harry Ross, M.D., is the Managing Partner of Aweida Capital Management, located in Superior. Aweida operates a \$100 million fund, providing seed or early stage financing ranging from \$500 thousand to \$10 million.

4. Randy Swenson heads Proteome Resources, LLC as its Chairman and CEO. The company, established in 2004, manufactures and provides biochemistry tools and services for drug discovery and basic research.

5. Ginny Orndorff is President and CEO of Evolutionary Genomics. The Aurora company has developed a patented gene discovery platform that sifts through large amounts of genomic data to identify only those genes that have a high likelihood of commercial value for downstream validation.

MATURE COMPANIES *continued*

Getting good talent isn't about the money, it's about the science. Am I going to have an opportunity to work on something that makes a difference? If we can provide good opportunities to work on something exciting and bring it to fruition, that's the first step in attracting the talent to Colorado.

Q: Successful businesses need access to top quality professional and technical support. How would you rate the quality and availability of these services in Colorado?

Greg: The service side in Denver is outstanding, from IT to legal to accounting. There's a tremendous environment to do business. We also have some outstanding medical device companies here who laid the groundwork for Baxa's success, like Cobe, Valleylabs and Gambro.

Sean: Service providers here have an entrepreneurial, Western spirit that comes through in many ways. For the vast majority of our needs we can easily get competitive bids.

Q: Some people feel Colorado needs more senior level executive talent. Do you agree?

Greg: Our head of sales and marketing lives here during the week and flies home on the weekends. To grow you have to be flexible. By and large we have all the senior level talent we need here but sometimes you have to improvise.

Mike H: I agree with Greg. The preference is always for people to live here, but if it's a person you want badly enough you try and accommodate them.

Mike G: The bottom line is the team. It's always better if the team is all in one place but the key for Colorado biotech executives is to be flexible.

Jim: The further you go through the development cycle the shallower the talent pool. That's because there are relatively few companies in Colorado with experience taking drugs to market. As more Colorado companies gain that experience there will be a deeper talent pool. It's a problem that solves itself over time.

Q: A lot of people worry about the impact of the State's economy on the growth of Colorado's bioscience cluster. How would you describe the business and economic climate in Colorado today, and how do you feel about the future?

Sean: People need the products we make regardless of the economy. The economy may affect individual employees and their personal optimism, but Colorado is a great place to be. There is a lot of political pressure on the pharmaceutical industry right now but I remain optimistic about the future.

Mike H: Colorado should not undersell our location in the middle of the country and the benefits of a premier facility like Denver International Airport. Having easy access to anywhere in the U.S. is a real asset, particularly to smaller companies.

Greg: The economic downturn actually gave us a bigger pool to recruit from. Rising energy prices are a concern but I'm generally encouraged about the economy.

Jim: A great unwritten story is the success Colorado companies like Myogen, Allos, Pharmion and Replidyne have had in licensing compounds from big pharma. It has a lot to do with our very robust phase III pipeline. We've never had so many drugs in late stage development.

Q: We don't have much state funding to promote bioscience. If Colorado could do one thing to promote the industry, what would it be?

Jim: We need complete unequivocal support for the State's institutions of higher education. We have some of the best people working at our universities and colleges. We won't be able to continue to attract and retain them unless we provide state support for higher education.

Mike G: Every successful biocluster is characterized by strong universities with great professors spinning out their ideas through tech transfer and funded by venture capital. We need a seamless tech transfer system so universities can create ideas and commercialize those opportunities. It is just critical.

Q: What do you think Colorado's bioscience industry will look like in ten years?

Mike H: I'm very optimistic. Good things are happening and success breeds success. CU can be the discovery engine that drives it all.

Greg: My hope is that more companies will establish themselves as Colorado companies and commit to staying here long term.

Sean: We will double the number of companies at all levels and establish a better tech transfer system to help us reach critical mass.

Jim: Colorado will see a significant increase in the number of products that come to market from university research. This will have an enormous impact on health care in the areas of cardiology, cancer care, eye health and arthritis.

Mike G: We have all the pieces in place for a successful biotech environment. The future is bright. Success is just around the corner. ♦



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YOUNG COMPANIES *continued*

Q: New companies constantly need early stage funding. How would you describe the investment environment in Colorado?

Harry: For a state the size of Colorado, the investment environment is pretty good here. Nationally, we often rank in the top five in terms of capital investment. When you consider we are in the same company as California, New York and Massachusetts, that's really good – especially when you crunch that down to a per capita basis. **Everybody always wants more money, but compared to 45 other states I think we are in great shape.**

Ginny: As an early stage company, we never have enough capital. Colorado really reflects what's going on in the whole country. The trend is not to invest venture capital in very early stage companies.

Harry: Try raising money in places like Montana or Utah or the Dakotas or Kansas. There is never enough money, but it's better here than just about anyplace else.

Randy: Colorado needs more funding for early stage companies without a product in the pipeline yet. Thanks to the Colorado BioScience Association (CBSA), it now looks like we are going to get some state-funded investment money specifically focused on early stage bioscience companies. That will be a big boost.

David: Technology transfer comes down to resources. It's a Darwinian business world out there. Viable ideas become concepts that become companies. Unfortunately, there is more capacity for productive use of capital than is available today.

What we are seeing across the country is that there are very few cases where private source capital does indeed step up sufficiently. So, if we are going to create a vibrant economy, and bioscience is part of it, then that becomes a role for government.

Terry: Colorado has a couple of heroic venture capital funds but none totally dedicated to life sciences investments. **It's a chicken and egg question. I guarantee you if we had more funds here dedicated to life sciences, more life sciences companies would emerge.**

Harry: There is nothing unique about the lack of early stage money here at all. People's risk tolerance has changed. They put money into companies that already have revenue, FDA approval, or are in discussion for acquisition. Since 2000, there are roughly half as many venture capital groups in existence as there were before. It leaves a big hole as far as what can be funded.

Terry: There is a movement afoot to fill the gap – the organized angels – not just the “mom and pop's who write a check angels”, but the West Coast Angels, the CTEK Angels –

all of these groups who are now banding together with a degree of organization we have never seen before.

Q: Another thing young bioscience companies need is ready access to high quality talent and resources. Are we doing a good job of making these resources available to new companies in Colorado?

Ginny: We are doing a good job here. When we needed to fill some temporary positions we got people with 20 years of experience in microbiology. There is fantastic talent here, and not just at the executive level. There are also good patent firms here. And CBSA is creating ties to national resources.

Terry: Colorado's strengths in recruiting are obvious. People move here without a job simply for the quality of life. Boulder County has more software engineers per capita than anywhere else in the nation. We have a smorgasbord of very good resources to draw from.

Harry: We have no problem recruiting people from California to Colorado for many reasons, including the cost of living, traffic, and the economy.

Randy: It's a buyer's market. Large corporations want to maintain facilities here simply because the cost of living is relatively low and the talent and education level is quite high. The cost of doing business is pretty good here.

Q: Where do you see your company or organization two years from now and what is the most important thing you need to get there?

Randy: Our plan is to be a \$400,000 per year company in two years as a reagent supplier. We need a little bit of capital and a little bit of time. We have most of the resources we need except a little extra funding.

Ginny: We will be cash flow positive, finally. We just did our first strategic alliance last fall and we plan to do several more over the next several years. And we plan to have millions of dollars in revenues.

Terry: Orthonetx just acquired an IT company, 20 percent of a multidisciplinary engineering and manufacturing company, and is merging with a profitable California public company that is moving its headquarters to Colorado. In two years we will be a force to be reckoned with.

Harry: We should be doing exactly what we are doing now.

David: We plan on having 15-17 fulltime employees and

royalties north of \$20 million. We plan to be financially self-sufficient because we struck the kind of deals that matured to the level that allows that to happen. In a couple of categories, we will be in the top ten universities in the number of startups we do – nine to 12 per year. We want people to think of the University of Colorado just after MIT and Stanford when they think of technology transfer.

Q: What advice do you have for bioscience entrepreneurs considering Colorado?

Ginny: If you have solid technology and a market for it, you will find a way.

Randy: Understand your capital resources and where they are going to come from.

Terry: Think of the four P's: production, product, people and policy. Go for world class in each category.

Harry: The biggest problem is not the lack of talent, it is lack of experience. Learn from others' mistakes; don't make your own. ♦

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The Urge to Converge

Collaboration Sparks Innovation for Colorado Bioscience

By Dan Christopherson

Splicing
Fusing
Adapting
Interfacing
Combining

These are connective bywords of the biosciences.

Add to that lexicon another word that embodies the direction of bioscience in Colorado: convergence.

Increasingly, professionals and organizations with varied expertise are coming together to spark new products from a variety of technological combinations. For example, photonics-medical devices, nanotech-photonics, IT-biotech, and alternative energy-biotech.

Proactively bringing together the state's leaders in these disciplines is one of the central strategies of the state's action plan to grow Colorado's bioscience cluster.

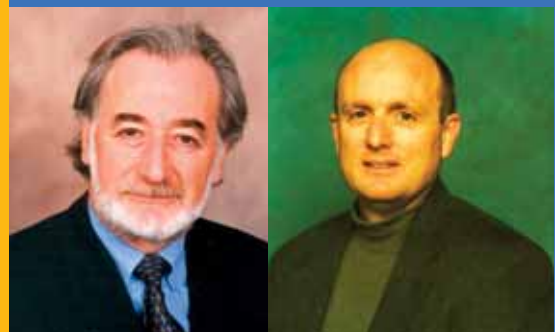
While several academic and industry groups are committed to creating collegial, interdisciplinary relationships, the official responsibility for weaving

together the statewide efforts of seemingly disparate bioscience players falls chiefly to Christine Shapard. She is the director of the state's Biosciences & Emerging Technologies Initiative, part of the Office of Economic Development and International Trade (OEDIT).

“Convergence is happening faster in the bioscience field, even faster than we thought it would,” she says. “We are focusing on it, taking advantage of Colorado’s unique technology assets to move ourselves ahead of the pack.”

That focus is embodied on a single floor of the same downtown Denver office building where her office is headquartered. The brainchild of OEDIT Director Brian Vogt, it is called the Advance Colorado Center. In partnership with the University of Colorado at Denver and Health Sciences Center, it brings together non-profit associations and industry support programs under one roof.

Shapard says it is indicative of the state's resolve that the new center became a reality only five months after the idea



Above left: Dr. Mervyn Jacobson, President/CEO, XY Inc.

Above right: Dr. Richard Casey, founder and Chief Scientific Officer, RMC Biosciences.

Left: Chris Shapard, Director of Colorado's Biosciences and Emerging Technologies Initiative.



was first conceived. She sees this new office suite – opened in 2004 – as an important catalyst for convergence.

The Colorado BioScience Association became the first official tenant. Since then, several other organizations with a stake in biosciences have moved in, including CTEK Venture Centers, the Colorado Software and Internet Association, the Colorado Environmental Business Alliance/P3, the Colorado Film Commission and the Colorado Alliance for Microenterprise Initiatives. The Colorado Nanotech Initiative is set to move in by mid-2005, as is the Colorado Manufacturers Association.

By bringing together associations representing various technological disciplines, the center leverages their membership bases, networks of contacts and intellectual capital. The center also promotes dialogue between association leaders, whether it is a casual conversation in the center's coffee room or more formal interactions such as trade missions and industry conferences.

Shapard says the relatively compact size of the bioscience industry in Colorado



“Call Me Madam,” the first filly in the world to have her sex predetermined, chases after her mother. Photo courtesy of XY Inc.

helps engender convergence. “Clusters form easily here. People tend to hear about each other and forge their own alliances.”

An interesting example of bioscience convergence is the linkup of agricultural animal biology, genetics, fluidics, optics and photonics. XY Inc. in Fort Collins

provides sex selection technologies to the U.S. and international dairy and livestock industries, among others. To do so, it employs a flow cytometer to sort “X” and “Y” chromosome-bearing sperm populations to help achieve desired sex-selected outcomes in

artificial insemination with at least a 90 percent accuracy rate.

In this case, XY’s genetics expertise converged with two other entities, the bovine and equine breeding research group at Colorado State University (CSU) Animal Reproduction and Biotechnology Laboratory, and Cytomation, a medical technology firm manufacturing flow cytometers that rely heavily on photonics.

Dr. Mervyn Jacobson, XY’s president and CEO, and the CSU Research Foundation, remain two of the major shareholders of the privately held XY Inc. Dr. Jacobson also was chairman and an early investor in Cytomation, a company that developed hardware and software to speed up the flow cytometry process over the existing state of the art. His ownership ended in 2001 when Cytomation merged with Danish-owned Dako to become DakoCytomation.

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XY Inc. CEO Mervyn Jacobson (seated) with Maurice Rosenstein and Juan Moreno, partner-owners of Inguran, XY Inc.'s first commercial licensee in the United States. Photo courtesy of XY Inc.

DakoCytomation's MoFlo SX flow cytometer (high-speed cell sorter), employed by XY, utilizes photonics technology to excite fluorescent dye in each sperm, then assemble and focus the fluorescent pulses on a detector that converts light into electrical signals; the signals are subsequently transformed into digital information and conveyed to a computer that controls the sorting process. XY Inc.'s early successes include, in 1998, the world's first sex-selected foal and, the following year, the world's first sex-selected calf, using frozen sexed sperm and artificial insemination.

Reflecting on the convergence phenomenon, DakoCytomation Vice President of Flow Cytometry, Ulrik Cordes, notes that flow cytometry itself is the result of convergence of the motivations and interests of physicists, biochemists and biologists. He feels the XY example is the perfect illustration of diverse disciplines coming together serendipitously to create a new bioscience solution.

"We developed our flow cytometers chiefly to deal with cancer cells," says Cordes, a biochemist by training. The idea of using the equipment as a workhorse to sort Xs and Ys never entered into the equation as the company's flow cytometers evolved. "The only common denominator between what we designed our products for and what XY does is cells. That's all." But such re-purposing is a distinguishing characteristic of convergence, and he points out that the Jet Propulsion Laboratory has expressed an interest in someday using his company's products to learn more about life on Mars.

After the cells are sorted, diagnostic data is the bottom line for DakoCytomation. Thus, IT plays an integral role in the company's products and success, just as it does for many of the state's bioscience companies. In Colorado, the IT companies involved in supporting the bioscience field range from sales and support offices of internationally prominent names such as IBM Life Sciences to startups working hard to make a name for themselves.

Take, for example, another Fort Collins company, RMC Biosciences. Its name reflects its market niche, providing computer aided drug design services for the biopharmaceutical industry.

Convergence, in a sense, is RMC's business. According to the company's founder and Chief Scientific Officer, Dr. Richard Casey, "We are at the intersection of IT, bioinformatics and computational resources to serve the biopharma industry."

Colorado biopharms that are not large enough to afford computational modeling and bioinformatics capabilities turn to RMC. Although the company has just three employees, RMC's know-how, computational resources and molecular modeling capabilities allow smaller companies to tap into immense databases. RMC helps small biopharms screen out thousands of drug experiment options that prove to have little chance of becoming drug candidates, thus obviating the need to proceed to what would otherwise be unnecessary, costly and time-consuming in vitro and in vivo tests.

Another “small subject” generating growing interest is nanotechnology, the manipulation of matter at the molecular and atomic level to create new products. (A nanometer is about one-hundred thousandth the width of a human hair.) Experts expect nanotech to play an increasingly prominent role in bioscience convergence in Colorado.

The state currently ranks third among all 50 states in nanotech potential according to a study released earlier this year by Lux Research. This was attributed to a favorable business climate and the presence of university and federal labs in the Denver and Boulder area.

Dr. Louis Hornyak, one of the founders of the Colorado Nanotech Initiative, says that while nanotechnology is applied to many fields, Colorado’s bioscience enterprises stand to benefit significantly from the state’s budding nanotech community.

“Nanotech will enable the biosciences in many ways. After all, bioscience is about Mother Nature, and Mother Nature is the ultimate nanotechnologist. At the atomic and molecular level, you don’t have functionality. The nano level is where combinations of atoms and molecules occur,” he says, enabling functionality.

Hornyak believes Colorado’s medical device industry will soon leverage nanotechnology’s key functional advantages of speed, surface impact and inherent property stability. “Nanotech is where things happen extremely quickly, immediately impacting a tremendous amount of surface area,” he says. Material addressed on a nanoscale level exhibits significantly different, more stable properties, opening up a world of scientific and manufacturing possibilities. “This will revolutionize bioscience.”


Some companies are ahead of the nanotech curve. Metafluidics, in Golden, brings together bio and nano in its cell sorting technology, which combines microfluidic flows and optical traps to create lab chips for microbiological research.

Zettacore, located in Denver, is the state’s premier user of nanotechnology. Zettacore develops molecular memory technology and products for semi-conductors. It uses molecules to store data on semi-conductor devices. Molecular properties remain stable at the nano level, permitting very small scaling.

Another example of nanotech’s impact is ALIO Industries of Wheat Ridge. The company designs and builds precision equipment for nano precision applications, including biomedical applications. The company’s stage devices control motion on micro and nano scales. Its three-axis and six-axis robots are enabling advances in fiber optics alignment and sub-micron automation. Such technology opens new opportunities for medical device innovation.




Photo courtesy of DakoCytomation.



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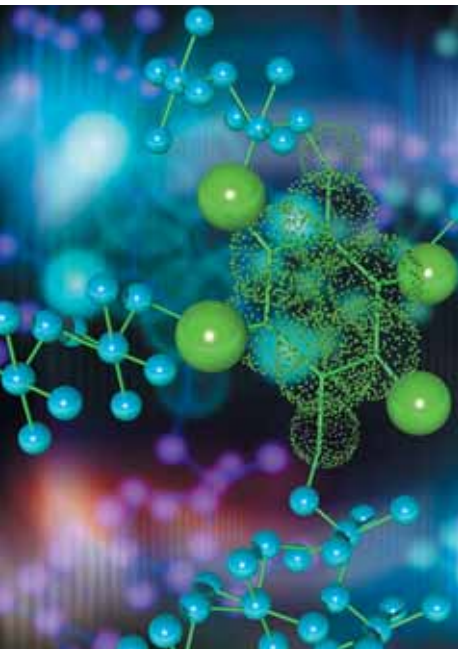
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Laser technology figures prominently in convergence. Dr. Silvia Mioc heads the Colorado Photonics Industry Association, a group promoting the role of photonics in convergence. The 70-member association hosts events focusing on biopharm, nanotechnology and homeland security, and maintains close contact with the Colorado BioScience Association and the Colorado Nanotech Initiative.

“Photonics is both an industry and a technology,” Mioc says. “It serves many different industries, including the biosciences. Because photonics is non-invasive and portable, it has many bioapplications.” She notes, for example, photonics is fundamental to the field of oximetry, which uses light to analyze and determine hemoglobin oxygen levels.



Nanotech and photonics converge at Spectranetics in Colorado Springs. The company’s technology features an excimer laser system for minimally invasive cardiovascular procedures. Laser catheters are used to adapt to circumstances where the goal is to ameliorate blood flow.

To promote the application of photonics, among other technologies, the state set up the non-profit Colorado Advanced Technology Center to rent photonics

equipment to bioscience and other technology companies. Currently housed in Longmont, plans are underway to move the center to the University of Colorado – Denver and Health Sciences Center.

Emblematic of the trend toward convergence, the Health Sciences Center itself is moving to the new Fitzsimons campus in Aurora. “Fitz,” as it is known, is a bioscience park where medical academicians, students and researchers can join with hospitals, clinics and nascent biotech, pharma and medical device companies to bring a wide, new spectrum of bioscience discoveries to light.

In Colorado, convergence is more than just a byword, it is an attitude. Every day, at every level, it is helping the industry evolve in exciting new directions. ◆

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STARTING OR RELOCATING, COLORADO'S BIOSCIENCE RESOURCES ARE LONG, STRONG AND DEEP

By Jere Paulmeno



Photo courtesy of NREL.

With nearly 40 years of bioscience industry experience, Colorado has a robust infrastructure to support biomedical, pharmaceutical and medical device companies. Relocating and startup companies alike will find a full array of specialized business resources to help them navigate a complex, worldwide health care market.

Perhaps the first consideration is physical space. Colorado offers abundant, affordable land for facility sites. Technology parks such as Westmoor, Commerce Center Longmont, the Denver Bioscience Campus at Stapleton, and Fitzsimons Bioscience Park — adjacent to the University of Colorado Health Sciences Center, provide master-planned campuses with plenty of room to grow in proximity to established metropolitan areas.

Site-seeking companies can also call on Colorado real estate specialists, such as Staubach, and Westfield Development Company/Frederick Ross, that are experienced in the requirements of the bioscience industry.

Entrepreneurs with an idea and a health care related mission can find startup incubators all along Colorado's Front Range. These provide comprehensive physical and service environments aimed at nurturing new ventures. Several to note are the Colorado Springs Technology Incubator, Fitzsimons Bioscience Park, Fort Collins Business Technology Incubator, and Rose Biomedical Development Corporation, the Boulder Innovation Center, and various CTEK locations.

Bioscience businesses needing design and construction of specialized laboratory and production facilities have numerous local experts to call on. Specialized architectural firms include The Abo Group, LS Planning, RNL Design, Christopher Carvell Architects, and Maynard/David Partnership. Clean room and laboratory design services are available from firms such as bioBubble and ISEC Laboratory Services.

Among bioscience construction engineers, managers and contractors are Cator, Ruma and Associates, Haselden Construction, Lauth Property Group, LS Planning, M.A. Mortenson, Martin/Martin, VECO USA, and InterTech Planning and Design.

Venture capital is a crucial resource for the state's maturing bioscience industry. Local venture capital firms that invest in the life sciences include Aweida Capital Management, Boulder Ventures, Morgenthaler Ventures, Sequel Venture Partners, Tango, and Quest Capital Partners.

Developing bioscience businesses will also find specialized assistance from state government and educational institutions. For example, the State of Colorado provides state tax and business financing assistance. Business development, technology transfer and proof of concept programs are offered by the University of Colorado, Colorado State University, and National Jewish Medical and Research Center.



Photo courtesy of the University of Colorado at Denver and Health Sciences Center.

Once the facilities are in place, successful bioscience companies require support from a wide range of highly-skilled people. Over the years Colorado has attracted and grown an established network of businesses and industries that specialize in serving the bioscience sector.

Experienced legal counsel is well-represented in Colorado, from venture financing to securities law, intellectual property, food and drug, and medical device law. Firms with substantial international practices, such as Hogan & Hartson, have Denver and Boulder area offices. Other firms with specialized expertise include Cooley Godward, Dorsey & Whitney, Faegre & Benson, Fairfield and Woods, Holland & Hart, Holme Roberts & Owens, Merchant & Gould, Patton Boggs, Sheridan Ross, Snell & Wilmer, Swanson & Bratschun, and Townsend and Townsend and Crew.

Bioscience companies in Colorado can outsource critical services to a multitude of highly specialized service providers. Hardware and software R&D, prototyping, contract manufacturing, components manufacturing, clean rooms, drug discovery, computation, laboratory testing and certification, and environmental health and safety are all locally available.

Colorado bioscience companies have easy access to highly specialized regulatory consultants. For assistance on regulatory compliance and quality assurance, the list to consult includes Reglera, CBR International, Cericon, Medical Device Consultants, and M.W. Wenzel.

For accounting, financial and IT assistance, companies can turn to Pricewaterhouse Coopers, Ernst & Young, Tatum Partners and others. Colorado is also home to bioscience-experienced public relations, investor relations and marketing

communications specialists such as Absolutely Public Relations, Burns Marketing Communications, ISIS Public Relations, Sage Public Relations Group, and Griff/SMC Marketing Communications.

Looking for good talent? With a youthful population and one of the nation's most highly educated workforces, only two other states have more scientists and engineers than Colorado.

Augmenting the continual influx of educated young people is Colorado's university and community college system. The University of Colorado, Colorado State University, and the University of Denver offer a wide variety of important life science research programs. Community and private technical colleges provide trained workers in a number of relevant disciplines.

Notable among the state's research hospitals and institutes are the University of Colorado Hospital, the Eleanor Roosevelt Institute, National Jewish Medical and Research Center, The Children's Hospital and VA Medical Center. High-profile federal laboratories include the National Renewable Energy Laboratory, National Institute of Standards and Technology, National Oceanic and Atmospheric Administration and the Vector-Borne Disease Lab, of the Centers for Disease Control and Prevention.

Several specialist firms help bioscience companies mine Colorado's fertile human resources for scientists, engineers, managers and other technical staff. These include Kelly Scientific, Kforce Scientific, Volt Scientific Services, and On Assignment. Contract technical training and human resource administration services are provided by Biopharma Training Institute, Employer Services Group, Knowledge Forge, and others.

Bioscience thrives when partnerships provide services to fill critical needs. Colorado, long an attractive place to do business, is broad and deep in the unique resources bioscience and health care companies need to succeed in a fiercely competitive market. ♦



Photo courtesy of NREL.

Fueling Colorado's Biotech Boom

Technology Transfer Takes Innovation from Lab to Market

With over \$500 million in annual life science research activity, Colorado's institutions provide a substantial pipeline for new technologies.

By Jon Pushkin



Technology transfer helps universities and research centers “transfer” their innovations from the lab to the marketplace. It allows them to license the technology to secure the investment dollars and means to commercialize the discovery.

Across the state, in university labs and public research institutions, Colorado's technology transfer wizards are helping scientists bring their discoveries to life. It's a dynamic combination that is just beginning to take off.

University of Colorado (CU)

Tech transfer is a high priority at CU. The university provides the resources to identify, protect, package, and license the intellectual property resulting from the research process. From advising faculty on IP issues to fostering inventor participation in the tech transfer process, CU educates campus researchers about tech transfer, solicits and analyzes invention disclosures from faculty, students, and staff, and analyzes commercialization feasibility of university intellectual property.

David Allen, Associate Vice President for technology transfer at CU, says Colorado must do a better job of creating early stage financing. He points out that California is investing billions in stem cell research, while Colorado is still recovering economically and runs the risk of falling behind.

Allen says that CU's success in discovering new technologies is proof of what can happen when research becomes an institutional priority. Federally funded research at CU increased by 77 percent from 1996-2001, the third highest increase among all U.S. universities.

In the past year, nine bioscience companies spun out of CU research. “Biology is the most common undergraduate science degree,” says Allen. **“The talent is out there. We just have to provide them with the resources to succeed.”**

Colorado State University (CSU)

The Colorado State University Research Foundation (CSURF) manages the intellectual property resulting from CSU research. This includes patenting, licensing and marketing technologies; developing close relationships with business and industry; providing support and guidance to startup companies; managing equity positions in startup businesses; evaluating technologies for commercialization potential and matching opportunities for technology development with University research capabilities. CSURF also handles any revenue from technology transfer.

Kathleen Henry, President and CEO of CSURF, says although Colorado receives significant research funding there could still be clearer communication and enhanced cooperation among private industry, universities and research institutions.

Clarifying the rules that govern the use of university facilities by private industry, and providing better defined opportunities on the participation of public university faculty and students in startups would help, she says. She also hopes for more state funding for higher education to help retain top faculty. In addition, "gap" funding is needed to bring the relatively embryonic state of university technology to a level in which it can be more easily commercialized.

CSU receives approximately \$240 million per year in research funding, the third highest total among public universities without a medical school.

National Jewish Medical and Research Center

Founded in 1899, National Jewish Medical and Research Center is the nation's top hospital for treating respiratory diseases. It is the only facility in the world dedicated exclusively to the treatment of patients with respiratory,

immune and allergic disorders, and is in the top five percent of all U.S. institutions for medical research funding from the National Institutes of Health.

The National Jewish tech transfer program facilitates the commercialization of laboratory research in biotechnology, biological materials and biomedical devices. It identifies and protects intellectual property and facilitates business partnerships for collaborative research and technology licensing. National Jewish has nearly 100 technologies in its active portfolio and owns more than 50 issued U.S. patents plus additional corresponding foreign patents.

Brad Brockbank, manager of the National Jewish tech transfer program, sees a large gap between developing an academic innovation and maturing the technology to the point that it becomes attractive to startups. To help bridge that gap, the institution is stepping up its emphasis on translational research, recruiting physician scientists who have a hand in both research and clinical activities, and developing a technology enhancement and commercialization fund to mature their intellectual properties and reduce risks for potential licensees.

AURORA

Bioscience...one of Colorado's leading industries by 2010.

Aurora is home to Fitzsimons, the largest bioscience development in the United States. The 578-acre project is undergoing a \$4.3 billion transformation that will result in approximately 15 million square feet of new construction. These facilities will be used for patient care, education, basic science research, and bioscience research and development. When completed, more than 32,000 professionals will work at Fitzsimons.

The Aurora Economic Development Council is the business and government partnership behind Aurora's unparalleled emergence as the most important city in Colorado's future. Through innovative employer recruiting, expansion and retention initiatives, Aurora EDC is helping build a new regional economic powerhouse representing the state's most promising growth industries, including transportation, biosciences, aerospace, and defense systems.



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Photo courtesy of Fitzsimons Redevelopment Authority

“Getting academic innovations to startups takes resources and a commitment from the institutions to invest in their own technologies,” says Brockbank. “It takes a shift in vision at the highest levels of the institution regarding its mission in the community.”

National Renewable Energy Laboratory

The National Renewable Energy Laboratory (NREL) in Golden, part of the U.S. Department of Energy, is the nation’s primary laboratory for renewable energy research.

NREL receives about \$210 million annually in R&D funding, about half of which is spent at its Colorado lab.

Additional grant money is distributed to universities and private companies in Colorado and nationally.

Turning biomass materials into renewable energy is one of NREL’s primary projects. Biomass is plant matter such as trees, grasses, agricultural crops or other biological material. It can be used as a solid fuel, or converted into liquid or gaseous forms for the production of electric power, heat, chemicals, or fuels. Biomass offers an exciting opportunity to replace imported oil with renewable, domestically produced transportation fuels.

Tom Williams, director of NREL’s technology transfer office, says partnerships create market opportunities. “Our mission is built on seeing our technologies commercialized,” says Williams. “We tailor our collaborations based on the needs of the company and the market demands.” Industry partnerships may include collaborative development, technology licenses, and the use of NREL facilities. Recent NREL partnerships include a licensing agreement with DuPont to convert biomass-derived starches and sugars to ethanol, and efforts to support a local startup company, Community Power Corporation, to develop modular biomass systems for distributed energy needs.

Williams sees a huge opportunity for growth in renewable energy. “All the seeds are here to drive the market,” says Williams. **“High fossil fuel prices, concern about global climate change, and our growing reliance on foreign oil are creating a new urgency to change our energy sources.** Biomass fuels are an important part of the solution, and other renewable sources such as wind and solar are already seeing double digit market growth rates.” ♦

COLORADO SPINOUTS

Tech transfer “spins out” innovations from the lab to the marketplace. Recent examples include:

Taligen spun out of the University of Colorado. It employs novel technology to manipulate the immune system to inhibit inflammation and to target inhibitors of inflammation to specific sites of tissue injury.

Keen Ingredients uses technology developed at Colorado State University, including a unique plant protein that has the nutritional quality of animal protein.

MicroPhage is based on technology from the Colorado School of Mines. It develops high-speed bacteria detection technologies for use in food safety, environment contamination, evaluation of infectious agents in humans and animals, industrial pathogens, and biological warfare threat agents.

Bioscience Parks Provide Perfect Homes for Growing Companies

By Jon Pushkin

Colorado Bioscience Park Aurora at Fitzsimons

Located just east of Denver in Aurora, one of the most advanced bioscience communities in the world is growing on the 578-acre site of the former Fitzsimons Army Medical Center.

Colorado's \$4.3 billion "square mile of life sciences" has become the launch pad, hub and focus for the biotechnology industry in the Rocky Mountain region. The 160-acre Colorado Bioscience



The University of Colorado at Denver and Health Sciences Center's Research Complex 1 at Fitzsimons

Park Aurora is the first university affiliated "biopark" to be developed west of the Mississippi. Adjacent to the University of Colorado Health Sciences Center and Hospital, The Children's Hospital, and the Fitzsimons Commons town center, it can accommodate early-stage, startup, and established bioscience companies looking for a research community alongside

a world class academic medical institution.

The research park's incubator currently houses 13 early-stage biotech companies and two university institutes. A new building ready for occupancy in fall 2005 will accommodate graduates of the incubator as well as more advanced companies.

A 600,000 square foot research complex opened in 2005 with 1,600 researchers in 240 labs. Through an affiliation between the University of Colorado and Fitzsimons Redevelopment Authority, any company in the research park can access the new core labs in the research complex.

From biotech research and discovery to patient care and education, "Fitz" is a Colorado treasure and the largest medical-related redevelopment project in the nation.

Denver BioScience Center at Stapleton

Young urban families are flocking to a new planned community at the site of Denver's former airport. Now businesses are, too. The Denver BioScience Center at Stapleton offers strategic and economic advantages that can add up to a real opportunity for a young business.

The 200-acre bioscience park is 20 minutes from Denver International Airport and 10 minutes from downtown Denver. More than three-quarters of Denver's highly skilled labor force lives within 30 minutes and parcels can be built-to-suit.

Competitive pricing, tax incentives, a great location, affordable housing, new schools and an experienced developer are just some of the reasons why the Denver BioScience Center at Stapleton is a smart choice.

Longmont - Boulder

With one of the highest educated workforces in the country, the Longmont-Boulder area is home to some of the largest and most successful bioscience companies in the state. Amgen, Array Biopharma, Pharmion and Valleylab are just some examples.

In addition to its talent pool, bioscience companies are attracted to the area by the affordable cost of real estate, the appealing lifestyle, proximity to the University of Colorado and a business environment poised for growth. Commerce Center Longmont, recently purchased from Pratt Properties by Circle Capital, includes a business park spanning over 200 acres and is home to many prominent Colorado bioscience companies. ♦

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- 4 Plenary Sessions
- Venture Showcase Highlighting 10 Start-ups
- Technology Transfer Poster Session
- 80 Industry Exhibitors over 2 Full Days
- 700 Attendees Expected

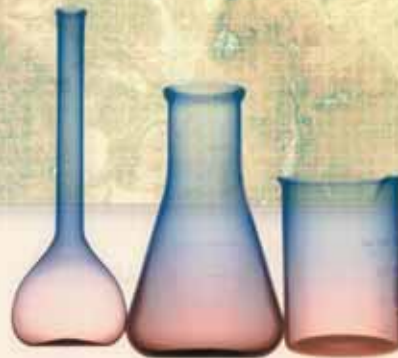
For BioWest information, contact:

Christine Shapard
Director, Bioscience and Emerging Technologies
Colorado Office of Economic Development and Int'l Trade
303-892-3840
www.biowestconference.com



2005

COLORADO BIOSCIENCE DIRECTORY



*Map graphic by Griff/SMC;
satellite photo courtesy of Space Imaging*

I N D E X

28	Research & Education Institutions
31	Biotechnology/Pharmaceutical
39	Medical Device
48	Bioscience Resources

Research & Education Institutions

Aims Community College

Greeley

www.aims.edu

Aims Community College is one of the largest and most comprehensive two-year colleges in Colorado. Since 1967 Aims has established four campuses, constructed 18 buildings, expanded curriculum to 2,000 day, evening and weekend courses and taught more than 300,000 students.

AMC Cancer Research Center

Denver

www.amc.org

AMC is a national, not for profit research institute dedicated to the prevention and control of cancer and other chronic diseases. AMC is conducting innovative and important research in the areas of cancer causation and prevention, behavioral research, nutrition, clinical and community studies and health communication.

Bonfils Blood Center

Denver Metro

www.bonfils.org

Bonfils Blood Center is one of the nation's leading community blood centers through their commitment to quality service, innovation, research and technology. They work around the clock to offer a full range of blood products and services to healthcare partners including supplying rare blood units or helping to determine the best cross-matched unit to ensure the best possible patient outcomes.

The Children's Hospital Research Institute

Denver

www.uchsc.edu/peds/research/ri/

The Children's Hospital Research Institute (TCHRI) consistently rates as one of the country's top ten percent federally funded pediatric research programs. TCHRI has achieved many firsts, including performing pediatric liver transplants, identifying causes of toxic shock syndrome and using nitric oxide for pulmonary hypertension. TCHRI now has a formalized tech transfer process with CU. Current research focuses include developmental biology, obesity, outcomes research, experimental therapeutics and clinical trials organization. Clinical research at Children's is a qualified enterprise zone from Adams County Economic Development. Children's also has only one of six pediatric general clinical research centers in the nation.

Colorado School of Mines

Golden

www.mines.edu

Colorado School of Mines (CSM) is a public research university internationally recognized for its leadership in engineering, applied science and related disciplines, with a special emphasis on the Earth and its resources.

Colorado State University

Fort Collins

www.colostate.edu

Colorado State University (CSU) expended approximately \$225 million in sponsored research in fiscal year 2004. CSU is designated by the Carnegie Foundation as being in the highest level of research classification: "Doctoral / Research Universities – Extensive." CSU boasts strong programs in veterinary medicine, biotechnology, engineering, agriculture, and natural resources. The CSU Center for Advanced Technology provides a physical location for companies and fosters relationships between CSU's research programs and private industry. The Center is home to the Natural Resources Research Center campus where nearly 1,000 federal employees work. The James L. Voss Veterinary Teaching Hospital is adjacent to the Center.

Community College of Aurora

Aurora

www.ccaurora.edu

The Community College of Aurora (CCA) provides lifelong educational opportunities, prepares the current and future workforce, and promotes excellence in teaching, learning and service to our diverse community.

Denver Veterans Administration Medical Center

Denver

The Denver Veterans Administration Medical Center (VAMC) is nationally and internationally recognized for its long and productive record of conducting high quality basic science and clinical research. Over forty Denver VAMC physicians and Ph.D. scientists annually conduct more than 450 research studies with total research expenditures at over \$17 million.

DeVry University

Denver, Westminster, Colorado Springs

www.devry.com

DeVry University is one of America's premier institutions of higher learning, providing career-focused undergraduate and graduate degree programs in technology, business and management. For over 70 years, DeVry has worked with industry leaders to define emerging requirements, develop curriculum and deliver education that is relevant for both personal and corporate workforce development. DeVry supports the workforce requirements of the bioscience industries with specialized degrees in Biomedical Informatics and Biomedical Engineering Technology, as well as programs in business and management. Many programs can be adapted and delivered on-site for companies needing specialized corporate training for their current employees. Call 303-280-7600 for more information.

Division of Vector-Borne Infectious Diseases

Fort Collins

www.cdc.gov/ncidod/dvid/

The Division of Vector-Borne Infectious Diseases (DVBID) is part of the U.S. Centers for Disease Control and Prevention (CDC). CDC is the lead federal agency for protecting the health and safety of people at home and abroad. DVBID serves as a national and international reference center for vector-borne viral and bacterial diseases, such as West Nile virus, Lyme disease, plague, tularemia, yellow fever and dengue. DVBID coordinates national disease monitoring activities, conducts field and laboratory research, responds to epidemic situations, develops strategies for disease prevention and control, provides diagnostic reference and epidemiologic consultation, and conducts technical assistance and professional training activities.

Eleanor Roosevelt Institute at the University of Denver

Denver

www.nsm.du.edu/eri/

The Eleanor Roosevelt Institute (ERI) was founded on the belief that biomedical and genetic research is the most effective, long-term approach to the eventual conquest of human disease. ERI has been at the center of genetic research since 1961. ERI's research accomplishments continue with the sequencing of chromosome 21, developing the sensitive environmental agent toxicity test, determining the lethal levels of x-rays for human cells and participating in the discovery of genes related to colon cancer, Lou Gehrig's disease, leukemia, heart disease and Alzheimer's disease.

Front Range Community College

Boulder, Fort Collins, Westminster, Brighton

www.frontrange.edu

Front Range Community College (FRCC) is an institution of higher education. FRCC admits individuals 16 years of age or older who can benefit from college preparatory and two-year college-level credit instruction in general education and occupational areas which may lead to a Certificate or an Associate of Applied Science, Associate of Arts, Associate of Science, or Associate of General Studies Degree, or lead to transfer to a four-year institution.

National Institute of Standards and Technology

Boulder

www.nist.gov

The National Institute of Standards and Technology (NIST) is a non-regulatory federal agency that operates eight different science and advanced technology research divisions in Colorado. NIST's list of research accomplishments includes a NIST senior scientist winning the Nobel Prize in 2001 for creating the world's first "Bose-Einstein condensate." In 2003 another NIST scientist won a MacArthur Fellowship for discovering a new quantum gas and was named by *Science* as one of the top ten scientific advances of the year.

National Jewish Medical and Research Center

Denver
www.nationaljewish.org

National Jewish Medical and Research Center (NJC), the number one respiratory hospital in the U.S., is also one of the most influential independent biomedical research centers in the world. More than 100 faculty members conduct basic, translational, and clinical research in immunology, respiratory medicine, allergy, cancer, and cell and molecular biology. NJC ranks among the top ten percent of all institutions for NIH support and for the impact of its research papers in the fields of Molecular Biology, Genetics, and Biology and Biochemistry. NJC manages a technology portfolio of more than 100 inventions.

National Renewable Energy Laboratory - National Bioenergy Center

Golden
www.nrel.gov/biomass/

The National Bioenergy Center, housed at the National Renewable Energy Laboratory (NREL), maintains world-famous research facilities to develop biological, chemical, and thermochemical technologies that produce economic and environmentally sensitive transportation fuels, chemicals, fibers and plastics from organic materials and other renewable biomass resources. The Center maintains laboratory, mini-pilot plant and pilot plant facilities that are available to private industry, federal and state agencies, and Department of Energy laboratories to develop profitable "biorefinery" business models based on these new technologies.

United States Geological Survey—Center for Biological Informatics

Denver
<http://biology.usgs.gov/cbi/>

The Center for Biological Informatics, at the Denver Federal Center, operates the national Biological Information Infrastructure (NBII). This is the first comprehensive electronic gateway dedicated exclusively to biological science data and information from sources throughout the world.

University of Colorado Hospital

Denver
www.uch.edu

As the flagship teaching and research hospital in the Rocky Mountain Region, the University of Colorado Hospital advances health knowledge through research and patient care. Strong research programs in immunology, cancer, neurosciences, drug and alcohol addiction and in all areas of biomedical science are evidenced by over 3,000 approved clinical trials.

University of Colorado

Boulder, Denver, Aurora, Colorado Springs
www.cu.edu

The University of Colorado System's 52,000 students and 28,000 faculty and staff contribute to every facet of life in Colorado. The state's economic vitality, educated workforce, entrepreneurial climate, cultural capital, health care delivery, and scientific explorations all rely on the driving force of a vigorous state university. By working with other CU academic and research units, as well as local, state, and federal funding agencies, commercial business, and nonprofit organizations, CU is creating a collaborative synergy in important areas that will better the wellness of society. The CU Institute of Bioenergetics, the Colorado Initiative in Molecular Biotechnology, the Center for Computational Biology, and the Center for Pharmaceutical Biotechnology attract intellectual strength to Colorado, provide new educational opportunities, and inspire innovative health care advances.

University of Denver

Denver
www.du.edu

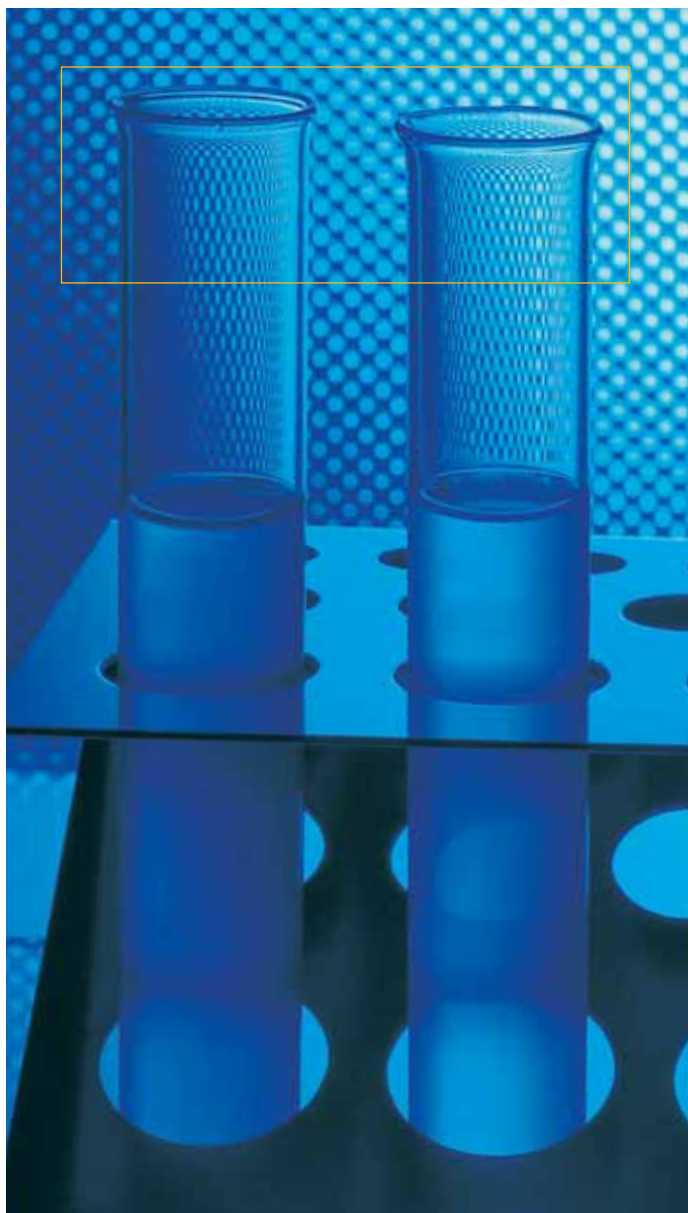
The University of Denver strives to provide the most modern educational and research facilities in the life sciences. Our history spans the Denver Research Institute's development of the first NASA life monitoring sensors,

the establishment of a state-of-the-art forensics laboratory, to the 2003 acquisition of the Eleanor Roosevelt Institute with pioneering efforts in genomics and bioinformatics. In 2004, the School of Engineering and Computer Science unveiled Colorado's first undergraduate program in Bioinformatics and master's degree in Bioengineering. The interdisciplinary mission of the University enabled the Department of Biology to launch new emphases in Bioengineering, Biophysics, and Cognitive Neuroscience designed for molecular biology majors. In addition to strong and quality curricula, bioengineering and life sciences at DU carry multimillion-dollar-a-year research studies in the creation of new knowledge and leading edge biotechnologies to improve quality of life for a worldwide community.

University of Northern Colorado

Greeley
www.unco.edu

University of Northern Colorado (UNC) is a multipurpose institution with a wide range of graduate and undergraduate programs. The university's mission is to prepare individuals for advanced study, professional careers, and positions of leadership.



FITZSIMONS

Giving Innovation New Life!



Fitzsimons—Take advantage of the opportunity
Receive state-of-the-art business and research support in our 160-acre bioscience park.

OPPORTUNITY



Fitzsimons—Benefit from our investment
Enjoy the spectacular Rocky Mountain West in Colorado's \$4.3 billion Life Sciences City.

INVESTMENT



Fitzsimons—Share in the synergy
Collaborate with thousands of scientists and research professionals.

SYNERGY

Discover new life at the Colorado Bioscience Park Aurora at Fitzsimons

To learn more about site location at Fitzsimons, call 720-859-4100.
email: info@colobio.com, or click www.colobio.com.

Biotechnology & Pharmaceutical Companies

Accelr8 Technology Denver

www.accelr8.com

Entered life sciences industry with the acquisition of advanced materials and instrumentation platforms for ultra-sensitive bio-analytic assays. They focus their product development on applying technologies to leading-edge bio-analytical products. Their initial product is OptArray™ microarraying slides.

Accera Broomfield

www.accerapharma.com

Is developing novel therapies that target metabolic defects in Alzheimer's disease (AD) and may lead to new treatments. These treatments are designed to increase energy to neuronal cells and provide raw materials for cholesterol and acetylcholine synthesis. Accera's revolutionary approach is unique among companies developing treatments for AD.

Aeropic International Berthoud

www.argrihouse.com

A NASA SBIR funded biotechnology company supplying bio-pharming, biotechnology, and consulting services. OEM of agri-technology, bio-controls and BL-3 containment systems. Pesticide-free CLESS systems for space and terrestrial Ag and biopharms for pharmaceuticals, Nutraceuticals and food crops.

Affinity Bioreagents Golden

www.bioreagents.com

Provides over 2,300 quality guaranteed antibody reagents for over 33 research areas. ABR Antibody-on-Demand™ (Custom Antibody Production) Services can create custom antibodies.

Agilent Technologies Englewood

www.agilent.com

Delivers critical tools and technologies that sense, measure and interpret the physical and biological world.

Agripro Wheat Berthoud

www.agriprowheat.com

Development and delivery of superior wheat seed genetics in North America.

Agro Management Group Colorado Springs

www.agromgt.com

Agro joined forces with Sterling Bio-Technologies Corporation to market bio-based engine lubricants under the Sterling Grade™ brand name throughout North America.

AKTIV-DRY Boulder

www.aktiv-dry.com

Provides dry powder processing solutions for the vaccine, pharmaceutical, and biotechnology industries.

Allos Therapeutics Westminster

www.allos.com

A biopharmaceutical company focused on developing and commercializing small molecule therapeutics for the treatment of cancer. Their product portfolio currently encompasses three novel compounds: EFAPROXYN™ (efaproxiral), a synthetic small molecule designed to sensitize hypoxic (oxygen-deprived) tissue, PDX (pralatrexate), a small molecule chemotherapeutic agent (DHFR inhibitor) and RH1, a targeted cytotoxic prodrug.

Alpharma Animal Health Longmont

www.alpharma.com

Manufacturer of generic liquid and topical pharmaceuticals in the U.S. The company also supplies generic pharmaceuticals in selected European markets.

American Allied Biochemical Aurora

www.aablabs.com

Specializes in the purification and distribution of restriction endonucleases.

Amgen Longmont

www.amgen.com

A biotechnology company that discovers, develops, manufactures and markets human therapeutics based on advances in cellular and molecular biology. Amgen Colorado is one of the company's key operations centers, providing medicines that are changing people's lives, including EPOGENR (Epoetin alfa), AranespR (darbepoetin alfa), and Kevivance™ (palifermin).

Analytical Development Corporation Colorado Springs

www.analyticaldevelopment.com

A contract analytical chemistry laboratory specializing in bioanalytical and metabolism research studies for the pharmaceutical and biotechnology, animal health, and agricultural industries.

ApopLogic, Inc. Denver

www.apoplogic.com

ApopLogic is developing therapeutic products for cancer, leukemia and autoimmunity based on its proprietary technologies that target apoptotic cell death pathways.

ARCA Discovery Aurora

A contract research company that specializes in enhancement of biopharmaceutical drug development. ARCA's specialized expertise is basic and clinical research in the field of heart failure. ARCA has a two-component business strategy: a) utilizing novel human systems perform contract basic and clinical research in its intramural or extramural laboratories; and b) engage in relationships to complete development of promising therapeutic agents.

Array BioPharma Boulder

www.arraybiopharma.com

A biopharmaceutical company focused on the discovery, development and commercialization of orally active drugs to address unmet medical needs. Their drug development pipeline is primarily focused on the treatment of cancer and inflammatory disease and includes several small molecule drug candidates that are designed to regulate targets in therapeutically important biologic pathways.

AspenBio Castle Rock

www.aspenbioinc.com

The focus of the company is to develop products to the point of introduction and seek the best potential large pharmaceutical company partner to penetrate the market. Current products include human and animal proteins, as well as human and animal hormones.

AstraZeneca Pharmaceuticals Arvada

www.astrazeneca.com

Their business is focused on turning good ideas into innovative, effective medicines that make a real difference in important areas of health care.

AstroPak Corporation Longmont

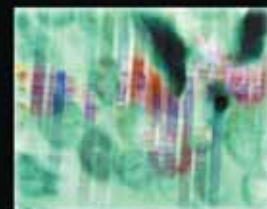
www.astropak.com

The company specializes in precision cleaning and passivation technologies for high purity bio-pharmaceutical systems and related components.

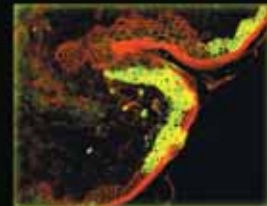
Atlas Biologicals Fort Collins

Supplier of research grade biologicals including Fetal Bovine Serum.

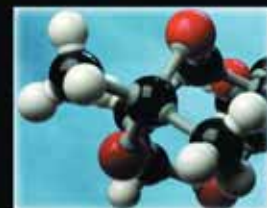
Technology Transfer



"One of the ways that a research university provides a direct return on society's investment is via technology transfer. Colorado State University, in close partnership with Colorado State University Research Foundation, and others, provides an opportunity for our faculty and industry to collaborate and develop commercially viable technologies which reach across the full breadth of the university's research portfolio."



Tony Frank
Vice President for Research and Information Technology



CSURE
Technology Transfer Office
P.O. Box 483, Fort Collins, Colorado 80522
970.482.2916

Vice President for Research and Information Technology
203 Administration Building
970.491.7194

Colorado State University
Knowledge to Go Places

Aurogen Fort Collins

www.aurogen.com

Their technology involves medicine that can reduce health care costs in global markets with multibillion dollar potential and without competing comparable products. The lead product is a newly patented pharmaceutical treatment for diabetic neuropathy. A second invention shows that Aurogen's neurotrophic hormones can act across the blood-brain barrier (BBB) to treat various brain disorders.

Avidity Denver

www.avidity.com

The company holds rights to the patented biotin-accepting peptides (AviTag) technology. Currently, this technology is licensed by 7 out of the top 10 leading pharmaceutical companies and is used by researchers in 22 countries. AviTag technology exploits the tight interaction of avidin or streptavidin with biotin for immobilizing, purifying and visualizing proteins.

Barofold Aurora

Acquired the rights to a patented protein dis-aggregation and re-folding technology from the University of Colorado. The company has received an initial contract to re-fold malarial proteins currently identifying early corporate partners, demonstrating the technology's benefits with partners' protein targets, identifying strategic partners for equipment development and manufacturing, and assessing potential pharmaceutical protein candidates for development of safer, potentially proprietary products.

BasePeak Analytics Lafayette

www.basepeakanalytics.com

Offers on-site liquid chromatography/mass spectrometry consulting and training to biotech and pharmaceutical clients.

BD-Pasco Laboratories Wheat Ridge

www.bd.com

The company manufactures microbial diagnostic systems.

Bioexel International, A Division of Bioxel Pharma

www.bioxelpharma.com

Developer, manufacturer and provider of naturally derived, biologically active pharmaceutical ingredients. These "paclitaxel" ingredients are used in drugs for various forms of cancer.

BioLogix Denver

Biologix breeds insects for pest control.

BioResponse Boulder

www.bioresponse.com

Nutrient delivery technology. They are dedicated to the research, development and commercialization of unique dietary supplements and functional foods. Most recently, BioResponse was awarded a patent for its delivery system for highly-absorbable ("bioavailable") Diindolylmethane.

BioServe Space Technologies

Boulder www.colorado.edu/engineering/BioServe/index.html
Developing new or improved products through space life science research in partnership with industry, academia and government.

Blue Sun Biodiesel Fort Collins

www.gobluesun.com

An agricultural energy company, developing oilseed energy crops and production and distribution networks to bring high-performance biodiesel fuel to the west-central United States.

Bolder BioTechnology www.bolderbio.com
Wheat Ridge
 Uses advanced protein engineering technologies to create proprietary human protein pharmaceuticals with enhanced therapeutic properties.

Boulder Scientific www.boulderscientific.com
Mead
 A manufacturer of advanced organometallic catalysts, ligands, and co-catalysts.

BP Proteomics
 A biotechnology company is developing diagnostic tools and methods that identify and quantify proteins, nucleic acids and pathogens from biological and environmental samples.

Brotica www.brotica.com
Fort Collins
 Produces Interval33, a termite attractant based on patent pending technology developed at Colorado State University. Interval33 works by producing the precise level of CO2 that has been shown to attract termites. Interval33 removes random chance and luck from the termite baiting strategy by luring termites directly to bait stations. Interval33 is environmentally friendly and relatively inexpensive.

CaP Biotechnology www.capbio.com
Golden
 Produces calcium phosphate hollow microspheres and custom shaped calcium phosphate materials used at tissue banks, corporate research, and other institutions.

Cardinal Health www.cardinal.com/pts
Boulder
 Offers oral, topical, inhalation, biopharmaceutical and sterile product support. They can provide individual and integrated solutions; development services ranging from discovery to clinical packaging; and capabilities for virtually every dosage form.

Cargill Health and Food www.cargillhft.com
Denver
 A developer, processor and marketer of science-based, health promoting ingredients for food and dietary supplement industries worldwide.

Cargill Research www.cargill.com
Fort Collins
 Works with food and pharma customers to develop ingredient systems and excipient solutions for affordable, healthy and convenient products.

Cell Point www.cellpointweb.com
Englewood
 The company targets metabolic imaging and therapeutic targeting through nuclear medicine. The company is developing novel radiopharmaceutical imaging agents, radiotherapeutic agents and local regional radio/chemotherapeutic drug delivery systems for the diagnosis, treatment and post therapy assessment of cancer, cardiovascular disease, infectious diseases and metabolic diseases.

CHATA www.chatasolutions.com
Fort Collins
 Produces hundreds of standard and custom HPLC mobile phases, dissolution media, buffers and other related reagents. HPLC mobile phases are packaged in 1, 2 or 5 liter CHEM+NECT bags with a proprietary polymer film over-wrap. The over-wrap is virtually impermeable to gas and moisture, which extends the shelf-life of solutions for months.

Chemins Company www.chemins.com
Colorado Springs
 Produces a wide range of dietary supplements including caplets, tablets, shaped tablets, chewable wafers, two-piece capsules and powdered products.

ClinImmune Labs www.clinimmune.com
Aurora
 This laboratory provides clinical HLA typing and crossmatching in support of kidney, bone marrow, heart, lung and pancreas transplant programs.

Colorado Genetics www.coloradogenetics.com
Loveland
 Provides livestock embryo-transfer research, artificial insemination, embryo collection, freezing and transfer, and international import and export services.

Colorado Histo-Prep www.histoprep.com
Fort Collins
 Utilizing the most sophisticated instrumentation available, their laboratory produces high quality slides, clinical chemistry and hematology data and fully integrated and detailed seamless pathology reports.

Colorado Serum www.colorado-serum.com
Denver
 Supplies veterinary biologicals, instruments, laboratory reagents and serums for the veterinary industry.

Cytoskeleton www.cytoskeleton.com
Denver
 Manufacturer and supplier of biochemicals, reagents and proteins.

DakoCytomation www.dakocytomation.com
Fort Collins
 Development and production of antibodies and instruments for the diagnostic industry. They specialize in the fields of immunocytochemistry, flow cytometry, and microbiology.

Dermik Laboratories www.dermik.com
Littleton
 Development, marketing, and distribution of innovative prescription pharmaceutical products. Dermik has created a new division, Dermik Aesthetics, to market innovative and enduring aesthetic treatments to improve appearance and well-being.



**Dharmacon
Lafayette**

www.dharmacon.com

The company's focus and vision is to develop 2'-ACE RNA technology as the standard for RNA synthesis and to advance RNA oligo-dependent applications and technologies. Since the first oligo was shipped in 1996, Dharmacon has provided tens of thousands of RNA oligos to the research community. Over the years, the RNA market has certified that 2'-ACE RNA chemistry is a clear and definitive leap in technology over all other chemical methods and is the way to chemically synthesize RNA.

**Discovery Partners International
Boulder**

www.discoverypartners.com

A participant in drug discovery collaborations. DPI offers services, products, and systems that span the drug discovery continuum, including target characterization, targeted and screening-library design and synthesis, high throughput and high content screening, lead generation and optimization, gene expression analysis, and protein crystallization.

**DMI BioSciences
Englewood**

www.dmibio.com

A biopharmaceutical company that discovers and develops small molecule and peptide-based pharmaceuticals and biomarkers for acute and chronic inflammation.

**DoveTail Technologies
Aurora**

www.dovetailtech.org

Engaged in research, development and commercialization of patented, immuno-therapeutic technologies with broad applications.

**Efficas
Boulder**

www.efficas.com

Efficas bioactives will be marketed in products that promote wellness and nutritionally support management of health conditions, including obesity, diabetes, allergies, bone health and inflammation.

**Elisa Tech
Aurora**

www.elisatech.com

Supplies immunoassays for the measurement of cytokines, growth factors, and lipid inflammatory mediators such as prostaglandins and leukotrienes. ELISA Tech specializes in making custom assays for compounds for which no commercial assays exist. ELISA Tech also performs all services in a timely fashion so investigators need not wait prolonged periods for results. All reagents and services are unconditionally guaranteed.

**Emergent Genetics (Monsanto)
Boulder**

www.emergentgenetics.com

A seed and related biotechnology company with operations in the U.S., Europe and India and has a product focus on cotton, rice, wheat and vegetables. Emergent Genetics was recently bought by Monsanto.

**Eppendorf - 5 Prime
Boulder**

www.5prime.com

Focus is the development and production of kits for the preparation of nucleic acids utilizing purification methods and enzymatic amplification for the molecular biology research market.

**Evolutionary Genomics
Aurora**

www.evolgen.com

Develop technology to identify commercially valuable gene targets by taking advantage of work already done by nature. The company has a fully operational, patented, gene discovery technology platform, the Adapted Traits Platform, and has been successfully identifying genes for three years. EG's Adapted Traits Platform screens for gene patterns indicative of adaptation to a strong selection pressure as a powerful data filter to find key genes.

**Eyetech Pharmaceuticals
Boulder**

www.eyetech.com

A biopharmaceutical company that specializes in the development and commercialization of novel therapeutics to treat eye diseases. Eyetech focuses on diseases affecting the back of the eye.

**Front Range Laboratories
Loveland**

A full service contract research and development laboratory.

**Gene Check
Fort Collins**

www.genecheck.com

A biotechnology company who in addition to their research and development program, produces and markets reagents and kits for research and offers veterinary genotyping tests for sheep.

**Genesis Laboratories
Wellington**

www.genesislabs.com

A full service laboratory provides services to clients in the agrochemical and pharmaceutical industries.

**Genethera
Wheat Ridge**

www.genethera.com

Provides genetics-based diagnostic and vaccine solutions to meet the growing demands of today's veterinary industry and tomorrow's agriculture and health care industries.

**Genetic Technologies Limited
Melbourne**

www.gtg.com.au

An Australian life sciences company, specializing in the fields of genetics and genomics. Recognizing the importance of 'non-coding' Deoxyribonucleic Acid (DNA), the company's key business streams include genetic testing, licensing and supporting research programs around the world.

ARRAY
BIOPHARMA

Innovation in Small Molecule
Drug Discovery & Development

**Building
on Success**

3200 Walnut Street
Boulder, Colorado 80301
Phone: 303.381.6600
Fax: 303.386.1390
www.arraybiopharma.com

GlaxoSmithKline
Denver

www.gsk.com

A research-based pharmaceutical company with a combination of skills and resources that provides a platform for delivering strong growth in today's rapidly changing health care environment.

Global Peptide Services
Fort Collins

www.globalpeptide.com

Offers custom research-grade Peptides and Antibodies. Peptides are produced in scales ranging from 1mg to multiple grams, and many modifications/conjugations are available.

GlobeImmune
Aurora

www.globeimmune.com

A biopharmaceutical company has developed an immunotherapy platform technology that will allow the production of products for targets that until now have been unapproachable by current techniques. The company is currently developing products targeted to HIV, hepatitis C, and a number of cancers. The company's business model will be to take selected products through proof of concept in human clinical trials and to manufacture at commercial scale.

Gonex
Fort Collins

www.gonex.com

A development stage company is dedicated to the research, development and commercialization of hormonal based health care strategies with applications for both the human and companion animal markets.

Hauser Laboratories, Division of Microbac
Boulder

www.hauserlabs.com

A research and development testing laboratory that provides research, development, testing, and expert witness services to the following industries: pharmaceutical, natural products, dietary supplement, medical device, legal and insurance, and consumer and industrial products.

HemoGenix
Colorado Springs

www.hemogenix.com

The company's focus is in stem cell hemotoxicity contract research and the development and production of clinical diagnostic tools.

Heska Corporation
Fort Collins

www.heska.com

Develops research-driven solutions that impact the quality of pet care. Their offerings include advanced diagnostics and specialty products that veterinarians can count on to help them make a difference. They focus on the canine and feline markets, developing high value products for unmet needs in veterinary medicine.

IHCtech Histology Services
Aurora

www.ihctech.net

Offers custom histopathology services, specializing in Immunohistochemistry. They test antibodies, molecular probes and biosensors in tissue and cells.

Insmed
Boulder

www.insmed.com

A biopharmaceutical company focused on the development of drug candidates for the treatment of metabolic diseases and endocrine disorders with unmet medical needs. Insmed's protein manufacturing operation, called Insmed Therapeutic Proteins (ITP), is commissioned for manufacture of the company's proprietary products.

Institute for Therapeutic Biology
Denver

A non-profit research and development institute for drug discovery in the field of immunology.

Inviragen
Fort Collins

A biotechnology company focused on the development of vaccines for emerging infectious diseases. They have constructed novel vaccines that protect against plague, a bioterrorism threat and an endemic disease in many parts of the world (including Colorado).

Isogenis
Denver

www.isogenis.com

Develop revolutionary therapies for organ transplantation and genetic disease. Their Transplantation Tree technology promises to be an improvement over existing therapies because it is administered in a cell-specific manner.

Isonics
Golden

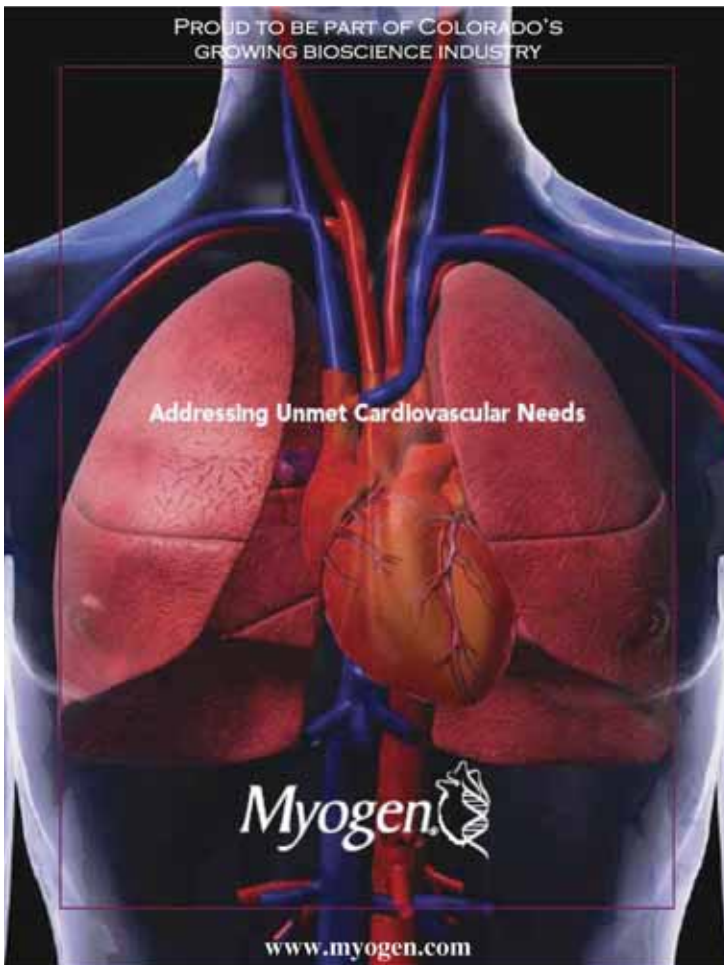
www.isonics.com

A specialty chemical and advanced materials company that develops, commercializes, and markets materials which have been sub-atomically engineered to enhance performance. These ultra-pure materials have applications in several areas including Medical Diagnostics, Imaging and therapy, and Drug Development.

Johnson & Johnson/Ortho Biotech
Denver

www.jnj.com

Through its operating companies, is a comprehensive and broadly based manufacturer of health care products, as well as a provider of related services, for the consumer, pharmaceutical, and medical devices and diagnostics markets.



Keen Ingredients

Fort Collins

Manufactures ingredients from an alternative and nutritious crop based upon technology developed in the Department of Food Science and Human Nutrition at Colorado State University.

Keeton Industries

www.keetonaqua.com

Fort Collins

Research and development in biological water treatment, aeration, ozone aeration, solids removal, biofiltration and other new technologies.

Keystone Biomedical

www.keystonebio.com

Westminster

A pharmaceutical company developing two families of proprietary chemical compounds designed to treat cardiovascular diseases, stroke, complications of organ transplantation, and cancer.

Lohocla Research Corporation

Aurora

The company's proprietary gene, mRNA and protein diagnostic markers differentially ascertain depression, anxiety, manic depressive disorders and addictive disorders. The company uses genomic, proteomic, and gene array technology together with rational drug design to develop diagnostic and therapeutic products in the area of chronic pain, mental and addictive disorders.

MacLeod Pharmaceuticals

www.macleodpharma.com

Fort Collins

Develops and manufactures anti-bacterial pharmaceuticals for the veterinary industry.

Mantic Biotech

www.manticbiotech.com

Loveland

In collaboration with researchers at the University of Virginia and Stockholm University, has developed proprietary technology and software to accurately represent and model protein conformations as discrete structures.

Martek Biosciences

www.martekbio.com

Boulder

Develops, manufactures and sells products from microalgae. The company's products include: specialty, nutritional oils for infant formula that aid in the development of the eyes and central nervous system in newborns; Martek DHA™ in the form of nutritional supplements and food ingredients that may play a beneficial role in promoting mental and cardiovascular health throughout life.

Mayne Pharma

www.us.maynepharma.com

Boulder

A supplier of multi-source injectable pharmaceuticals in the U.S. The Colorado site specializes in the supply of active pharmaceutical ingredients for both internal and external markets.

Mediral International

www.mediral.com

Denver

A homeopathic supplier and has now become a provider of hand-processed homeopathic medicine in the world.

MicroPhage

www.micro-phage.com

Longmont

The Company obtained the exclusive license to proprietary and patented high-speed bacteria detection technologies that it plans to commercialize in worldwide markets including: food safety, water safety, clinical and veterinary diagnostics and detection applications. Specific pathogens that may be addressed with the company's technology include: Escherichia coli, Listeria monocytogenes and Salmonella.

Molecular BioSciences

www.molbio.com

Boulder

The discovery research division is engaged in the design and development of novel therapeutic agents. The Company applies a highly integrated, multidisciplinary approach to drug discovery and has developed proprietary drug design technologies which have yielded several lead compounds.

Monsanto

www.monsanto.com

Englewood

A global provider of agricultural products and integrated solutions for farmers.

Mycologics

Aurora

The company focuses on infectious human fungal diseases. The company's mycotechnology will be used to discover novel drugs that act by directly inhibiting fungal cell-wall assembly.

Mycos Research

Loveland

Provides mycobacterial derived biochemicals to the research community, contract research, animal models for tuberculosis and other BSL3 organisms, and novel monitoring or vaccine products in the area of mycobacterial infection.

Myogen

www.myogen.com

Westminster

A biopharmaceutical company focused on the discovery, development and commercialization of therapeutics for the treatment of cardiovascular disorders. Myogen, in collaboration with Novartis, also conducts a cardiovascular focused research program.

Navigant Biotechnologies

www.navigantbiotech.com

Lakewood

Developing techniques to improve the safety of the blood supply by reducing the pathogens found in donated blood. The Mirasol Pathogen Reduction Technology (PRT), from Navigant Biotechnologies applies light and riboflavin to alter the nucleic acids and proteins of pathogens, rendering them inactive.



Newellink

Colorado Springs

Develops and markets the patent-pending bioenergetics platform technologies invented at CU-Colorado Springs. Bioenergetics is the study of how cellular metabolism governs the interactions between cells, which are central to life, death, and disease.

Novartis Pharmaceuticals Corporation

Littleton

The Pharmaceuticals Division works in the discovery, development, manufacture, and marketing of prescription medicine.

Novus Biologicals

Littleton

Develops, tests and markets antibodies for research of human diseases such as cancer, cardiovascular and neurological disorders.

Nutraceutix

Lafayette

Develops custom blends and made-to-order formulations in bulk tablet, bottled and other forms for private labels and brands.

Origin USA

Boulder

A contract services organization providing regulatory, drug development, clinical, quality assurance and project management services to the pharmaceutical industry.

OSI Pharmaceuticals

Boulder

A biotechnology company primarily focused on the discovery, development and commercialization of high quality pharmaceutical products that extend life or improve the quality of life for cancer and diabetes patients worldwide.

PAMBEC Laboratories

Loveland

Research based drug discovery company in the field of AIDS. The company's drug AIDFAREL™ inhibits both the replication and transcription of the integrated viral DNA known as a provirus by using the drug technology termed Binary Molecular DNA Clamp (BMC).

Paradocs Biomedical

Conifer

A contract research and development for integration of advanced molecular techniques into preclinical and clinical research for both small molecule and peptide-based drug development.

Peak Analytical

Golden

A contract laboratory specializing in materials and chemical analysis. They perform a variety of molecular and atomic level spectroscopic techniques to identify failures and defects.

Pfizer

Centennial

Discovers, develops, manufactures, and markets prescription medicines for humans and animals and many of the world's best-known consumer brands.

Phaelix

Castle Rock

Conducts custom research projects for the medical industry and specializes in emerging medical technologies and startups, with current focus on imaging, nanobiotechnology, tissue engineering and telemedicine.

Pharmion

Boulder

A pharmaceutical company that is dedicated to the hematology and oncology communities.

Phasics BioScience

Castle Rock

A seed-stage contract manufacturing company located in the Front Range of Colorado, offers early-stage, funded biotechnology companies process development services and scalable manufacturing facilities capable of providing recombinant protein for the preclinical and clinical trials required to receive mandatory FDA approval of therapeutic drugs.

PhosphoSolutions

Denver

Focuses proteins known as phosphoproteins that regulate almost all cell processes from cancer to Alzheimer's.

Pisces Molecular

Boulder

Focused on applying molecular biology to problems in the aquatic environment.

PR Pharmaceuticals

Fort Collins

Creating innovative drug delivery technologies to improve human and animal health. The company is focused on developing, manufacturing and commercializing pharmaceutical products using controlled-release technology.

Premier Laboratory

Boulder

Supplies histology and pharmacology needs for mission-critical research. They focus on process control and improvement to ensure the delivery of relevant, consistent and reproducible histopathology and pharmacology data.

Progenity

Denver

Custom contract manufacturing for the biopharmaceutical industry.

Proligo

Boulder

Offers DNA and RNA synthesis reagents for superior oligonucleotide synthesis: DNA phosphoramidites and CPG, liquid reagents, RNA and 2'O Methyl phosphoramidites and modifications and linkers.

Proneuron Biotechnologies

Englewood

A biopharmaceutical company developing therapies for neurological disorders, including spinal cord injury (SCI). Procord is an experimental cell therapy that is being developed for the treatment of patients with a recent spinal cord injury.

Proteome Resources

Aurora

Manufacturer and provider of biochemistry tools and services or drug discovery and basic research. Presently, the company supplies 98% pure ubiquitin enzymes and apoptotic nucleases, as well as custom protein cloning and expression services, to researchers engaged in Ubiquitin Proteasome Pathway apoptosis and other areas of study.

Provident Pharmaceuticals

Colorado Springs

A contract manufacturer of prescription and OTC pharmaceuticals. Their focus is to provide product development, manufacturing and packaging, and laboratory services for the pharmaceutical industry.

PureVision Technology

Fort Lupton

Develop proprietary biotechnology processes that can manufacture fiber, ethanol and other high value industrial chemicals from biomass such as agricultural and wood residues. PureVision's patented fractionation technology produces a relatively pure cellulose stream by removing the hemicellulose and lignin fractions from agricultural and waste biomass.

<p>Pyxant Labs Colorado Springs A contract research laboratory specializing in GLP bioanalytical chemistry development support for life sciences clients.</p>	<p>www.pyxant.com</p>	<p>Sentigen Biosciences Aspen Primary focus is to apply its proprietary technologies to internal drug discovery and development initiatives targeting the largest class of receptors in the body, G Protein-Coupled Receptors (GPCRs).</p>
<p>QLT-USA Fort Collins A global biopharmaceutical company specializing in developing treatments for cancer, eye diseases and dermatological and urological conditions. They have combined their expertise in the discovery, development, commercialization and manufacture of innovative drug therapies with our unique technology platform to create highly successful products such as Visudyne® and Eligard®.</p>	<p>www.qltinc.com</p>	<p>Sentry Biosciences Greenwood Village An emerging biosciences company discovering and developing compounds that regulate the process of programmed cell death (apoptosis). Apoptosis has been implicated in 50% of human diseases, including cancer, neurodegenerative disease, and autoimmune disease.</p>
<p>Replidyne Louisville A drug discovery company focused on identifying and developing drugs to treat serious infectious diseases. Replidyne is discovering and developing novel antibacterial drugs that act by directly inhibiting bacterial DNA replication.</p>	<p>www.replidyne.com</p>	<p>Sirna Therapeutics Boulder Developer of therapeutics based on RNA interference (RNAi) technology. Sirna is leveraging its proprietary technology and expertise in nucleic acids to develop RNAi-based drugs that selectively target disease-causing genes and viruses.</p>
<p>RMC Biosciences Fort Collins Offers molecular modeling, computer aided drug design, protein-ligand docking models, drug bioavailability models, drug bioactivity models, contract drug discovery research, and high performance computing.</p>	<p>www.rmcbiosciences.com</p>	<p>SomaLogic Boulder Developing cutting-edge proteomics tools for research and clinical diagnostics based on its proprietary aptamer technology. Aptamers were invented in the University of Colorado. SomaLogic's microarrays (aptamer chips) will allow the simultaneous quantitative measurement of tens and ultimately, thousands, of proteins. These same aptamers can be used to rapidly develop novel assays for individual proteins.</p>
<p>Roche Colorado Corp Boulder Developed manufacturing processes for some of the world's most complex pharmaceutical compounds. Roche Colorado also is a manufacturing facility, with the flexibility to handle sophisticated manufacturing techniques.</p>	<p>www.rochecolorado.com</p>	<p>Source Precision Medicine Boulder Dedicated to improving drug development and patient care through the practical application of advanced genomics and related technologies. The Source TheraTrax™ System is based on high-precision molecular assays, targeted disease and drug response databases, and predictive biomedical algorithms.</p>
<p>Rocky Mountain Diagnostics Colorado Springs A supplier of specialty in-vitro diagnostic test systems and of other innovative technologies to the clinical and research laboratory markets.</p>	<p>www.rmdiagnosics.com</p>	<p>STA Laboratories Longmont Provider of diagnostic services to agricultural biotechnology. STA Genomics features high through-put molecular marker technology. STA Seed Quality provides seed analysis, seed health and IEF electrophoresis hybrid purity services.</p>
<p>Rocky Mountain Reagents Denver In 1951, the company started manufacturing stains, culture media and chemistry solutions for the medical industry. Since that time, the product line has been expanded to include titration reagents, indicators, acids, bases, and a variety of chemicals for industrial uses.</p>	<p>www.rmreagents.com</p>	<p>Sterling Bio-Technologies Corporation Sterling The company is engaged in commercialization of renewable, bio-based products. Sterling BioTech works with industry, universities and federal laboratories to identify promising new technologies for using plant matter as a key component in manufacturing consumer products. By replacing certain petroleum products with bio-based materials, they deliver economic, environmental and societal solutions including the use of renewable, agricultural materials instead of dwindling natural resources.</p>
<p>RxKinetix Louisville A specialty pharmaceutical company that uses its proprietary drug delivery technologies to develop new medicinal products. The company's technology platforms have produced a lead product candidate for the prevention and treatment of oral mucositis, RK-0202, that is currently in Phase 2 clinical trials.</p>	<p>www.rxkinetix.com</p>	<p>Summit Plant Laboratories Fort Collins The company is in the specialty micropropagation business, applying laboratory plant cloning and greenhouse technologies to produce planting stocks for breeders, greenhouses, and field crop producers.</p>
<p>Sandoz Broomfield Supplier of high-quality generic pharmaceuticals. Sandoz is also operating two Business Units with specific strategic focuses – Anti-Infectives and Biopharmaceuticals.</p>	<p>www.us.sandoz.com</p>	<p>Syngenta Seeds Longmont An agribusiness committed to sustainable agriculture through innovative research and technology. The company is in crop protection, and ranks third in the high-value commercial seeds market.</p>
<p>Sciona Boulder Researches and develops DNA screens for common gene variants that affect an individual's response to food, medications and the environment.</p>	<p>www.sciona.com</p>	
<p>Seedex Longmont A research facility specializing in development, production and sales of sugar beet, corn, and other seeds; has developed sugar beet hybrids.</p>	<p>www.seedexseed.com</p>	



Taligen Therapeutics

Aurora

The company employs innovative technologies to manipulate complement proteins of the immune system to inhibit inflammation and to target inhibitors of the inflammation to specific sites of tissue injury. By targeting the complement system, Taligen's technology inhibits inflammation proximal or upstream in the inflammatory cascade, such that blockade at a single step results in the down-regulation of multiple effector mechanisms.

Tapestry Pharmaceuticals

www.tapestrypharma.com

Boulder

A company focused on proprietary therapies for the treatment of cancer. They are also actively engaged in evaluating new therapeutic agents and related technologies for in-licensing.

Theravance

www.theravance.com

Denver

Discovers and develops medicines in large markets; their drug discovery efforts are based on their multivalency.

Thinc Pharmaceuticals

www.thincpharmaceuticals.com

Aurora

The company is focused on the development of iron-chelating therapies (with applications in Oncology, Hematology, and Gastro-Intestinal disorders) and drugs and drug therapies for the treatment of Neurodegenerative Diseases.

Transgenomic

www.transgenomic.com

Boulder

Provides research tools and related consumable products to the life sciences industry for the synthesis, separation, analysis and purification of nucleic acids and a wide variety of nucleic acid-based specialty chemicals. Transgenomic's biosystems segment offers its WAVE® Systems and associated consumables.

U.S. Pharmacal

www.uspharmcal.com

Erie

Research, development and sales of topical pharmaceuticals for the senior community.

Vitro Diagnostics

www.vitrodiag.com

Aurora

Has recently launched a product line, VITROCELL™, consisting of novel Human Cell Lines for Research and Development.

Medical Device Companies

Able Planet

www.ableplanet.com

Fort Collins

The Able Planet™ micro-technology was designed to be a hearing aid compatible and hearing accessible technology. The Able Planet™ micro-technology when installed into a telephone receiver, hands-free unit or any consumer audio equipment provides for enhanced telephone accessibility for people with mild to severe-to-profound hearing loss.

AbleLink Technologies

www.ablelinktech.com

Colorado Springs

Addresses the need for well-researched cognitive support technologies for individuals with intellectual disabilities.

About Packaging Robotics

www.aboutpackagingrobotics.com

Thornton

Produces affordable robotic package handling systems. Their products are engineered to open, fill, transport, seal, code and label a variety of pre-made pouches and bags. Their line of packaging and systems for on demand product identification is currently used in the medical, industrial and food industries.

Accellent www.accelent.com
Arvada
Offers a comprehensive menu of outsourcing solutions to the medical device market, including design and engineering services, precision component production, finished goods assembly, and complete supply chain management.

Access Battery/Alpha Source www.accessbattery.com
Elizabeth
Has been assembling, manufacturing and supplying America's leading Hospitals, Medical Centers, Fire, EMS and Police Departments with their portable battery needs.

Accu-Tube Corporation www.accutube.com
Englewood
Manufactures top quality standard and custom size stainless steel tubing. Sizes from small diameter hypodermic medical tubing .009" OD (.23mm) to .375" OD (9.35mm).

Actall Corporation www.actall.com
Denver
Engineers and manufactures wireless personal duress systems. Actall Corporation's experienced engineering staff continues to lead research and development toward integration of many types of wireless and hard wired products such as Biometric Identification.

Ada Technologies www.adatech.com
Englewood
Develops and commercializes technology. They have an active research program focused on mercury control technology, instruments and sensors, water treatment and a new business venture they call PhysioNetics®.

Advanced Cosmetic Intervention www.acisurgery.com
Parker
An advanced medical technology company developing innovative devices and minimally invasive surgical techniques for plastic and facial plastic surgical procedures.

Advanced Medical Ceramics
Golden
A manufacturer of hip and spinal implants for orthopedic companies. They make copy exact components and devices. They are the spherical bearing surface experts. Their materials provide highly wear resistant options to patients who want to maintain an active, healthy lifestyle.

Advanced Power Technology www.advancedpower.com
Parker
Designs, manufactures, and markets high power, high voltage, high performance semiconductors for both switching and RF applications. Their products are powering the next generation high power systems for industrial applications such as advanced medical imaging systems, lasers, semiconductor process equipment, as well as military and aerospace power systems.

Alcohol Countermeasure Systems www.acs-corp.com
Aurora
Manufacturer of alcohol sensing and breath test instruments. The company is also engaged in the research and development of breath analysis techniques to introduce leading designs of breath analysis products to suit a variety of applications.

AlloSource www.allosource.com
Centennial
Develops processes and distributes life-enhancing bone and tissue allografts to the medical community.

Allpro www.allprodental.com
Broomfield
Produces a large selection of non-latex prophylactic cups.

AlphaSniffer
Boulder
Develops technologies to detect contaminants, toxins and other chemical agents.

Amidex www.amidexmedical.com
Lakewood
Manufacturer of the Amilyser™, which collects non-volatile aerosols from exhaled breath and produces results within five minutes, then continues to monitor breathing circuits to provide time-resolved trends of analytes.

Anatel Corporation www.anatel.com
Loveland
The company's instrumentation excels in deionized (DI) or ultrapure (UPW) water monitoring.

Animal Care Systems www.animalcaresystems.com
Littleton
The company has invested heavily in research and development to bring a better mouse cage to the life science industry.

Animark www.animark.us
Aurora
The company provides electronic breeding equipment business.

Auri-Stim Medical www.net1000device.com
Denver
The NET-1000 device offers a viable alternative therapy to millions of individuals who suffer from Migraine Headaches, Hormonal Migraine, Chronic Headaches, Premenstrual Syndrome (PMS), Nicotine and Narcotics Addictions.

Avantes www.avantes.com
Boulder
A company in the field of low cost spectroscopy and fiber optic applications. They offer miniature spectrometer systems for on-line measurements and analysis, usually consisting of a light source, fiber optic cables and probes and a spectrometer for the analysis of the light.

Baxa Corporation www.baxa.com
Englewood
A medical device company that continually improves and maximizes long-term value through lifetime partnerships with customers. They provide innovative product solutions globally to handle and administer fluid medications. Baxa makes a lasting contribution to society by enabling health care providers to treat patients with complete safety and effectiveness.



BD Diagnostic Systems www.bd.com
Wheat Ridge
 A medical technology company that serves health care institutions, life science researchers, clinical laboratories, industry and the general public. BD manufactures and sells a broad range of medical supplies, devices, laboratory equipment and diagnostic products.

Bell Dental Products www.belldental.com
Denver
 Designs, develops, and manufactures precision dental equipment based on electric motor technology.

BioCare Systems www.biocaresystems.com
Parker
 An emerging medical device company founded to develop and market patent-protected, FDA cleared low level light products in the infrared spectrum (IR Therapy) to decrease pain.

Biofeedback Systems www.users.qwest.net/~pitchj.com
Boulder
 BFS, Inc. is engaged in the design, manufacture, sales and service of a complete line of biofeedback hardware and software including subliminal and supraliminal audio self-help cassette programs. The company is an FDA registered medical device manufacturer.

Biophorix www.biophorix.com
Aurora
 Research and development company for the intelligent design of life saving drugs.

Biotrol International www.biotrol.com
Louisville
 Manufactures and markets Infection Control and Preventive products for the dental industry.

bioZhena www.biozhena.com
Bellevue
 An early-stage bioelectronic technology and informatics company focusing on female reproductive health.

Braun BioSystems www.braunbiosystems.com
Centennial
 Expanding the cost savings and therapeutic benefits presently experienced by managing anticoagulants in the cardiovascular market to many other health care venues where this technology can provide similar benefits.

Byers Peak www.byerspeak.com
Wheat Ridge
 Presents a simple alternative to low/mid volume contract manufacturing and outsourcing services for today's cost-conscious economy. They are an ISO 9001:2000 Certified/FDA Registered Electro-Mechanical Turnkey Contract Manufacturer of Finished Devices, including design support, product release assistance, refurbishment, field service, end-user distribution, and worldwide sourcing.

Canberra Industries www.canberra.com
Arvada
 Manufacturer of radiation detection and analysis instrumentation. Supplier of integrated nuclear gamma and alpha spectroscopy instrumentation. Canberra maintained its position in its existing markets and expanded into areas such as health physics, computer-based spectroscopy, and neutron counting instrumentation through a series of acquisitions.

Cardio-Optics www.cardio-optics.com
Boulder
 The company has invented and developed Trans-Blood Vision™ (TBV™), an enabling, platform technology that provides direct, real-time, optically-based vision through blood and brings the physician's sense of sight into play in blood-filled areas.

Care Electronics www.careelectronics.com
Boulder
 Mobility Monitors alert a caregiver when a resident attempts to leave the safety of a chair or bed. Mobility Monitors use an adjustable cord clipped to the clothing which activates an alarm. There are two models to choose from.

Caroba Plastics www.caroba.com
Englewood
 A full service custom injection molder specializing in the demanding needs of the medical and high technology industries.

CeMines www.cemines.com
Golden
 CeMines has developed its breakthrough Molecular FingerPrinting™ blood test for the early detection and optimized treatment of a variety of cancers and other immune diseases. Based on monitoring disease-specific molecular changes in gene regulatory machinery. Its minimally invasive diagnostic tests will provide accurate, early detection of most widespread cancers including: lung, breast, prostate and gastrointestinal.

Certol International www.certol.com
Denver
 Their mission is to provide patients and health care professionals with innovative products and responsible solutions to the complicated infection control challenges.



Colorado BioScience
 ASSOCIATION

**The Colorado BioScience Association
 is the heart of Colorado's fast growing
 life science industry.**

- Speaks with a single voice on behalf of the industry.
- Provides educational programs to help the industry compete.
- Works with government officials to strengthen the industry.
- Acts as a catalyst to increase academic and industry cooperation.
- Helps Colorado's economic development agencies attract, grow and create life science companies.

Colorado BioScience Association
 Advance Colorado Center
 1625 Broadway, Suite 950, Denver, Colorado 80202
 303-592-4073
www.cobioscience.com



CLP Microtechnologies
Boulder

www.clpmt.com

A start-up based on University of Colorado technology, specializes in the microfabrication of polymeric devices with diverse chemical, electrical and mechanical properties. These technologies will increase CLP's ability to design and fabricate small, inexpensive devices for diverse applications.

COBE Cardiovascular
Arvada

www.cobe.com

COBE Cardiovascular, partnered with Sorin Biomedical to an entity devoted to meeting the needs of the cardiopulmonary market. From oxygenators, cardioplegia systems, tubing packs, and biocompatible surfaces to heart/lung and auto-transfusion systems.

Cochlear Americas

www.cochlearamericas.com

Design, manufacture and distribution of hearing implants. Nucleus Freedom cochlear implants are designed to mimic the intricacies of natural hearing.

COMEG Endoscopes, U.S.A.
Denver

www.comeg.de

Development and manufacture of high-grade endoscopes and accessories.

Confi-Dental Products
Louisville

www.confidental.com

Contract manufacturer of quality dental cements, composite resins and injection molded plastics.

CoorsTek
Golden

www.coorstek.com

Using advanced technology, materials, manufacturing and assembly to develop their medical customer's ideas.

Corgenix Medical Corporation
Westminster

www.corgenix.com

The company develops and manufactures innovative diagnostic test kits used to aid in the diagnosis of specific immunological diseases.

CytoLogic
Fort Collins

www.cytologic.com

The company's technology, UNLEASH™ Immunotherapy, uses a medical device to treat solid tumors. In a process similar to kidney dialysis, UNLEASH™ Immunotherapy selectively removes blood-borne inhibitors that protect tumors from the body's own immunological defenses.

Delphi Medical Systems
Longmont

www.delphimedical.com

Focuses on medium volume, high complexity systems for the production of many types of instruments.

Dentsply Friadent/CeraMed
Lakewood

www.dentsply.com

Designs, manufactures and markets dental implant and surgical devices.

Denver Biomedical
Golden

www.denverbiomedical.com

Designer, manufacturer and distributor of specialized medical products for fluid management of pleural effusion and ascites. Our Pleurx pleural catheter and the Denver pleural and ascites shunts contribute to the compassionate palliation of the patient.

Denver Instrument
Denver

www.denverinstrumentusa.com

The company designs and manufactures analytical balances, electrochemistry instruments, moisture analyzers, and titration controllers.

Denver Optic Company
Englewood

www.eyeprosthetics.com

Specializes in the fitting and fabrication of two types of ocular prosthesis. The custom made ocular prosthesis is made for the patient who has had their eye either enucleated or eviscerated. The custom made scleral cover shell is made to fit over the patient's blind disfigured eye. Both are made to cosmetically restore symmetry to the patient's companion eye.

Die Cut Technologies
Northglenn

www.diecuttech.com

They engineer, design, and manufacture the finished product using a myriad of materials. Their products and services meet customer specifications. Die Cut Technologies works to design, prototype and fabricate non-metallic parts that improve the manufacturing processes.

DNA-IntelliGen Corporation
Monument

Develops and applies current biometric technology into products designed to provide improved security measures to thwart identity theft, provide more robust personal security.

DNTLworks Equipment Corporation
Centennial

www.dntlworks.com

Manufacturer of portable, mobile and self-contained dental equipment.

Eagle Research
Lakewood

www.eagleresearchllc.com

Designs, manufactures, and markets alternative health products. Their product line ranges from nutritional supplements to electronic equipment for the alternative health industry.

Elantec Med
Golden

<http://members.aol.com/lmallen/homepag.htm>

The company is engaged in product development for itself and for others on contract, is a manufacturer, and is a drug delivery system research and development company. Its products are sold domestically and internationally.

Eldon James Corporation
Loveland

www.eldonjames.com

Design and manufacture of tubing and hose fittings used worldwide as components in medical devices and water filtration systems.

Ellab Inc.
Centennial

www.ellab.com

Manufacturer of complete Thermal Validation Solutions for food and pharmaceutical industries and other industries where thermal processing involves safety, energy savings, improvement of quality, optimization and where accurate and complete documentation is essential.

Encision
Boulder

www.encision.com

Design and manufacture of AEM Laparoscopic Instruments. Based on their patented active electrode monitoring technology, AEM Instruments are an emerging Standard of Care greatly benefiting patient, surgeon and operating room staff.

Encynova International www.encynova.com
 Broomfield
 Designs and manufactures superior fluid control systems for a broad range of metering and dispensing applications.

Evergreen Research www.evergreenresearch.com
 Golden
 Contract product development emphasizing medical devices.

Falcon Rehabilitation Products www.falconrehab.com
 Colorado Springs
 Designs and manufactures seating solutions for wheelchairs. Falcon's services are especially helpful for patients with Multiple Sclerosis (MS) due to the changes they experience in body positioning.

Ferraris Respiratory www.ferrarismedicalusa.com
 Louisville
 Developer and manufacturer of respiratory care products and services. They specialize in cardio-pulmonary diagnostics, asthma management and other non-invasive respiratory solutions.

Fischer Imaging www.fischerimaging.com
 Denver
 Designs, manufactures, and markets imaging systems for the screening and diagnosis of breast disease.

Gambro www.gambro.com
 Lakewood
 A global medical technology company in renal care, services, products, and blood component technology. Gambro Renal Products develops and supplies hemodialysis, peritoneal dialysis and acute dialysis products, therapies and services.

Gambro BCT www.cobebct.com
 Lakewood
 The company's Trima system is the first automated blood collection system to collect a combination of leukoreduced red blood cells, platelets and plasma, helping blood centers be more efficient than ever before.

Genesee BioMedical www.geneseebiomedical.com
 Denver
 Manufacturer of cardiac surgery instruments and devices.

Gnathodontics www.gnatho.com
 Wheat Ridge
 Specializing in functional dentistry, advanced implant work, precision partial dentures, combination cases and metal-free fixed restorations.

Guidant www.guidant.com
 Castle Rock
 Design and development of cardiovascular medical products. Their devices help patients with heart disease return to active and productive lives.

Hach Company www.hach.com
 Loveland
 Manufactures and distributes analytical instruments and reagents used to test the quality of water and other aqueous solutions.

Halleck-Willard www.hwresearch.com
 Fredrick
 Custom development of nearly a hundred different products in industries including medical, telecommunications, industrial controls, computer peripherals and food and beverage.

HealtheTech www.healthetech.com
 Golden
 Develops and markets technologically advanced and proprietary diagnostic devices and software that measure and monitor health parameters.

HEI Advanced Medical Operations www.heii.com
 Boulder
 A full service developer and manufacturer of high performance components, medical software, medical devices, and non-medical products. HEI produces microcircuits and subsystems for hearing and medical applications, communications, and high-speed data processing.

Hirsh Precision Products www.hppi.com
 Boulder
 A contract manufacturer of precision-machined and assembled components. The company attracts the attention of industry with their quality program and inventory reduction strategies. Industries served include Medical, Automotive, Communications and Instrumentation.

Hosuk America www.hosuk.net
 Aurora
 Manufactures syringe and packaging products for the medical community.

Ideatrics www.ideatrics.com
 Boulder
 Develops hand held manually operated mechanical instruments and provides consulting services to organizations involved in the design, manufacture and distribution of medical devices.

InDevR www.indevr.net
 Boulder
 Dedicated to innovating technological advances in the area of biomedical instrumentation. Their mission is to discover and apply new technologies to problems in clinical and biochemical analysis with the goal of developing and manufacturing instruments.

Innovative Machining www.innovativemachininginc.com
 Wheat Ridge
 Produce specialized parts in quantities from single prototypes to high production runs for engineers, scientists, inventors, technicians and mechanics.

Ionic Fusion www.ionicfusion.com
 Longmont
 Designs, manufactures, distributes, and services equipment for their proprietary process utilizing Ionic Plasma Deposition (IPD). The Ionic Plasma Deposition Process impregnates many metals and ceramics into substrates enhancing the surface characteristics.

Ionics Instruments www.ionicsinstruments.com
 Boulder
 Manufacturer of instruments used to measure total organic carbon (TOC) in water. In addition, they offer advanced total carbon analyzers, boron analyzers, oxygen demand analyzers, sulfur and nitrogen chemiluminescence detectors, nitric oxide analyzers, oil on water monitoring systems, and certified reference materials.

IPAX www.ipaxinc.com
 Englewood
 Assembly and packaging of medical products.

JMST Systems www.hyperquan.com
 Colorado Springs
 A manufacturer of high performance chemical analysis instruments. Since JMST is the original source of the designs manufactured, JMST can offer the highest performance instruments for most applications of optical monitoring, liquid delivery, robotic sampling, and liquid fraction collection.

Jorgensen Laboratories www.jorvet.com
 Loveland
 Run by veterinarians who have used these instruments in veterinary practice, design and manufacture instruments which are used regularly in the animal health field.

Kestrel Labs Boulder	www.kestellabs.com	Medtronic SNT Louisville	www.medtronic.com
Research and development projects, consulting, and contract development of innovative, patient monitoring concepts and other medical technologies. Kestrel Labs focuses on finding innovative medical device concepts.		Producer of pacing technology. Medtronic is a medical technology company, providing lifelong solutions for people with chronic disease.	
Kuschall Longmont	www.kuschallna.com	Meinhard Glass Product Golden	www.meinhard.com
Research, development, and manufacturer of ultra-lightweight rigid and folding frame "personal mobility vehicles" (wheelchairs).		Nebulizer design, the company's principal goal is to produce finer, more narrowly sized dispersed aerosols while maintaining the high quality, low cost and simplicity of design and operation that characterize the MEINHARD® nebulizer.	
LaBac Systems Denver	www.labaconline.com	Meritech Englewood	www.meritech.com
Designs and builds high quality, innovative quadriplegic seating systems.		Providing employee hygiene equipment to the medical cleanroom. Using the latest technology, Meritech provides a no-touch, automated method of washing and sanitizing bare hands, gloved hands, boots, and shoes.	
Lenox MacLaren Surgical Instruments Louisville	www.lenoxmaclaren.com	Mesa Laboratories Lakewood	www.mesalabs.com
Manufacturer of custom surgical instruments.		Acquires, develops, manufactures and markets high-quality, computer based, and electronic measurement instruments. Mesa's products are used to assure product quality and to solve problems in niche markets in industrial, pharmaceutical and medical applications.	
Lexicor Research Center Boulder	www.lexicor.com	Metafluidics Golden	www.metafluidics.com
Manufactures an EEG data acquisition medical device called the Digital Cortical Scan. The company also offers quantitative EEG data analysis through its DataLex Reporting Service.		Is focused upon developing chip-top cell handling instrumentation. Their focus is a chip-top microfluidic device capable of completely automating the processes involved in therapeutics screening of cellular suspensions within a single high-throughput, disposable device.	
LogiSens Fort Collins		Nanogen Ft. Collins	www.nanogen.com
Delivers products and services for stress management and peak performance. Stress is a leading cause of illness and consequently of increased health care costs. The company's first product uses scientifically proven biofeedback technology in an office/PC environment.		Provides instrumentation for multiplexed detection in genetic and infectious disease testing. The NanoChipâ 400, an electronic microarray platform, fully automates highly complex assays. Analyte Specific Reagents using MGB Eclipse™ probes are available for real-time PCR assays.	
McKinley Medical Wheat Ridge	www.mckinleymed.com	Nervonix, Inc. Longmont	www.nervonix.com
An infusion technology company that offers innovative solutions designed to meet the growing needs of the worldwide health care market for high quality drug delivery.		A development stage medical device company, which has invented, patented, and prototyped a break-through nerve imaging technology that operates non-invasively at the skin surface to accurately locate and image peripheral nerves.	
Medegen Medical Products Northglenn	www.medegen.com	Optibrand Fort Collins	www.optibrand.com
Develops, manufactures and markets disposable medical products. MMP focuses on medical disposable/reusable products that are not subject to technology innovation costs. MMP manufactures three product lines: Patient Utensils, Laboratory Disposables and Procedure Kits.		Provides U.S. and international livestock producers with a fraud-resistant, inexpensive system to add value to their product. By positively identifying individual animals from birth and throughout the food processing chain, the Secure Identity Preservation system helps assure food safety, control the spread of animal disease and add value to branded premium products.	
Medical Modeling Golden	www.medicalmodeling.com	OrthoNetx Superior	www.orthonetx.com
Produces highly accurate 3-D physical models of human bone structure from imaging such as CT or MRI.		Develops, manufactures, markets, and supports proprietary medical devices for distraction osteogenesis to treat human bone-related tissue deficiencies and deformities, both congenital and acquired.	
Medispec Ltd Glendale	www.medispec.com	Otologics Boulder	www.otologics.com
Develops, manufactures and markets high-tech medical equipment for the fields of Urology, Uro-Gynecology and Orthopedics.		Developing and commercializing surgically implantable alternatives to conventional "in the ear" hearing aids, to better address the needs of the approximately 6.9 million people in the world with significant hearing loss.	
Medivance Louisville	www.medivance.com	Oval Window Audio Nederland	www.ovalwindowaudio.com
Working in the field of therapeutic temperature management with the development and introduction of its first product platform — the patented Arctic Sun Temperature Management System.		Produces induction loop assistive listening systems and unique visual and vibrotactile technologies that help the deaf and hard of hearing.	
MedSource Technologies/InstruMed Englewood			
Manufactures a line of precision surgical instruments and components made from strip metal, wire, tubing, and nonferrous materials, including electrodes for use in general surgical, laparoscopic, endoscopic, arthroscopic, and gynecological procedures.			

Pare Surgical www.paresurgical.com
Englewood
 A surgical instrument development, manufacturing and distribution company. The company is dedicated to the development of innovative surgical instruments which also result in a cost savings to hospitals and surgical centers.

Parker Medical www.parkermedical.com
Englewood
 A company devoted to saving lives by improving the technology for tracheal intubation in the hospital and pre-hospital setting.

Particle Measuring Systems www.pmeasuring.com
Boulder
 Particle Measuring Systems has over 30 years' experience designing, manufacturing, and servicing precision microcontamination monitoring instrumentation and software used for detecting particles in aerosols, liquids, slurries, gas streams and vacuum processing environments as well as surface molecular contamination monitoring.

PCC/Advanced Forming Technology www.pcc-aft.com
Longmont
 The company designs and manufactures metal injection molding (MIM). Metal Injection Molding (MIM) has proven to be a viable alternative to older forms of manufacturing.

Peak Robots www.peakrobotics.com
Colorado Springs
 An engineering-rooted company that manufactures robots, special equipment, and turnkey automated systems for a variety of industries including: biotech, electronics, medical, semiconductor, etc.

Pernicka www.pernicka.com
Fort Collins
 Custom manufacturing of products, parts or prototypes to precise specifications whether a single test unit or a large production run is needed.

Physiodynamics www.therastim.net
Englewood
 TheraStim® is a unique, wall plug-in and battery powered electrical neuromuscular stimulation modality. It is a treatment of soft tissue rehabilitation. TheraStim® has introduced an exclusive direct current waveform not found in any conventional electrotherapeutic muscle stimulators.

Piko Healthcare Products www.pikohealthcare.com
Louisville
 Design and development of low-cost, intelligent, electronic medical devices to service the needs of the global homecare market.

Point Technologies www.pointtech.com
Boulder
 Specializes in precision manufacture of critical biomedical metal subcomponents. Core technologies include electrochemical pointing, plating, burr-free cutting and micro-machining of small diameter wire and tubing.

Porta-Lung www.porta-lung.com
Denver
 The Porta-Lung provides noninvasive ventilatory support for long-term respiratory patients who need more portability than the iron lung allows, while maintaining the same level of ventilating efficiency.

Precision Glassblowing www.precisionglassblowing.com
Centennial
 Precision Glassblowing is the source for all ICP and General Laboratory glassware needs. Precision Glassblowing is one of the largest providers of custom and OEM scientific glass.

Preferred Medical Products www.pmpcolorado.com
Englewood
 Specializes in the manufacture of stainless steel medial components for hypodermic needles and lancet type products.

Probetronix www.probetronix.net
Colorado Springs
 Manufacturer of oscilloscope probes.

Pro-Safe Products www.prosafeproducts.com
Grand Junction
 Capabilities include customizing existing products, creation of new products/prototyping; custom packaging and labeling; contract design and manufacturing; fulfillment services and design and engineering. Manufacturing is limited in sewn products.

Protomed www.protomed.net
Arvada
 ProtoMED models are used for presurgical planning of complex reconstruction cases and for patient fitted prosthesis design.

Quest Product Development www.quest-corp.com
Evergreen
 Provides full service engineering and product development services for the medical device industry.

Radiological Imaging Technology www.radimage.com
Colorado Springs
 RIT received FDA clearance on RIT113 radiation therapy film dosimetry. RIT113's innovations provide clinical and research physicists with the first high precision automated QA tool for advanced radiation therapies.

Rand-Scot www.easypivot.com
Fort Collins
 Designs and manufactures the EasyPivot lift, which is a streamlined "transfer machine" designed for safe, efficient transfers that contribute to the health of the patient as well as the health of the caregiver.

Reynolds Polymer Technology www.reynoldspolymer.com
Grand Junction
 Manufactures superior quality cast acrylic cylinders for hyperbaric chamber manufacturers. The quality assurance and precision in molding acrylic cylinders are applied also to the production of hemispheres and spheres for the PVHO's (Pressure Vessels for Human Occupancy) and tourist submersibles.

RJD Machining www.rjdmachining.com
Parker
 Provides components to medical equipment, aerospace, electronic components, optical, measuring devices, pumping and electro-magnetic companies.





Rocky Mountain Biosystems
Golden

Combines physical science and biotechnology to design products that make people "look and feel better™." RMBI's proprietary high frequency energy conversion systems temporarily or permanently modify tissues for transdermal and deposition drug delivery, and for cosmetic skin resurfacing.

Rocky Mountain Orthodontics www.rmortho.com
Denver

Developing the first set of prefabricated orthodontic appliances. After much clinical research and experimentation, the first preformed bands, attachments, stainless steel wire and welder were introduced.

Sandhill Scientific www.sandhillsci.com
Highlands Ranch

Manufacturer of medical instrumentation for gastroenterologists and endoscopic surgeons.

Sciencetech www.sciencetech-inc.com
Boulder

Manufacturer of semi-micro balances, analytical balances, semi-analytical balances, and toploading balances.

Shippert Medical Technologies www.shippertmedical.com
Centennial

Manufactures and distributes medical disposable products and instruments. The company serves the Ear, Nose and Throat, Plastic Surgery, Emergency/Trauma Care, Family Practice, Pediatric, and Dermatology fields.

Sienco www.sienco.com
Arvada

A small manufacturing company focused on providing tools for hemostasis monitoring and viscoelastic evaluations. Their mission is to develop and commercialize niche whole blood/platelet coagulation management tools for the clinical and research communities.

Silverglide Surgical Technologies www.silverglidesurgical.com
Boulder

Manufactures and distributes electro-surgical instruments for stopping bleeding in the brain, spine and other delicate surgical fields. All instruments incorporate the SILVERGLIDE® non-stick technology. This technology virtually eliminates the frustrating problem of tissue sticking to the instrument, especially during bipolar electro-surgery.

Sonora Medical Systems www.4sonora.com
Longmont

Sonora is an ISO-9000 certified and FDA registered provider of high quality products and services to the diagnostic ultrasound and MRI markets.

Sontec Instruments www.sontecinstruments.com
Englewood

Has been supplying the medical industry with the finest in surgical instrumentation for all specialties. They offer complete in-house repair service and custom instrument manufacturing in addition to their already broad line of instruments.

Sound Surgical Technologies www.vaser.com
Golden

Creators of the VASER® System and the LipoSelectionSM procedure, focuses on ultrasonic technologies and related techniques for aesthetic surgery.

Spectranetics www.spectranetics.com
Colorado Springs

Develops, manufactures and markets the "cool" ultraviolet excimer laser technology for multiple cardiovascular procedures to physicians and hospitals worldwide.

Summa Design www.summa-design.com
Montrose

A contract design and development company focused on the medical device market. They provide the entire spectrum of medical business support, including product design and development, business development, international distribution, quality system and regulatory consulting.

Summit Doppler Systems www.summitdoppler.com
Golden

Manufacturer of ultrasound Doppler systems used to detect fetal heartbeat and to monitor peripheral arterial and venous blood flow. The people behind Summit have been developing fetal and vascular Dopplers for over three decades and are proud to introduce the most advanced Doppler systems available today.

Sunrise Medical www.sunrisemedical.com
Longmont

Manufacturer of homecare and extended care products. The company's products have been built from many popular brands in the homecare industry including Quickie, Sopur, Jay, DeVilbiss, Hoyer, Guardian, Coopers, Oxford and Joerns.

Synthes USA www.synthes.com
Monument

The company develops, produces and markets instruments, implants and biomaterials for the surgical fixation, correction and regeneration of the human skeleton and its soft tissues.

T.R.S. www.oandp.com
Boulder

Develops, manufactures and markets body-powered prosthetic devices. Designs and builds only high quality technology for persons missing a hand(s).

Takeishi Technologies
Pueblo

Develops and manufactures a hand-held device that uses ultrasound technology to measure how much urine is in the bladder. The device emits ultrasound waves to measure the size of the bladder, which shrinks and grows based on how much liquid is in there.

Tapeless Wound Care Products
Englewood

Manufactures and distributes a system of patented secondary wound dressing retention devices, offering an alternative to traditional secondary wound dressings, including tape, gauze, elastic wraps and elastic netting.

Tartan Orthopedics www.tartanortho.com
Northglenn

Manufactures an entire line of orthopedic products such as sacro lumbar belts, dorsal lumbar belts corsets and moldable insert, Ottenberg style elbow splint, pelvic traction belts, arm slings, cervical collars, acromioclavicular splints, and ankle supports.

TDA Research www.tda.com
Wheat Ridge

Development and commercialization of a variety of components and devices, including single-use devices, life support equipment, fuel systems and MEMS-based devices.

Tech-X Corporation www.txcorp.com
Boulder

Committed to scientific and technical excellence and innovation. They provide technical solutions through collaboration and product development and are dedicated to advances in science and engineering. Their business consists of grant funded scientific R&D projects and scientific software products.

Thermo Electron www.thermo.com/poc
Arvada

Supplier of analytical laboratory instruments. Thermo's Point of Care & Rapid Diagnostics business unit develops highly sensitive and specific patient diagnostic tests for rapid detection of respiratory, gastrointestinal, sexually transmitted diseases.

TMJ Implants www.tmj.com
Golden

Design and manufacture of alloplastic implants for the treatment of temporomandibular joint disorders and injuries. The company manufactures both stock and custom devices for partial and total TMJ joint replacement.

Touch of Life Technologies www.toltech.net
Aurora

This early stage company commercializes scientific applications based on advances in human anatomy simulation.

Transtracheal Systems www.transtracheal.com
Englewood

Manufactures and markets respiratory therapy products including the SCOOP transtracheal oxygen therapy system.

Trelleborg American Variseal Corporation www.trelleborg.com
Broomfield

Spring Energized Polymeric Sealing Systems which can be used to seal packaging for biohazard containment/disposal.

Valleylab www.valleylab.com
Boulder

Product development by designing, manufacturing, and marketing advanced electrosurgery systems and accessories worldwide.

Value Plastics www.valueplastics.com
Fort Collins

Designs and manufactures plastic tubing components including Luers, Luer Accessories, Large Bore, Tube-to-Tube, Threaded, Panel Mount, Blood Pressure and Bondable Fittings.

Water Pik Technologies www.waterpik.com
Fort Collins

Developer, manufacturer and marketer of revolutionary health care products for the entire family.

WestMed www.westmedinc.com
Englewood

Designs, manufactures and markets leading quality medical devices for Anesthesia and Respiratory professionals.

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RNL Design
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Cator, Ruma & Associates
www.catorruma.com

Haselden Construction
www.haselden.com

InterTech Planning and Design

ISEC Laboratory Services
www.iseinc.com

Lauth Property Group
www.lauthproperty.com

LS Planning
www.lsplanning.com

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www.mortenson.com

Outsource Facility Solutions
www.outsourcefs.com

VECO USA
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www.affygility.com

BeamOne
www.beam-one.com

Biomed Ink
www.biomedink.com

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www.biopharmatraining.com

Bioscience Translation & Application
www.biotransapp.com

Capstone
www.capstone.com

Chart Biotech Consulting

Colorado Corn Growers Association
www.coloradocorn.com

Embassy Suites
www.eshgateway.com

Excel Biomedical Associates
www.excelbiomed.com

Front Range Technical Strategies

Med Quality Central
www.medqualitycentral.com

Mid-Continent Technology Transfer Center
www.mcttc.com

MPI Research
www.mpiresearch.com

Onody Associates
www.onodyassoc.com

Peak to Peak Pharmaceutical Associates

PhRMA
www.phrma.org

Precision Management Consultants
www.precisionmanage.com

Publicis Selling Solutions
www.psellingsolutions.com

QuickSTAT
www.qicstat.com

Reimbursement Principles
www.reimbursementprinciples.com

RenewalNet
www.renewalnet.com

Research Consultants

Resnik Partners
www.resnikpartners.com

RMC Pharmaceutical Solutions

Robsun Consulting
www.robsuninc.com

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www.scientificduediligence.com

Strategy 3
www.samsondesign.com

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www.summitroundtable.com

TransPerfect Translation
www.transperfect.com

Wild Rose Biophysics

ECONOMIC DEVELOPMENT

Adams County Economic Development
www.adamscountyed.com

Aurora Economic Development Council
www.auroraedc.com

British Consulate - Denver
www.britainusa.com

Canadian Consulate
www.international.gc.ca

City of Denver
www.denvergov.org

Colorado Office of Economic Development and International Trade
www.state.co.us/oed

Denver Metro Chamber of Commerce
www.denverchamber.org

DIA Partnership
www.diapartnership.org

Jefferson County Economic Council
www.jeffco.org

JETRO Los Angeles
www.jetrolosangeles.org

Longmont Area Economic Council
www.longmont.org

Metro Denver Economic Development Corporation
www.metrodenveredc.org

Northern Colorado Economic Development Corporation
www.ncedc.com

FINANCIAL AND INVESTMENT

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www.aweida.com

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www.commercebankcolorado.com

Ernst & Young
www.ey.com

Merrill Lynch - Office of Bruce Williams
www.ml.com

Morgenthaler Ventures
www.morgenthaler.com

Pricewaterhouse Coopers
www.pwc.com

Quasar Group
www.quasargroup.com

Quest Capital Partners

Sequel Venture Partners
www.sequelvc.com

Silicon Valley Bank
www.svb.com

Tango

Tatum Partners
www.tatumpartners.com

Trinity Capital Services
www.tricapllc.com

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www.uven.com

Wells Fargo Bank
www.wellsfargo.com

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www.colorado-insurance.com

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VWR International
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www.hollandhart.com

Holme Roberts & Owens
www.hro.com

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www.merchant-gould.com

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www.pattonboggs.com

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www.burnsmarketing.com

Downs Marketing

Griff/SMC Marketing Communications
www.griffsmc.com

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www.isispr.com

Joe Knows
www.joe-knows.com

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Westfield Development/Frederick Ross

www.frederickross.com

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